

**Planning Act 2008 – section 55**

**Application by Rosefield Energy Farm Limited for an order  
granting development consent for the Rosefield Solar Farm**

**(EN010158)**

**Written Representation on behalf of the**

**Claydons Solar Action Group (CSAG)**

**Reference** [REDACTED]

## CONTENTS

### Pages

1. Introduction
2. Consideration of Alternatives/Application of the Mitigation Hierarchy
3. Need
4. ES Methodology
5. Residential visual amenity
6. Conclusion

### 1) INTRODUCTION

2. The Claydons Solar Action Group (CSAG) is an incorporated community organisation of residents from villages that would be affected by the Development Consent Order (DCO) proposals.
3. The community feels embattled by large scale development, which has been underway in the surrounding area for several years and will expand and continue following the granting of permissions for further projects.
4. These include the HS2 railway line, the East-West Rail link, Grendon Prison, Greatmoor Energy from Waste facility and extensions to the Calvert Landfill Development area. Planning permission has been granted for the 25MW Tuckey Solar Farm to the northwest of the proposed Rosefield order limits and for a 500 MW Battery Energy Storage System (BESS) development adjoining the eastern boundary

5. There are live planning applications for another 500MW BESS to the immediate north of the order limits and for further solar PV development, Longbreach Solar to the east and Calvert Solar to the west. The East Claydon sub-station is due to be relocated nearer to the village, with a planning application expected this year.
6. If consent for the Rosefield project is granted, the area of major development would stretch between HS2 in the west, EFW to the south, EWR to the north and East Claydon substation to the east. Statera BESS and Tuckey Solar Farm are expected to start construction adjacent to East Claydon substation in the near future.
7. The Order Limits currently provide a valued oasis for agriculture, amenity and wildlife separating these areas of development. This area of refuge would be lost if the DCO is granted.
8. The construction phase of the proposed Rosefield project would add to and exacerbate the disruption to local communities, through noise, vibration, increased heavy goods traffic, highway damage and road and public rights of way (PRoW) closures.
9. Until very recently, the historic Claydon villages sat within a tranquil rural landscape. Residents continue to enjoy a comprehensive and valued public rights of way (PRoW) network providing residents with ready access to countryside offering extensive and long-reaching views.

10. The recent development has encroached on the settings of the Claydon villages, some designated as conservation areas in recognition of their intact heritage and historic importance. Biodiversity is squeezed through loss of habitat.

11. This Written Representation is in 12 parts:

Part 1 – Overview and consideration of site selection/alternatives (CSAG-01)

Part 2 – Ecology (CSAG-02)

Part 3 – Landscape and Visual (CSAG-03)

Part 4 – Heritage (CSAG-04)

Part 5 – Soils (CSAG-05)

Part 6 – Fire risk and safety (CSAG-06)

Part 7 – Noise and vibration (CSAG-07)

Part 8 – Highways (CSAG-08)

Part 9 – Public Rights of Way (CSAG-09)

Part 10 - Combined Baseline and Project Information Plan (CSAG-10)

Part 11 - Photograph of Site from Hogshaw Hill (CSAG-11)

Part 12 – Requests for clarification/further information

Appendices are numbered CSAG-001, CSAG-002 etc.

12. Part 6 will be submitted at Deadline 2 to enable CSAG's safety expert to review the new smoke plume assessment requested by the UK Health Security Agency, which the Applicant proposes to submit at Deadline 1.

13. A further report in support of Part 8 may be submitted at Deadline 2 or earlier.

14. This document is Part 1. It covers the following matters:

- Consideration of alternatives and application of the mitigation hierarchy
- Need
- Environmental Statement methodology
- Residential amenity

15. Where the National Policy Statements EN-1 and EN-3 are referenced, they are the January 2024 versions, which apply to these proposals because the application was accepted for examination before final publication of the approved 2025 amendments. (Para. 162 of the January 2026 National Policy Statement EN-1).

16. CSAG defers to the Local Planning Authority for consideration of the scheme's compliance with local planning policy.

17. CSAG has raised a number of requests for further information or clarification throughout the WR. These are collated in Part 12 (CSAG 12).

18. The matters addressed in this WR encompass CSAG's principal areas of concern. Where an issue has been assessed as part of the application, but is not considered in this WR, it should not be taken that CSAG agrees with the Applicant's conclusions.

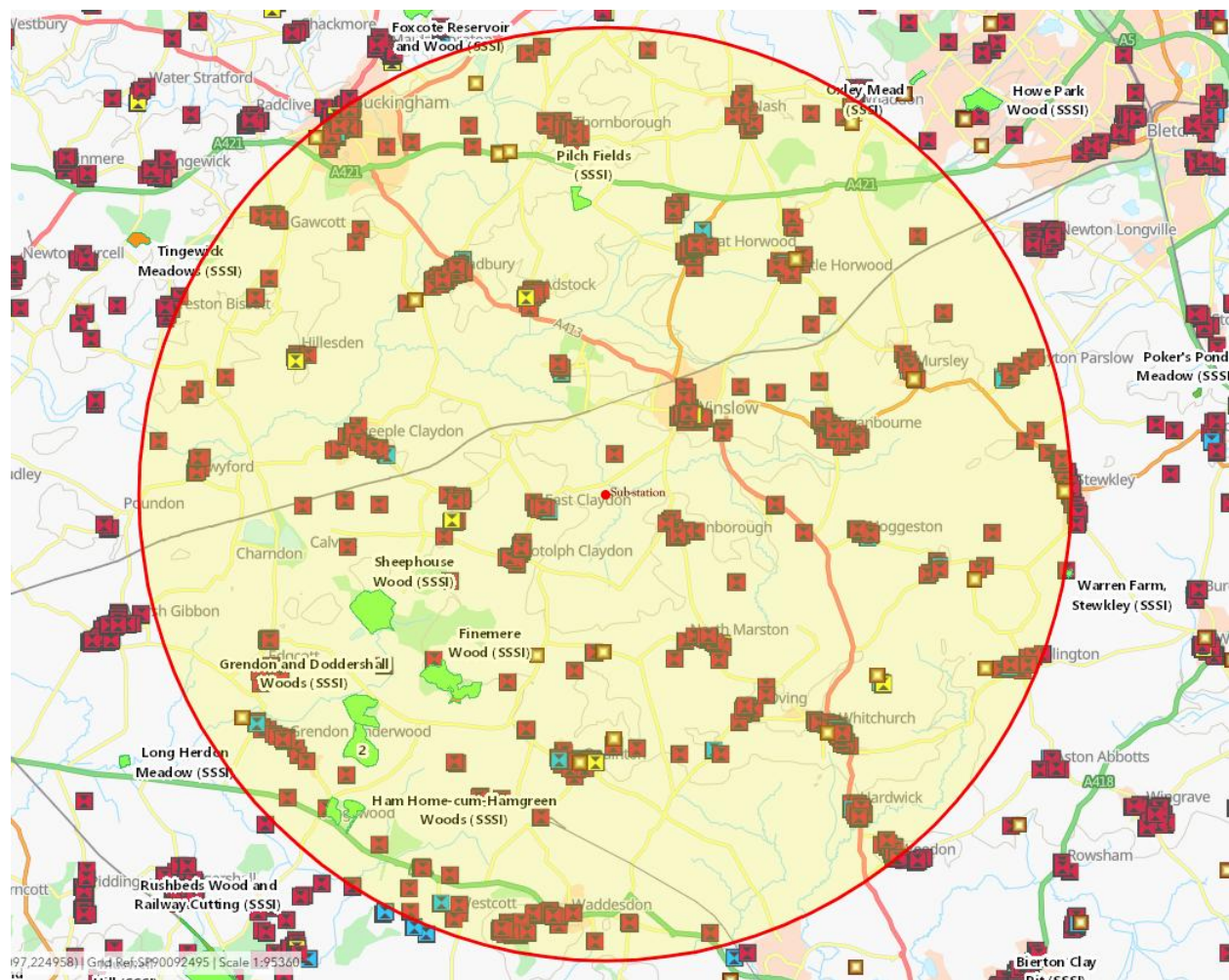
## **2) CONSIDERATION OF ALTERNATIVES & APPLICATION OF THE MITIGATION HIERARCHY**

19. CSAG has significant concerns about the Applicant's approach to site selection. From the Applicant's evidence – in particular in the Reasonable Alternatives Considered Chapter of the Environmental Statement (**APP-047**) - it appears that no other site was considered for the proposed development.

20. According to the Applicant's statements, the site selection process entailed securing a preliminary grid connection offer (grid connection is considered in more detail below) followed by identification of a nearby landowner willing to provide sufficient land for the development. It appears no other site was considered.
21. There is no information about the process by which the Order Limits were selected by the Applicant or landowner. The landowner, Claydon Estates, owns in excess of 2,000 hectares of land in the area, more than three times the amount allocated to the Order Limits. The landowner's holding, as understood by CSAG, is shown on the plan at CSAG-10.
22. Although the Applicant claims to have carried out a search for sites within 10km of the East Claydon substation no other sites are identified.
23. As an apparent consequence of this approach to site selection, the Reasonable Alternatives Considered Chapter (**APP-047**) does not assess any reasonably alternative sites and is instead a retrospective justification for selection of the Order Limits.
24. As Fig. 1 below shows, the land within the Order Limits is subject to greater environmental constraints than any other area within the chosen radius.
25. These constraints include land identified for designation as a Site of Special Scientific Interest, existing Sites of Special Scientific Interest, Local Wildlife Sites and Ancient Woodland on adjoining land, and numerous species of bat, including a vulnerable colony of Bechstein's bats. (See CSAG-02)

26. The Order Limits include land identified as a Local Nature Recovery Strategy Area, the aims of which are incompatible with the proposed development.

27. Fig. 1 shows that ancient woodlands are a rarity in the wider landscape. Selecting a site away from wooded areas could have reduced potential ecological impacts, the requirement for wide buffers and the problem of shading.



**Fig. 1. Extract From DEFRA's Magic Map showing 10 km radius of East Claydon Sub-Station, showing protected sites, ancient woodland, listed buildings and scheduled monuments.**

28. Much of the order land is higher and more undulating than most of the surrounding area, increasing landscape impacts and limiting the potential efficacy of mitigation.
29. The Order Limits are within the settings of numerous listed buildings, including Grade 1 listed Claydon Park and its registered park and garden. There are conservation areas immediately adjacent to the site.

#### **Application of the Mitigation Hierarchy**

30. The Applicant has provided no evidence that the mitigation hierarchy played any part in site selection. Had the hierarchy been followed, the Order Limits, or parts of them, should have been excluded from consideration for the avoidance of adverse impacts at site selection stage.
31. Examples include fields B6, B7, and B8, which Natural England proposes to designate as a Site of Special Scientific Interest for the protection of the Bechstein's bat colonies and other interest. **(AS-038)**.
32. CSAG's ecologist considers that all of fields B2-B11, B18-B20 and D28 and D29 should have been excluded because these are within the Core Sustainment Zone for Bechstein's bats. (CSAG-02)
33. The fields occupied by Preston Farms in support of TCS Biosciences could have been excluded from the Order Limits and the BESS relocated to avoid noise and vibration and fire/smoke risk to the highly sensitive horses, whose welfare is central to the operation of the bioscience business.

34. Adverse impacts on conservation areas and the setting of listed buildings (See CSAG-04) may have been avoided or reduced, or the number of heritage assets affected reduced.

35. By declining to provide information about how the Order Limits were defined, the Applicant has failed to demonstrate that any of the harms arising from the proposals and requiring mitigation could instead have been avoided.

36. National Policy Statement EN-1 (Jan. 24) says at 4.2.11

*“Applicants must apply the mitigation hierarchy and demonstrate that it has been applied. They should also seek the advice of the appropriate SNCB or other relevant statutory body when undertaking this process. Applicants should demonstrate that all residual impacts are those that cannot be avoided, reduced or mitigated.”*

37. At 4.3.15:

*“Applicants are obliged to include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant’s choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility.”*

38. And at 5.4.42

*“As a general principle, and subject to the specific policies below, development should, in line with the **mitigation hierarchy**, aim to **avoid** significant harm to*

*biodiversity and geological conservation interests, including through **consideration of reasonable alternatives.***" (Our emphasis)

39. EN-3 says at 2.1.8:

*"Early application of the mitigation hierarchy is strongly encouraged, as is engagement with key stakeholders including SNCBs, both before and at the formal pre-application stage."*

40. Regulation 14 (1) (d) of **The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017** requires the Applicant to provide:

*"a description of the reasonable alternatives studied by the applicant, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment;"*

41. Despite the clear guidance in the NPS, the Reasonable Alternatives Considered Chapter (**APP-047**) makes no reference to the mitigation hierarchy and offers no indication that any other land was considered for the scheme.

42. The Planning Statement (**APP-037**) refers to the application of the mitigation hierarchy at paragraphs 9.19.32 to 9.19.55, citing the Reasonable Alternatives Considered Report (**APP-047**) and the Site Selection Report at Appendix 1 to the Planning Statement, but neither of these Reports indicate any application of the mitigation hierarchy.

43. Appendix 1 to the Planning Statement (**APP-037**) describes how elements of the scheme were designed to reduce or mitigate impacts, but there is no information about impacts avoided at site selection stage.
44. The Applicant has not shown that any other site, including any other land in the control of the same landowner, was considered and rejected to avoid identified harms, as paragraph 5.4.42 of EN-1 indicates was required.

#### **Applicant's search criteria**

45. The Reasonable Alternatives Considered Chapter (**APP-047**) sets out the Applicant's site search criteria.
46. CSAG disagrees with the Applicant's claim that the criteria accord with EN-3 guidance. Elements of the NPS were disregarded, most notably, the advice that topography plays an important role in irradiance.
47. The first of the Applicant's "core criteria" as set out at Paragraph 4.3.2, is the *"Existence of sufficient land to deliver the project and meet the scale of the Proposed Development's aims."*
48. The Applicant claims that this factor is identified by EN-3 as one of *"three fundamental core attributes... which large scale solar developments require"*, although this does not appear in EN-3 or any other NPS. The scale of the proposed scheme is a commercial decision for the developer and not addressed by government policy.
49. The other two of the Appellant's core criteria are:

*“Availability and capacity of a suitable Point of Connection to the National Electricity Transmission System” and*  
*“Solar irradiation levels to support the development's potential to produce an efficient and economic energy yield”.*

50. These criteria are derived from EN-3, but are only two of seven *“Factors influencing site selection and design”* of solar PV sites set out at Paragraphs 2.10.18 – 2.10.40 of the NPS.

51. EN-3 outlines the seven factors under the following headlines:

- *Irradiance and site topography*
- *Network Connection*
- *Proximity of a site to dwellings*
- *Agricultural land classification and land type*
- *Accessibility*
- *Public rights of ways*
- *Security and lighting*

52. Although, these were not the Applicant’s *“fundamental core attributes”*, five of the EN-3 factors were said in the Reasonable Alternatives report (**APP-047**) to have been considered *“before arriving at the preferred site”*. The report does not, however, identify any other site that was tested against these (or any other) factors.

53. The Applicant’s Site Selection Report (Appendix 1 to the Planning Statement - **AS-037**) lists all seven of the EN-3 factors but does not apply them to any site other than the Order Limits. The report says sites on the Local Planning Authority’s brownfield

register were considered and lists these on Table 1. However, these were not genuine options because the Register is kept to comply with **The Town and Country Planning (Brownfield Land Register) Regulations 2017**, which requires identification of sites for residential development, not for the type of development proposed.

54. The Government's Planning Practice Guidance, says *"In considering whether alternative lower-risk sites (which could, where relevant, be a series of two or more smaller sites) would be capable of accommodating the proposed development, such alternative sites do not need to be owned by the applicant to be considered 'reasonably available'."* Paragraph: 028 Reference ID: 7-028-20220825
55. Although the PPG relates to the application of the flood risk sequential test, it provides a useful test of what constitutes a "reasonably available site". Land ownership is not a relevant constraint and the development does not need to be carried out on a single block of land.
56. The proposed Order Limits extend c. 6.5km from west to east, and c. 6km from north to south, requiring long interconnecting routes, potentially increasing its impact, compared with a more compact (and more level) site. The ES does not explain why parts of the Order Limits – for example fields between SA35 and SA50 - were not allocated for infrastructure, although these are lower lying and flatter than most of fields selected for solar PV.
57. That the Applicant decided that the ease of reaching agreement with a single landowner over-rode any other consideration, is confirmed in Appendix 1 to the Planning Statement **(AS-037)** which says:

*“Once it was clear that the landowner of the Order Limits was amenable in principle to bringing forward a solar scheme on their land, which met the site selection criteria and offered a large landholding with opportunities for flexibility in precisely where solar and associated mitigation was located, the Applicant didn’t look further for alternative sites.”*

58. This does not explain why the Order Limits were identified from within the Claydon Estate’s ownership.

59. The majority of the land in the Order Limits land is tenanted, much of it in multi-generational tenancies. According to the Population Chapter of the ES (**APP-057**), 624 ha of land within the Order Limits is owned by the Claydon Estates, of which 450 ha – 72% - is tenanted.

60. The distress and disruption caused to tenants required to relinquish multi-generational tenancies – including, in one case, a family home – is not considered in the ES to be a significant impact of the project. CSAG considers that it is.

61. Chapter 14 of the ES – Population (**APP-057**) says at 14.8.23:

*“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).”*

62. It is unclear, because this is not addressed in ES or site selection evidence, why any of the land directly farmed by the landowner or offered in mitigation/compensation to displaced tenants could not have been allocated for development. Tenants were

not initially offered land swaps when advised they would have to surrender their tenancies, so this land was apparently available when the development area was selected.

### **Site Assessment**

63. As noted above, the Applicant's site assessment is confined to consideration of the land within the Order Limits, with no reasonably alternative sites for comparison.

64. CSAG disagrees with many of the conclusions reached by the Applicant in assessing the site's compliance with EN-3's site selection and design factors.

65. Taking these in turn:

i) **Irradiance and Topography.**

66. The Reasonable Alternatives Considered report (**APP-047**) lists irradiation levels as a core requirement in site selection, but makes no reference to topography, although the two elements are inextricably linked by the NPS. EN-3 says at 2.10.19:

*"Irradiance of a site will in turn be affected by surrounding topography, with an uncovered or exposed site of good elevation and favourable south-facing aspect more likely to increase year-round irradiance levels. This in turn affects the carbon emission savings and the commercial viability of the site."*

67. The Order Limits include relatively steep, sloping ground, generally higher than the surrounding area. This is demonstrated by Fig. 3.3 in the Applicant's Design Approach Document (**APP-038**).

68. Parcels 1 and 2 are on notably undulating land. The Design Approach Document shows that ground levels across the order limits range from 79m AOD to 137m AOD. (Para. 3.2.2) The Document acknowledges that only Parcel 3 is on relatively flat ground at 89-95m AOD. Although parcel 3 would appear more suitable than the other parcels in terms of irradiance, the Applicant has not explained why solar arrays are not proposed for much of this area.
69. The hilly topography is also evident from the Applicant's LVIA Fig.10.4, which shows that the hills and slopes within the Order Limits are rare in these landscapes, predominantly flat clay vales and plateaux. (Environmental Statement Volume 3 Landscape and Visual Figures 10.1 - 10.26) **(AS-031)**.
70. The majority of the areas intended for solar arrays slope broadly northward, although CSAG acknowledges that the steepest fields have been set aside for mitigation.
71. Few of the fields containing solar arrays would be on south facing slopes. Fields B11 and B12 and B20 would be on north facing slopes, B4, B7, B8 and B10 would be on west facing slopes, while D26, D14, D15 and D16 would be east-facing. The Residential Visual Amenity Assessment describes on page 48 how "*Solar PV modules wrap(s) around the western slopes of Knowl Hill in Field B11.*" **(APP-114)**
72. Many of the fields are also bordered by woodland or include in-field trees, for example, B11, D6, D16 and D44, while fields B6, B7, B8, B9 and B10 are bounded by broad, overgrown hedges or woodland corridors. As well as providing important habitat – including for Bechstein's bats – these are likely to shade solar panels, creating pressure for removal.

73. Very little of the land proposed for solar arrays accords with the EN-3 recommendation for an “*exposed site of good elevation and favourable south-facing aspect*”. Some of the most suitable fields in terms of topography are not proposed to contain solar arrays, in parcel 3 in particular.

74. The undulating topography creates further problems by making it difficult to provide mitigation screening. See CSAG-03.

ii) Network Connection

75. The Applicant has advised that the solar PV element of the proposed scheme has a Gate 2 position enabling connection to the East Claydon substation by around 2035. However, the Battery Energy Storage System component has a Gate 1 connection, meaning that it does not have an agreed grid position. (CSAG-001)

76. There is an extant permission for a 500MW BESS development (Statera – Appeal Ref. APP/J0405/W/25/3360815) immediately adjacent to the site. The Appellant has not explained why this facility could not serve the proposed solar PV, especially given that awarding of a Gate 1 position to the Rosefield BESS indicates this element of project is surplus to National Grid requirements.

77. The government’s National Energy Systems Operator (NESO) carried out a major reform of the grid connections queue in 2025, removing unviable and unsuitable projects to accelerate grid connections. Even after the removal of large numbers of projects from the queue, NESO advises that a large oversupply of BESS remained.

78. NESO’s Website says:

*“Batteries are significantly oversupplied with around three times more projects than the permitted capacity. This is due to projects that have protections such as planning permission. There will be no capacity for batteries in the next window. Only projects that have become protected since the last application window will be able to progress.”*

***What does this mean?***

*There won’t be any new battery projects allowed until the current ones are ready and the application window opens again.”*

79. In respect of solar, NESO says:

*“Solar is slightly undersupplied for 2036 in some zones, with less than 500MW of available in those zones in the next window. GB appears below the 2030 capacity target because rooftop solar is not captured in the data, even though it is already built.”*

80. NESO’s evidence shows that Order Limits are in an area that is oversupplied for solar, meaning the proposals are not needed to meet the government’s clean energy targets. (See Section 2 - Need)

81. EN-3 at 2.10.17 and 2.10.18 acknowledges that selection of a site:

*“based on nearby available grid export capacity” may “minimise disruption to local community infrastructure of biodiversity and reduce overall costs.”*

*“Where this is the case, applicants should consider the cumulative impacts of situating a solar farm in proximity to other energy generating stations and infrastructure.”*

82. ES Volume 2 Chapter 17: **(APP-060)** addresses cumulative impacts, confirming that these did not play any part at the site selection stage. Buckinghamshire Council was not approached about which developments should be considered in a cumulative impacts assessment until June 2025 and no other stakeholders were contacted.
83. The Site Selection Report (Appendix 1 to the Planning Statement **(AS-037)**) says that NPS EN-3, *“establishes that the starting point for the site selection process can be determined by the availability of a nearby suitable connection to transmission network”* and cites a number of NSIP decisions in which the proximity of a connection agreement was a relevant consideration in the choice of site.
84. Network connection is the second factor listed in EN-3, not the “starting point”, and is subject to consideration of disruption to local community infrastructure, biodiversity and a requirement for assessment of cumulative impacts. The Applicant has not provided any evidence that these factors were considered in the site selection process.
85. The proposed scheme would give rise to significant disruption to the local community, to biodiversity and to tenants and businesses, adding to the years of disturbance already arising from major projects underway and proposed in the local area.
86. CSAG acknowledges that the availability of a grid connection is an important consideration in site selection. However, the Applicant’s own evidence is that the connection could have been utilised anywhere within a 10 km radius of the sub-station not only within the Order Limits. **(APP-047)** says *“preference was given to*

*sites in close proximity to the point of connection”, but fails to identify any other site that was considered and ruled out.*

87. The NPS attach significant weight to the existence of a grid connection. While this significant weight may be applied to the solar PV element of this proposal because it has secured a Gate 2 connection, the fact that the BESS has not secured a connection should weigh significantly against granting consent for this element of the project.

88. EN-1 says at 4.11.12

*“The Secretary of State should be satisfied that appropriate network connection arrangements are/will be in place for a given project regardless of whether one or multiple (linked) applications are submitted.”*

89. Granting consent for additional BESS development in this location would add to the pressures on the National Grid, which NESO has sought to relieve through reform of the grid connection process.

iii) Proximity of a site to dwellings

90. Given the scale of solar PV development it is accepted that it is often difficult to locate a site away from any dwellings. However, in this case there are several settlements, in addition to more remote dwellings, very close to the site.

91. The Applicant has not demonstrated that there was no other reasonably available site that would have been further away from, have less impact on, or affect fewer dwellings.

92. The Applicant's Residential Visual Amenity Assessment (**APP-114**) considered 31 dwellings, close enough to the development to require RVAA. The nearest of these would be 50m from the proposed infrastructure. Properties more than 200m from solar PV were excluded (although greater distances were applied to BESS and substation infrastructure). CSAG disagrees with the methodology and conclusions of the RVAA as set out in section 4 of this Part of the WR.

93. The Site Selection Report (Appendix 1 to Planning Statement (**APP-037**)) says:

*"The Applicant focused on areas away from the major settlements to ensure there would be sufficient separation between the Order Limits and surrounding towns and villages to minimise adverse visual and residential amenity impacts."*

94. There is no evidence to support this assertion, which is contradicted by the proximity of the Order Limits to several villages. There are only two larger settlements – Buckingham and Winslow - within the area searched (see Fig. 1). Winslow is less than 2 km from the order limits.

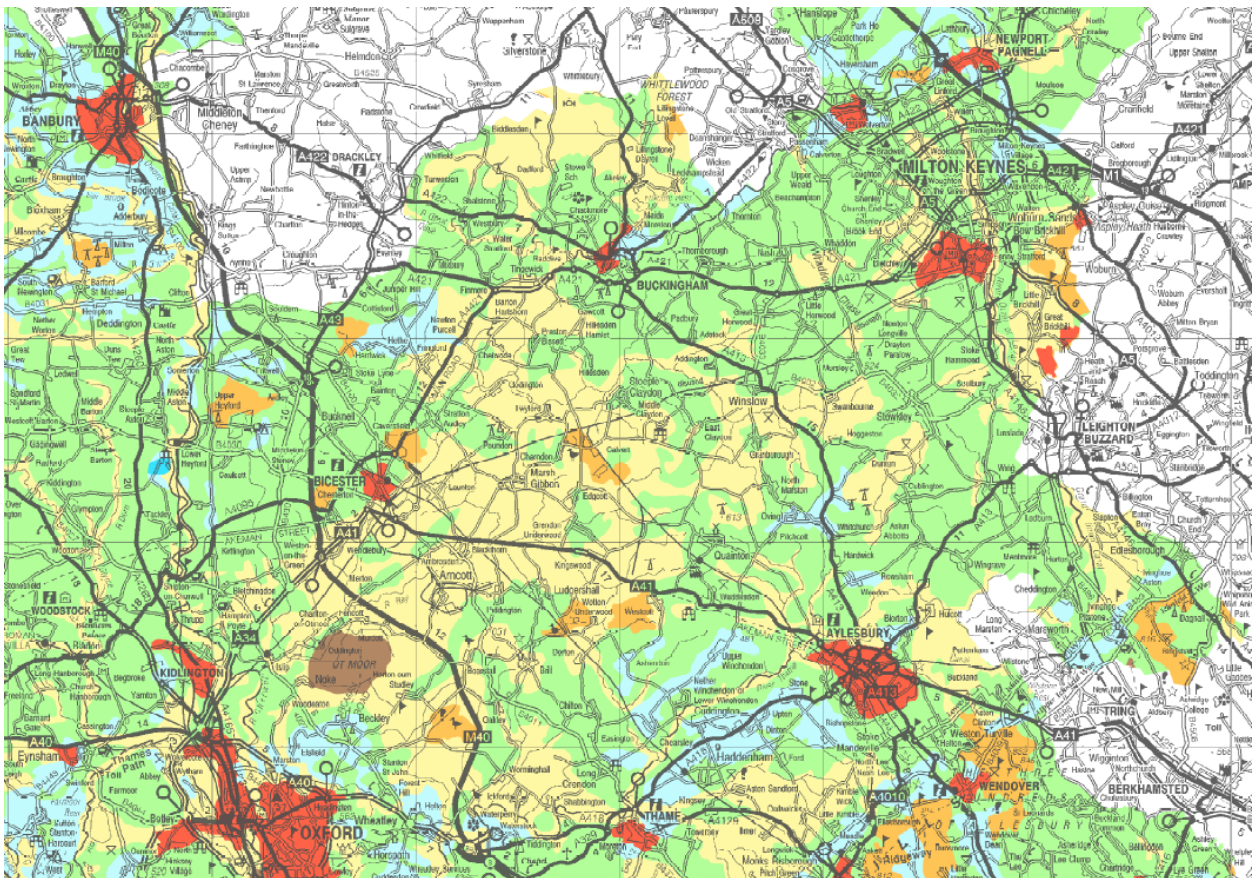
iv) Agricultural land classification and land type

95. Appendix 1 to the Planning Statement (**APP-037**) says at 5.1.7.

*"The available land was identified as being a mixture of both Grade 3 and Grade 4 according to the provisional ALC mapping (DeFRA and Natural England). It avoided*

*the larger swathe of Grade 3 land identified to the north of the Search Area, as well as the small areas of Grade 2 to the north and south east.”*

96. However, Natural England’s regional agricultural land classification maps shows that there are large areas of grade 4 or 5 agricultural land within the search area (Fig. 2). In fact, parts of the Order Limits are on land shown as Grade 3 surrounded by poor quality land. It appears that the Applicant’s soil sampling was carried out after the site was selected, before which it was not possible to determine from the mapping whether or not the land within the order limits was BMV.



**Fig. 2) Extract from Natural England ALC Map. Grade 3 land coloured green; poor quality land (grades 4 and 5) yellow**

97. The Appellant has not provided any information to suggest that ALC classification was factored into the selection of the site. Nor has the Applicant shown the use of agricultural land to be necessary, albeit the Site Selection appendix **(APP-037)** purports to have considered brownfield sites. (See above)
98. EN-3 paragraph 2.10.29 says *“Solar is a highly flexible technology and as such can be deployed on a wide variety of land types. While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land”*.
99. Impacts on soils are addressed in CSAG-05.

v) Accessibility

100. EN-3 paragraph 2.10.36 *“Given that potential solar farm sites are largely in rural areas, access for the delivery of solar arrays and associated infrastructure during construction can be a significant consideration for solar farm siting.”*
101. Highway/transport impacts are addressed in CSAG-08.
102. The Applicant has not shown that Accessibility played any part in site selection and consideration of alternatives. The Consideration of Alternatives Report **(APP-047)** addresses access at paragraphs 4.7.58 to 4.7.64, but only to describe the points of access to the site

103. The Site Selection Report (Planning Statement Appendix 1 (**APP-037**)) says at 5.1.10 “...it was acknowledged that some areas would require condition improvements, passing places and localised widening to be suitable for the purposes of the Proposed Development”. There is no examination of whether an alternative site was available, which would have avoided the need for such mitigation.

104. Of significant concern to CSAG is that impacts during the construction period will exacerbate and prolong years of highways disruption to the local population caused by HS2, East West Rail and other projects.

vi) Public Rights of Way

105. Impacts on Public Rights of Way are considered in CSAG-09.

106. The extensive networks of PROWs across the Order Limits are well-used and highly valued by the local community. While the proposals include replacements for stopped up/diverted rights of way and proposed new permissive routes, in CSAG’s view, these do not compensate for the large-scale loss of amenity to PROW users.

107. The Applicant has provided no evidence that any other site, which may have had lesser impacts on the PROW network, or where PROWs were less well used or valued by the local community, was considered.

vii) Security and Lighting

108. Security and lighting is another EN-3 criteria omitted from consideration in the site selection process (**APP-047**). Lighting is a particular concern, due the proximity of the Order Limits to the habitats of numerous species of bat.
109. Dark night skies are valued in the area around the application site, where East Claydon and Botolph Claydon share only a single streetlamp.
110. The Applicant has provided no evidence that security and lighting played any part in site selection or that any other land was considered, despite the sensitivity of areas within the Order Limits to light pollution.

#### CONCLUSION ON ASSESSMENT OF REASONABLE ALTERNATIVES

111. CSAG does not consider that the Applicant's assessment of alternatives complies with EN-1 paragraph 4.3.15, by which Applicants are **obliged** to take into account *"the environmental, social and economic effects"* of reasonable alternatives considered, or with the EIA Regulations.
112. The Appellant has not presented any alternative site or land considered for the project and has, consequently, not demonstrated that environmental factors played any part in the site selection process.
113. EN-1 paragraph 4.2.15 says *"Where residual non-HRA or non-MCZ impacts remain after the mitigation hierarchy has been applied, these residual impacts are unlikely to outweigh the urgent need for this type of infrastructure."*
114. And at 5.4.43:

*“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.”*

115. **The significant impacts of the proposed development are not truly residual because the Applicant disregarded the first stage of the mitigation hierarchy. Opportunities to avoid adverse impacts, including on protected habitats and species, were not taken by considering either alternative sites or different order limits.**

116. See also CSAG-002.

## **2) STATEMENT OF NEED**

117. The central argument of the Applicant’s Statement of Need (**APP-036**) is that solar and BESS schemes should be approved even if they exceed the targets set by the government in the Annex to the Clean Power 2030 Action Plan because other forms of renewable energy may take longer to deliver.

118. The Statement says at 6.12.5:

*“The evidence shows that there are many significant uncertainties associated with the development of such schemes, particularly in relation to the timeframes in which material contributions to decarbonisation and security of supply must be made. Put plainly, such schemes cannot yet be relied upon to contribute to the delivery of Net Zero and many simply will not be ready to contribute in a meaningful way to*

*decarbonisation before the 2030s. Achieving meaningful progress in decarbonisation during the 2020s is of critical importance in the fight against climate change.”*

119. This assertion does not accord with government guidance and such an approach would risk delivering the unbalanced energy mix the Action Plan targets and NESO reform were designed to avoid.

120. The Annex to the Clean Power 2030 Action Plan (CSAG-002) says at page 5:

*“Moving from a ‘first come, first served’ system to one that is strategically aligned requires that we set out the capacities we will need in each technology type. To do this, we have set out national pathway figures for the capacity which should be prioritised for all technologies, and further regional breakdowns for the capacity which should be prioritised for solar, batteries and onshore wind. This will enable network companies to accelerate, and developers to bring forward, projects which best align with strategic need.”*

*“For solar, batteries, and onshore wind, we need to ensure that ready projects can progress while delivering a balanced energy system for 2030. Regional breakdowns are needed to give network companies greater control over capacity allocation for these technologies because they are characterised by a larger number of smaller projects, are geographically dispersed and, **in the case of solar and batteries, are oversubscribed nationally in our current connection queue.**” (Page 6) (Our emphasis)*

121. NESO's Connections Reform Detailed Results Data published this year (Figs 3 and 4) shows that Zone T6, within which the application site sits, is full with no permitted capacity remaining for future gated windows for either solar or batteries.
122. NESO's information demonstrates that the BESS element of the project is surplus to requirements and that there is already ample solar in the queue, which could deliver the government's target if consent is not given for this scheme.
123. Permission and a grid connection have been granted for a BESS facility of the same size adjacent to the Order Limits (Statera 500MW BESS). The Applicant has not explained why the Statera BESS could not serve the solar PV element of the project or why a duplicate facility is required.
124. The permitted Statera facility is not co-located with any other renewable energy project.
125. The Statement of Need argues at paragraph 6.12.2.
- "The capacity ranges create a framework to help increase the pace of delivery of schemes which are more ready to be developed and can be connected to the grid in those timeframes. However, the capacity ranges do not constitute a government pathway [Ref. 1-3, Connections Reform Annex, p5] and therefore should not be interpreted as a cap or ceiling on the requirement for low carbon electricity generation capacity."*

MARCHES PLANNING & ENVIRONMENT

Transmission network region	Solar (MW) 2030	Solar (MW) 2035 <a href="#">[footnote 22]</a>	Onshore wind (MW) 2030 <a href="#">[footnote 23]</a>	Onshore wind (MW) 2035	Batteries (MW) <a href="#">[footnote 25]</a> 2030	Batteries (MW) 2035
N. Scotland	100	-	5,500	-	1,900	1,900
S. Scotland	600	-	8,800	-	3,900	3,900
N. England	500	-	-	-	800	800
N. Wales, the Mersey and the Humber	1,200	-	300	-	4,200	4,200
Midlands	4,000	-	-	-	1,300	1,300
Central England	2,100	-	-	-	500	500
E. Anglia	100	-	-	-	200	200
S. Wales and the Severn	1,100	-	1,300	-	900	900
S.W. England	300	-	-	-	400	400
S. England	200	-	-	-	100	100
South East England	600	-	-	-	1,700	1,700
<b>GB total</b>	<b>10,800</b>	<b>-</b>	<b>15,900</b>	<b>-</b>	<b>15,900</b>	<b>15,900</b>

**Note:** MW capacity figures have been rounded to the nearest 100 MW.

Fig. 3) Table from Clean Power 2030 Action Plan: Connections reform annex showing regional available transmission capacity

Table 21: MW permitted capacity remaining by technology and Transmission zone for future Gated Application Windows



Phase 2 (Phase 2 Zones)	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	Grand Total
 Battery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
 Solar	0.0	0.0	0.0	74.8	207.1	0.0	0.0	0.0	0.0	134.6	0.0	416.5

Fig. 4) NESO Connections Reform showing remaining available grid capacity (Order Limits are in Zone T6)

126. CSAG disagrees with this interpretation of the Annex (CSAG-002). The Annex indicates that the ranges do create a ceiling. Page 5 advises that NESO's allocation of connection offers is at "the top-end of the government's 2030 pathway (i.e. DESNZ 'Clean Power Capacity Range'".

127. And on page 6:

*"Where a viable project exceeds the relevant 2035 technology capacity ranges, it will receive an indicative 'Gate 1' offer if directly transmission-connected (or revert to its initial DNO connection agreement if embedded) and will have opportunities to join the queue in future **where gaps emerge and/or where capacity ranges are revised upwards by the first SSEP.**" (Our emphasis)*

128. In the context of Gate 1 offers, the Annex observes that solar and batteries are oversubscribed in the connections queue.
129. Consequently, subject to publication of the government's planned Strategic Spatial Energy Plan, expected this year, the Annex sets out the government's targets, including caps, for these technologies, which show that there is no requirement for additional BESS or solar.
130. The proposed scheme may not have a grid connection until the mid-2030s or even later. National Grid was due to have submitted a planning application for a new sub-station in 2025, but this has still not materialised as the second quarter of 2026 approaches indicating a connection may not be available until even later.
131. The Applicant's Statement of Need says at 6.12.13.  
*"Flexibility of supply is also necessary to maximise the use of renewables when there is an abundance of generation, and to fill the supply gaps in periods of shortfall. Storage capacity is needed to increase to support renewable electricity generation capacity growth. The Proposed Development seeks to bring forwards co-located storage facilities as associated development to the main (renewable generation) development."*
132. However, as the Statement of Need acknowledges, BESS provides storage for short periods only. This type of storage cannot compensate for the most significant limitation of Solar generation, which is that it makes no contribution to the grid at night and limited amounts during the winter, when demand is at its highest.

133. CSAG notes the Applicant's assertion that "*Achieving meaningful progress in decarbonisation during the 2020s is of critical importance in the fight against climate change*" at 6.12.5 of APP-036.
134. Such meaningful progress would not include the Rosefield project, which does not propose to commence construction until 2029 – a date that may be pushed back due to delay in the construction of the proposed new East Claydon sub-station.
135. CSAG-001 shows that the Applicant is seeking a grid connection by around the mid-2030s.
136. As the Applicant has acknowledged, the BESS element of the project, has secured only Gate 1 status and may not proceed to a connection given the oversupply of battery storage.

### **3) ENVIRONMENTAL STATEMENT (ES) METHODOLOGY**

137. Methodology used across the ES is often opaque or lacking entirely, resulting in skewed conclusions, invariably in the Applicant's favour i.e. reducing levels of impact and/or finding impacts to be non-significant.
138. Problems with the methodology used in the Applicant's LVIA and ecology assessments are addressed in CSAG-03 and CSAG-02.
139. An example of flawed methodology is in Chapter 15 of the ES, Transport and Access (**APP-058**)

140. The assessment criteria are provided in Table (15.8) of this Chapter. In respect of receptor sensitivity: *“Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs. Includes roads with traffic control signals, waiting and loading restrictions, traffic calming measures”* – indicates a high sensitivity receptor. However, low sensitivity is ascribed to any *“small rural settlement, few community or public facilities or services.”*
141. These categories are unexplained and appear contradictory. Their use enabled the Assessment to define residential receptors as of low sensitivity, even though they live on *“minor rural roads, not constructed to accommodate frequent use by HGVs.”*
142. Residents of Snake Lane/Fidler Field and Claydon Road are ascribed low sensitivity in Table 15.9, although they live on rural roads not designed for HGV traffic.
143. Paragraphs 15.6.14 to 15.6.7, under the heading Magnitude of Effect, describe the range of impacts on receptors and references relevant guidance. However, Table 15.10 *“Magnitude of Effect”* setting out how levels of magnitude have been determined, does not include any of these impacts and disregards the guidance in its entirety. Instead, *“Magnitude of Effect”* is determined according to whether the effects are deemed to be *“material in the decision-making process.”*
144. Firstly, this means that assessments of magnitude are entirely subjective. Secondly, this is back-to-front: it is the role of the decision-maker to determine what is a material consideration in the light of the evidence provided by the Environmental Impact Assessment.
145. Even having employed an inappropriate method of assessment, the Chapter’s conclusions fail to accord with its own methodology. For example, users of Snake Lane/Fidlers Field are ascribed high sensitivity, but the *“residual significance of*

*effect*” is minor in Table 15.15. In accordance, with Table 15.11, this should equate to a moderate effect, but the overall effect on these receptors is deemed to be minor.

146. Best practice in EIA is to compare sensitivity of receptors against levels/magnitude of effect to arrive at overall effect, from which it can be determined whether the effect is significant. Table 15.15 confusingly refers to Residual “Significance” of Effect, although paragraph 15.6.19 says any low or negligible effects are not significant.
147. Paragraph 15.6.19 sets the threshold for significance: effects “*judged to be of minor or negligible **significance** are considered **not significant***”. While this may be dismissed as poor terminology, it is unclear and creates confusion, especially because there is no explanation of how magnitude of effects have been assessed.
148. It is also unclear why Table 15.15 includes an additional column for duration of effect (“temporary during construction”), since the assessment is of construction effects. The operational and decommissioning periods are scoped out of the ES.
149. There is no equivalent assessment of non-residual effects, which are merely described in paragraphs 15.8.1 to 15.8.7 and no assessment of cumulative impacts with other projects.
150. In the Population Chapter of the ES (**APP-057**), it is unclear how the categories of receptor were identified and the impacts selected for assessment are cherry-picked in a way that prevents meaningful assessment.
151. For example, paragraph 14.6.49 explains: “*This chapter does not attempt to quantify the in-combination amenity effects of different environmental effects on the*

*tourist economy given the number of variables and externalities but presents a summary of potential effects based on professional judgement.”*

152. In respect of Public Rights of Way (PROW) paragraph 14.6.57 says: *“The effects assessed by this chapter are distinct from those assessed by ES Volume 2, Chapter 15: Transport and Access”.*

153. And paragraph 14.6.58: *“The effects assessed by this chapter are distinct from those assessed by ES Volume 2, Chapter 10: Landscape and Visual and ES Volume 2, Chapter 13: Noise and Vibration which consider changes in environmental amenity experienced by users of PROW.”*

154. Paragraph 14.6.59: *“The assessment within this chapter therefore considers the ability for people to continue to use PROW for recreational and connectivity purposes, in order to access commercial, recreational, community facilities and social networks and to undertake recreational active travel as intended by the purpose of the PROW.”*

155. This means that the Chapter considers only one aspect of impacts on PROWS and this exemplifies the approach of much of the ES: there is no holistic, in-combination assessment of impacts, inter or intra-project.

156. The Population Chapter says at 14.6.62. *“For each receptor that is present, professional judgement has been used to consider the likely effects that the Proposed Development would have and to determine if the effect is likely to be beneficial, neutral or adverse. The effect is then quantified with regard to the nature of the impact, the probability of the impact and the duration, frequency and reversibility of the impact.”*

157. Without a clear methodology and having opted not to cross-reference other evidence in the ES, “professional judgement” in this Chapter constitutes little more than opinion.
158. In other cases, receptors are excluded by creating impossibly high thresholds of significance in advance and scoping matters out where the threshold is not met.
159. For example, paragraph 14.10.56 places the threshold of significance for effects on private property at demolition or loss of habitability, enabling the Applicant to screen out impacts on residential amenity for all dwellings outside the RVAA buffer zone. (See section 4 below).
160. There is nowhere in the ES in which the intra-project impacts of the proposals on residents (or other receptors) are considered.
161. Dwellings in settlements adjacent or close to the Order Limits will suffer multiple adverse impacts, including loss of open countryside views, noise and vibration (during the operational period), and significant noise, dust and disruption during the 2.5-year construction period. (See Appendix CSAG-003 for example views of the site from affected properties.)
162. There is no assessment of cumulative or in-combination effects with other proposed and ongoing development in the area, meaning impacts are likely to have been further understated.
163. ES Volume 2, Chapter 17: Cumulative Effects (**APP-060**) purports to have considered inter-project effects, but its conclusion that no significant cumulative impacts are anticipated, *“assuming the other developments have adequate*

*mitigation in place*” lacks credibility given that each of those schemes in themselves are acknowledged to give rise to residual effects.

164. Added to this, the Applicant’s own assessments cannot rule out significant impacts of the project itself. For example, the noise and vibration assessment is provisional because proposed technology has not been identified and noise impacts from inverters and vibration impacts of piling are omitted altogether. (See CSAG-07).
165. ES Chapter 4 Appendix 5.5, Health and Wellbeing (**APP-083**) is inadequate as a result of the same flaws. There is no assessment of residential amenity, only an assertion at paragraph 5.4.8 that *“The Applicant has designed the Proposed Development to limit impacts on properties in accordance with Project Principles set out in the Design Approach Document. “*
166. The Design Approach Document (**APP-038**) addresses only visual amenity.
167. Residential visual amenity is addressed separately in the Residential Visual Amenity Assessment (**APP-114**). See section 4 below.

#### **Impacts on local businesses**

168. The Population Chapter appears to contain the ES’ only consideration of impacts on local businesses and employment, despite this being a major risk of the project.
169. The Chapter acknowledges the likely significant adverse impact – including potential loss of viability of important local businesses including, TCS-Biosciences and Hogshaw Wildlife Park.

170. The Chapter finds that, even during the construction phase, Hogshaw Wildlife Park would suffer only “visual effects”. Although these impacts would be significant adverse, the Wildlife Park is lumped in with the tourist sector as a whole allowing the Applicant to conclude a temporary slight adverse residual impact on tourism, which is considered to be not significant. (14.10.51)

171. The Population Chapter says at 14.8.28:

*“During the construction phase, the Proposed Development would have the potential to result in:*

- The displacement of land that may affect the viability of other (non agricultural) businesses within and affected by the Order Limits and the elements of the Proposed Development; and/or*
- Changes to the environment or accessibility within the local area affecting business viability.*

172. And at 14.8.97:

*“During the operational (including maintenance) phase, the Proposed Development would have the potential to result in:*

- The displacement of land that may affect the viability of other (non agricultural) businesses within and affected by the Order Limits and the elements of the Proposed Development; and/or*
- Changes to the environment or accessibility within the local area affecting business viability.”*

173. No consideration is given to the risk of fires/thermal runaway from the BESS element of the project, which could have highly damaging long-term effects on both TCS Biosciences and Hogshaw Wildlife Park.
174. Nor are disruption from traffic or road closures considered.
175. Loss or damage to the viability of TCS or Hogshaw Wildlife Park could entail large numbers of job losses. The two businesses together employ around 100 people. At 14.8.82 the Population Chapter estimates that the operation and maintenance phase would support around 24 FTE jobs, after displacement equating to 18 jobs, less than one fifth of the employment generated by those two companies alone.
176. Damage to the viability of TCS- Biosciences would have major consequences for the National Health Service, which is reliant on this company for a large proportion of its medical testing. The company is also understood to be an important exporter of its medical technology.
177. The risk to these businesses, which are large local employers and make an important contribution to the area, should be the subject of separate assessment.

***Cumulative highway impacts***

178. The cumulative impact on the local population of highway disruption and additional heavy goods traffic with other large construction projects underway or proposed in the local area, which have entailed numerous, long-standing and repeated road closures does not appear to have been addressed anywhere in the ES.

179. The local general practitioners surgery is concerned that construction traffic and potential road closures could have significant health implications, in particular for elderly and disabled people, who are dependent on home visits for medical care and support . (CSAG-003 and CSAG-004))

180. Local G.P. Dr Dickson who is Senior Partner at 3W Health, says: *“The proposed solar farm development, in conjunction with the disruption anticipated from the East West Rail link and the HS2 route between London and Birmingham, presents what I believe to be a “perfect storm” of disruption to local communication and transport pathways. These pathways are essential for the safe delivery of primary healthcare services in our rural community.*

#### **4) RESIDENTIAL VISUAL AMENITY**

181. CSAG has a number of concerns about the Applicant’s Residential Visual Amenity Assessment.

182. The RVAA selected the dwellings to be assessed based on fixed screening distances, as specified in paragraph 1.6.7. These are as follows:

- 200m of any Solar PV modules;
- 400m of any siting zones for structures up to 6m (i.e. Satellite Collector Compounds, Main Collector Compound and BESS); and
- 800m from any siting zones for structures up to 15m (i.e. Rosefield Substation).

183. The distances were determined by extrapolating from the Landscape Institute's RVAA Technical Guidance Note 2/19, which suggests a preliminary study area of approximately 1.5 - 2 km radius for "*conspicuous structures such as wind turbines.*"
184. The Applicant's has taken conspicuousness as meaning only height. While the LI guidance refers to the "low-profile" of other forms of development it also suggests a more limited screening distance for overhead transmission lines, because these form a smaller component of the view, making clear it is not only concerned with the height of structures, but with their extent and impact.
185. While the proposed substation, for example, may not be as tall as a wind turbine, it would result in a more, substantial and conspicuous change to views across a wider area and would be viewed in association with other elements of the project and other proposed development – the Statera Bess and the proposed East Claydon substation.
186. The LI Guidance does not prescribe fixed screening distances. Considerations include the "*size / scale and location*" of the proposed development relative to the property, and, importantly in this case, whether it is on higher or lower ground.
187. *TGN 2/19 says at 4.3.*

*The description of the development should provide a robust, transparent basis for defining the extent of the study area and the scope, including which properties to include in the assessment. Mapping techniques such as Zone of Theoretical Visibility (ZTV) analysis are useful in this regard."*

188. CSAG notes that the 800m screening zone for the substation narrowly excludes dwellings in East Claydon and Botolph Claydon (conservation area), although countryside outlooks from these properties will be transformed to views of industrial development. See Appendix CSAG-004 showing existing views of the site from dwellings adjoining the Order Limits.
189. The combined features of the project are likely to become the dominant feature in views at much greater distances than the buffer zones allow for. The project would place industrial structures across the whole expanse of these views, which are by definition, valued.
190. The use of ZTV mapping to determine buffer zones for RVAA would provide for more robust screening but should be based on a vegetation-free scenario.
191. That is because the Applicant has relied on existing and proposed vegetation to rule dwellings out of the RVAA threshold.
192. It would be helpful if the RVAA conclusions were revisited to assume that existing vegetation may not persist for the full lifetime of the development and that mitigation planting may not be fully (or at all) effective.
193. CSAG is also uncertain how the RVAA has measured the distance between the curtilages of the dwellings and the proposed development. (Curtilages are not defined in the assessment, although it is noted that TGN 2/19 appears to conflate garden and curtilage).

194. It is difficult to scale from the Applicant's layout drawing and the RVAA does not provide mapping showing how distances between the properties and proposed development were measured.
195. It would be helpful if the Applicant could provide mapping showing precise distances and sightlines between the properties selected for the RVAA.
196. Visualisations or wire frame representations would also be helpful in illustrating potential visual impacts.
197. When assessing the baseline of outlooks from each property, the RVAA focuses on whether views are currently available, and apart from noting detractors, does not consider the quality, nature or extent of existing views.
198. This approach does not accord with the LI Guidance, which says at 4.10:
- "The existing (or baseline) visual amenity of a residential property should be described in terms of the type, nature, extent, and quality of views that may be experienced 'in the round' (see glossary) from the dwelling itself, including its 'domestic curtilage' (domestic gardens and access drives)."*
199. The following are examples in which CSAG considers the RVAA assessments to be flawed. These are examples only and do not indicate CSAG agrees with the findings of the RVAA on other dwellings.
200. The RVAA's judgement on the impact on 4-5 Catherine Cottages is:

201. *“The visual effect at these properties would not reach the Residential Visual Amenity Threshold. Whilst there would initially be a significant visual effect on views from the rear of these dwellings, this would arise from oblique views of Solar PV modules at distances of 50m to the south east and 100m to the south west. Mitigation would limit any effect in the long term to primarily first floor windows. The Proposed Development would not have an overbearing effect on the visual amenity experienced by residents of these properties.”*

202. The assessment included the following assertion:

*Views from ground floor windows and the rear gardens would have glimpses of the Proposed Development through a gap in the field boundary/garden hedgerow to the south east and oblique middle-distance views to Solar PV modules to the south west in Field B22.*

203. This is contradicted by the RVAA photographs showing the gardens to Catherine Cottages are bounded a post and rail fencing, affording clear views over the open countryside. The solar arrays would be on land that slopes to the south from these properties, initially gradually but then more steeply toward Knowl Hill, which is prominent in the views from these properties.

204. The judgement also fails to note that there would be views of solar panels to three aspects of these properties and their gardens. It does not factor in that blocking these open views with new planting would in itself give rise to adverse visual impacts. While scaling is difficult, the distances from the solar arrays appears to have been overstated. In CSAG’s view, the impact of the development on these dwellings would be overbearing and readily meet the RVAA threshold.

205. Another example is the RVAA judgement in respect of Sion Hill Farmhouse:

*“The visual effect at this property would not reach the Residential Visual Amenity Threshold. The principal effect would be on views experienced from first floor windows of the Rosefield Substation to the east, however these views would be in the context of the existing large overhead lines and the National Grid East Claydon Substation. There would also be prominent views of the Proposed Development on arriving/leaving the residence along the farm track extending from East Claydon, however, in the long term views would be partially screened and filtered by the proposed woodland screening belt to the western boundary of Parcel 3, such that the Proposed Development would not have an overbearing effect on the visual amenity experienced by residents of this property.*

206. The RVAA’s own photographs show that the garden overlooks open fields, which are proposed for development. Fig. 6) below shows Sion Farmhouse in its current pastoral setting.

207. Sion Hill Farm, would be less than 200m from the Rosefield substation to the east, which would block open, rural views across the valley toward Granborough. South facing windows would overlook solar PV modules and the Main Collector Compound in Fields E21 and E23. The proposed new East Claydon grid station would occupy the land to the immediate north of the dwelling. There would also be views towards the solar arrays in parcel 2.

208. The approach to the property would also be adversely affected, with views of open countryside changing to highly industrialised views of the new substation, the collector compound and solar PV.



**Fig. 5) Sion Hill Farm viewed from the southeast**

209. The proposed development, in conjunction with the new East Claydon substation (assuming permission is granted on the proposed site) would result in the dwelling being surrounded by industrial scale development several metres high, blocking current open countryside views in all directions. It is impossible to understand how the Applicant has concluded that the RVAA threshold is not met in this case.

210. Borshaw Farm, which would be some 300m from the BESS element of the scheme to the north and to solar PV to the west, was not visited for the RVAA. The report concluded:

*“Over 350m to BESS with views predominantly screened by intervening buildings and mature vegetation and not considered further.”*

211. The distance measurement appears to be understated and as, noted above, vegetation should not be relied on to ensure mitigation throughout the lifetime of the development.
212. Since the RVAA’s screening threshold for proximity to BESS structures was 400m, it is unclear why assessment of Borshaw Farm was ruled out.
213. Other examples in which the RVAA threshold has been excluded in reliance on intervening vegetation include Pond Farmhouse, the Old Dairy and Granary Cottage, all of which would lose open views. These dwellings would be surrounded by solar panels on all aspects other than to the south east, where views of the development would be precluded by existing woodland, albeit perhaps not in the longer term.

#### **4) CONCLUSION**

214. CSAG considers that the Applicant has adopted a flawed approach to assessment of impacts of the proposed development and failed to follow the mitigation hierarchy from the outset.
215. There is no evidence that any alternative site was considered prior to determination of the Order Limits or that the Applicant considered altering site boundaries to avoid the most sensitive areas.

216. **The significant impacts of the proposed development are not truly residual because the Applicant disregarded the first stage of the mitigation hierarchy. Opportunities to avoid adverse impacts, including on protected habitats and species, were not taken by considering either alternative sites or different order limits.**
217. Significant and cumulative impacts are not clearly identified or assessed, because effects were siloed into different categories of assessment and because of flaws in the methodology adopted.
218. Assessment criteria and methodology are often inconsistent or incompatible with industry guidance, meaning impacts are frequently understated or misrepresented.
219. CSAG suggests the amendments and/or additions to the ES set out in Annex 1 are required to improve the quality of assessment. (It is noted, however, that retrospective identification of alternative sites would not be possible).

Submission ID: S0A99FE2F

CSAG would like to submit further documents as part of its written representation. These are:

An explanatory note setting out the parts of the WR, Summaries and appendices

A map showing site details

One more appendix - Natural England guidance

**Planning Act 2008 – section 55**

**Application by Rosefield Energyfarm Limited for an order**

**granting development consent for the Rosefield Solar Farm**

**(EN010158)**

**Summary of Part 1 of Written Representation**

**on behalf of the**

**Claydons Solar Action Group (CSAG)**

**Reference** [REDACTED]

All Figures are in the main document

1. The Claydons Solar Action Group (CSAG) is an incorporated community organisation of residents from villages that would be affected by the Development Consent Order (DCO) proposal.
2. If consent for Rosefield project is granted, an area of major development would stretch between HS2 in the west, EFW to the south, EWR to the north and East Claydon substation in the east. Statera BESS and Tuckey Solar Farm are expected to start construction adjacent to East Claydon substation in the near future.
3. The construction phase of the proposed project would add to and exacerbate the disruption to local communities, through noise, vibration, increased heavy goods traffic, highway damage and road and public rights of way closures.

#### **Consideration of Alternatives**

4. CSAG has significant concerns about the Applicant's approach to site selection. The Applicant's has provided no evidence that any other site was considered for the proposed development, although the Applicant claims to have carried out a search for sites within 10km of the East Claydon substation
5. There is no information about the process by which the Order Limits were selected by the Applicant or landowner. The landowner, Claydon Estates, owns more than 2,000 hectares of land in the area, three times the amount allocated to the Order Limits. The landowner's holding, as understood by CSAG, is shown on the plan at CSAG-10.

6. As Fig. 1 in CSAG-01 shows, the land within the Order Limits is subject to greater environmental constraints than any other area within the chosen radius.
7. By declining to provide information about how the Order Limits were defined, the Applicant has failed to demonstrate that any of the harms arising from the proposals and requiring mitigation could instead have been avoided.

#### **Application of the Mitigation Hierarchy**

8. The Applicant has provided no evidence that the mitigation hierarchy played any part in site selection. Had the hierarchy been followed, the Order Limits or parts of them should have been excluded from consideration at site selection stage.
9. Examples include fields B6, B7, and B8, which Natural England says should remain undeveloped for the protection of the Bechstein bat colonies (AS-038). (Also see CSAG-02)
10. The fields occupied by Preston Farms in support of TCS Biosciences could have been excluded from the Order Limits and the BESS relocated to protect the business's sensitive horses.
11. It is unclear why any of the land directly farmed by the landowner or offered in mitigation/compensation to displaced tenants could not have been allocated for development.

## Site Selection

12. CSAG disagrees with many of the conclusions reached by the Applicant in assessing the site's compliance with EN-3's site selection and design factors.

i) Irradiance and Topography.

13. The Reasonable Alternatives Considered report (**APP-047**) lists irradiation levels as a core requirement in site selection, but makes no reference to topography, although the two elements are inextricably linked by EN-3 at 2.10.19:

*"Irradiance of a site will in turn be affected by surrounding topography, with an uncovered or exposed site of good elevation and favourable south-facing aspect more likely to increase year-round irradiance levels. This in turn affects the carbon emission savings and the commercial viability of the site."*

14. The Order Limits include relatively steep, sloping ground, generally higher than the surrounding area. This is demonstrated by Fig. 3.3 in the Applicant's Design Approach Document (**APP-038**).

15. Parcels 1 and 2 are on notably undulating land. The Design Approach Document shows that ground levels across the order limits range from 79m AOD to 137m AOD. (Para. 3.2.2) The Document acknowledges that only Parcel 3 is on relatively flat ground at 89-95m AOD. The Applicant has not explained why solar arrays are not proposed for much of parcel 3.

16. The majority of the areas intended for solar arrays slope broadly northward.

ii) Network Connection

17. The Applicant has advised that the solar PV element of the proposed scheme has a Gate 2 position enabling connection to the East Claydon substation by around 2035, while the Battery Energy Storage System component has a Gate 1 connection, meaning that it does not have an agreed grid position. (CSAG-001)
18. The government's National Energy System Operator (NESO) carried out a major reform of the grid connections queue in 2025, removing unviable and unsuitable projects to accelerate grid connections. Even after the removal of large numbers of projects from the queue, a large oversupply of BESS remained.
19. The Order Limits are in an area oversupplied for solar, meaning the proposals are not needed to meet the government's clean energy targets.
20. Granting consent for additional BESS development in this location would add to the pressures on the National Grid, which NESO has sought to relieve through reform of the grid connection process.

iii) Proximity of a site to dwellings

21. The Applicant has not demonstrated that there was no other reasonably available site further away from or affecting fewer settlements.

iv) Agricultural land classification and land type

22. The Applicant has not provided any information to suggest that soil quality was factored into the selection of the site. Nor has the Applicant shown the use of agricultural land to be necessary.

v) Accessibility

23. The Applicant has not shown that Accessibility played any part in site selection and consideration of alternatives.

24. Of significant concern to CSAG is that impacts during the construction period will exacerbate and prolong highways disruption arising from other projects. (CSAG-08)

vi) Public Rights of Way

25. The extensive networks of PROWs across the Order Limits are well-used and highly valued by the local community. The Applicant has provided no evidence that any other site, which may have had lesser impacts on the PROW network, or where PROWs were less well used or valued by the local community, was considered. (CSAG-09)

vii) Security and Lighting

26. Security and lighting are not identified as a consideration in the site selection process.

CONCLUSION ON ASSESSMENT OF REASONABLE ALTERNATIVES

27. CSAG does not consider that the Applicant's assessment of alternatives complies with EN-1 paragraph 4.3.15, by which Applicants are **obliged** to take into account "*the environmental, social and economic effects*" of reasonable alternatives considered, or with the EIA Regulations.

## **2) STATEMENT OF NEED**

28. The central argument of the Applicant's Statement of Need (APP-036) is that solar and BESS schemes should be approved even if they exceed the government's targets in the Annex to the Clean Power 2030 Action Plan because other forms of renewable energy may take longer to deliver.

29. This assertion does not accord with government guidance and would risk delivering the unbalanced energy mix the Action Plan targets and NESO reform seek to avoid.

30. NESO's Connections Reform Detailed Results Data published this year show that Zone T6, within which the application site sits, is full with no permitted capacity remaining for future gated windows for either solar or batteries.

31. Permission and a grid connection have been granted for a BESS facility of the same size (500MW) adjacent to the Order Limits (Statera). The Applicant has not explained why the Statera BESS could not serve the solar PV element of the project or why a duplicate facility is required.

## **3) ES METHODOLOGY**

32. CSAG demonstrates in CSAG-01, CSAG-02 and CSAG-03 that the methodologies used in the Environmental Statement are frequently flawed, resulting in a substantial under-representation of impacts across the chapters.
33. There is no holistic, inter or intra-project assessment of impacts, meaning the overall effects of the development on the environment have not been assessed.

#### **Impacts on Local Businesses**

34. The Population Chapter acknowledges the threat to the viability of two important local businesses, TCS-Biosciences and Hogshaw Wildlife Park.
35. Adverse impacts on these businesses could result in job losses. The two businesses together employ around 100 people, compared with 24 FTE jobs, equating to 18 jobs after displacement projected for the operational phase of the Project.
36. Any constraint on TCS- Biosciences could have major consequences for the National Health Service, which is reliant on this company for a large proportion of its medical testing. The company is also understood to be an important exporter of its medical technology.

#### **Cumulative Highway Impacts**

37. The cumulative impact on local communities of highway disruption and additional heavy goods traffic with other large construction projects underway or proposed in the local area, resulting in long-standing and repeated road closures, does not appear to have been addressed anywhere in the ES. (See CSAG-08)

38. The local general practitioners' surgery is concerned that construction traffic and potential road closures could have significant health implications, in particular for elderly and disabled people, dependent on home visits. (CSAG-003 and CSAG-004))

### **Residential Amenity**

39. The screening distances selected for the Applicant's Residential Visual Amenity Assessment (**APP-114**) do not accord with the Landscape Institute's RVAA Technical Guidance Note 2/19.
40. CSAG notes that the 800m screening zone for the substation narrowly excludes dwellings in East Claydon and Botolph Claydon, although countryside outlooks from these properties will become views of large scale industrial development. See CSAG-004.
41. Part 1 of CSAG's WR (CSAG-01) includes examples of conclusions in the Applicant's RVAA which CSAG considers to be wrong.

### **CONCLUSION**

42. CSAG considers that the Applicant has adopted a flawed approach to assessment of impacts of the proposed development and failed to follow the mitigation hierarchy from the outset.
43. There is no evidence that any alternative site was considered prior to determination of the Order Limits.

**44. The significant impacts of the proposed development are not truly residual because the Applicant disregarded the first stage of the mitigation hierarchy. Opportunities to avoid adverse impacts, including on protected habitats and species, were not taken by considering either alternative sites or different order limits.**

MARCHES PLANNING & ENVIRONMENT

MARCH 2026

**ROSEFIELD SOLAR FARM – CRITIQUE OF ECOLOGICAL COMPONENTS OF EIA  
SCOTT SCHEDULE – BIOSCAN UK LIMITED, MARCH 2026**

ES Ref:	Quoted text or subject matter	Comment
<b>ES Chapter 7 – Biodiversity</b>		
Table 7.1 (pp 7-8)	<p>Stakeholder engagement (Natural England)</p> <p>“At the time of writing (September 2025), limited information on the proposed Bernwood SSSI designation is publicly available and the date for designation is not yet known. <b>Therefore, the proposed Bernwood SSSI has not been specifically considered in the assessment presented in this chapter as a receptor in its own right.</b> However, Sheephouse Wood SSSI, Finemere Wood SSSI, Grendon and Diddershall Woods SSSI, ancient woodland and Bechstein’s bats (all of which would fall under the proposed Bernwood SSSI designation) have all been scoped into the assessment (see Table 7.2 below). Therefore, <b>the Applicant considers that the conclusions of these individual assessments can be applied to the Bernwood SSSI, should the SSSI be designated following submission of the DCO Application and before the DCO Application is determined</b>” (emphasis added)</p>	<p>This is a questionable and arguably flawed approach to this emerging SSSI designation. In comparable situations, EIA assessment proceeds on the basis that if land has been recognised as qualifying for SSSI designation, it should be attributed national importance and weighted as such in the assessment process. In the case of the proposed Bernwood SSSI designation, this is an active Natural England workstream as part of its designations pipeline so is not theoretical. While the spatial delimitation of the emerging designation is not fixed, it was presumably discussed in general terms at the recorded DAS meetings between applicant and NE and can be readily deduced from the components that are known to be included. The applicant’s approach to assessment arguably suppresses the appropriate value judgment and spatial constraint attendant with the proposed SSSI. It appears to leave out of due account the constraint such a designation would place upon (in particular) the “agricultural land between the current SSSI designations” that is mentioned as having been cited by NE as a potential or likely part of the eventual designated area. It would have been simpler, and more robust, to take a precautionary approach here, but the applicant has sought to do the opposite, and indeed (as evidenced in Table 7.1 of the ES) has taken an approach of seeking to place solar PV modules in sensitive locations being considered for inclusion in the SSSI, and only then removing them at the request of NE, rather than taking an informed and stepwise approach consistent with the mitigation hierarchy of seeking to avoid impacts in the first place. Even then, some PV arrays are still proposed in fields that NE advise may be important to Bechstein’s bats – i.e. B7, B8 and B10. This suggests a failure of the precautionary principle<sup>1</sup> in the design process. See also comments around mitigation hierarchy later in this table.</p>

<sup>1</sup> Noting that the precautionary principle is otherwise claimed to have been followed – see e.g. para 7.4.1 of the ES.

ES Ref:	Quoted text or subject matter	Comment
Table 7.1 (pp 11-15)	<p>Stakeholder engagement (Natural England)</p> <p>(p.11) “Management of grassland across the Site will likely be undertaken by a combination of sheep and cattle grazing. If grazing for any reason is not possible then a late summer hay cutting regime will be implemented.”</p> <p>(p.14) “The Proposed Development has aimed to keep as much grassland as possible to avoid a reduction of cattle grazing across the Site, and most of the Solar PV development will be located in arable fields.”</p>	<p>The extent of any project-driven changes to grazing regime across the project area will have potentially highly significant implications for the impact assessment in terms of effects on bats (including Bechstein’s bat) and other fauna such as invertebrates and birds. The importance of cattle grazing to the local Bechstein’s population is documented in NE (2024) [Ref 7-26<sup>2</sup>]. There is a very high margin of uncertainty embedded in the application documentation (e.g. the Outline LEMP) as to whether fields with solar arrays will be grazed, whether other fields (including mitigation fields) within the Order Limits will be grazed and/or whether they will retain existing grazing and stocking patterns, and whether the continuation of livestock grazing will be a viable or sustainable land-use in the wake of such changes. Often there is a stated default to mowing, which does not generate the same type or consistency of invertebrate-rich biomass as livestock (especially cattle) grazing. This introduces a significant and uncertain variable into the impact assessments on (inter alia) bats, invertebrates and birds, (both construction and operational phase) and it is contended that greater certainty should be sought via the Examination process on such matters, and specifically that grazing commitments sufficient to at least replicate the current position should be settled and robustly secured prior to a decision on whether to award any consent, if they (and the applicant’s reliance upon them) is to be given any weight in that decision.</p>
Table 7.1 (pp 12)	<p>Stakeholder engagement (Natural England)</p> <p>“There are no proposals to increase drainage of the Site, with no significant effects to hydrology regime for either surface or groundwater predicted.”</p>	<p>Recent (Jan-Feb 2026) interventions (ditch clearance and woody vegetation removal) to improve drainage in the area of the proposed BESS (Parcel 2, fields D8 &amp; D9) suggest that this statement may not be correct (see Bioscan letter of 13<sup>th</sup> February 2026 appended). Any and all drainage improvement works for the purposes of delivering this scheme and/or addressing flood risk concerns regarding the BESS should have formed part of the application proposals and should have been assessed as part of the EIA.</p>
Table 7.1 (pp 19)	<p>Stakeholder engagement (Natural England)</p>	<p>In some instances, a 10 or 15m setback from hedgerows (noting that it is not made clear here whether the centre-line of the hedge or its outer edge is being considered as the starting point for such measurement) will do little more than</p>

<sup>2</sup> i.e. Natural England. 2024. *The Bernwood Population of Bechstein’s bat: A Non-Technical Summary of the Evidence*. NECR558. Natural England.

ES Ref:	Quoted text or subject matter	Comment
	<p>“Setbacks from hedgerows in Fields B3, B6, B7, B8 and B10 that link Shrubs Wood, Sheephouse Wood and Decoypond Wood have also been increased from 10m to 15m with a mosaic of species-rich grassland and arable field margins proposed along with strengthening of the existing hedgerows to provide a wide corridor link (30m between fence lines and 40m between the edges of the closest solar panels) between these woodlands, helping to reduce potential displacement effects from Solar PV to foraging and commuting bats and ensure the connectivity between these woodlands is maintained, as detailed within Section 7.7 of this chapter.”</p>	<p>capture <i>existing</i> field margin habitats, and therefore will secure little or no benefit over the present situation. The reference to species-rich grassland is also not substantiated – on heavy clay soils with a legacy of arable cultivation, “species-rich” grassland will be challenging to create, and the ES does not provide examples of successful creation of species-rich field edges or species-rich grasslands on former arable land in this location. In many instances, the 30-40m corridor cited will be in effect little different from what is currently there. That may help to avoid or mitigate impacts, but the extent to which it would <i>enhance</i> conditions may be overstated.</p>
Table 7.1 (p.24)	<p>Stakeholder engagement (BBOWT)</p> <p>“The Outline LEMP [EN010158/APP/7.6] details how a minimum 10% net gain in biodiversity will be achieved using the latest version of the Statutory Biodiversity Metric. The biodiversity design will be realistic and cognisant of local biodiversity priorities already identified for the areas and in consultation with Natural England, Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust and Buckinghamshire Council. These measures will focus on compensating adverse effects on habitats and species already known, and to improve the Site for species that could feasibly colonise the Site in.”</p>	<p>The reasons for concern around the veracity of claims made about BNG are discussed at para reference 7.6.17 below.</p>

ES Ref:	Quoted text or subject matter	Comment
Table 7.1 (p.33)	Stakeholder engagement (BBOWT)  “Monitoring of bat activity would be undertaken during the operation (including maintenance) phase to confirm the effectiveness of the embedded mitigation and further the evidence base regards effect of Solar PV modules on bats.”	Whilst monitoring is of course necessary and welcomed, it is unclear (and not stated) what the applicant would intend to do should the monitoring show impacts on bats arising from the project. A commitment to review PV locations and retrospectively amend the design in the event of monitoring showing significant effects (that are not covered in the present EIA) should be secured as part of any awarded DCO. Particularly so, given the high margins of uncertainty arising from flawed premises and assessment approaches, as discussed further in later rows.
Table 7.1 (p.33)	Stakeholder engagement (Bucks Council)	The reasons for concern around the veracity of claims made about BNG are discussed at para reference 7.6.17 below.  Uncertainty around future grazing management discussed above.
Table 7.1 (p.34)	Stakeholder engagement (Bucks Council)  “Mitigation for ground nesting birds includes the creation/enhancement of c.95 ha of grassland within dedicated biodiversity mitigation areas. Details on grassland areas lost and created are provided within ES Volume 4, Appendix 7.17: Biodiversity Net Gain Assessment [EN010158/APP/6.4].”	The proposed Order Limits encompass 675.05 ha of land around 50% of which will, for the lifetime of the development, become unsuitable or (at best) less suitable for a suite of ground nesting and open-country birds that currently use the site, including (in particular) breeding and wintering skylark, meadow pipit, lapwing, golden plover, scarce raptors and owls, but also other declining farmland birds such as yellow wagtail, corn bunting, yellowhammer and grey partridge. By any measure, c.95ha of grassland (only a proportion of which will be new) will not be sufficient to accommodate the levels of displacement of species such as skylark, meadow pipit, lapwing and golden plover. The project will therefore give rise to a net displacement impact for such species and a net diminution of local populations. For some of these species the numbers concerned are likely to be significant to at least District and in some cases arguably County level (i.e. by comparison with District/County population). By aggregating birds into ‘lumped’ receptors, the EIA masks and fails to document this impact, or to recognise that the mitigation and offsetting provision for ground nesting birds (and open-country wintering birds) is insufficient to avoid a significant, net detrimental effect. The EIA conclusions on ground nesting and wintering birds are therefore fundamentally flawed and they furthermore seek to rely upon compensatory provision such as seed mixes along field margins to arrive at a conclusion of no more than temporary adverse and non-significant

ES Ref:	Quoted text or subject matter	Comment
		effects. Such proposed mitigation has the potential to be ameliorative for only a proportion of the wintering bird assemblage and therefore <b>that is an untenable EIA conclusion on the facts presented within the applicant’s own wintering birds surveys.</b>
Table 7.2 (p.43)	Rare and notable arable (non-crop) Plants  “Notable arable plant surveys have been undertaken at targeted areas within the Order Limits”	It is unclear why a targeted approach was taken, unless it was for reasons of retrospective effort to remedy oversight. Arable plants should have been documented as a matter of course during Phase 1/UKHab surveys and this would have ensured full coverage of the proposed Order Limits. In our letter of 3 <sup>rd</sup> December 2024, responding to the PEIR, Bioscan noted that “ <i>We note that the prospective applicant has given specific consideration to arable plants (paras 3.3.23-3.2.26 of Appendix 7.7) which is welcomed, and which represents progress on a matter that is so commonly neglected in solar farm EIAs affecting arable habitats. However, the comments and conclusions presented in these paragraphs are rendered somewhat unconvincing by the depauperate species list presented at para 3.2.26. For such a large site area, on these soils, Bioscan would expect a list of arable plants several times the length of this one to be obtained from anything close to a thorough consideration of this matter</i> ”. Whilst this criticism would appear to have catalysed a further effort to consider this matter on the part of the applicant, we remain less than convinced that the baseline for this species group has been robustly documented and agree with the Planning Inspectorate that there has been insufficient evidence provided to scope out effects on this receptor.
Table 7.3 (p.46)	Receptors scoped into the assessment  (proposed Bernwood SSSI)	See above comments re proposed Bernwood SSSI. There is a clear order of weighting in this table which confirms that the applicant’s non-precautionary decision to disregard areas readily deduced as likely within the proposed Bernwood SSSI has resulted in a reduced weighting being attached to areas and habitats being actively considered by Natural England for designation as of national importance. This is a fundamental flaw in the approach to the EIA. The applicant’s contention that its identification of Bechstein’s bats as a receptor recognised of national importance in some way adequately covers off the point is demonstrably inadequate, as for this to act as a proxy for attaching SSSI-

ES Ref:	Quoted text or subject matter	Comment
		equivalent weight to areas of land that might imminently fall within the boundaries of that designation requires that the survey data for Bechstein's be comprehensive, which quite clearly it is not, even after drawing upon the NE study. It also fails to take into account that Bechstein's bat is not the only special interest basis for the notification that is being actively purposed by NE.
Table 7.3 (p.55)	Receptors scoped into the assessment  (Barn owl, red kite, hobby)	A consistent pattern of approach by the applicant is again revealed in the comments in this row of Table 7.3, which is to attempt to scope out or otherwise play down potential significant effects on relevant receptors on the basis of scant or inadequate information, unless and until challenged or directed otherwise by evidence from third parties or (in this case) by comments from the Planning Inspectorate. This is a non-precautionary approach to assessment and one that does not accord with best practice. The Examining Inspectors are asked to note what it says of the approach to EIA in this case.
Table 7.4 (p.62)	Receptors scoped <b>out</b> of the assessment  Fish and aquatic invertebrates	The decision to scope these receptors out of the assessment is non-precautionary and arguably highly flawed. The BESS is proposed to be sited in close proximity to a tributary of the Claydon Brook, and flood risk amelioration works are proposed in association. The proximity of the BESS to the Brook also introduces a risk of chemical pollution from equipment failure and/or fire water. We do not agree that these receptors should have been scoped out and note that this is flatly inconsistent with the scoping-in of species such as otter and water vole.
Table 7.4 (p.62-63)	Receptors scoped <b>out</b> of the assessment  Brown hare	The decision to scope brown hare out of the assessment is also unjustified. No evidence is presented to support the unstated assumption that this species will not be displaced or otherwise impacted by the significant landscape-scale changes associated with solar PV installation – rather it appears that the applicant thinks that it is enough that fencing will be designed to allow continued access by this species though perimeter fencing. In the absence of robust evidence that brown hare populations are not negatively impacted or displaced by solar installations, in the same way that ground nesting birds such as skylark and wintering plovers are, the approach taken here is flawed and non-precautionary.

ES Ref:	Quoted text or subject matter	Comment
7.5.9	Approach to proposed Bernwood SSSI	The applicant’s approach to assessment arguably suppresses the appropriate value judgment and spatial constraint attendant with the proposed SSSI. It appears to leave out of due account the constraint such a designation would place upon (in particular) the “agricultural land between the current SSSI designations” that is mentioned as having been cited by NE as a potential or likely part of the eventual designated area. It would have been simpler, and more robust, to take a precautionary approach here, respecting and avoiding core sustenance zones and/or home ranges for rare bat species <sup>3</sup> or at the very least weighting land and/or features within those zones at the correct (up to national) level of importance. Instead, the applicant has sought to do the opposite, and indeed has taken an approach of seeking to place solar PV modules in sensitive locations being considered for inclusion in the SSSI, and only then removing them at the request of NE, rather than taking a stepwise approach consistent with the mitigation hierarchy of seeking to avoid impacts in the first place. This suggests a failure to adopt the precautionary principle in the design process.
7.5.37-7.5.39 & 7.5.47-7.5.48	<p data-bbox="383 815 1010 951">Arable Field Margins and Notable arable flora</p> <p data-bbox="383 887 1010 951">“No species-rich or priority arable field margins were identified within the Order Limits.”</p> <p data-bbox="383 999 1010 1198">“No notable arable flora were identified within the Order Limits during targeted surveys and have not been identified during subsequent surveys. Therefore, notable arable flora are not considered further in this Assessment.”</p>	<p data-bbox="1037 815 2029 1273">It seems highly unlikely that no arable field margins capable of qualifying as priority arable field margin habitat are present within the Order Limits and more likely that this is a failure of rigour and/or expertise. In fact Bioscan noted tussocky field margins qualifying as the priority habitat in 2024, noting that at that stage the applicant had failed to even map or classify many of these field margins and that “<i>Some of these field margins have a not insignificant complement of neutral grassland indicator species such as knapweed and meadow barley – others are tussocky with a significant Deschampsia component. Such features will be highly important for supporting farmland species and facilitating their dispersal and movement through the landscape, and some at least will be representations of Priority habitat. Certain scarce species recorded in the prospective applicant’s surveys (e.g. grasshopper warbler) will almost certainly only have been present by virtue of these habitats.</i></p>

<sup>3</sup> e.g. as indicated at Figure 5 of Natural England. 2024. The Bernwood Population of Bechstein’s bat: A Non-Technical Summary of the Evidence. NECR558. Natural England.

ES Ref:	Quoted text or subject matter	Comment
		<p><i>They are also likely to be a critical resource for bat foraging and for farmland birds, amphibians and potentially also reptiles.</i>" (Bioscan letter of 3<sup>rd</sup> December 2024). We are concerned that the applicant's failure to identify priority representations of arable field margin habitat, taken together with its inability to identify any arable plant species or assemblages of note, may say more about matters of rigour, effort and expertise than it says about the actual baseline conditions on the site. This undermines confidence in the impact assessment, and in the accuracy and conclusions of the BNG assessment.</p>
7.5.67-7.5.71	<p>Ground nesting birds</p> <p>"Grey partridge were recorded as probable breeding within the survey area during the 2022 breeding bird surveys and recorded again during the 2024 field surveys. Skylark and yellow wagtail were recorded as confirmed breeding with the survey area with skylark having 34 breeding territories recorded during the 2022 breeding bird surveys. Both species were also recorded breeding during the 2024 field surveys"</p>	<p>Given the preponderance of arable fields and open grassland, 34 breeding territories for skylark over the &gt;600ha of the proposed Order Limits is almost certainly not just an under-estimate, but a very significant under-estimate. In early 2026, a walkover of Parcel 2 noted skylark territories being set up at an average density of 1-2 per field, which (extrapolated across the proposed Order Limits) would give a population for the Order Limits at least twice that of the applicant's figure. This is a crucial omission as skylark is one of the species most impacted by the conversion of open arable and grassland into solar installations and an accurate assessment of the baseline population is essential for considering the adequacy of proposed compensation to accommodate the inevitable displacement. This matter is returned to later in the table when discussing mitigation and compensation.</p>
7.5.70-7.5.85	<p>Evaluation of breeding and wintering bird assemblage</p>	<p>Whilst we have significant concerns around the accuracy of the baseline as regards skylark in particular but also other declining farmland species, we would agree with the overall valuation of the breeding and wintering bird assemblage as being of County importance. This spotlights that the compensation for displacement must be adequate if impacts that are significant at County level are to be avoided.</p>
7.5.97	<p>Bechstein's bat</p> <p>"Parcels 1, 1a and 2 are wholly within the Core Sustainance Zone for Bechstein's bat. The home range – generated from radio-tracking 'fixes' (i.e., from bats which have been caught, tagged and</p>	<p>This factual position, illustrated on Figure 5 of Natural England report NECR558, taken together with the accepted National importance of the bat assemblage, the absence of certainty provided by incomplete survey work and understanding of how Bechstein's and other rare species use the local landscape, collectively provides a compulsion to adopt an approach of strict adherence to the mitigation hierarchy and precautionary principle. Logically</p>

ES Ref:	Quoted text or subject matter	Comment
	<p>located as they travel through the landscape) is a smaller area which nonetheless encompasses much of Parcel 1, all of Parcel 1a and the southern most parts of Parcel 2, as well as the Interconnecting Cable Corridors (though much of that would be underground).”.</p>	<p>that would determine that panels would not be sited within the known or assumed Home Range as a starting position, and that such areas of the Order Limits should instead be a priority area for compensatory habitat enhancements. That is not how the development design has evolved however, and because the scheme continues to involve encroachments into these zones, and the impact of these encroachments is at best uncertain, there is a serious question of whether due regard has been had to the principle of avoidance first, and the mitigation hierarchy generally.</p>
7.5.100	<p>Bats (collectively) and their use of the local landscape</p> <p>“In line with overall activity patterns, both barbastelle bat and the ‘all other species’ group demonstrated consistently greater levels of activity on hedgerow detectors across both survey periods, with hedgerow activity levels ranging from double to 120 times more than on field detectors across all detector pairings and survey periods”.</p> <p>“As a group, Myotis activity did not demonstrate significant variation between hedgerows and fields during the October 2024 survey period. However, in May 2025, hedgerow Myotis species activity was found to be 26 to 191 times that recorded by detectors within the fields.”</p>	<p>A differential between activity recorded on hedgerow and in-field detectors is unsurprising, but it cannot be taken from it (as the applicant appears to seek to do) that field units within the Order Limits are generally of low value for bats such that significant changes to them via the installation of PV arrays will have no significant effect. There are a number of reasons why such a premise is flawed. A key technical one is that ‘in-field’ detectors are inherently less likely to record activity due to their sampling only a small segment of in-field habitat, meaning they are likely to only pick up a proportion of bats using that field. By contrast, hedgerow-placed detectors are very likely to pick up most bat activity (commuting or foraging) that takes place in a linear fashion along that hedgerow. Direct comparison of the two datasets in the manner set out and relied upon by the applicant is therefore inherently unreliable as such comparison will be subject to a significant margin of sampling and detection bias. The suggestion that hedgerow activity levels may be up to 120 times more than in-field activity levels is not therefore a robust or safe one and is very likely to misrepresent the true position, particularly where concerning livestock-grazed grassland. This limitation is not apparently recognised by the applicant.</p>
7.5.102	<p>“The findings of these surveys indicate that within the Order Limits, the hedgerows are likely to provide a more valuable and well used resource than open areas within fields with no evidence found to indicate a significant reliance on open field areas for foraging or commuting at the paired static detector locations.”</p>	<p>See above. Due to inherent methodological bias in the approach the applicant has taken to making this comparison, this contention and assumption is manifestly unsafe, yet it is heavily relied upon to dismiss concerns about the placement of solar arrays in habitats well within the Home Range of Bechstein’s bats, including permanent grassland habitats likely to be of elevated value for foraging.</p>

ES Ref:	Quoted text or subject matter	Comment
7.5.105	<p>“Bechstein’s bat (foraging, commuting and roosting) are considered to be of <b>National</b> importance. Barbastelle bats (foraging, commuting and roosting) are considered to be of <b>District</b> importance. Other bat species (foraging, commuting and roosting) are considered to be of <b>Local</b> importance.”</p>	<p>We would agree with the valuation of the local Bechstein’s population as a receptor of National importance. We question how the applicant has arrived at a valuation of only District importance for barbastelle, a species known to be rare or absent across most of Buckinghamshire. We similarly question the valuation of Leisler’s, also scarce locally, as of no more than Local importance. Collectively we believe the site’s bat assemblage is consequently undervalued.</p>
7.6.5	<p>Survey limitations</p> <p>“There are no known survey-specific constraints that represent a significant limitation or data gap and the baseline that has been established is considered suitably robust for the assessment.”</p>	<p>See rows above for an example of significant methodological bias which has gone disregarded, unrecognised and/or undeclared by the applicant.</p> <p>Paired detector surveys (ES Volume 4 Appendix 7.16: Paired Static Bat Detector Survey Report (2025)) were of very limited coverage and quite apart from the methodological bias discussed above cannot be a reliable basis for a generic conclusion that in-field use is absent/insignificant. The deployment of static detectors generally (ES Volume 4 Appendix 7.10: Bat Activity Report (2024)) was sparse meaning that questions around the degree of linkage between Sheephouse/Decoypond and Shrubs Wood (for example) have not been thoroughly answered. This accentuates the concern about a non-precautionary approach being taken to placing solar PV arrays within the Bechstein's and barbastelle CSZs and Home Ranges.</p> <p>It is instructive to consider that if each parcel were considered a potential development site in its own right, the combined static/paired detector survey coverage would be sparse to inadequate. A lower standard of rigour cannot be justified purely on the basis that the site is very large and therefore achieving adequate survey coverage challenging.</p> <p>With both bats and bird surveys, the cable corridors received sparse or no coverage. Whilst impacts in these areas may be temporary, they still have the potential to be significant and should have been rigorously assessed as part of the EIA process.</p>

ES Ref:	Quoted text or subject matter	Comment
7.6.8	<p>Scientific rigour in assessment</p> <p>“This preliminary assessment has comprised the following steps:</p> <ul style="list-style-type: none"> <li>• Identify relevant ecological features (e.g. designated sites, habitats, species or ecosystems) that may be impacted;</li> <li>• Determine the ecological importance of receptors using geographic frames of reference; and</li> <li>• Provide a scientifically rigorous and transparent assessment of the likely ecological impacts and resultant effects. Impacts and effects may be positive or negative.”</li> </ul>	<p>Again, see the rows above for examples of where the geographic frame of reference used in valuing bat receptors is at best questionable and at worst simply wrong on the available facts. And for examples of where scientific rigour has been clearly departed from in failing to recognise a substantial source of bias when comparing datasets and reaching highly influential (but likely wrong to a greater or lesser degree) conclusions from such comparison.</p>
7.6.16 and Table 7.6	<p>Mitigation hierarchy</p> <p>“Throughout the assessment, regard has been paid to the biodiversity mitigation hierarchy comprising avoid, minimise, mitigate and offset. Table 7.6 provides an overview with regard to how the Proposed Development has applied the mitigation hierarchy”</p>	<p>See rows above for clear examples of failure to adhere to the mitigation hierarchy. A stringent ‘mitigation hierarchy’ based approach would have seen the precautionary principle applied in cases of doubt or insufficient evidence. This would have seen a development design which avoided the placement of PV arrays within the known or assumed Core Sustenance Zone and/or home range of the roosts of rare Bechstein’s and barbastelle bats, especially where on permanent grassland, unless such placement could be supported by clear evidence. Such evidence is lacking in the EIA, and what is instead relied upon by the applicant is an unsafe and biased comparison of datasets to reach a generic conclusion that fields within the Order Limits are of low value to bats compared to hedgerows. This comparison process is manifestly flawed and unsafe and no such conclusion can be arrived at, even disregarding that the data does not (and cannot) provide robust evidential support as regards Bechstein’s bat due to that species being unable to be reliably separated from</p>

ES Ref:	Quoted text or subject matter	Comment
		<p>other <i>Myotis</i> species via echolocation alone. Consequently, the premise upon which the applicant seeks to justify development incursion into areas proximal and likely to be important to the maintenance of maternity roosts for some of Britain's rarest bat species, is a flawed and unsafe one. Why would barbastelle and Bechstein's bats regularly travel along hedgerows into the site if not to forage, and given that suitable foraging habitats for both species include livestock grazed fields, the premise sought to be relied upon is demonstrably flawed.</p> <p>Similar comments can be made about the approach to open-country bird species which the collective evidence (most of which is not remarked upon by the applicant) consistently points to being displaced by solar arrays, including (in particular) skylark, lapwing and golden plover. The assessment is deficient in its consideration of these species generally, and that has led to (or been a product of) a failure to apply the mitigation hierarchy to these receptors too.</p>
7.6.16 and Table 7.6	<p>Mitigation hierarchy (contd)</p> <p>"The creation of species-rich grassland under and between Solar PV modules will increase floristic diversity and consequently increase invertebrate diversity and abundance. An increase in invertebrate diversity and abundance will provide a foraging source for birds and bats, providing additional enhancement across the Site."</p>	<p>The claimed and proposed creation of species-rich grassland is made without anything close to adequate supporting evidence that it is achievable and/or any more than theoretical on this site –where soil conditions and fertility will work against that objective. The much more likely outcome is that a more mundane form of agricultural grassland and shade-tolerant communities will develop in and around solar arrays. This is for the following reasons:</p> <ul style="list-style-type: none"> <li>i) On arable land, latent high soil fertility will militate against the successful creation of species-rich grassland. The applicant does not point to anywhere on the site where high quality species-rich grassland (to the level claimed in the BNG assessment) has been created on such soils, so there can be little confidence that it is achievable.</li> <li>ii) Substantial areas will be subject to significant shading, accentuated by the preponderance of north and east facing slopes across the proposed Order Limits. Empirical experience of solar farm installations, especially on former cultivated land, shows that these will develop ruderal and thistle</li> </ul>

ES Ref:	Quoted text or subject matter	Comment
		<p>dominated communities rather than species-rich grassland, especially where on former arable soils.</p> <p>iii) There is no certainty provided by the applicant that the current levels of grazing across the proposed Order Limits will even be replicated/maintained, let alone expanded and enhanced. This has major implications for the claim that invertebrate biomass will substantially increase to the benefit of “birds and bats”. It is notable that these species are considered here as a lumped aggregate, disregarding that for some bird species the greater factor is displacement due to change in habitat structure, and that different bat species have different affinities to livestock grazing.</p>
7.6.17	<p>Biodiversity Net Gain</p> <p>“Although not yet mandatory, the Applicant is still committing to achieving a minimum gain of 40% for area habitat, 17% for hedgerows and 10% for watercourses will be delivered which will be secured in the Outline LEMP [EN010158/APP/7.6].”</p>	<p>For a suite of reasons, including classification errors (e.g. failure to recognise priority arable field margins) and unevidenced assumptions about delivery of species-rich grassland (see row above), the applicant’s BNG assessment (and its accompanying calculation) and the veracity of the claims and objectives set out in the oLEMP more generally are highly challengeable and should not be considered adequate or robust for decision making. It is disappointing (and raises questions about due transparency and public participation) that the applicant’s completed BNG Metric has not been made available in Excel form with the application documentation. This prevents due scrutiny and the ExA is requested to direct the applicant to make their completed Metric available in interactive form.</p>
7.8.37-7.8.38	<p>“Embedded mitigation” – ground nesting birds</p> <p>“The Solar PV development covers an area of c.279.93ha, much of which is used by ground nesting birds, although numbers will vary each year depending on the current cropping regime.</p> <p>The embedded mitigation detailed in Table 7.7 includes for the creation of approximately c.95ha</p>	<p>On these figures alone, this would represent a 76% decrease in available habitat for species such as breeding skylark, and wintering lapwing and golden plover. Skylark territories will be displaced from fields with solar arrays, and such fields will not continue to be used by lapwing or golden plover. In simple terms, this means that the compensatory provision (incorrectly called ‘mitigation’ by the applicant when in fact it is compensation) is around 76% short of achieving parity or no-net loss as regards these species. This amounts to a significant negative impact on receptors valued up to County level.</p>

ES Ref:	Quoted text or subject matter	Comment
	<p>of species-rich grassland for ground nesting birds, as detailed in and secured by the Outline CEMP [EN010158/APP/7.2] and Outline LEMP [EN010158/APP/7.6]. Although this habitat creation could take time to establish, it is anticipated that ground nesting birds would utilise it relatively quickly.”</p>	
<p>7.8.45- 7.8.47</p>	<p>“Embedded mitigation” – wintering birds</p> <p>“The embedded mitigation detailed in Table 7.7 and secured by the Outline LEMP [EN010158/APP/7.6] includes for the creation and/or improvement of species-rich grassland, scrub, hedgerows, arable field margins and woodland, resulting in an increase of suitable foraging habitat for wintering birds across the Site.</p> <p>In the absence of additional mitigation, there may be temporary indirect adverse impacts to the habitats that support these species, such as surface water pollution run-off and dust pollution.”</p>	<p>The applicant’s approach to assessment for this receptor is to “lose” the wintering species that will inevitably be displaced by the development (including wintering lapwing, golden plover, and typical associates such as scarce overwintering raptors and owls) into a generic wintering birds aggregate. Thus the applicant seeks to rely on “<i>the creation and/or improvement of species-rich grassland, scrub, hedgerows, arable field margins and woodland, resulting in an increase of suitable foraging habitat for wintering birds across the Site</i>” without engaging with the fact that none of these things will compensate for the loss of open, uncluttered field units favoured by such species. This results in a suite of important (at up to County level) receptors being left wholly out of account in the applicant’s EIA, and in their thinking as regards the adequacy of compensation.</p>
<p>7.8.48- 7.8.63</p>	<p>“Embedded mitigation” – Bechstein’s bat</p> <p>“The Proposed Development has been designed to ensure the retention, protection and improvement of almost all hedgerows and field margins within the Order Limits, thus ensuring that the most valuable aspects of these areas are</p>	<p>For the reasons discussed above, in relation to methodological flaws, false precision and unreliable comparisons, there is insufficient evidence to be confident in the applicant’s approach to assessment which is predicated on an assumption that fields within the home range and/or CSZ for local Bechstein’s bat roosts are of little value for this species and that the focus is solely hedgerows. This assumption is particularly weak when concerning the potential impacts from installation of solar arrays on grassland fields close to the key woodland blocks within the proposed Order Limits.</p>

ES Ref:	Quoted text or subject matter	Comment
	protected and remain available to foraging and commuting Bechstein’s bat.”	
7.8.64- 7.8.70	“Embedded mitigation” – Barbastelle bat	Similar comments apply to this similarly rare bat species (arguably undervalued in the assessment as discussed above). There is significant focus on hedgerow use, but little or no consideration given in the assessment as to why barbastelle would be commuting into the Order Limits area along hedgerow systems, if not to forage not only within woodlands and along hedgerows, but also along field margins and (in particular) livestock grazed pasture.
7.8.100	Operational impacts – ground nesting birds  “The placement of the Solar PV modules is likely to displace ground nesting birds, in particular species such as skylark which like to nest in large open fields. This will be a long-term effect for the duration of the operation (including maintenance) phase. The embedded mitigation detailed within Table 7.7 and secured by the Outline LEMP [EN010158/APP/7.6] to compensate for habitat loss will be the creation of c.95ha of neutral grassland managed for the benefit of ground nesting and wintering birds, which will be in key open and connected areas. The proposed area and retained areas for habitat creation and improvement have been estimated as sufficient to support the number of territories that would be lost, by increasing the carrying capacity and quality of nesting and foraging habitat for ground nesting birds.”	Whilst the inevitability of displacement of skylark is (finally) acknowledged in this paragraph of the Environmental Statement (after being hitherto studiously avoided – see rows above), the contention that c.95ha of grassland creation managed for the benefit of ground nesting birds will compensate for the loss of c.279.93ha of suitable skylark habitat (a c.76% loss) is absurd. The assessment singularly fails to consider whether and to what extent the compensation land is already used by skylark (i.e. whether there is even any carrying capacity for extra birds on this land) and adopts a very highly questionable assumption about the quantum of skylark territories that will be displaced. Empirical evidence from Bioscan walkovers in 2024 and early 2026 suggests an average of 1-2 territories per field which, extrapolated across the proposed Order Limits gives a quantum of territories being displaced that is far greater than could ever be accommodated in the allocated c.95ha, even if that area did not already have skylarks (which it does). There is certainly a District level and potentially a County level net negative impact here that is disregarded in the EIA.
	Operational impacts – wintering birds  Not considered	It is unclear why the applicant has disregarded the scope for operational phase effects on wintering birds, when it has considered the matter of displacement for ground-nesting birds (see row above).

ES Ref:	Quoted text or subject matter	Comment
7.8.109-7.8.129	<p>Operational phase effects – Bechstein’s bat</p> <p>“The nature of literature findings for Myotis varies, with Tinsley et al. (2023) [Ref. 7-29] finding statistically significant evidence of a negative impact from Solar PV modules on Myotis where Solar PV modules were present along boundary features, suggesting that, in this configuration, Solar PV modules may be adversely impacting typical flight paths, potentially resulting in increased habitat fragmentation. Meanwhile Szabadi et al. (2023) [Ref. 7-30] found that, although Myotis activity was higher, to a statistically significant degree, in grassland habitats compared to solar farm sites, there was not a statistically significant difference between Myotis activity in arable fields, such as those present throughout much of the Order Limits, and solar farm sites. While both papers have limitations due to the early stages of the research into the impacts of solar developments on bats, currently available findings indicate a variable effect of solar farms on Myotis depending both on the baseline habitat and potentially the composition of Myotis recorded by each study. This underlines the importance of not making broad generalisations from small-scale studies.”</p> <p>“Beyond the loss of habitats, the installation of Solar PV modules will result in the modification of habitats within the Order Limits which may adversely impact Bechstein’s bat foraging and/or</p>	<p>The uncertain evidential picture as regards impacts on Bechstein’s bats from solar developments is touched upon here, underlining that a precautionary approach in the face of such uncertainty (and one in line with the mitigation hierarchy) would be to avoid the placement of solar PV arrays within known CSZs and/or home ranges for the species entirely.</p>

ES Ref:	Quoted text or subject matter	Comment
	<p>commuting behaviour through reductions in habitat quality or habitat fragmentation. However, the area covered by Solar PV modules as a result of the Proposed Development represents only 2.75% of the Bechstein’s bat core sustenance zone and 5.33% of the Bechstein’s bat home range associated with Bernwood [Ref. 7-26]. It is therefore considered that the majority of the Bechstein’s bat core sustenance zone and home range will be retained without impact from the Proposed Development, ensuring that substantial alternative foraging areas remain available for Bechstein’s bat.”</p>	
<p>7.8.115 and 7.8.116</p>	<p>Operational phase effects – Bechstein’s bat</p> <p>“Barring one occasion in which greater activity was recorded within a field (Location 2: Abbot’s Coppice October 2024), Myotis activity across the paired static detector surveys demonstrated a clear pattern of greater activity on hedgerows compared to that within the centre of fields. Although in October 2024 this pattern was non-significant due to low levels of activity, increased activity in May 2025 provided a clearer picture, with 98.7% of all May 2025 Myotis activity recorded on hedgerow detectors. Within the Myotis species group, this pattern was also recorded for specific Bechstein’s bat identifications, albeit this was limited in number. Notably Bechstein’ bat identifications were only recorded in May 2025, with all such</p>	<p>This is another illustration of the flawed analytical approach to unreliable datasets being relied upon to rest an assessment conclusion on manifestly unreliable premises, as discussed at greater length above.</p>

ES Ref:	Quoted text or subject matter	Comment
	<p>identifications originating from detectors along hedgerows.”</p> <p>“The results of the paired static detector surveys therefore indicate that <i>Myotis</i>, including Bechstein’s bat, may make greater use of hedgerows (which are being largely retained and protected by buffer zones throughout the operation of the Proposed Development) than the open, currently arable, fields where Solar PV modules will be located”.</p>	
7.8.117	<p>Operational phase effects – Bechstein’s bat</p> <p>“This reflects typical Bechstein’s bat foraging activity [Ref. 7-41] and findings relating to their dietary make-up, with up to 74% comprising invertebrates associated with woodland habitats [Ref. 7-26]. On this basis, it is considered that the open field areas within the Order Limits, which will house Solar PV modules, are of lesser importance to foraging Bechstein’s bat.”</p>	<p>Ref-7-26 provides a stronger evidential foundation for Bechstein’s preference for woodland habitats than the approach taken by the applicant to analysis of its paired static survey data, but it still provides for an evidence-based assumption that over 25% of Bechstein’s foraging may be in non-woodland habitats. Taken together with the applicant’s dataset of <i>Myotis</i> registrations, which include occasions where significant <i>Myotis</i> activity <u>was</u> recorded in open field locations, this undermines any confidence that should be had in the premise that the open fields within the Order Limits are unimportant to this species.</p>
7.8.120	<p>Polarised light effects on invertebrate prey</p> <p>“Invertebrates have also been found to be impacted by how Solar PV modules polarise light, resulting in the attraction of a range of invertebrate species; in particular, species with an aquatic life stage (e.g. [Ref. 7-52 and Ref. 7-53]. This attraction of invertebrates to Solar PV modules could result in changes to bat prey distribution within the Site, while unsuccessful attempts to egg-lay onto Solar PV modules [Ref.</p>	<p>This paragraph is notable for the prevalence of qualifiers such as ‘could’, ‘might’ and ‘many’ which (fairly) reflect the uncertainty around this issue. However, such uncertainties provide a driver for greater precaution, and avoidance, for example of Bechstein’s bat maternity roost CSZs. This is another example of where the mitigation hierarchy has not, despite claims otherwise, been rigorously observed and/or followed.</p> <p>The statement that “many modern Solar PV modules; however, have anti-reflective coatings intended to minimise light polarisation and thereby reduce the impact on invertebrate species” is presented as ameliorative, however it is</p>

ES Ref:	Quoted text or subject matter	Comment
	<p>7-54] could have adverse impacts on invertebrate abundance and therefore bat prey availability. Many modern Solar PV modules; however, have anti-reflective coatings intended to minimise light polarisation and thereby reduce the impact on invertebrate species, although the impact of such coatings requires further research to fully understand its effectiveness and variations between invertebrate taxa [Ref. 7-55].”</p>	<p>noted that no commitment to adopt such designs is made, again suggesting an absence of precaution.</p>
<p>7.8.130- 7.8.144</p>	<p>Operational phase effects – barbastelle bat</p>	<p>Similar concerns about the lack of precaution taken by the applicant in situations of scientific uncertainty apply with this species as with Bechstein’s as discussed above. The consequence of impacts arising as a result of any such failure of assessment would, it is contended, resonate at above the District level of valuation that the applicant has (inexplicably) attributed to this locally very rare species.</p>
<p>7.10.1- 7.10.3</p>	<p>Residual impacts – designated sites</p> <p>“Statutory designated sites are considered to be of National importance.</p> <p>Non-statutory designated sites and ancient woodland are considered to be of County importance.</p> <p>Taking into account the embedded design and additional mitigation measures to minimise the impact of construction activities detailed in and secured by the Outline CEMP [EN010158/APP/7.2], Outline SMP [EN010158/APP/7.7] and Outline LEMP [EN010158/APP/7.6], there is not anticipated to be an adverse effect on the integrity of statutory</p>	<p>The disregard of the proposed Bernwood SSSI here is a failure of assessment. As a designation actively being pursued via NE’s designations pipeline, the statutory authority must have satisfied itself that it meets the criteria for designation, even if not yet at the point of fixing boundaries and notifying. In the absence of any evidence that NE is in the process of abandoning its intention to designate, this site should have fallen to be assessed as a nationally important site alongside the designated SSSIs. As it stands it is not clear whether the applicant has valued it as equivalent to a non-statutory site (County importance) or has left it largely out of account. The EIA should not be regarded as complete in the absence of an assessment of impact on the proposed SSSI, and Natural England should be asked to clarify to the ExA the position as regards what land is being considered for designation and whether the SNCO remains content that it merits designation. The applicant’s approach of suggesting that the proposed SSSI is ‘covered’ by the impact assessment of Bechstein’s and other species is flawed for various reasons – not least that landtake from a SSSI would be a matter of significant weight and raise significant policy compliance challenges in its own right, even if there was</p>

ES Ref:	Quoted text or subject matter	Comment
	designated sites, non-statutory designated sites or ancient woodland during construction, which is considered to be not significant”	compelling evidence that such landtake did not impact on Bechstein’s or any other interest feature, or that such impacts could be mitigated/compensated.
7.10.4-7.10.25	Residual impacts – habitats	For the reasons discussed earlier in this table, the EIA should be considered incomplete and/or deficient in respect of the assessment of impacts on arable plants and priority arable field margin habitats. In the case of the latter, and in combination with unevidenced claims around unlikely-to-be-effective habitat creation, little or no weight or reliability can be placed on the applicant’s BNG assessment, noting also that this cannot be properly examined and scrutinised without access to the completed Metric which remains absent from the Examination Library.
7.10.34-7.10.37	Residual impacts – ground nesting birds	For the reasons discussed in more detail earlier in this table, the assessment of impacts on ground nesting birds is seriously flawed and consequently arrives at a serious under-estimate of impact. The displacement of skylark, in particular, from fields where solar arrays are placed will far outstrip the capacity of the proposed c.95ha of compensation land, even if such land didn’t already have a breeding skylark population. The impacts on this species will be permanent (for the life of the development), adverse and significant at County level.
7.10.38-7.10.47	Residual impacts – non-ground nesting and wintering birds (including specially protected species)	Again, the assessment of this group of species is flawed, in part by aggregating species likely to be subject to significant displacement effects (e.g. yellow wagtail) in with species that may be subject to neutral or even positive effects (e.g. dunnock). This has the effect of masking significant impacts on a suite of open country/farmland species that happen to be of high conservation significance. In respect of wintering birds, the errors are even more egregious – there is no assessment of displacement effects on wintering plovers (i.e. lapwing and golden plover) despite them having been documented in the applicant’s baseline surveys as using the site in County-significant numbers. The impacts on these species will be permanent (for the life of the development), adverse and significant at County level.

ES Ref:	Quoted text or subject matter	Comment
7.10.48- 7.10.58	Residual impacts – Bechstein’s bat	The impact assessment for this species suffers from being predicated on flawed comparisons of static detector datasets, leading to (at best) poorly supported conclusions about the relative value of ‘in-field’ habitats for this species compared to hedgerows and woodland. There is sufficient evidence to suggest that livestock grazed grassland may have some importance locally for this species, notwithstanding its preference for ‘clutter’ and its strong woodland associations. Given that solar arrays are proposed to be sited close to known maternity roosts and within their critical ‘Core Sustenance Zones’, it is not a safe assumption to dismiss the possibility for this to give rise to impacts solely on the basis that ‘hedgerows are more important’. A precautionary approach is merited, given the rarity of this species, the vulnerability of the local populations and the lack of certainty around the impacts of this scheme and of solar installations on bats more generally, as acknowledged by the applicant. The scheme should be amended, at the very least, to obviate those risks by removing any proposed solar installations from the CSZ.
7.10.59- 7.10.65	Residual impacts – barbastelle bat	Very similar comments apply to this similarly rare species as for Bechstein’s, noting that its habitat and foraging preferences, and factors such as CSZ size and home range will differ. The species is very rare in Bucks and therefore the applicant’s valuation of no more than District importance is at best challengeable.
<b>Chapter 17 – Cumulative Effects (Ecology)</b>		
17.7.10- 17.7.12	Cumulative effects on ground nesting and wintering birds  e.g.: “The continued loss of agricultural land may cause inter-project cumulative effects with regards to loss of ground nesting bird habitat. However, given that the decline in farmland birds is largely driven by intensification of agricultural practice, which has resulted in a reduction of nesting habitat and loss of foraging habitat, and considering the extent of arable land	This is not a thorough consideration of the various factors that could act in combination and cumulatively to magnify impacts from each of the relevant projects alone. In particular, there is no attempt to quantify the displacement of farmland birds from each of these projects and assess this in the context of county populations. There is an unevicenced assumption that each project either provides adequate compensation for displaced skylark and other species, or that adequate room for these displaced birds will be found somewhere else locally. These are assumptions and conjecture, not fact or evidence-based assessments. Given that the Rosefield scheme will result in significant net displacement of certain ground nesting and wintering birds,

ES Ref:	Quoted text or subject matter	Comment
	still available within the County, any such inter-project cumulative effects are considered to be unlikely”.	there can be no confidence that the other projects will not also have this effect, in which case there is a significant cumulative impact.
17.7.13-17.7.15	“Based on professional judgement, and an understanding of the limited value of arable land to bats, the habitat improvement measures are considered sufficient to support the bat assemblages within the Order Limits, including Bechstein’s bat. The paired static detector surveys (see ES Volume 4, Appendix 7.16: Paired Static Bat Detector Survey Report [EN010158/APP/6.4]) indicate the importance of the hedgerow resource to the bat assemblage, including both foraging and commuting Bechstein’s bat and barbastelle bat. Surveys undertaken by Natural England [Ref. 17-18] indicate the importance of the woodland resource for Bechstein’s bat. This provides confidence that the approach to the Proposed Development design and mitigation is appropriate. However, there is limited evidence to confirm the efficacy of mitigation measures and whether they are wholly sufficient to counter the potential for a displacement effect.”	The premises relied upon in this assessment statement are demonstrably weak, unreliable and/or contingent on methodological flaws and bias, as discussed in earlier rows of this table. No confidence can therefore be had that unmitigated impacts from the proposed development would not cumulatively with those arising from other local projects within the CSZ of Bechstein’s and/or barbastelle bats.
17.7.16	Therefore, using the Precautionary Principle, there is anticipated to be a potential long term, adverse inter-project cumulative residual effect on Bechstein’s bat due to the modification of habitat (installation of Solar PV modules) for the duration of the operation (including maintenance) phase, with other developments located within the Bechstein’s bat Core Sustenance Zone. This	It is notable that while the precautionary principle is cited here in the context of assessment, it has not been applied to the process of design. Had it been so, the scope for significant effects on Bechstein’s bat could have been designed out. We note that the continued dispute and discussions between the applicant and Natural England over removing solar PV arrays from certain fields reflect the lack of certainty around impacts in these areas. Correct application of the precautionary principle (and the mitigation hierarchy) would determine that design changes ought to have been made to avoid this position.

ES Ref:	Quoted text or subject matter	Comment
	<p>would be potentially significant at the District level. It is considered that this potentially significant effect would not amount to, nor equate to, ‘significant harm’ as the predicted impacts will be of a scale that will not impact the overall favourable conservation status of the species as the Proposed Development design and mitigation has focused on protecting and enhancing Bechsteins’s bat foraging and commuting habitat.”</p>	
<p>17.7.17- 17.7.20</p>	<p>“For those developments involving the loss of arable land, woodland or hedgerow habitat that are not considering mitigation, then these could have a significant adverse inter-project cumulative effect on both ground nesting birds and foraging and commuting bats. This is considered most likely for those developments that lie within the core sustenance zone and home range for Bechstein’s bats.</p> <p>However, for ground nesting birds, this would be considered as an ‘independent’ effect - as the Proposed Development is not considered likely to have any significant adverse residual effects on ground nesting birds during the construction and operation (including maintenance) phases ensuring there would be no inter-project cumulative effects.”</p>	<p>For the reasons discussed earlier in this table - i.e. a flawed approach to assessment – no conclusion can be reached that there will be no significant residual effects on ground nesting birds (such as skylark) during the construction and operation (including maintenance) and indeed no such conclusion can be reached as regards certain wintering bird species. The impacts on these receptors will therefore act cumulatively on any unmitigated impacts arising from the other local projects resulting in losses of arable land.</p>

Helen Hamilton  
Co-ordinator/advocate  
Claydons Solar Action Group

**BY E-MAIL ONLY**

Bioscan (UK) Ltd  
The Old Parlour  
Little Baldon Farm  
Little Baldon  
Oxford  
OX44 9PU

Tel: +44 (0) 1865 341321  
bioscan@bioscanuk.com  
www.bioscanuk.com

8<sup>th</sup> March 2026  
Our Ref: DW/E2241/HH-080326

Dear Helen

**Rosefield Solar – Deadline 1 - Written Representations  
Review of ecology components of EIA**

Further to CSAG's previous instruction in 2024, and their more recent instruction to conduct a review of the ecological elements of the material now submitted for formal examination by the applicant, I have duly reviewed the EIA documentation published on PINS' Nationally Significant Infrastructure Project web pages and set out below my professional critique of the standard of the ecology work and the conclusions reached. In doing so, I draw upon my >30 years' experience in professional ecological practice (including writing numerous EIAs, including for NSIPs) and upon site visits that I have taken since 2024 to the three land parcels, using public rights of way. I am grateful to the project proponents for also releasing to me, upon request, unredacted versions of the various confidential reports on breeding birds and other sensitive species.

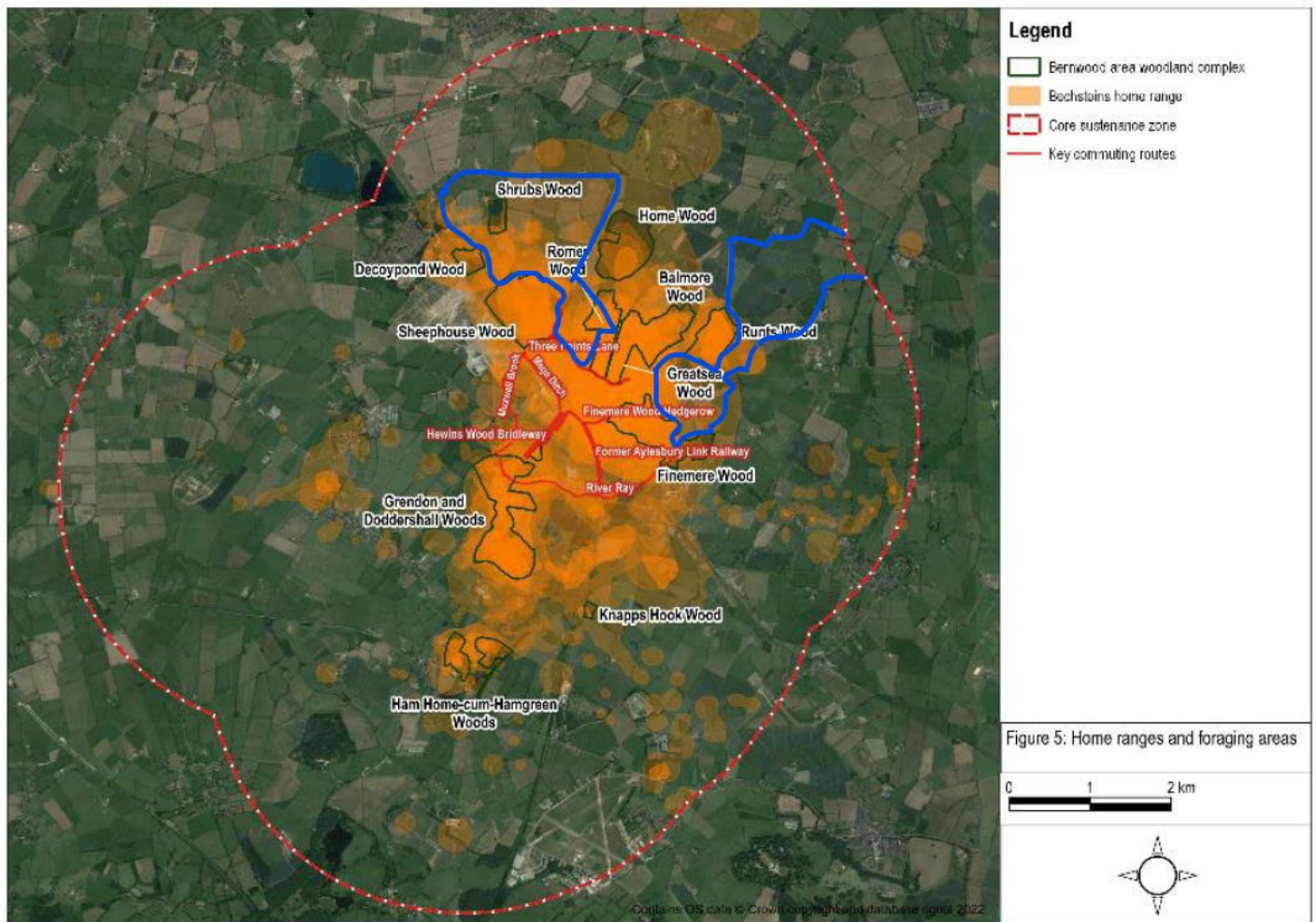
I set out the headline issues that I have identified below and attach a more comprehensive 'Scott Schedule' of particularised concerns, flaws and points of contention, cross referenced to specific sections within ES Chapters 7 and 17, the various appendices to Chapter 7 and relevant accompanying documents such as the outline LEMP.

While elements of the baseline surveys that support the EIA have been executed adequately such that their results provide a reasonable or even robust platform for the assessment of significant environmental effects, and while I note that the applicant has moved to remedy some of the issues I identified in my letter of 3<sup>rd</sup> December 2024 (attached for ease of reference), there are still a number of ongoing and serious deficiencies in the assessment which for ease of rapid understanding I group into headings below.

**Failure to justify departure from the mitigation hierarchy and precautionary principle**

This issue centres around bats in particular, given the known presence of maternity roosts of rare and very rare species in woodlands at the southern fringe of the proposed Order Limits, and the pursuit of an expanded 'Bernwood SSSI' designation by Natural England to protect these and other significant interests resonating at a national level of importance.

There is a significant overlap between the theoretical Core Sustenance Zone and the mapped Home Range of one of these species, Bechstein's bat, and Parcels 1 and 2 of the proposed development. This is illustrated by the extract from a Natural England radiotracking study of Bechstein's bat reproduced overleaf, upon which I have sketched in blue (approximately) the boundaries of Parcels 1 and 2.



**Figure 5: Bernwood area's Bechstein's bat home range and foraging areas**

Due adherence to the precautionary principle and the first stage of the mitigation hierarchy (avoidance of impacts) would compel the applicant to avoid the known range of this species unless there is very clear evidence that there is no scope for significant effect upon it. For the reasons set out in the attached Scott Schedule, the applicant has failed to provide conclusive or convincing evidence that harms to Bechstein's bat (and to the proposed Bernwood SSSI) would not arise from the placement of solar arrays in these areas. Particular concern has to be expressed around the applicant's continued intention to place PV arrays in Fields B2-B11, B18-B20 and D28 and D29. We note that these concerns are broadly shared by Natural England.

**Deficient approach to assessment of impact on ground nesting and wintering birds**

By aggregating all species of ground nesting birds and wintering birds into single receptors for assessment purposes, the EIA masks the certainty of significant displacement impacts on skylark and on wintering plovers (golden plover and lapwing). We also contend based on our own empirical experience from site walkovers, and from knowledge of skylark breeding densities generally, that the applicant has significantly under-estimated the breeding population of skylark on the site, and by extension the magnitude of displacement. The applicant proposes limited scale compensatory habitat enhancement (around 25% of what will be lost to solar arrays) as a panacea for such impacts, but the quantum of land involved is demonstrably inadequate to achieve parity (i.e. no net loss), let alone enhancement, is in parts unsuitable for species such as lapwing and golden plover and the ES does not consider its carrying capacity having regard to any extant use by breeding skylark. Because of all these deficiencies, impacts up to County level are left out of account and there can be no confidence in the applicant's claims about the efficacy

and adequacy of its proposed compensation for these species. Further detail on this issue is given in the attached Scott Schedule.

### **Ongoing issues with accuracy of habitat classifications and valuation and implications for BNG**

In our letter of December 2024, we highlighted a number of omissions and oversights in the applicant's habitat mapping for Parcel 1. We welcome that these have now been partially remedied, but we continue to have concerns that a) priority habitat types have failed to be recognised and documented (arable field margins) and b) such omissions have infected the BNG assessment, resulting in suppressed scores for baseline habitat value being used and c) that insufficient rigour has been applied to surveying for and assessing impacts upon scarcer arable flora. We also harbour concerns that unrealistic BNG scores have been attributed to habitats that will be created in the future, in particular the claimed 'species-rich' grasslands which appear to be relied upon to paint a positive picture of overall landscape-scale habitat change without due regard to matters such as shading beneath PVs and the latent high soil fertility from ex-arable land. We are concerned that the positive Metric calculation output figures cited by the applicant are inflated and unreliable, though we have not been able to investigate the consequence of that in more detail as the applicant's Metric calculation does not appear to have been made available for due scrutiny. Again, further detail on these issues is given in the attached Scott Schedule.

### **Other survey deficiencies/omissions**

We are concerned that other species or taxonomic groups capable of being a material consideration in the assessment process, including aquatic invertebrates and the 'Priority' species brown hare, have been 'scoped out' of the assessment on the grounds, seemingly, that significant impacts upon them are not anticipated. In the case of brown hare, the ES fails to provide any evidence in support of that contention in the context that this is an open country species with similar habitat preferences to skylark and wintering plovers, and similarly likely to be displaced or impacted by landscape-scale change in the form of solar arrays. In the case of aquatic invertebrates, the decision to scope these out of any further consideration a) sits at odds with the decision to scope-in other riparian species (otter and water vole) and b) disregards the clear scope for pollution impacts arising from the close proximity of the proposed BESS to a tributary of the Claydon Brook – including the construction of outfalls into the Brook from attenuation features. Again, further discussion of these issues is contained in the attached Scott Schedule.

I hope the above and the attached provide an appreciation of the main issues identified from my review. I suggest you include this letter and attachment with your formal Written Representation submission to the examination.

Best regards



**Dominic Woodfield** CEcol CEnv MCIEEM  
Director

Enc:

- 1) Scott Schedule of particularised concerns and identified errors/deficiencies
- 2) Copy of Bioscan letter of 3rd December 2024
- 3) Copy of Bioscan letter dated 13th February 2026

PINS Ref: EN010158

# Rosefield Solar Development

Application by Rosefield Energyfarm Limited for an Order granting Development Consent for a proposed solar development on land in central Buckinghamshire

# Landscape & Visual Report

## Deadline 1 Written Representations

March 2026

by

Carly Tinkler BA CMLI FRSA MIALE

for

Claydons Solar Action Group

# Contents

Page no.

1. Introduction	1
2. Summary of Key Matters	4
3. Landscape Character Effects: Introduction	5
4. Landscape Sensitivity	8
5. Landscape Character Effects	19
6. Amenity Effects	31
7. Visual Effects	42
8. Glint and Glare Effects	58
9. Conclusions	61

# 1. Introduction

- 1.1 I am a Chartered Member of the Landscape Institute (CMLI), a Fellow of the Royal Society of Arts (FRSA), a Member of the International Association for Landscape Ecology (MIALE), a Design Council Expert, and a member of the Landscape Institute's Knowledge and Practice Committee, which *inter alia* is responsible for ensuring best practice in landscape assessment.
- 1.2 I specialise in landscape, environmental and colour assessment and planning in the UK and abroad, and have done so for over 40 years. Since 2020, I have been involved with numerous renewable energy and electricity generation / transmission / storage proposals (wind / solar / pylons / battery energy storage systems (BESS)), some of which are Nationally Significant Infrastructure Projects (NSIPs), working with local planning authorities (LPAs), parish councils, and community groups at all stages of the planning / Development Consent Order (DCO) process. I am therefore very familiar with the issues associated with the proposed Scheme.
- 1.3 I am also familiar with the landscapes of the area, having advised parish councils on landscape and visual matters at the appeal hearing for the proposed East Claydon BESS complex on land at Rookery Farm, Granborough (APP/J0405/W/25/3360815), in May 2025.
- 1.4 In July 2025, I was approached by the Claydons Solar Action Group (CSAG), which represents people in communities that would be affected by the proposed development. They asked whether I would be prepared to advise on landscape and visual matters relating to the Application, and act for the Group during the Examination. I considered the issues likely to be involved in this Scheme, concluded that I would be prepared and able to undertake the work, and was subsequently appointed.
- 1.5 I reviewed the Application documents and other material, and carried out an in-depth desktop assessment of landscape, visual and associated effects. I visited the sites and surrounding areas on several occasions, in different seasons, undertaking on-the-ground survey and assessment, and consultation with residents, stakeholders, and experts appointed by CSAG to deal with other environmental topics / planning matters. I analysed the findings, drew conclusions, and compared the results with the Applicant's. The assessment and review were carried out in accordance with relevant published guidance including *Guidelines for Landscape and Visual Impact Assessment* Edition 3 ('GLVIA3')<sup>1</sup>. This report sets out my conclusions.
- 1.6 However, this commission is different from a 'standard' Landscape and Visual Impact Assessment (LVIA), in that it is a 'hybrid' between an assessment of effects, a review of the Application documents, and a response to the Application in the form of a Written Representation (WR) on behalf of CSAG; it also factors in matters raised during the Examination process to date, including in the Applicant's Response to Relevant Representations (RRs) [PDA-006], and during Open Floor Hearing (OFH) 1, which I attended.
- 1.7 I was also greatly assisted by people from the communities, many of whom have in-depth knowledge and a lifetime's experience of the area's natural and cultural history, features, resources and qualities. The information they gathered and their responses were used to inform my assessment. The material submitted to the Examination by residents provides important details and illustrations of the site and contextual landscapes, the features, resources and qualities which are

---

<sup>1</sup> Guidance followed includes the Landscape Institute (LI)'s *Guidelines for Landscape and Visual Impact Assessment* 3<sup>rd</sup> edition ('GLVIA3'); LI Technical Guidance Note (TGN) 1/20 *Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*; LI TGN 02/21 *Assessing landscape value outside national designations*; and LI TGN 2/19 *Residential Visual Amenity Assessment*. Also, various LI Technical Information Notes (TINs); *Landscape Character Assessment Guidance for England and Scotland* The Countryside Agency and Scottish Natural Heritage (2002); *Topic Paper 5: Understanding Historic Landscape Character* (ditto); *Topic Paper 6: Techniques and criteria for judging sensitivity and capacity* (ditto); and Natural England's publications *An Approach to Landscape Character Assessment* (October 2014) and *An approach to landscape sensitivity assessment – to inform spatial planning and land management* (June 2019).

most highly valued, and the reasons for their concerns, so should be referred to for more information as required.

- 1.8 It is normal but sometimes frustrating that in the planning process, environmental and other topics are kept in silos (heritage, ecology, landscape, transport etc); however, many overlap, and the connections between them may be critical (this is where many problems occur but are not recognised). Because the relevant information is so scattered, it can be difficult to establish how one relates to another, and carry out the necessary analysis / assessment.
- 1.9 For this reason, at an early stage in the process, CSAG decided to produce a plan combining baseline and project information, using a 1:25,000 scale OS map as the base. This has proved very helpful to residents and experts whilst preparing their responses, so in case useful for others' reference, CSAG will submit the plan with their WR (ref. CSAG-10 *Combined Baseline and Project Information Plan*).
- 1.10 The photograph overleaf is provided for orientation, because it shows the full extent of the proposed Scheme from south west to north east. The location and nature of the view are explained in detail in the following sections, but in summary, it is a view from the Outer Aylesbury Ring long-distance trail where it crosses Hogshaw Hill, c. 2km east / south east of the site at its nearest point (Finemere Hill).
- 1.11 Note that a larger version of the photo will be submitted separately (ref. CSAG-11 *Photograph of Site from Hogshaw Hill*), and a high-resolution version can be provided if required.

*View of proposed Rosefield solar development site looking west to north from Hogshaw Hill (image © Bruce Hyde)*



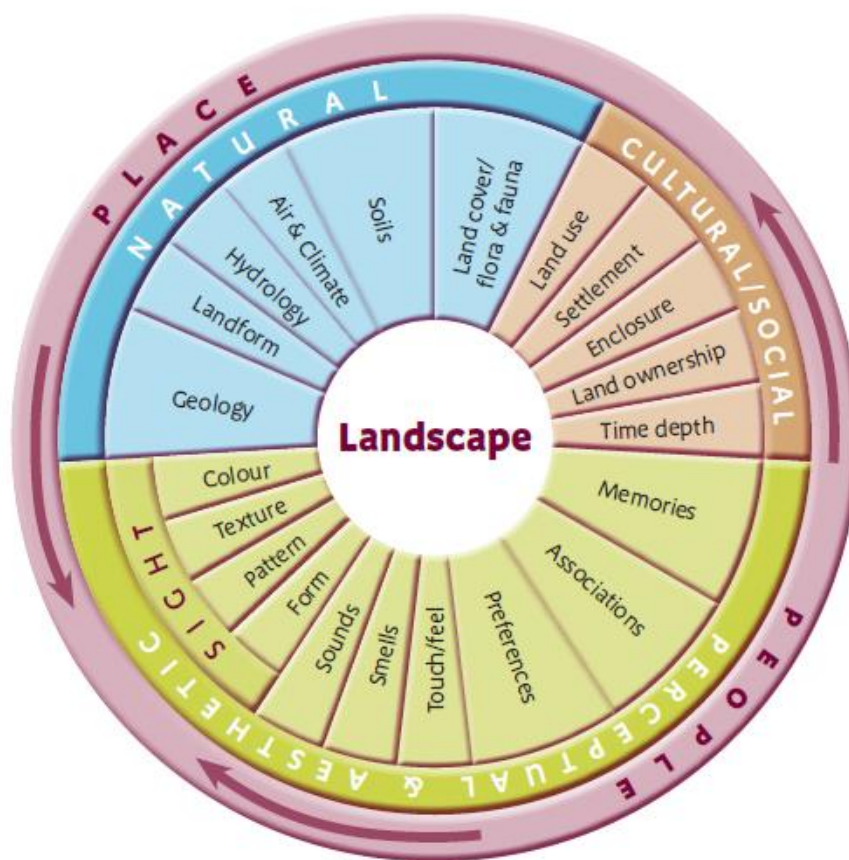
## 2. Summary of Key Matters

- 2.1 Broadly, I **agree** with many of the Applicant's LVIA's conclusions about landscape and visual effects. There are a few matters with which I do not agree, mainly relating to the LVIA method, and certain assumptions which have been made. Where relevant, these are noted, and reasons for differences of opinion are explained.
- 2.2 The key matters are summarised below, with more detailed explanation in the following sections.
- 2.3 The Applicant's LVIA concludes (in the main LVIA report [APP-053] ES Volume 2 Chapter 10 *Landscape and Visual*) that the proposed development would result in **significant adverse effects on landscape character and visual amenity**.
- 2.4 I **agree** with this conclusion; however, in many cases I do **not agree** with the LVIA's conclusions about the predicted levels of landscape and visual effects. My own assessment concluded that levels of adverse effects, including their extent and duration, have been underestimated, and beneficial effects have been overstated.
- 2.5 This is an important matter because the LVIA judges levels of certain adverse effects to be **below** the significance threshold, whereas the higher level would render them 'significant'.
- 2.6 This report explains i) the steps I undertook to understand and establish why, where and how the underestimations occurred and the implications, with analysis and comparison; and ii) why I consider that levels of beneficial effects have been overstated. The report also considers how high levels of adverse landscape and visual effects could potentially be reduced.
- 2.7 In summary, there are several reasons why the LVIA underestimates levels of landscape and visual effects, some of which relate to a lack of baseline-gathering and analysis, others to what I consider to be incorrect interpretations of / departure from the relevant guidance. In some cases, the LVIA's justifications for the judgements are not always clear or easy to follow, and there appear to be inconsistencies. In addition, the LVIA does not adequately consider or assess effects on recreational / social amenity, nor does it appear to have considered glint and glare effects.
- 2.8 I have a number of queries about the above and other matters. Hopefully, these can be resolved during the Examination, but where clarification from the Applicant would be helpful, it is highlighted in the text (**emboldened blue**); also, for ease of reference, these and other queries raised by CSAG are listed in doc. ref. CSAG-01). In the light of the responses, further assessment may be necessary.

### 3. Landscape Character Effects: Introduction

- 3.1 Firstly, it is important to understand the definition of ‘landscape’ as used in the context of LVIA and other forms of landscape / visual assessment.
- 3.2 The different aspects of ‘landscape’ – all of which should be considered in LVIA baseline studies and assessments of effects – are illustrated in Figure 1: *What is Landscape?* on page 9 of Natural England’s 2014 publication *An Approach to Character Assessment*, provided below for ease of reference. Many of the factors of relevance to the Scheme are not included in the Applicant’s LVIA, or are not factored into judgements about levels of sensitivity and effects.

Figure 1: What is landscape?



- 3.3 In LVIAs, effects on the character of the landscape are assessed separately from effects on views. That is because effects on character occur even if there are no places from which the change would be visible so no one would see it.
- 3.4 For ease of reference, in a nutshell, the steps in judging overall levels of landscape effects are as follows:  
 Level of landscape **value** + level of **landscape susceptibility to change** of the type proposed = level of landscape **sensitivity**. Level of landscape **sensitivity** + level of the development’s **magnitude of effect** = level of **overall effect** on landscape character (professional judgement must also be applied).
- 3.5 Environmental Impact Assessments (EIAs) and LVIAs consider whether a predicted effect would be ‘significant’. Note the error in the Applicant’s LVIA at para. 10.6.21, where it is incorrectly assumed that combining the sensitivity of the receptor with the magnitude of effect results in the ‘significance

- of effect'. In fact, the combination of sensitivity and magnitude results in the **overall level of effect**; once this is established, judgements about whether or not the effect is 'significant' are based on a pre-set significance threshold<sup>2</sup> (see Section 5 below).
- 3.6 Even if fully screened from view, development **directly** affects the character of the land on which it is situated, and **indirectly** affects the character of the landscapes beyond, mainly in terms of how they are perceived and experienced.
  - 3.7 Here, direct effects would occur on land within the Order limits where development / infrastructure would be located / other activities would take place (and potentially, along construction routes); indirect effects would occur elsewhere within the Order limits, and beyond.
  - 3.8 It is important to note that **direct effects cannot be mitigated**, but many indirect effects can potentially be mitigated. Some indirect adverse effects on landscape character are visual (in terms of perception), and can be mitigated by visual screening / integration; however, many perceptual, aesthetic and experiential effects are **non-visual**, for example sound, smell, awareness, security / safety, memories, associations and so on (see *Figure 1: What is landscape?*), and **cannot** be mitigated by screening / integration. In my opinion, the Applicant's LVIA does not adequately consider these effects. It is useful to consider how development would affect blind / partially-sighted people.
  - 3.9 The issue of intervisibility vs interinfluence / association also applies to assessments of effects on the settings of heritage assets – see Historic England's publication *The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3* (Second Edition), page 2, 5<sup>th</sup> para. of *Part 1: Settings and Views*, which confirms that harm to settings arises from non-visual as well as visual effects.
  - 3.10 The LVIA process involves considering effects on landscape character at different scales, from national to site level.
  - 3.11 Nationally, landscapes are divided into National Character Areas (NCAs). Natural England produces profiles for each NCA, these being '*guidance documents which can help communities to inform their decision-making about the places that they live in and care for [and] also help to inform choices about how land is managed and can change*'.
  - 3.12 In Buckinghamshire, as in many parts of the country, the landscapes are divided into Landscape Character Types (LCTs).
  - 3.13 The larger 'mother' LCTs are subdivided into smaller 'daughter' Landscape Character Areas (LCAs), which reflect the overall characteristics of the mother type but display features and possess qualities which set them apart from sister LCAs in the same mother LCT.
  - 3.14 NCAs, LCTs and LCAs are based on natural, cultural and other variations in landscapes that make one area distinct from another. The names of NCAs and LCAs are area-specific, summarising the overarching character. Here, the influence of 'clay' predominates. The whole of the Scheme lies within NCA 108 Upper Thames Clay Vales. The LCAs denote the localised contrasts in character between the extensive low-lying claylands (eg LCA 5.7 Hogshaw Claylands and LCA 7.3 Claydon Bowl) and smaller areas of locally-distinctive hills and ridges (eg LCA 9.1 Finemere Hill). The variations in topography are also important factors in levels of visibility across the study area.

---

<sup>2</sup> This is a fairly common error amongst practitioners. In 2013 and 14, the Landscape Institute produced statements of clarification (SoCs) on the subject (GLVIA3 SoC 1/13 10-06-13 and GLVIA3 SoC 1/14 28-01-14), and covered it in Technical Guidance Note LITGN-2024-01 *Notes and Clarifications on aspects of the 3<sup>rd</sup> Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3)* (August 2024). Under the heading *For Non-EIA Landscape and Visual Impact Appraisal*, SoC 1/14 28-01-14 reiterates the correct process set out in GLVIA3 (and clarified in SoC 1/13 10-06-13), ie '*Identify the level of effect (e.g. 'a minor level of effect' or 'effects would be minor') and set out whether the effect is significant or not*'.

- 3.15 The names of the LCTs denote the overarching character, but are not area-specific and can occur anywhere in the country. The Scheme straddles three LCTs: LCT 5 Shallow Valleys; LCT 7 Wooded Rolling Lowlands; and 9 Low Hills and Ridges, resulting in both direct and indirect effects on these LCTs, along with indirect effects on LCT 8 Vale.
- 3.16 Several LCAs would be directly and indirectly affected by the Scheme, as shown on LVIA Figure 10.4 in ES Volume 3 Chapter 10: *Landscape and Visual Figures [AS-031]*, CSAG's *Combined Baseline and Project Information Plan* (CSAG-10), and described variously in the LVIA / associated reports, and in the following sections.

## 4. Landscape Sensitivity

### 4.1 Introduction

- 4.1.1 One of my study's aims was to understand the reasons for the variations in levels of landscape sensitivity which the LVIA records across the Scheme and throughout study area, as this is a crucial factor in judgements about overall levels of effects.
- 4.1.2 Here it is important to note that the LVIA uses a three-point scale to record levels of landscape value, susceptibility to change, and sensitivity – see LVIA Table 10.6 *Landscape sensitivity criteria*. A four-point scale is used for levels of magnitude and overall effect (LVIA Table 10.8 *Significance of effect criteria*).
- 4.1.3 The LVIA expresses levels of landscape susceptibility to change and sensitivity as High, Medium, and Low, while levels of landscape value are expressed as National, Regional, and Community, although the latter are equivalent to High, Medium and Low, as shown in LVIA Table 10.8.
- 4.1.4 For ease of comparison, in this section, I have used High, Medium and Low throughout. However, in my opinion, the use of a three-point scale is problematic. It is too blunt a tool for the granular analysis and assessment required for very complex projects such as this, being better suited to high-level landscape-scale strategic studies. The LVIA permits split categories eg Medium - Low, but no criteria are provided. A five-point scale ranging from Very High to Very Low, with split categories, is much better.
- 4.1.5 The main reason why the three-point scale causes problems is that if the High category is reserved for designated landscapes / features / qualities, there is no distinction between the hierarchy of international, national and local designation. If High only includes 'National' designation, then 'Regional / Local' designation must fall in the Medium category; however, 'Medium' applies to the majority of the landscapes in the UK, so the weight of designation value – which is often synonymous with high levels of susceptibility to types of change such as that proposed here – is not factored in.
- 4.1.6 Also, the Medium category does not account for important localised variations in character and associated value and susceptibility factors. It does not differentiate between ordinary / everyday landscapes with an equal balance of negative and positive qualities (and potentially with potential for improvement), and those with distinctly negative qualities with less chance of recovery, but which do not quite meet the criteria for Low.
- 4.1.7 The LVIA's criteria for landscape value and susceptibility to change (upon which judgements about levels of sensitivity are based) are provided in [APP-112] ES Volume 4 Appendix 10:3: *Landscape Sensitivity Appraisal*, although unfortunately they are not set out against the point scale; instead, two categories are provided, namely *Indicators of 1) Higher*, and 2) *Lower Sensitivity to Solar PV development*.
- 4.1.8 Note that although the word 'sensitivity' is used in the heading, it should be 'value' in the value category, and 'susceptibility to change' in that category (because level of value + level of susceptibility = level of sensitivity).
- 4.1.9 Given the use of the three-point scale, it must therefore be assumed that the criteria for High are as per the *Higher* category, Low as per the *Lower* category, and Medium somewhere in between the two. This is explained further below.
- 4.1.10 With a few exceptions, I **agree** with the LVIA's conclusion that broadly, the character of the landscapes within the Scheme boundaries are typical / good representations of their host character areas / types, albeit with a few notable localised natural and cultural variations in character and quality / qualities.

- 4.1.11 A good example of such variations is in host LCA 7.3 Claydon Bowl, the daughter of LCT 7 Wooded Rolling Lowlands. The LVIA judges LCA 7.3's level of sensitivity to be **Medium** (see below). Overall, LCA 7.3's landscapes are as described in the published LCA profile, ie *'Moderate level of woodland cover... Mixed farming with slightly more arable... a cohesive agricultural landscape with attractive historic settlements in prominent locations... The area has a high amenity value... a lively and visually rich area with historic settlements running along the ridges and Claydon Park in the centre of the bowl... The most prominent historic landscape feature is the nationally important Claydon House and Parkland which is also registered as a conservation area... The influence of estate management goes beyond the parkland'*.
- 4.1.12 Claydon Park is a Registered Park and Garden (RPG). Claydon House is Grade I listed, as is the associated Church of All Saints, and there are two Grade II listed buildings in the complex. The Park is within (and forms the greater part of) Middle Claydon Conservation Area.
- 4.1.13 Not only is the character of the Park itself distinctly different in character from other parts of LCA 7.3, but also the designed landscapes beyond, which form the settings of the House and Park. Ornamental features / remnants of such features are clearly visible, including within areas where solar arrays and other infrastructure are proposed.
- 4.1.14 At para. 2.18, the Middle Claydon Conservation Area report states, *'The land to the south of the Botolph Claydon to Charndon road, outside the Conservation Area, includes extensive areas of woodland, some of which may have been planted prior to the 18<sup>th</sup> century landscaping of the park. Within the woodlands, sections of rides, aligned on the house still survive and a formal avenue extends south-east for approximately three quarters of a mile to the south-east of Claydon House'*.
- 4.1.15 The features are distinctly different from the characteristic contextual rural / agricultural features and landscapes into which they have been integrated. As well as long avenues of trees radiating out from the Park, clumps of trees were planted on hilltops to act as eye-catchers from the Park / House.
- 4.1.16 The photograph below shows a mature clump of what appears to be lime (*Tilia* spp.) on top of Knowl Hill, in the centre of Parcel 1. The photo is looking west towards Knowl Hill from the upper floor of 4 – 7 Calvert Cottages which is along Orchard Way which runs south / south west of Botolph Claydon.

*View from Calvert Cottages looking west towards Knowl Hill*



- 4.1.17 I also **agree** that there are distinct differences between the three host LCTs, albeit very importantly, some are more visible than others – see photos below, and Section 5. LVIA para. 10.5.32 states that: *'Site survey work has identified that there are notable **differences** in the landscape character*

*across the three identified parcels of land that form the Site and these **reflect the boundaries of the LCAs relatively accurately**.*

- 4.1.18 However, I do **not agree** with the LVIA's ascribed levels of sensitivity: in my opinion, they have been underestimated, as explained below.
- 4.1.19 Note that Buckinghamshire Council (BC) **agrees** that the Applicant's LVIA's sensitivity levels are probably lower than they should be – see BC's RR [RR-026] para. 78, which states, *'The sensitivity values for various character areas appear low and the Council consider that these require to be robustly checked'*.

## 4.2 LCT 5 Shallow Valleys and Associated LCAs

- 4.2.1 It is not clear why the LVIA ascribes **Low** levels of landscape sensitivity to certain parts of the Scheme and study area. Specifically, mother LCT 5 Shallow Valleys (direct effects), and daughter LCAs 5.4 Twyford Vale and LCA 5.6 Claydon Valley (indirect effects).
- 4.2.2 This is an important issue because in my opinion, it is one of the main reasons why the Applicant's LVIA underestimates levels of overall adverse landscape effects.
- 4.2.3 On the LVIA's three-point scale, Low means that these landscapes are **amongst the lowest value and sensitivity landscapes in Britain**. I do **not agree** with this conclusion: my own studies assessed the level of sensitivity of LCT 5 and LCAs 5.4 and 5.6 to be **Medium**.
- 4.2.4 It is difficult to ascertain exactly how the LVIA arrived at the Low level of sensitivity, but in my opinion, the reasons for the underestimation certainly include lack of granular baseline analysis and comparison, and the three-point scale has not helped.
- 4.2.5 The LVIA's criteria for **Low** value include landscapes *'with little evidence of archaeological, historical or cultural interest... in a poor physical state... a weak sense of identity... offering few recreational opportunities where experience of landscape is important... has little that appeals to the senses... with a weak perceptual value... does not perform a clearly identifiable and valuable function'*.
- 4.2.6 However, in the column headed *Explanation* (ie for the judgement), the LVIA confirms that LCA 5.6 contains several 'indicators of higher sensitivity'.
- 4.2.7 The indicators include heritage assets such as a medieval moated grange, and ridge-and-furrow, which, whilst not especially notable, certainly 'contribute positively to the landscape'.

*Ridge-and-furrow at East Claydon (image © Colin Kitchen)*



- 4.2.8 But most importantly, what the LVIA does **not** factor into judgements about value is that LCA 5.6's landscapes form the settings for nationally-significant heritage assets in adjacent LCAs, some of which are very close to LCA 5.6's boundary.
- 4.2.9 For example, Grade I listed Winslow Hall lies adjacent to the boundary, on the southern edge of Winslow. It is mentioned in BC's published landscape character assessment for Aylesbury Vale<sup>3</sup> in the profile for LCA 5.6. The LVIA summarises the profile and notes the feature, but does **not** explain that a) the Hall is Grade I listed, and b) the profile states that LCA 5.6's landscapes '*form a part of the setting for Winslow Hall, it's [sic] south facing aspect commands views across this landscape*'. The Hall is intervisible with the site.
- 4.2.10 The LVIA does not identify Grade II\* Church of St Lawrence, also on the southern edge of Winslow, nor the fact that Winslow is a Conservation Area (despite this being mentioned in LCA 5.6's profile).
- 4.2.11 The Grade II\* Church of St Mary at East Claydon lies c. 180m west of LCA 5.6's boundary, which here is contiguous with the Scheme boundary; the Grade II\* Church of St John the Baptist in Granborough lies c. 1.3km to the south east.
- 4.2.12 The landscapes of LCA 5.6 make important contributions to the settings of these assets, and the assets – especially the churches which are notable features – increase the landscapes' level of value.
- 4.2.13 Other **higher** value indicators included in the LVIA for LCA 5.6 are '*a landscape generally in **fair to good** condition (not Low)... 'a **strong sense of identity** as a farmed landscape... some **recreational offering** with a number of Public Rights of Way (PRoW) through the area, which local residents use for walking...*' (emphasis added).

<sup>3</sup> Aylesbury Vale District Council & Buckinghamshire County Council Aylesbury Vale Landscape Character Assessment 2008

- 4.2.14 The LVIA does not factor in the value of the PRoWs to visitors from outside the area who use them for recreational purposes, despite noting “*The landscape has a good amenity value with several promoted rights of way running through the area.*” (AVLCA’), and stating that this is ‘**A generally pleasant rural landscape**’, albeit with ‘*no characteristics which elevate the scenic qualities of the landscape above other similar landscapes*’. I agree with this description, but do **not agree** that it describes a **Low** sensitivity landscape, just a relatively ordinary one.
- 4.2.15 The value of LCA 5.7 Hogshaw Claylands (direct and indirect effects) is categorised as **Low**, although sensitivity is reported as **Medium – Low** due to a higher level of susceptibility to change – see below.

*LCA 5.7 Hogshaw Claylands at Granborough in foreground, looking south west towards LCA 9.2 Quinton Hill*



- 4.2.16 I note that in the LVIA carried out by the applicant for the East Claydon BESS scheme mentioned above, the sensitivity of that project’s host LCA 5.7 Hogshaw Claylands was judged to be **Medium**. The LVIA categorises LCA 5.7’s sensitivity as Medium – Low (in the LVIA it is not clear why LCA 5.7 is of higher sensitivity than other LCAs in LCT 5, and **clarification of this point would be helpful**).
- 4.2.17 Of course, levels of landscape sensitivity are based on levels of value **and** susceptibility to change. Taking LCA 5.7 as an example, the LVIA concludes that the level of susceptibility to change is **Medium**, and I **agree** with this judgement. However, in terms of susceptibility, it is not clear what differentiates LCA 5.7 from the mother LCT 5 (Medium – Low), and sister LCA 5.4 Twyford Vale (Low). **Clarification of this point would also be helpful**.
- 4.2.18 The existing pylons are detractors in the landscape, but a) they cross other LCAs not categorised as Low, and b) their existence does not preclude landscape designation. Overhead cables on pylons run through National Parks and Landscapes. In fact, the structures are relatively transparent, allowing contextual land- and skiescapes to be seen through them.
- 4.2.19 There are a few very despoiled landscapes in the study area. The HS2 construction corridor in the southern part of the study area is certainly currently despoiled, but the situation should improve somewhat over time as the landscape recovers; also, due mainly to topography, the railway’s negative influence on the Scheme’s contextual landscapes is relatively limited. The Greatmoor

Energy from Waste facility, is adjacent to HS2 and is also a detractor. The tall chimney is visible in longer-distance views, but topography screens the bulk of the complex in views north of Knowl Hill and Finemere Hill.

- 4.2.20 The existing substation at East Claydon is a good example of a despoiled landscape. Its host is LCA 5.6 Claydon Valley, which the LVIA also categorises as being of Low value. However, its influence in the landscape is not extensive, especially in terms of LCA 5.6: the substation lies at the south-westernmost edge of LCA 5.6, which extends for c. 6km from west to east. Also, in many views, the substation's recessive colours and partially-open structures help visually-integrate it into its landscape context. Therefore, its presence is not a convincing reason for the whole of LCA 5.6 to be categorised as Low – indeed it exerts equal influence over adjacent LCAs 5.7 and 7.3 which are not Low, and other LCT 5 LCAs are categorised as Low but do not display such obvious detractors.
- 4.2.21 During site inspections – indeed, whilst travelling around the country – perhaps the Examining Inspectors could look for other examples of what might be categorised as Low sensitivity landscapes and decide whether, in comparison, Low is the appropriate level in the areas identified in the LVIA. As always, it is important to understand what one is looking at in terms of nature, culture, and other factors which may mean that a landscape which appears 'ordinary' or 'everyday' is anything but.
- 4.2.22 Also, bear in mind that the proposed development would result in significant adverse changes to the character of these landscapes, so their level of sensitivity would be lower than it is now. But in this case, as Low is LVIA's the lowest category, there would be no differentiation.

*View from lane south east of Botolph Claydon, within LCA 5.7 Hogshaw Claylands, looking north towards LCA 7.3 Claydon Bowl*



## 4.3 LCT 7 Wooded Rolling Lowlands and associated LCAs

- 4.3.1 LCT 7 Wooded Rolling Lowlands would be directly and indirectly affected by the Scheme.
- 4.3.2 The above comments about levels of sensitivity having been underestimated also apply to this LCT and its daughter LCAs, but there are other factors which apply to the LCAs.
- 4.3.3 The LVIA categorises LCT 7's levels of landscape value, susceptibility to change, and sensitivity, as **Medium - Low**.
- 4.3.4 For reasons which are not clear, the LVIA only considers effects on LCA 7.3 Claydon Bowl (which would be directly and indirectly affected by the Scheme); however, LCA 7.2 Calvert Clay Pits and LCA 7.4 Kingswood Wooded Farmland lie adjacent to the Scheme, and would certainly be indirectly affected. LCA 7.1 Charndon Settled Hills would also be indirectly affected, but to a lesser degree as it is further away, beyond LCA 7.2.
- 4.3.5 **It would be very helpful if assessments of effects on LCAs 7.1, 7.2 and 7.4 could be added to the LVIA**, with levels of landscape value, susceptibility and sensitivity recorded in the same way as for other LCAs. This would allow comparison to help with understanding why the LVIA categorises LCA 7.3's levels of landscape value, susceptibility to change, and sensitivity as **Medium**, when the mother LCT 7's levels are **Medium - Low**.

*LCA 7.3 Claydon Bowl south of Runts Wood (image © Bruce Hyde)*



*LCA 7.3 Claydon Bowl east of East Claydon in foreground, looking east towards Granborough LCA 5.7 Hogshaw Claylands*



*LCA 5.7 Hogshaw Claylands in foreground, looking west from Granborough towards LCA 7.3 Claydon Bowl*



4.3.6 Also, as noted above, broadly, I **agree** with the Applicant's LVIA's conclusion that the Scheme's landscapes are typical of their host LCTs, but there are some important exceptions which influence judgements about levels of sensitivity.

- 4.3.7 For example, the presence of Claydon House and Park is noted in the LVIA, but it is not clear whether the sensitivity judgements factored in that the Park and associated landscapes are of higher value and susceptibility than other parts of LCA 7.3. **Clarification of this point would be helpful.**
- 4.3.8 Another example relates to topography, which is not noted in the LVIA. The LCA profile explains that *'The landform in this area has a ridge of higher ground around most of the edge and slopes towards lower ground in the centre. There are two gaps in the surrounding high ground where streams drain out to the northwest'*.
- 4.3.9 However, whilst Knowl Hill is part of this ridge, it is domed rather than elongated – as mentioned above, presumably because of its distinctive shape, a clump of trees was planted on top to act as an eye-catcher from Claydon House / Park. Also, the lower southern slopes of Knowl Hill are undulating and complex, resulting in characteristics and qualities not found in other parts of LCA 7.3, and which are of higher value and susceptibility to change.
- 4.3.10 This point is also very relevant to decisions made about a) **site selection and alternatives**, and b) where panels and other infrastructure should be located, ie ideally, on the **least** sensitive areas. In this case, I understand that the predominant factor in the Applicant's selection of this site was a single large landowner (see Part 1 of CSAG's WR (CSAG-01)).
- 4.3.11 Finally, it is not clear why LCA 7.3's level of sensitivity (Medium in the LVIA) is the same as that of LCA 9.1 Finemere Hill and 9.2 Quainton Hill, when large parts of these LCAs are within a designated Area of Attractive Landscape (AAL) which is of higher value – see below. **Clarification of this point would be helpful.**

## 4.4 LCT 9 Low Hills and Ridges and Associated LCAs

- 4.4.1 LCT 9 Low Hills and Ridges would be directly and indirectly affected by the Scheme.
- 4.4.2 It is not clear why the LVIA's **highest** level of landscape sensitivity within the study area is only **Medium**, ie LCT 9 Low Hills and Ridges, and LCAs 9.1 Finemere Hill and 9.2 Quainton Hill. In my opinion, this judgement is flawed, but **clarification of the point would be helpful.**
- 4.4.3 Firstly, parts of LCT 9 are locally designated as an AAL, the purpose of which is to 'protect and enhance the visual and ecological quality of these specific areas within the Vale of Aylesbury'. The designation confers higher levels of landscape value than in other parts of LCT 9. However, the LVIA does not appear to differentiate between the designated and non-designated areas. Yet the special qualities which clearly set the AAL apart from and in terms of value elevate it above other landscapes in the area are identified in the LVIA at paras. 10.10.148 - 149; they include a 'remote and wild character', a 'strong sense of rural tranquillity, openness and a coherent landscape character', 'spectacular panoramic views from frequent vantage points' across the landscapes within which the Scheme would be built, and a 'public rights of way and road network which enable views of and appreciation of the landscape'. These qualities are described further and illustrated in the following sections.
- 4.4.4 Also, within the AAL there is a greater concentration and variety of valuable / susceptible landscape features / qualities / resources than other parts of the study area, especially in terms of a) heritage, b) ecology, c) amenity, d) scenic quality, and d) aesthetic and perceptual qualities.
- 4.4.5 Secondly, as noted above, with the LVIA's three-point scale, the Medium category covers the majority of the landscapes in the country, and does not account for important localised variations in character, and associated value / susceptibility factors. Thus, in the LVIA, this locally-designated landscape with associated special qualities is not judged to be of any higher sensitivity than the surrounding 'ordinary / everyday' landscapes.

- 4.4.6 I agree with the LVIA that LCT 9 has the highest level of sensitivity of the three directly-affected LCTs, but if LCT 5 is Medium sensitivity (as opposed to the LVIA's Low), and LCT 7 is Medium – High (as opposed to Medium – Low), then the non-AAL parts of LCT 9 should be High (as opposed to Medium), but that is the highest possible level, and the AAL parts of LCT 9 should be higher – yet not as high as nationally-designated landscapes.
- 4.4.7 Nor is it clear why LCA 9.3 Pitchcott-Whitchurch Ridge, much of which is also within the AAL, is of lower susceptibility and sensitivity than the mother and sister LCTs / LCAs (Medium - Low as opposed to Medium). Also, why LCA 9.1's level of susceptibility to change is higher than that of its mother and sisters (High – Medium as opposed to Medium).
- 4.4.8 Of course, the outcome of levels of landscape sensitivity being higher than stated is that levels of overall adverse effects will **automatically be higher**.

*LCA 9.1 Finemere Hill looking west from Hogshaw Hill in LCA 9.2 Quainton Hill (image © Bruce Hyde)*



*LCA 9.2 Quainton Hill at Hogshaw Hill Farm, looking south east (image © Bruce Hyde)*



*LCA 9.2 Quainton Hill, looking south from footpath west of Granborough within LCA 5.7 Hogshaw Claylands*



## 4.5 Sensitivity Summary

- 4.5.1 It should be noted that there are often differences of opinion about levels of landscape (and visual) effects, and although there should not be, a degree of subjectivity. However, if there is subjectivity, it is in judgements about the level of magnitude of effect (especially where clear criteria are not provided), not evidence-based baseline factors.
- 4.5.2 In my opinion, in the light of the above, throughout the LVIA, all the stated levels of sensitivity should be increased, and levels of overall landscape effects adjusted accordingly. Also, ideally, a five-point scale should be adopted.
- 4.5.3 In terms of the LCTs only at this stage, the suggested increases in levels of sensitivity are set out below, reported using the three-point scale with split categories, and what they would be if a five-point scale was used.

LCT 5 Shallow Valleys: LVIA currently **Low**, increase to **Medium** (also **Medium** on five-point scale).

LCT 7 Wooded Rolling Lowlands: LVIA currently **Medium - Low**, increase to **between High - Medium and Medium (High - Medium)** on five-point scale).

LCT 9 Low Hills and Ridges: LVIA currently **Medium**. Increase parts of LCT 9 which are **not** within AAL to **High - Medium (between High and High - Medium)** on 5-point scale). Increase parts of LCT 9 which are **within** AAL to **between High and High - Medium (High)** on five-point scale).

## 5. Landscape Character Effects

### 5.1 Introduction

- 5.1.1 The LVIA process entails establishing levels of landscape value and susceptibility to change, which are combined to give levels of landscape sensitivity, as set out in the previous section.
- 5.1.2 The next stages in the process involve assessing the likely levels of magnitude of the effect of the proposed development on landscape character, and then combining levels of sensitivity and magnitude to give levels of overall effects. This section compares the results of this part of the Applicant's effects assessments with my own.
- 5.1.3 At this stage, the Examining Inspectors will already have a good understanding of the character of the study area's landscapes, from having a) reviewed the Application documents and other material, and b) undertaken the Unaccompanied Site Inspections (USIs).
- 5.1.4 The USIs were carried out in winter (November and February), which is the best time of year to appreciate elemental character in terms of form, structure, pattern etc. However, I believe the USI routes were in relatively close proximity to the site, and did not include visits to longer-distance viewpoints at elevations from which the full extent of the developed site would be visible.
- 5.1.5 One of the best places from which to gain panoramic long-distance views of the site and its wider character context is from the Outer Aylesbury Ring long-distance trail on the northern slopes of Quainton Hill, the summit of which lies c. 2.5km east of the southern part of the site at Finemere Hill. **Perhaps this viewpoint could be included in the future Accompanied Site Visit (ASI).**
- 5.1.6 Quainton Hill is within the AAL, so this is also a good point at which to observe / experience some of the AAL's special qualities, especially the 'spectacular panoramic views from frequent vantage points' across the landscapes upon which the Scheme would be built, as well as the villages, heritage assets, woodlands, watercourses, and existing infrastructure in the landscapes beyond which provide context and form its setting.
- 5.1.7 In fact, the northern slopes of Quainton Hill comprise two smaller hills – Conduit Hill, and Hogshaw Hill, the latter being the northernmost.
- 5.1.8 The Applicant's LVIA includes a photograph and visualisation from a viewpoint on the Outer Aylesbury Ring (and other long-distance trails which cross Quainton Hill – see below) at the Hill's summit (LVIA VP30), but topography and vegetation obscure part of the view. It is better to stop lower down on the trail at Hogshaw Hill, on the slopes above and c. 100m north east of Hogshaw Hill Farm. The viewpoint is at c. 160m AOD on a spur of the Chilterns – a greensand hill – that overlooks the clay vales. In clear weather, at least six counties are visible. Looking in an arc from south west to north east, the full extent of the Scheme can be seen (see photos, and visual effects below).
- 5.1.9 As mentioned previously, understanding landscape character and effects upon it entails consideration not only of what the landscape looks like, but also why it looks that way, and importantly, what features / qualities are present that may not be visually obvious or evident without having firstly carried out some desktop research. For example, a landscape in poor condition may be of high heritage and / or ecological value.
- 5.1.10 The viewpoint on the slopes above Hogshaw Hill Farm is not only a very good example of this, but also of why in LVIAs, levels of landscape (and visual) sensitivity – and thus overall effects – are so often underestimated due to lack of research / granular analysis / scrutiny.
- 5.1.11 The photograph overleaf shows the view from the slopes looking north / north east. The north-eastern section of the site (Parcel 3) and the existing East Claydon substation are visible on the

left-hand side of the photo, c. 3.5km from the viewpoint (higher resolution versions of most of the photos in this report can be provided if required).

*View from Hogshaw Hill looking north / north east (image © Bruce Hyde)*



- 5.1.12 In the vales below the viewpoint, in the mid-ground of the photo, just south of the lane which runs east / west between Claydon Road and North Marston, there is a farmstead (Fulbrook Farm, centre of photo)), and nearby, north of the lane, a residential property (Fulbrook House, further left). The buildings are set in a rural agricultural landscape context, the character of which appears relatively 'ordinary', but 'pleasant'.
- 5.1.13 For information, the viewpoint is within LCT 9 Low Hills and Ridges, and LCA 9.2 Quainton Hill. The LVIA categorises both as being of Medium sensitivity, despite this part of LCA 9.2 lying within the AAL. The AAL, LCT and LCA boundaries run along the lane between Claydon Road and North Marston. The landscapes visible beyond, at least, as far as Winslow, are all LCT 5 Shallow Valleys, which the LVIA categorises as being of Low sensitivity, comprising LCAs 5.6, 5.7 and 5.8, which the LVIA categorises respectively as being of Low, Medium – Low, and Low sensitivity.
- 5.1.14 However, the fields immediately south and east of the farm, and immediately north and east of the house, are deserted medieval settlements of national importance, being scheduled monuments. The earthworks are more clearly visible when travelling along the lane.
- 5.1.15 The land in the foreground of the photo overleaf (from the same viewpoint looking north) is very uneven: grassed mounds and undulations extend across and down the slopes which at first glance suggest previous use as a BMX bicycle track. However, the landowners explained that whilst the lumps and bumps are indeed man-made, they are in fact ancient earthworks, and much earlier than the scheduled medieval remains in the fields below. This was originally thought to be evidence of Iron Age activity / settlement, but recently, Bronze Age artefacts have been found and recorded. Also, the hill is on the route of an ancient trackway. In addition, there are many springs in the area, which were always a good reason to settle in a place.

*View from Hogshaw Hill looking north*



- 5.1.16 In winter at least, the grass on the mounds does not appear to be at all interesting, but it is ancient species-rich pasture and managed as such to improve biodiversity (which is already considerable – the landowners said they *"allow, indeed enthusiastically welcome, various friends and organisations who are keen to come and observe, identify, measure and survey the biodiversity that we have"*).

## 5.2 LVIA Method and Process

- 5.2.1 The LVIA method and process are explained in more detail below; however, firstly it is important to deal with the matter of the Applicant's LVIA's use of three- and four-point scales, as it is causing certain problems.

### **Point Scales**

- 5.2.2 As explained in the previous section, the LVIA uses a three-point scale to record levels of landscape value, susceptibility to change, and sensitivity (see LVIA Table 10.6 *Landscape sensitivity criteria*), whereas in my opinion, a five-point scale is more suitable for complex projects such as this.
- 5.2.3 For levels of magnitude and overall effect, a four-point scale is used (see LVIA Table 10.8 *Significance of effect criteria*) – the LVIA expresses levels of overall effects as Negligible, Minor, Moderate and Major. LVIA para. 10.6.24 states, *'Moderate effects lie somewhere in the middle of the range of effects identified'*. However, using a four-point scale means that 'Moderate' is **not** in the middle, where it should be. Odd-numbered scales should be used.
- 5.2.4 The implications of Moderate not being in the middle relate to judgements about 'significance'. In the Applicant's LVIA, the threshold for a 'significant' effect is Major – Moderate. Para. 2.7.2 states, *'Where the effect has been classified as Major or Major/Moderate, this is considered to be equivalent to likely significant effects. Where Moderate effects are predicted, professional judgement is applied to determine whether the effect is significant or not...'*.

- 5.2.5 However, using the four-point scale means that there is only one full-step category above (Major), and two below (Minor and Negligible). The Moderate level is not in the middle, it is the second highest category. Therefore, in my opinion, Moderate effects should **automatically** be categorised as 'significant', and professional judgement applied to determine whether a Moderate - Minor effect is significant or not.
- 5.2.6 Also, in LVIA Table 10.8 (reproduced below for ease of reference, and note the table title should be 'level' not 'significance' of effect), the overall levels of effects do not step up consistently: sometimes a split category is included, sometimes not. For example, the left-hand Magnitude column steps up from Negligible, to Minor – Negligible, to Minor, but the top row steps up from Negligible, to Minor, to Moderate – Minor, ie the half-step is omitted. **It would be very helpful if the Applicant could explain why this approach was adopted, and check whether it skews the results.**

**Table 10.8 Significance of effect criteria**

		Magnitude of effect			
		Negligible	Slight	Moderate	Substantial
Receptor sensitivity	Low	Negligible	Minor	Moderate/ Minor	Moderate
	Medium	Minor/ Negligible	Moderate/ Minor	Moderate	Major/ Moderate
	High	Minor	Moderate	Major/ Moderate	Major

- 5.2.7 **Another point on which clarification would be helpful** is that the Applicant's LVIA reports levels of operational effects on landscape character at Years 1 and 10. I do **not agree** with this approach, in fact I am surprised the LVIA assumes that by Year 10, all the proposed screen planting would have become fully effective. For projects such as this, Year 15 is the norm for hedges at least – woodlands often take decades to form substantial screens (some Examining Inspectors have preferred 25 years). **Perhaps the Examination will establish whether this approach is acceptable.**

### **Magnitudes of Landscape Effect**

- 5.2.8 There are several reasons for the LVIA's underestimations of *overall* levels of landscape effects. Some are the result of underestimations of levels of landscape sensitivity, and issues with the use of the three- and four-point scales, as explained above. Others are the result of underestimations of levels of the development's magnitudes of effect, including not factoring in adverse effects arising from certain aspects of the Scheme, and / or not identifying their cause and nature. Examples include adverse effects on soils and water quality, which can result in adverse effects on character and associated views / experiences.
- 5.2.9 Whilst there may be a degree of subjectivity involved in judgments about magnitudes of effect, in LVIA, criteria are set, and should be applied. The criteria should relate to a) the size or scale of change, taking account of loss of landscape elements; changes to aesthetic / perceptual qualities; and whether the effect changes the key characteristics of the landscape which are critical to its distinctive character; b) the geographical extent over which landscape effects would occur / be experienced; and c) the duration and reversibility of the effects (see GLVIA3 para. 5.48 – 52). These are the criteria applied in the Applicant's LVIA – see for example LVIA Report 10.6.16 - 20, and Plate 1.10, and explained further below.
- 5.2.10 High levels of adverse magnitudes of landscape effect are attributed to this Scheme not only by the Applicant but also many statutory and other consultees, and are inevitable, partly due to its

very large size and scale, and subsequent large extent of effects. Even a reduction in size is unlikely to result in levels being much lower.

#### Nature of Development

- 5.2.11 In **[PDA-006]** the Applicant's *Response to Relevant Representations*, on p. 46 of the PDF under the Theme heading *General Comment*, the Applicant responds to a landscape issue raised in BC's RR **[RR-26]** which states that *'the Proposed Development would have an industrialising effect on a rural landscape'*.
- 5.2.12 The Applicant's response is, *'The Applicant recognises the concerns regarding landscape change but does not consider the terms 'industrialisation' and 'industrialised' applicable to the Proposed Development'*.
- 5.2.13 I am very surprised by and **do not agree** with this response.
- 5.2.14 Firstly, although the Applicant's LVIA does not use the term 'industrial', it does recognise that the landscape change would result in significant adverse effects, presumably mainly due to the stark contrast between the existing rural agricultural landuse, and the proposed large-scale power-generating / -storing use with associated infrastructure / elements. In my opinion, the latter can only be defined as 'industrialisation' – it certainly does not describe the generally-accepted definition of a 'farm'<sup>4</sup>.
- 5.2.15 Secondly, according to the EIA Regulations, solar projects of this nature are *'Industrial installations for the production of electricity, steam and hot water'*.

#### Size and Scale

- 5.2.16 The Scheme covers an area of c. 675ha, and extends c. 6.5km from west to east, and c. 6km from north to south.
- 5.2.17 It is difficult to fully comprehend the magnitude of size and scale of the proposal, especially relative to its wider context and how much land it would cover, and this is best established by travelling around the area by car and / or on foot / bicycle / horseback.
- 5.2.18 However, by way of comparison, the whole of the City of Oxford, which lies c. 22km to the south west, is c. 8.5km long and c. 5km wide. Aylesbury is c. 6km x 4km, and Bicester is c. 3.5km x 3.5km.

#### Extent of Effects

- 5.2.19 Direct adverse landscape effects would occur throughout the Order limits, and potentially, along the construction routes.
- 5.2.20 Indirect adverse landscape effects would extend for several kilometres beyond the Scheme boundaries in all directions. As explained previously, levels of effects on character decrease gradually with distance from the developed / changed areas. Levels are highest closest to the developed / changed areas (in this case, in my opinion, the levels would be 'significant' adverse), and would eventually reduce to Neutral.

#### Duration and Reversibility

- 5.2.21 I **agree** with the LVIA's approach of assessing effects on the basis of the proposed change being **permanent** where it lasts for more than 40 years (**[APP-110]** ES Volume 4 Appendix 10:1: *LVIA Methodology and Assessment Criteria* para. 2.4.15). Note that in this case, from the start of construction to the end of decommissioning, the duration of the project would be at least 45 years.

---

<sup>4</sup> The Cambridge Dictionary defines 'farm' as *'an area of land, together with a house and buildings, used for growing crops and/or keeping animals as a business'*.

- 5.2.22 Also, as confirmed by the Applicant, the proposed DNO substations, and associated security / access routes and cables, would remain in place post-decommissioning.
- 5.2.23 In addition, some effects would be fully permanent in terms of the loss of irreplaceable landscape features, others would extend for decades beyond the decommissioning phase, for example damage to soils.
- 5.2.24 However, it is not clear whether the LVIA has actually assessed effects on the basis of them being 'permanent' – in fact, it would appear not.
- 5.2.25 The key at the top of LVIA Table 10.14: *Summary of the landscape and visual assessment* includes duration, where '*P = permanent or T = temporary*'. In all cases apart from one, effects on landscape (and visual) receptors are categorised as (T), ie **Temporary** (and Adverse). Evidently, and as LVIA Plate 10.1 confirms, the magnitude of temporary effects is lower than that of permanent effects.
- 5.2.26 The exception is effects on landscape 'fabric', which are judged to be (P) **Permanent** (and Beneficial, whilst all other effects are adverse – see previous section).
- 5.2.27 **It would be helpful if the Applicant could clarify this point.**

#### **Cause and Nature of Effects**

- 5.2.28 In my opinion, the LVIA does not factor in the cause and nature of many of the impacts and effects arising from the Scheme, resulting in levels of adverse effects on landscape character (and associated views) being higher than the LVIA assumes.
- 5.2.29 Examples are given in the previous and following sections, but include:
- little consideration given to natural and cultural heritage, which make highly important contributions to the area's landscape character, and the fact that adverse effects on both are likely to adversely affect character as a whole;
  - many critical landscape and visual functions are not identified, so adverse changes to / loss of the functions are not considered;
  - analysis of the area's aesthetic and perceptual qualities, and effects upon them, is limited; and
  - the effects of glint and glare are not mentioned (see Section 8 below).

### **5.3 Direct Effects on Character**

- 5.3.1 As explained previously, **direct** effects on landscape character would occur on land within the Order limits where development / infrastructure would be located / other activities would take place. They may also arise along the construction routes.
- 5.3.2 I **agree** with the LVIA's conclusion that **during all phases of the development**, the direct overall effects on the character of the developed areas would be **significant adverse**, and the effects could not be mitigated.
- 5.3.3 However, in my opinion, the levels of adverse effects would be a certain degree **higher** than the LVIA predicts.
- 5.3.4 For example, according to the LVIA, during the 40-year operational period, the highest level of direct overall adverse effect on character would be **Major - Moderate Adverse**. In my opinion, the highest level would be **Major Adverse**.

- 5.3.5 That is based on a) the highest sensitivity landscape receptor, ie the part of LCA 9.1 Finemere Hill which lies within the AAL, where in my opinion, the level of sensitivity is between High and High – Medium; b) a Substantial level of magnitude of effect, as per LVIA Plate 10.1; and c) the matrix at LVIA Table 10.8. Also note that in terms of area covered, LCA 9.1 is a fairly small LCA, and a relatively large proportion would be directly affected.
- 5.3.6 Direct effects on other LCTs and LCAs would be higher than reported mainly due to the underestimation of levels of sensitivity.
- 5.3.7 Regarding construction and decommissioning effects, in many cases (but not all), the levels of adverse effects on character are **lower** than between Years 1 and 10 of operation, whereas they are often at their highest. It is possible that the LVIA has factored the relatively short-term duration of the works into judgements about overall levels, whereas the overall level of effect should be reported and the period during which it would be experienced noted separately. **Clarification of this point would be helpful.**

## 5.4 Indirect Effects on Character

- 5.4.1 **Indirect** effects on landscape character would occur a) on land within the Order limits where no development / infrastructure would be located / other activities would take place, and b) beyond the Order limits, including along construction routes.
- 5.4.2 The Applicant's LVIA does not always make clear the difference between direct and indirect effects, and in places the explanations are confusing. Also, for some reason, LVIA Table 10.14: *Summary of the landscape and visual assessment* does not report the levels of **indirect** effects that would occur on the host LCTs and LCAs, this has to be inferred from the text.
- 5.4.3 Taking indirect effects on LCA 9.1 Finemere Hill as an example, the LVIA Report concludes that the high (significant) levels of direct adverse effects that would occur throughout the Scheme's lifetime '*would quickly diminish to small and negligible outside of Parcel 2*', and that '*Any effects on landscape character beyond this tract of LCA 9.1: Finemere Hill would be not significant*'.
- 5.4.4 I do **not agree** with this conclusion.
- 5.4.5 As noted above, in my opinion, the LVIA underestimated levels of direct effects on the parts of LCA 9.1 that lie within the AAL, predicting **Major - Moderate Adverse** direct effects during all phases of the development, when in my opinion, the level would be **Major Adverse**.
- 5.4.6 Usually, levels of effects on landscape character decrease gradually with distance from the developed / changed areas. Levels are highest closest to the developed / changed areas, and eventually (depending on certain factors) reduce to **Neutral**. In this case, therefore, the highest level of **indirect** effect on LCA 9.1 should be **between Moderate - Major and Moderate Adverse**, ie 'significant'.
- 5.4.7 Indirect effects on other LCTs and LCAs would be higher than the LVIA predicts (and are likely to be significant adverse closest to the developed areas) mainly due to the underestimation of levels of sensitivity, and partly because the LVIA does not factor in a) non-visual effects on character, and b) the adverse effects arising from the proposed screen planting that would result in loss of characteristic openness (explained further below).
- 5.4.8 As mentioned previously, the landscapes around and between all the villages make highly important contributions to the settings of numerous significant heritage assets, some of which are Grade I and II\* listed / scheduled. Some of the villages are Conservation Areas: Botolph Claydon; Middle Claydon (which includes Claydon Park); Winslow; and North Marston. Furthermore, the heritage assets make highly important contributions to the value of their associated landscapes.

- 5.4.9 The proposed development would result in significant adverse effects on the assets' contextual landscapes, so where the landscape forms an integral part of an asset's setting, it is likely that due to the large-scale industrialisation of the highly rural context, the proposed development would result in high levels of harm to the setting of the heritage asset.
- 5.4.10 Very importantly, solar panels in particular 'sterilise' and homogenise rural landscapes, where seasonal changes would otherwise be seen and experienced.
- 5.4.11 Best practice guidance (the previously-mentioned Historic England's publication *The Setting of Heritage Assets*) highlights the need to consider diurnal and seasonal changes. Often, seasonal changes manifest with views being more or less prominent in winter and summer respectively, as trees and hedges come into and go out of leaf. There is an obvious expectation for agricultural land to change with the seasons for example as arable fields are ploughed, sown, tended, and harvested throughout the course of the year. Indeed, in rural areas, such changes are often celebrated with seasonal festivals and events, as has been the tradition for many hundreds if not thousands of years.
- 5.4.12 Solar development of this type and at this scale not only obscures views of the land itself, and introduces alien, industrial elements across a wide area, but also establishes a static, sterile year-round appearance which is very different from the character of a seasonally-dynamic agricultural landscape. This in turn will have notable adverse effects on the settings of heritage assets which have their significance contributed to by an agricultural context in which they can be experienced and understood. This would extend as much to the brief periods of intense activity and noise associated with harvest as to the non-visual aspects – some perhaps much-changed from traditional practice, but still an unmistakable part of the farming year.
- 5.4.13 As someone said to me recently, at an isolated farmhouse now surrounded by solar panels, "You knew exactly where you were with the seasons, now there's no rhythm or flow".
- 5.4.14 In addition, and also very importantly, currently many views of the heritage assets are from rural lanes, footpaths and properties, looking across the assets' contextual / associated landscapes. Given the proposal to let hedges grow up to 3.5m, it is inevitable that many such views would be lost. In LVIA, the total loss of a view results in a high level of adverse visual effect.
- 5.4.15 The matter of over-reliance on vegetation to screen views – existing and / or proposed – is discussed in Section 7, but as noted previously, the setting of a heritage asset is neither necessarily determined by its present-day visibility, nor even by visibility *per se*.

## 5.5 Cumulative Landscape Effects

- 5.5.1 Given that on its own, the proposed development would give rise to extensive significant adverse effects on landscape character, in my opinion there can be no doubt that in combination with other existing and proposed industrial / industrialising developments within the study area, the inter-project cumulative landscape effects would also be significant adverse, but levels would be considerably higher due to being even more extensive / widespread.
- 5.5.2 I **agree** with BC's landscape expert's position on this matter, as set out in BC's RR [RR-026] at paras. 73 and 75, which state, 'BC recognises that, in line with the NPSs, all energy generating infrastructure of this kind occasions some landscape and visual amenity harm. However, the Council consider that the cumulative effects of this Proposed Development taken with other development in the area mark it out as an **unusual and exceptional case**. As a result, the Council consider this a case which departs from the starting point for Critical National Priority Infrastructure in NPS EN-1... The net effect of this is that **the local landscape is already at a tipping point**. The area risks a **stark and rapid transformation from a rural landscape to one dominated by modern infrastructure**' (emphasis added).

- 5.5.3 It is important to note the highly important function that the site plays in this wider existing and future development context, in that it forms a critical gap and 'respite' between the developments, allowing the unimpeded movement of wildlife and people.
- 5.5.4 Also note that taken individually, some effects may not be 'significant'; however, when taken as a whole, they may well be and indeed, often are. Here, the Scheme's *intra-project* cumulative effects would be 'significant', as well as the *inter-project* cumulative effects.
- 5.5.5 Importantly, the increase in such development results in ever-more pressure being put on ever-decreasing landscape resources, meaning that the resources become even more valuable, and more susceptible to these forms of change.

## 5.6 Effects on Landscape 'Fabric'

- 5.6.1 The Applicant's LVIA concludes that by Year 10, when it assumes that the planting proposed to mitigate adverse landscape and visual effects had established, matured, and become effective, the Scheme would result in direct and 'permanent' **Moderate Beneficial** effects on what it calls the Scheme's landscape 'fabric' (see previous note about this being the only 'permanent' effect identified in the LVIA).
- 5.6.2 I do **not agree** with this prediction.
- 5.6.3 Firstly, as explained previously, the LVIA concludes that after ten years of operation, the proposed new hedges and trees would have matured sufficiently to have become effective visual screens, but I do not agree that by Year 10, all the planting would have achieved this objective – see previous note about whether Year 15 would have been more appropriate for hedges and Year 25 for trees especially in woodland stands.
- 5.6.4 The LVIA also assumes that the existing (and proposed) vegetation would remain in place and screen views for the 40+-year duration of the operation. This is highly unlikely, especially given that here, screening is currently provided by mature conifer plantations which could be felled at any time, trees with ash dieback, and hedges with Dutch elm disease – see Section 7.3.
- 5.6.5 Secondly, the LVIA considers this Moderate Beneficial effect to be 'significant'. Moderate is below the LVIA's threshold for significance, but professional judgement was applied and in this case, the threshold was lowered (see previous comments about the Moderate level not being in the middle of the four-point scale).
- 5.6.6 Thirdly, apart from a couple of passing references, the term 'fabric' is not found in GLVIA3, although for some reason recently, a few practitioners have started using it.
- 5.6.7 In fact, landscape 'fabric' is the same thing as landscape 'elements', which the GLVIA3 glossary defines as '*Individual parts which make up the landscape, such as, for example, trees, hedges and buildings*', ie they are physical / tangible / quantifiable. The LVIA confirms this in the LVIA Method [APP-110] at para. 2.4.4, although the LVIA notes the elements of relevance to the Scheme as being '*hedgerows, trees and woodland*' (I **agree** these are relevant elements, but would also include watercourses).
- 5.6.8 At para. 10.1.8, the LVIA states that '*Landscape effects derive from changes in the landscape fabric, which may result in changes to landscape character*'. However, it is not true to say that **all** landscape effects derive from changes to physical 'fabric' / elements. Some landscape effects are the result of disturbance, movement, noise, odour, awareness, and many other factors which alter not just how a landscape is experienced (as explained above), but also, and most critically, **how it functions**.
- 5.6.9 GLVIA3 para. 5.1 explains that '*An assessment of landscape effects deals with the effects of change and development on **landscape as a resource**. The concern here is with how the proposal will affect*

*the elements that make up the landscape, [and] the aesthetic and perceptual aspects of the landscape **and** its distinctive character'* (emphasis added).

- 5.6.10 The LVIA reports that generally, throughout the study area, the landscape 'fabric's' level of sensitivity is **High - Medium** (para. 10.10.25); however, I could not find the judgements about levels of a) landscape value, and b) landscape susceptibility to change. It is important to know these, as levels of sensitivity are derived from the combination of levels of value and susceptibility. High – Medium could be the result of High value and Medium susceptibility, or *vice versa*, or other combination. I note that the *Landscape Sensitivity Appraisal [APP-112]* refers to the 'fabric' in the study area being in 'good' or 'fair to good' condition. **It would be helpful if the Applicant could state the fabric's levels of landscape value and susceptibility to change.**
- 5.6.11 **It would also be helpful if the Applicant could explain why the LVIA concludes that the landscape 'fabric' is of a higher level of sensitivity than the landscape character receptors** (NCAs, LCTs, and LCAs), which range from Low to Medium, especially given that the nature, quality, condition etc. of the 'fabric' is an important factor in judgements about levels of overall landscape sensitivity.
- 5.6.12 Fourthly, the LVIA confirms (see for example Section 10.7 and Table 10.9: *Embedded mitigation relevant to landscape and visual*) that the proposed planting, which would become new landscape 'fabric', is required for landscape / visual **mitigation** purposes, to reduce high levels of adverse effects on character and views. What the LVIA does not appear to realise is that landscape / visual mitigation measures such as screen planting cannot then be double-counted as landscape / visual enhancement / beneficial effect.
- 5.6.13 Clearly, double-counting mitigation measures as enhancements has implications for judgements about levels of effects, since true enhancements / scheme benefits *could* potentially outweigh harm.
- 5.6.14 Enhancements are **not** required to mitigate adverse effects, so **can** be counted as scheme benefits. GLVIA3 para. 3.39 explains that **enhancement** '*means any proposals that seek to improve the landscape and / or visual amenity of the proposed development site and its wider setting beyond its baseline condition*'. Para. 3.39 also explains that enhancement '*is often referred to **incorrectly** as an outcome of proposed mitigation measures*' (emphasis added) – as is the case here.
- 5.6.15 See also the Landscape Institute's Technical Guidance Note (TGN) LITGN-2024-01 *Notes and Clarifications on Aspects of GLVIA3* (August 2024) Issue / Question 4 (3) (emphasis added):  
*'Distinguishing between landscape and visual mitigation:*  
***'Care should be taken to ensure landscape and visual mitigation is not confused. For example, it does not necessarily follow that screening a development from view would reduce its landscape effects, such as those on landscape character.'***
- 5.6.16 In theory, the landscape effect of the proposed 'fabric' would be at best **Neutral**.
- 5.6.17 However, the LVIA assumes that the native wildflower meadows which are proposed as mitigation would establish successfully. The problem is, they require low-fertility soils, whereas here, the soils are predominantly nutrient-rich clay and thus high fertility: presumably, topsoil would have to be stripped and removed. Furthermore, hay-meadow flowers do not do well in shade, and will not grow under panels.
- 5.6.18 Also, and very importantly, the LVIA does not factor in that in itself, the new planting would give rise to adverse landscape and visual effects.
- 5.6.19 For example, the LVIA acknowledges that planting would not screen (or filter) all views of the development, especially those from more elevated locations where even very tall trees would not screen (see visual effects in Section 7). However, to help achieve screening from lower-lying viewpoints, especially on and in proximity to the developed areas, the LVIA states that where

within the Applicant's (or other associated body's) control, existing and new hedges would be maintained at a height of between c. 3 and 3.5m.

- 5.6.20 The problem is that characteristically, hedge heights vary throughout the study area, reflecting a) use / function (eg doubling as a windbreak for stock / crops in exposed areas), and b) level of management. Thus, because the Scheme covers such a large area, it is inevitable that in some parts, tall hedges would be uncharacteristic.
- 5.6.21 Also, whilst from some viewpoints the proposed planting might successfully screen views of the development, the LVIA does not factor in that in many cases, the tall hedges (and proposed woodland) would result in the **loss of characteristic openness** that is currently experienced, which is a contributory factor in judgements about levels of overall adverse landscape effects (see also total loss of view in visual effects below). Note that openness is an important quality of the AAL.

*Open landscapes at Knowl Hill*



*Open landscapes east of East Claydon and Botolph Claydon (image © Bruce Hyde)*



*Open landscapes between East Claydon and Granborough*



## 6. Amenity Effects

- 6.1 Effects on views and visual amenity are set out in Section 7 below. However, there are other forms of amenity, such as social / recreational, and residential, which require consideration in the planning process and assessments of landscape, visual, and other effects. Effects on amenity is an important matter in this case, where all forms are likely to be adversely affected to varying degrees during all stages of the Scheme.
- 6.2 A dictionary definition of 'amenity' generally, which is helpful in the context of planning / assessment, is *'The quality or character of an area and elements that contribute to the overall enjoyment of an area'*.
- 6.3 Visual amenity is defined in GLVIA3 as *'the overall pleasantness of the views [people] enjoy of their surroundings'*.
- 6.4 Social / recreational amenity relates to that enjoyment, although importantly, it also relates to other highly-valued aspects of the amenity resource; for example, people use landscapes for meeting friends and family; keeping fit; walking the dog; and peace and quiet / reflection / solace. These and other aspects of amenity make important contributions to the quality of people's lives, and are integral to maintaining and improving mental and physical health and wellbeing.
- 6.5 Residential amenity is not defined in law, but involves consideration of *'Elements that are particularly relevant to the living conditions of a dwelling'*. These include visual and non-visual factors during all phases of development, including loss of privacy; overlooking; loss of daylight; overshadowing; lighting; glint and glare; late-night / early-morning activities; movement; disturbance; disruption; noise; vibration; odours; dust; flooding; pollution; and a general awareness of what is going on.
- 6.6 Effects on residential visual amenity are the subject of the Landscape Institute's Residential Visual Amenity Assessment (RVAA) TGN 2/19 15 March 2019, which defines residential visual amenity as *'the overall quality, experience and nature of views and outlook available to occupants of residential properties, including views from gardens and domestic curtilage'*. The Applicant has carried out an RVAA for this project – see visual effects in Section 7.
- 6.7 The Applicant's LVIA provides limited analysis of, and information about effects on, the non-visual aspects of amenity. Ideally, in LVIA's, effects on social / recreational and residential amenity are considered in terms of both visual and non-visual effects. In terms of social / recreational amenity, non-visual effects are often included in the landscape effects chapters, for example where assessing effects on landscape resources and functions. The visual effects sections below consider visual effects along routes through the study area, and should be referred to for more detail about the routes, and the experiences they offer.
- 6.8 My own assessment concluded that the highest sensitivity amenity receptors – ie those for whom the landscape's social / recreational resources and functions are especially important – would experience **significant adverse** effects during all phases of the Scheme.
- 6.9 The LVIA concludes that in parts of the study area, the resources and functions are of no more than Low ('Community') value, for example LCA 5.7 Hogshaw Claylands. However, it is not clear why LCA 5.7 is categorised as Low value, but LCA 7.3 is Moderate ('Regional'), when the descriptions in the LVIA's Sensitivity Appraisal [APP-112] suggest that whilst both are 'farmed' landscapes, LCA 5.7 provides 'local recreational opportunities', which are not noted in LCA 7.3's level of value.
- 6.10 My own baseline studies and analysis found that the network of lightly-trafficked rural lanes and PRow's are enjoyed not only by people from the local communities, but also by those visiting and travelling through the area, and thus all are of **at least Moderate** ('Regional') value.

- 6.11 As explained previously, my assessments were informed by material provided by and conversations with people from the local communities. They assisted with the desktop and on-the-ground landscape and visual baseline studies, and identified features and factors that contribute to landscape, and visual / other amenity value. They helped with research on the area's existing recreational, social, and cultural features / qualities, and analysis of how the resources are used, by whom, which routes they take, and which modes of transport they use. They carried out consultation and organised and conducted surveys, for example asking people using certain recreational routes questions about the purpose and frequency of visits. In responses to the question, "*How important is this facility?*", on a scale of 0 – 5 with 5 being highest, all the ratings were "5".
- 6.12 Some of the residents' information will be submitted directly into the Examination as WRs, and / or by CSAG. The documents provide details and illustrations of the site and contextual landscapes, and the features, resources and qualities which are most highly valued, and should be referred to as required, but a few extracts from notes produced by residents which are relevant to amenity, and associated health and wellbeing, are provided at the end of this section.
- 6.13 In the conversations I had with residents, and according to the notes they sent me, the adverse effects on their social / recreational amenity and health and wellbeing are of great concern.
- 6.14 According to one, "*the local PRow network provides the area's most important recreational amenity for all of the local villages, as well as those from further afield*".
- 6.15 Note that the site lies in the middle of a highly rural area which is surrounded by large towns: from the north in a clockwise direction, Milton Keynes, Leighton Buzzard, Aylesbury, Bicester, and Buckingham. Many of these towns are rapidly expanding into the surrounding countryside and taking up land once used for recreational purposes, meaning that people come here specifically to escape the urban influences and enjoy relative peace and quiet within rural, tranquil landscapes many of which display positive aesthetic and perceptual qualities, evident time depth, and biodiversity, and which despite the presence of some existing energy infrastructure detractors, currently contain very few developments similar to the type proposed.
- 6.16 Importantly, it must be borne in mind that even landscapes categorised as Low value because they are despoiled may be of High value to those for whom it is all they have as a recreational resource/ open space.
- 6.17 Visitors also use local facilities such as shops and hostelrys, and travel to local attractions including Claydon House and Park, and Hogshaw Farm and Wildlife Park.
- 6.18 Pedestrians, equestrians and cyclists are equally well-catered for within the study area, as there is a very good, interconnected network of lanes, long-distance trails, bridleways and other PRowS, some of which cross parts of the Scheme. These are shown on [AS-031] LVIA Figures 10.5 a – d, and CSAG's *Combined Baseline and Project Information Plan* (CSAG-10).
- 6.19 Where lanes are lightly trafficked, people say they feel safe using them for recreational purposes, as well as for getting from A to B. However, here it is important to note that the construction of large-scale projects such as HS2 has resulted in a significant increase in construction and other associated traffic using the roads and lanes. This has had a significant detrimental effect on people's amenity, health and wellbeing, and the quality of their lives – many no longer use certain recreational routes along highways because now they are not only unpleasant to use, but very unsafe. Importantly, this means that routes which are not so badly affected have become an even more highly-valued resource.
- 6.20 National Cycle Route (NCN) 51 runs through Winslow and Steeple Claydon, and at weekends especially, the lightly-trafficked local lanes are busy with cyclists ranging from families with children to road-racing groups. The lanes are also used for organised runs.

- 6.21 The long-distance trails are described in more detail in the visual effects section which follows, but one which is particularly popular with residents and visitors alike, being for use by pedestrians, cyclists and equestrians, is the Bernwood Jubilee Way, a c. 61-mile / 100km route through the Buckinghamshire countryside which circles the former Royal Hunting Forest of Henry II (important enough to be noted on Google Maps), and which crosses the site.
- 6.22 According to the comprehensive *Bernwood Jubilee Way* guide book (which can be made available if required), *'In 2001, the Bernwood Ancient Hunting Forest Project was launched as a unique initiative'*; the route was opened in 2022. Through the study area, it runs north – south between Buckingham and Waddesdon, via Steeple Claydon, East Claydon, Botolph Claydon and Quainton, crossing / adjacent to the Parcel 2 array areas proposed between Botolph Claydon and Finemere Hill. The route also runs along the northern edge of Claydon Park RPG.
- 6.23 Along the route, a series of separate local walks have been created, which are described and illustrated in the published guide book. Those which would be most affected by the Scheme, directly and indirectly, are Route 5: Claydons and Claydon Wood Walk, and Route 6: Quainton to Finemere Woods Walk.
- 6.24 The Bernwood Ancient Hunting Forest Project *'aims to conserve and enhance the environment and to widen public access, understanding, and enjoyment of the physical heritage of Bernwood'*. In my opinion, the proposed development would not fulfil any of these objectives. It certainly would not *'enhance the environment'*, and *'enjoyment of the physical heritage of Bernwood'* would be very difficult under the changed circumstances. As explained in Section 7, the Applicant's LVIA concludes that during operation, the development would result in *'a major/moderate adverse effect on views from the Bernwood Jubilee Way, which is considered to be significant'* (and along some sections of the route, levels could be even higher). Levels of adverse non-visual aesthetic / perceptual / experiential effects would also be very high along this route.
- 6.25 Also note that there is a proposal for a section of the Buckinghamshire Greenway to cross the site. According to the website, *'The Buckinghamshire Greenway is our vision for a continuous walking, wheeling and cycling route that goes through the length of Buckinghamshire (over 50 miles). The route is being split into sections which will provide useful local links, create access to community amenities and connect to local public transport networks. When complete, it will connect the entire county from the north (Silverstone) to the south (Colne Valley)'*. If implemented, presumably users would experience similarly high levels of adverse effects.
- 6.26 Many residents and visitors are very unhappy about the disruption that would be caused to their amenity by the proposed closures (some permanent) and diversions of PRoWs crossing the site, most of which are along routes which have been in public use for centuries if not millennia. None of those I spoke to were enthusiastic about the proposed permissive paths, given they would be travelling through a heavily industrialised as opposed to a rural agricultural landscape.
- 6.27 The proposals for closures / diversions are shown on [AS-009] 2.6.2 *Illustrative Layout Plans and Sections (Rev 2)*. However, the plans do not show the PRoWs in the context of the proposed Scheme layout, making it difficult for residents to see how much of the network would be lost, diverted or surrounded by electrical infrastructure. In November 2025, CSAG asked PINS whether the Applicant could be asked to provide a plan showing both, and the Applicant kindly sent 2.6.2 *Illustrative Layout Plans and Sections (Rev 2)- Key Plan With Existing Prow To Be Stopped Up Added*, which is very helpful, although it does not appear to be in the Examination Library.
- 6.28 Effects on people's visual amenity are an integral aspect of effects on recreational / social amenity, and are the subject of the next section, but in summary, levels of adverse visual effects along many of the recreational routes beyond the site would be high, with glint and glare being a major contributory factor. In addition, there would be high levels of adverse non-visual effects, including

- on tranquillity (which is often assumed to mean 'places which are quiet', but includes 'the presence of nature, feeling safe, visually pleasing surroundings and a relaxing atmosphere'<sup>5</sup>).
- 6.29 However, there is no doubt that the most profound changes to people's experiences would occur along the PRoWs which cross the site. Here, levels of adverse visual and other amenity effects would be extremely high.
- 6.30 This is mainly due to proximity to the large industrialising elements which would replace the rural landscape. In many places, the panels and other structures would act as screens, resulting in loss of characteristic openness and fine / pleasant open views; elsewhere, tall hedges proposed to screen the development would also result in loss of openness and view.
- 6.31 There is another concern relating to the dangers associated with creating what would effectively become **inescapable corridors**.
- 6.32 People who are walking along the public footpaths and bridleways may be accompanied by small children, and / or may be elderly / infirm. Some may have dogs. It is inevitable that deer would also use these routes, along with badgers, foxes and hares. The bridleways are also used by people riding horses and bicycles.
- 6.33 It is also inevitable that at some point, there would be conflict between one or more of the above, for example: horses bolting (see below); dogs running out of control / chasing people or animals; equestrians / cyclists travelling fast towards other equestrians / cyclists, or walkers, who may not hear them approaching. This could potentially result in serious injury to both humans and animals, especially where there is limited room to stand out of the way.
- 6.34 In terms of the safety of horses and riders, it must be borne in mind that many horses are very unpredictable, awkward, nervous, and highly sensitive to certain forms of change:
- a) Horses may be reluctant to go along enclosed corridors, or get part way along and refuse to go further.
  - b) Even during operation when there is no activity on the site, they may be spooked by noise; activity; glint / glare; other animals; and people walking / cycling along the path.
  - c) If the horse is spooked, or bolts, there is little room for other path users to move out of the way.
- 6.35 Furthermore, it is important to consider the risks of the enclosed corridors to **personal safety and security**.
- 6.36 An example is a solar development that was proposed in Worcestershire<sup>6</sup>. In a letter dated the 10<sup>th</sup> of November 2021, the Parish Clerk wrote to the LPA (Malvern Hills DC) on behalf of *'three parishioners who have asked for anonymous representation in responding to this planning application'*. The letter went on to say that *'As Parish Clerk I have brought these residents together in this response so that they can share their experiences and material concerns with District Councillors'*.
- 6.37 The letter explained that the three parishioners used the local footpaths on a daily basis, and all had specific and very sound reasons for not wishing to find themselves trapped within a fenced corridor along the footpaths, for example, due to the threat of pursuit / violence from known parties.

---

<sup>5</sup> The definition of tranquillity that has been adopted by both Welsh Government (Welsh Government 2012) and Natural Resources Wales (NRW 2016a) is *'An untroubled state, which is peaceful, calm and free from unwanted disturbances. This can refer to a state of mind or a particular environment. Tranquillity can be measured in terms of the absence of unwanted intrusions, or by a balancing of positive and negative factors. These include the presence of nature, feeling safe, visually pleasing surroundings and a relaxing atmosphere'*. See also the L's technical information note (TIN) on the subject (TIN 01/2017 revised March 2017).

<sup>6</sup> LPA ref 21/01846/FUL (refused), PINS ref APP/J1860/W/23/3325112 (appeal dismissed)

- 6.38 The Clerk explained that the parishioners' opinion is that there was a '*lack of any consideration of public safety and well being in the sense that this application creates an **inescapable corridor** along an existing right of way that was previously open to the wider countryside. The route as it currently exists provides users under threat with numerous options for escape and means of drawing attention in the event of an emergency. This is not the case if the current solar farm layout and design is carried out*' (emphasis added). It is not clear how such risks could be designed out.
- 6.39 In my opinion, the proposed development would significantly adversely affect people's health and wellbeing, and the quality of their lives.
- 6.40 See also the representation in the form of a note submitted by a local GP, which is appended to CSAG's WR for ease of reference. The note concludes, '*impact on healthcare accessibility, patient wellbeing, and service delivery represents a material planning consideration that warrants careful scrutiny before any approval is granted. This proposal will have a direct and detrimental effect on our community's health that will be measurable*'.
- 6.41 There are also likely to be adverse economic effects. As noted previously, several businesses and commercial enterprises would be adversely affected in various ways and to varying degrees by the development, a) during construction, interim, and decommissioning works due to physical and visual disruption, and b) during operation, with people being deterred from visiting the area due to the industrialisation of the countryside generally, and effects on certain resources specifically, both resulting in a loss of trade.
- 6.42 Given that on its own the proposed development would give rise to extensive significant adverse effects on social / recreational amenity, and health and wellbeing, in my opinion there can be no doubt that in combination with other existing and proposed industrial / industrialising developments within the study area, the inter-project cumulative amenity / wellbeing effects would also be significant adverse, but levels would be higher due to being even more extensive / widespread. See also BC's position on this matter in their RR **[RR-026]**.
- 6.43 Finally, note that effects on all forms of amenity are of concern to many people living in the area: the WRs which will be submitted by CSAG and other members of the community will explain these effects in more detail.
- 6.44 Below are a few extracts from notes produced by residents which are relevant to amenity and health and wellbeing, followed by photographs of the site and surrounding area, and people who enjoy using them.

*The peace and quiet of the area. There was, and still is, a chance to listen to bird song and enjoy the sounds of nature. The views of the countryside from our house and garden are precious to us.*

*From Botolph Claydon we can walk to the Medieval woods, Runts, Finemere and Romer Woods. These woods are remnants of the ancient Bernwood Forest that covered this area. In Springtime the woods are carpeted with Bluebells. The scent of the flowers is wonderful. It was a family tradition that we always made a trip to see the Bluebells. Runts Wood was also a favourite horse ride for the children, and is also a good place to see Butterflies in the summer.*

*Between the villages there is only one street light. This means we are able to enjoy dark skies. It is beautiful looking at the stars on a clear night and experiencing moonlight and occasionally seeing the northern lights.*

*This area is very peaceful. We do hear cars driving through the village, but as traffic levels are low this is not a concern. The only other noise, apart from the sounds of nature, is farmers at work which is what you would expect.*

*I walk my 2 dogs daily, on the path to Runts Wood, sometimes the Circular walk too. It's a lovely walk, with fabulous views towards Quainton & around. Having moved to the area from the Chilterns, which*

*are an area of natural beauty. These views compare!! I choose this walk, particularly during the winter, as a lot of Steeple Claydon along the Brook is underwater due to flooding. It is the only non muddy walk around! I personally have had 3 joint replacements (with both hips & a knee). Therefore choose my walks carefully. Over the years this walk has become very sociable, meeting like minded neighbours with dogs. Knowing owners & dogs names!*

*For young novice riders and cyclists, and for families walking, the lanes and Deadmans Lane bridleway provides a beautiful network of paths and bridleways that can be linked to explore the local countryside and see the great variety of birds, deer, foxes, hares, badgers etc. They are far safer than busier roads and this network allow local people to travel miles without touching a busy road.*

*I would estimate there are more than 300 ridden horses in this area who use these bridleways. Some riders simply like to enjoy the countryside by hacking around these bridleways, other riders with highly valuable competition horses also incorporate hacking out with their horses as part of their exercise routine. I cannot emphasise enough the importance of these bridleways for riders as it enables them to do as little roadwork as possible so avoiding accidents with vehicles.*

*Living here allows us to experience less stress and share the joy of the countryside with our grandchildren. This will all change with the construction of this solar 'farm'.*

*Local residents are well aware of the unsuitability of the rural roads for Industrial traffic and recognise that construction work will destroy large areas of our countryside. It is not acceptable.*

*During construction and for many years thereafter, our views will be dominated by industrial activity and solar infrastructure rather than the open valley and woodland we currently enjoy.*

*The introduction of construction noise and industrial infrastructure will destroy the tranquility we currently rely on, negatively impacting the mental health of my entire family.*

*There is a significantly increased risk to my family's safety when walking along roads that will now be heavily used by HGVs.*

*If all this goes ahead we fear for the mental health of all of us. This is a long way from my childhood in this beautiful area, being destroyed by all these developments/projects, that my brother and I spent in this area walking and spending most weekends with our grandfather (God rest his soul) around the woodlands and paths admiring the scenery and wildlife.*

*This is the last piece of Countryside, & we treasure it.*

**LANDSCAPES** (all images © Bruce Hyde)







**PEOPLE**





## 7. Visual Effects

### 7.1 Introduction

- 7.1.1 Many of the matters dealt with in previous sections are relevant to effects on views. For example, levels of landscape value and susceptibility to change; the changes to character that would occur, which many people would see; effects on people's recreational / social amenity; and technical issues relating to the Applicant's LVIA's method and process. These sections should be referred to for more information about the subjects, but where relevant, they are noted below, along with technical matters which are specific to visual effects.
- 7.1.2 Broadly, the approach to assessing visual effects is the same as that for character, in that levels of value + susceptibility = sensitivity, and levels of sensitivity + magnitude = overall effect, except that character assessment considers receptors' susceptibility to the specific type of change that is proposed, whereas visual assessment only considers receptor susceptibility – see below.
- 7.1.3 As with the character assessments, I have a few questions about the LVIA's assumptions and conclusions.
- 7.1.4 Note that the LVIA does not report or summarise effects on receptors at each viewpoint (VP) identified; rather, it assesses effects on views along roads and PRoWs along which the VPs are located. However, I was unable to find a plan showing the highlighted routes and VPs in one place: **it would be helpful if the Applicant could provide this.**
- 7.1.5 The first part of this section is a brief overview of visual effects, the second part summarises relevant technical matters, especially those which, in my opinion, have led to the underestimation of levels of adverse visual effects. This is followed by more detailed explanations of effects on a) public and b) private views.
- 7.1.6 As explained and illustrated in Section 5, one of the best places from which to see the full extent of the site and its wider character context is from the Outer Aylesbury Ring long-distance trail at Hogshaw Hill on the northern slopes of Quainton Hill, which is within the AAL. Although LVIA VP30 includes a photograph and visualisation from the Quainton Hill summit, topography and vegetation obscure part of the site and its immediate surrounds to the east, so it is better to stop lower down on the trail, on the slopes above and c. 100m north east of Hogshaw Hill Farm, and look in an arc from south west to north east (photos from this point are included in this report and other WRs).

### 7.2 Summary of Visual Effects

- 7.2.1 The LVIA's conclusions about visual effects on receptors at public VPs are summarised in LVIA Table 10.14.
- 7.2.2 Broadly, the Applicant's LVIA concludes that at the majority of the public VPs, and along most of the public view routes identified, visual receptors would experience **significant adverse visual effects during construction, operation, and decommissioning.**
- 7.2.3 I **agree** with this conclusion. However, in my opinion, levels of adverse visual effects have been underestimated, as explained in the following sections.
- 7.2.4 Effects on receptors at private properties are the subject of a separate RVAA [**APP-114**]. The RVAA concludes, and I **agree**, that levels of visual effects at a few residential properties adjacent / in proximity to the site would be significant adverse. However, in my opinion, again, levels of adverse visual effects have been underestimated.

## 7.3 Technical Matters

### Study Area

- 7.3.1 LVIA para. 10.4.3 states that 'A 6km study area is considered proportionate and adequate to identify effects on landscape and visual receptors, including likely significant effects'.
- 7.3.2 I **agree** that most landscape and visual effects arising from the Scheme in isolation would not be significant beyond 6km from the Order Limits, but when seen in combination with other similar existing / proposed developments, significant effects / sequential visual effects would extend beyond 6km from the scheme – see below.

### Zones of Theoretical Visibility

- 7.3.3 The Applicant's LVIA includes a series of plans showing the proposed development's likely zone of theoretical visibility (ZTV) – see [AS-031] ES Volume 3 Chapter 10: *Landscape and Visual Figures*. The plans show visibility scenarios based on different levels of screening provided by existing on- and off-site vegetation.
- 7.3.4 I **agree** with the LVIA's use of a bare earth ZTV model, as recommended in GLVIA3 (although note this was only provided following a consultation request from BC ([APP-053] LVIA Report Table 10.1: *Summary of stakeholder engagement*)).
- 7.3.5 Originally, the LVIA had only provided 'Standard' and 'Detailed' ZTV plans, the former accounting for *buildings and significant blocks of woodland in the landscape*, the latter, *hedgerows and other vegetation over 2.5m in height* ([APP-110] LVIA Method para. 2.10.5).
- 7.3.6 Para. 2.10.7 goes on to say that '*The actual extent of visibility on the ground will be considerably less than suggested on the [worst-case bare-earth scenario] plan*'.
- 7.3.7 I agree that in theory, that could be the case. However, it simply cannot be assumed that this vegetation would continue to screen the same views for the 40+-year duration of the operation – indeed, there is no certainty that the vegetation which existed when the surveys were carried out is the same height as it was, or even if it is still standing – explained further below.
- 7.3.8 It would have been helpful if the ZTV plans had been on a coloured OS map base, to make it easier to identify potential VP and view route locations along roads and PRoWs, and landscape features. The same applies to the VP location plans. However, see CSAG's combined baseline and project information plan.

### Viewpoint Locations

- 7.3.9 The LVIA's public and private VP locations are not intended to give an indication of the future scheme's extent of visibility – the bare-earth ZTV should be the starting point for that, factoring in the nature and likely degree of permanence of both existing and proposed screening vegetation (see below).
- 7.3.10 As explained above, the public VP locations are representative of points along roads and PRoWs from which the developed site would / may be visible to varying degrees, but there are many other locations from which it would / may be seen, as shown on the ZTV plan.
- 7.3.11 Eleven of the forty-two identified VPs are the subject of photomontages ([APP-117] Volume 4 Appendix 10.6: *LVIA Visualisations Photomontages*), which give an indication of how the developed site may appear at Years 1 and 10. My comments on the photomontages are set out below, but note that only three are from viewpoints on the periphery of the site, and **none are from viewpoints along PRoWs crossing the site**.

- 7.3.12 LVIA VP42 is on a public footpath crossing Fields B1 and B4, but only 'flat' visualisations are provided ([**APP-116**] ES Volume 4 Appendix 10.6: *LVIA Visualisations Photoextents Part 2*), ie they show the area of land that would be developed, but do not show vertical elements such as panels or fences. These visualisations are not helpful when trying to assess the visual and other effects that would occur whilst travelling through the fenced corridors. Note that at VP42 looking east, Grade II listed Pond Farmhouse is currently visible. It is likely that views towards the asset, and over its contextual landscapes, would be screened by panels, or new hedges.
- 7.3.13 In my opinion, the LVIA does not illustrate the worst-case visual scenario. **Additional photomontages from viewpoints along PRowS crossing the site should be produced**, at locations to be agreed through consultation, especially with local residents. For example, at VP42, VP10, and where the North Buckinghamshire Way / Midshires Way cross Parcel 3 between Fields E21 / 22, and E23.
- 7.3.14 To give an idea of the adverse visual effects that may be experienced by users of PRowS crossing solar sites, the first computer-generated image (CGI) below is the existing view along a PRow through a field where solar development was proposed. The second image illustrates the proposed Year 1 view along the same PRow.

*Existing view*



*Developed view*



**Visual Receptor Sensitivity**

- 7.3.15 I do not agree with the LVIA's criteria for visual receptor susceptibility, as set out in [APP-110] LVIA Method para. 2.5.2. The LVIA correctly states that *'Those living within view of the Proposed Development are usually regarded as the highest susceptibility group as well as those engaged in outdoor pursuits for whom landscape experience is the primary objective'*, and also depends on *'the activity of the receptor'*. However, it then incorrectly goes on to include value factors, which should be separate considerations.
- 7.3.16 Also, as mentioned above, broadly, the approach to assessing visual effects is the same as that for character, except that character assessment considers receptors' susceptibility to the specific type of change that is proposed, whereas visual assessment only considers susceptibility in terms of people's occupation / activity, and *'the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations'* (GLVIA3 para. 6.33); see also LITGN-2024-01 Notes and Clarifications on Aspects of GLVIA3 (August 2024) Error E3, which states, *'The susceptibility of receptors is not dependent on the specific change which is being proposed'*.
- 7.3.17 The LVIA does not appear to have recognised the difference (see LVIA Method [APP-110] para. 2.5.2), and this may have affected judgements about visual effects.
- 7.3.18 I do not agree with the LVIA's conclusion that the level of sensitivity of all road users should be categorised as 'Medium', as this does not represent the worst-case-scenario. It assumes that all people travelling along roads are drivers whose attention would not primarily be focussed on the view, and may be travelling at speed. However, in reality, a) some people are not able to walk, so enjoy going for a leisurely drive / being driven through pleasant rural landscapes instead; and b) as explained previously, many people use the lanes for walking, cycling and horse-riding. For these receptors, a higher level of visual sensitivity is appropriate, and thus, levels of adverse visual effects would be higher.

- 7.3.19 It must also be borne in mind that people on horseback have a higher eye-level than pedestrians and cyclists. Indeed, this was raised by BC, as noted in LVIA Table 10.1: *Summary of stakeholder engagement*. The Applicant's response states, '*Buckinghamshire Council requested inclusion of viewpoints from within the Proposed Development and for experience of horse riders to bridleways to be considered*'. The Applicant's response was, '*Agreed, a number of viewpoints have been included from within the Proposed Development as requested. Due to the proposed hedgerow heights, the experience of riders on horseback is not assessed separately as they would experience the same degree of visibility at Year 0 and Year 10 as people on foot*'.
- 7.3.20 I do **not** agree that all riders on horseback would experience the same degree of visibility at Year 0 and Year 10 as people on foot, a) because not all views would be screened by proposed hedgerows, and b) whilst the LVIA has adopted a receptor eye-level height of 2m, which is probably generous, the eye-level of riders on horseback is usually considerably higher than that of pedestrians / cyclists (on an average-sized 16-hand horse, around 2.5m). Evidently, some equestrians would be able to see over screening elements that other visual receptors would not.
- 7.3.21 Whilst on the subject of horses, it is important to note that they are highly sensitive receptors, in that they are vulnerable to factors such as disturbance and pollution, which can adversely affect their health. Many other animals are also sensitive to the types of change proposed here, and vulnerable to the associated risks (for example BESS thermal runaway events which can have catastrophic consequences for environmental, human and animal health).
- 7.3.22 The Scheme is proposed on, and would be adjacent to, fields in which currently, hundreds of horses and sheep are kept by a business which supports critical biomedical supply chains and is licensed by the Home Office. The nature of the business is such that the animals have enhanced welfare, environmental and biosecurity requirements. Most importantly, it is absolutely essential that they are kept in a biosecure, low-stress rural environment with sufficient surrounding land. This is confirmed in the RR [RR-266] submitted by the business in question, which also states that '*[The] impacts would be compounded by the cumulative effects of other proposed energy and infrastructure projects in the area, which collectively threaten the viability of long-standing rural businesses and the livelihoods they support*'. I understand that further representations about these matters will be submitted during the Examination.
- 7.3.23 The Scheme would also be adjacent to Hogshaw Farm and Wildlife Park. Again, disturbance and / or pollution are likely to adversely affect these animals, and potentially, the business.

*Horses in fields east of St Mary's Road between East Claydon and Botolph Claydon*



**Adverse Visual Effects of Mitigating Measures**

- 7.3.24 As explained in Section 5, the LVIA does not factor in that in itself, the new planting would give rise to adverse landscape and visual effects.
- 7.3.25 For example, the LVIA acknowledges that planting would not screen (or filter) all views of the development, especially those from more elevated locations where even very tall trees would not screen, but to help achieve screening from lower-lying viewpoints, especially on and in proximity to the developed areas, the LVIA states that where within the Applicant's (or other associated body's) control, existing and new hedges would be maintained at a height of between c. 3 and 3.5m. The problem is that characteristically, hedge heights vary throughout the study area, reflecting a) use / function, and b) level of management. Thus, because the Scheme covers such a large area, it is inevitable that in some parts, tall hedges would be uncharacteristic and therefore visually inappropriate.
- 7.3.26 Also, in many parts, the taller hedges would result in loss of characteristic openness.
- 7.3.27 In addition, whilst from some viewpoints the proposed planting might successfully screen views of the development and thus **reduce** levels of adverse visual effects, the LVIA does not factor in that in many cases, the tall hedges (and proposed woodland) would result in the total loss of a fine / pleasant open view, which results in a **high** level of adverse visual effect.
- 7.3.28 Furthermore, in parts of the site, new hedges would be planted to divide areas, along security fences, and / or to screen views, in places where hedges did not previously exist, on arbitrary lines. This would result in the disruption of characteristic field patterns, as shown on the photomontages (eg at VP11).

### **Worst-Case Scenario**

- 7.3.29 The LVIA uses winter photographs for the photomontages (albeit at BC's request, to demonstrate the worst-case scenario – see LVIA Table 10.1), and mentions seasonal differences in levels of screening by vegetation. However, it is not clear whether the LVIA reports levels of effects at Year 10 as they would be in winter or in summer: clarification of this point would be helpful. The worst-case scenario of winter Year 10 should be adopted (or ideally, Year 15).
- 7.3.30 Conversely, the LVIA photomontages show Year 10 effects in what appears to be late spring, when trees and hedges have leafed-up, so the degree of visual screening is higher than during the winter months: here, deciduous vegetation is often leafless for almost half the year. Again, the worst-case scenario of winter Year 10 should be adopted (or ideally, Year 15).

### **Reliance on Vegetation to Screen Views**

- 7.3.31 These days, it is not considered safe (nor best-practice in LVIA) to rely on vegetation to screen views even in the shorter term, because realistically, it is so unlikely that existing / proposed screening vegetation would remain in place for the lifetime of the development.
- 7.3.32 As mentioned previously, the LVIA's baseline studies and subsequent predictions about levels of landscape and visual effects factor in screening which a) is currently provided by existing vegetation, and b) would be provided by reinforcement of existing and planting of new vegetation.
- 7.3.33 Indeed, the LVIA relies heavily on, and emphasises the importance of, existing and proposed vegetation to reduce high levels of adverse landscape and visual effects, including inter- and intra-project cumulative landscape / visual effects, and sequential visual effects, by screening / filtering views of the Scheme. The requirement for such extensive and substantial screening acknowledges that the large-scale industrial development is inappropriate in this location.
- 7.3.34 LVIA para. 10.5.50 explains that '*For the purposes of this assessment, the future baseline has been taken to be the same as the current baseline. Over the lifetime of the Proposed Development, agricultural practices and crops may change resulting in alterations to the baseline arable landscape. Climate change may expediate this change in the landscape; however, **such change is difficult to predict with any certainty** and it is therefore **assumed that the baseline will remain unaltered***' (my emphasis).
- 7.3.35 I completely **agree** that it is not possible to predict with any certainty that existing / proposed screening vegetation would remain in place for the lifetime of the development. In fact, recently, during a solar appeal inquiry, a resident asked the Inspector to visit an area where the applicant's LVIA has said views of the developed site would be screened for 40+ years by a large, mature coniferous woodland. The entire woodland had just been felled.
- 7.3.36 This is why LVIA's should report the **worst-case scenario** effect of there being no screening of views by vegetation (which is the main reason why GLVIA3 recommends bare-earth ZTVs). However, I do **not** agree with the LVIA's decision to assume that *the baseline will remain unaltered*.
- 7.3.37 LVIA Section 10.8 *Assessment of likely effects (without additional mitigation)* does report the worst-case scenario, (para. 10.8.3 emphasising that '*in the absence of additional mitigation measures during construction/decommissioning, it is impossible to say with any certainty what the impact on existing landscape fabric (including woodland, trees and hedgerows) might be*'). Unsurprisingly, it concludes that *there would be potential for significant [adverse] effects to arise on landscape character and visual amenity during construction, operation, and decommissioning*'.
- 7.3.38 However, the LVIA goes on to say, '*these are unrealistic scenarios as the additional mitigation set out in Section 10.9 will be secured*'. The point is, the mitigation measures may be 'secured', but

will they remain effective for the duration of the operation? And is it safe to assume that levels of adverse effects would not be higher than the LVIA predicts?

- 7.3.39 There are many reasons why vegetation should be considered impermanent, many of which are set out in detail in the Woodland Trust's *Woodland Creation Guide*<sup>7</sup>.
- 7.3.40 Factors include inappropriate species selection for situation; wrong planting specification; adverse ground conditions; soil type; nutrient availability; soil preparation; maintenance and management regimes / quality of care; competition; deliberate removal (authorised / planned, for example forestry plantations / orchards, or unauthorised / unplanned); accident; erosion, decline and death from intensive landuse / pollution, and / or pests / pathogens<sup>8</sup> / diseases (eg Ash dieback and Acute Oak Decline); climate / weather-pattern changes, especially increasing alternating prolonged periods of heat, drought, rainfall / flooding; storms / gales; or a combination of these and other factors.
- 7.3.41 In some parts of the study area, the Applicant's LVIA relies on vegetation to screen views which comprises existing short-lived coniferous forestry and broadleaved plantations / shelterbelts. Also, ash trees and elm hedges.
- 7.3.42 This is important because the screening currently afforded by diseased trees and hedges will be lost very soon. Both ash dieback and Dutch elm disease are widespread here (LVIA Table 10.1 includes a comment from National Trust / Historic England regarding '*potentially issues with Dutch elm disease*'). Most of the single-species elm hedges are healthy, but that is only because they are managed at a height of around 1.5 – 2m, the reason being that the elm bark beetles which carry and spread the Dutch elm disease fungus attack elm suckers / shoots once the plant has grown to a few metres tall, so keeping them low reduces the risk of dieback (that is why elm survives in hedges but not as isolated mature remnant hedgerow trees in open fields).
- 7.3.43 In some parts of the study area, the elm hedges have grown up to 4 -5m and currently screen views, and the LVIA assumes they would continue to do so for over 40 years. Evidently, that is not the case: dieback at the top of the plants can be seen everywhere; dead hedgerow trees can also be seen but often the dead parts are removed quickly and the plant is allowed to grow back from the base, which takes several years.

---

<sup>7</sup> [www.woodlandtrust.org.uk/media/50673/woodland-trust-woodland-creation-guide.pdf](http://www.woodlandtrust.org.uk/media/50673/woodland-trust-woodland-creation-guide.pdf)

<sup>8</sup> In 2021, the pathogen *Phytophthora pluvialis* was found in a woodland in Cornwall: it was the first report of this pathogen in Europe.

*Elm hedges along Hogshaw Road*



- 7.3.44 Notwithstanding the above, it is still necessary to factor existing vegetation in to visual assessments, but it is important to note the nature of the vegetation – for example, is it a large, dense block of healthy ancient woodland with an assumed high degree of permanence (subject of course to the above factors), an old orchard with sparse / fallen trees, or a thin, overgrown hedge which may be cut back at any time?
- 7.3.45 In addition, the assessment should note whether screening of views by vegetation is likely to be year-round or seasonal, and the degree of screening – some views may only be partially-screened, or filtered by vegetation.

**Visualisations / Photomontages / CGIs**

- 7.3.46 The LVIA's photomontages do not show what the development would look like in reality. For example, a) they show mitigation / enhancement measures having established successfully and having become effective by Year 10, whereas in my opinion, in most cases, that outcome is unlikely; b) they show 'benign' light conditions; and c) they do not show the correct colour and texture of the panels as they would appear under 'normal' weather / light conditions – the panels are coloured in black, which in many landscape contexts and subject to contrast is a recessive colour, and the image is too flat and 'dull', and does not account for the effects of glint and glare.
- 7.3.47 The first image overleaf is a computer-generated illustration of a proposed solar development from their air, showing how light on the panels would behave under the weather and light conditions specific to the original photo. The photos below that are of operational solar sites, showing how the perceived colour varies according to light conditions.

*CGI of proposed development, aerial view*



*Photos of operational solar sites*







## 7.4 Effects on Public Views

- 7.4.1 The LVIA does not report or summarise effects on receptors at each VP identified; rather, it assesses effects on views along roads and PRoWs along which the identified VPs are located, with visual receptors using each route categorised into 'receptor groups'.
- 7.4.2 LVIA Figures 10.5 a – d [AS-031] highlight the recreational routes which run through the study area – the lanes, NCN, long-distance trails, and PRoWs, but do not show the locations of the VPs; however, they are shown on CSAG's combined baseline and project information plan.
- 7.4.3 As mentioned previously, one of the long-distance trails which is very popular with residents and visitors alike, and along which levels of adverse visual and amenity effects would be very high throughout all phases of the Scheme, is the historic Bernwood Jubilee Way, which is used by pedestrians, cyclists and equestrians.
- 7.4.4 In the vicinity of the Scheme, Routes 5 and 6 runs along lanes and tracks between East Claydon and Quainton, a distance of c. 8km. Route 5 crosses the Parcel 2 array areas proposed between Botolph Claydon and Finemere Hill (Fields D3 (south), D4, and D11 – D15); the northern part of Route 6 is adjacent to arrays at the southern end of Parcel 2, on Finemere Hill (Fields D28 and D29).
- 7.4.5 The LVIA assesses effects on people using this part of the route, with specific views of the development identified along the way (from north to south, VPs 40, 13, 9, 10, 11 and 17) – see text in LVIA paras. 10.10 579 - 586.
- 7.4.6 VPs 40 and 13 are along St Mary's Road which runs between East Claydon and Botolph Claydon: the views are looking east towards Parcel 3 to the north east, and Parcel 2 to the south, where panels and other infrastructure are proposed. VP9 is along Weir Lane, south of Botolph Claydon, looking towards panels / infrastructure. VPs 10 and 11 run through fields where panels / infrastructure are proposed. VP11 is on the northern boundary of the AAL, and the point at which LCT 7 (Wooded Rolling Lowlands) / LCA 7.3 (Claydon Bowl) transition into LCT 9 (Low Hills and Ridges) / LCA 9.1 (Finemere Hill). VP17 is at Shipton Lee, on lower ground on the south side of Finemere Hill where the route joins Claydon Road.
- 7.4.7 VP41 is not on the Bernwood Jubilee Way route but nearby, at the southern end of Runt's Wood on the north-facing slopes of Finemere Hill, adjacent to Fields D28 and 29, on which panels / infrastructure are proposed. The route skirts the western ends of these Fields. VP16 is also nearby, to the west.
- 7.4.8 The LVIA categorises **all** visual receptors using this route as being of **High – Medium** sensitivity. In principle, based on the LVIA's three-point scale, I **agree**, but note previous comments about a) the problems associated with the scale, and b) the fact that the LVIA does not differentiate between levels of visual receptor sensitivity within and outside the AAL, whereas the latter should confer a higher level (as explained in previous sections, the LVIA concludes, and I agree, that broadly, levels of landscape sensitivity on and in the vicinity of the site are higher in the southern sections, and lower in the northern sections).
- 7.4.9 The LVIA concludes that between Years 1 and 10 of operation, the development '*would result in a moderate magnitude of effect on visual amenity*'. However, it appears that this level has been applied to all sections of the route, regardless of a) proximity to the Scheme, and b) intervening screening. In my opinion levels of magnitude would vary along the route.
- 7.4.10 Evidently, without mitigation (see below), the magnitude of visual effect would be highest within / adjacent to the site, and broadly, as with character, would decrease gradually with distance from the developed area to Neutral (although that may not be the case where views are screened by permanent features such as hills and settlements close to the developed area, at which points levels may still be high, or at longer-distance elevated viewpoints).

- 7.4.11 **It would be helpful to know whether the LVIA's Moderate Adverse level of magnitude is an average, or only experienced at certain VPs.** However, in my opinion, where the route runs through / adjacent to the site where panels / infrastructure are proposed, the level would be Substantial (see LVIA Plate 10.1).
- 7.4.12 In terms of the level of overall visual effect, the LVIA concludes that between Years 1 and 10 of operation, *'there would be a **major/moderate adverse** effect on views from the Bernwood Jubilee Way, which is considered to be significant'*. Again, it is not clear whether this applies to the whole of the route or specific VPs, so **perhaps the Applicant could confirm**. Also, with a higher level of magnitude, the level of overall effect would be higher.
- 7.4.13 At para. 10.10.584, the LVIA then goes on to describe the proposed mitigating measures, which include *'Mitigation and infill planting in the form of new hedgerows'* that would grow up to 3.5m high, and *'a wide, 50m corridor for trail users which would be sown with a wildflower mix to create visual interest'*.
- 7.4.14 Yet, notwithstanding the above, and somewhat surprisingly, the LVIA concludes that **the mitigating measures would make no difference to levels of adverse effects**. Para. 10.10.586 states, *'in Year 10 of operation (including maintenance), there would be a **major/moderate adverse** effect on views from the Bernwood Jubilee Way, which is considered to be significant'*. This level of effect would remain until decommissioning at Year 40.
- 7.4.15 Also, in my opinion, the level would be higher. It must be borne in mind that:
- i) It is highly unlikely that the proposed wildflower meadows would establish successfully given they require low fertility soil, whereas this is high fertility arable soil.
  - ii) In many cases the proposed screening vegetation would result in the total loss of fine / pleasant open views.
  - iii) In many areas, such tall hedges are uncharacteristic.
  - iv) New boundaries would disrupt historical field patterns;
  - v) It is highly unlikely that existing / proposed screening vegetation would remain in place / effective over the longer term.
- 7.4.16 Other very popular long-distance trails run through the study area along which views would be adversely affected, levels depending on distance and degree of visibility. Many people using the Bernwood Jubilee Way between East Claydon and Quainton travel back to East Claydon via long-distance trails to the north, which cross Quainton Hill.
- 7.4.17 These include the North Buckinghamshire Way and Midshires Way, both of which run through the north-eastern part of the site where panels and other infrastructure is proposed.
- 7.4.18 The Outer Aylesbury Ring also crosses Quainton Hill, although it departs from the other routes, running down the slopes above Hogshaw Hill Farm then heading east to North Marston and Oving. Three other long-distance trails (North Buckinghamshire Way, Midshires Way, and Swans Way) use the same route along this section, and pass VP30.
- 7.4.19 The LVIA concludes that as will all the VPs along this route, effects at VP30 would be **Moderate Adverse and significant** for the 40-year duration of the operation. However, in my opinion, they would be higher at this VP than at other VPs along the Outer Aylesbury Ring.
- 7.4.20 This is partly because VP30 is within the AAL: LVIA para. 10.5.16 notes that *'long distance views, including those of the Site, are characteristic of the Landscape Character Type (LCT) 9 Low Hills and Ridges, represented by Landscape Character Area (LCA) 9.2 Quainton Hill and LCA 9.3 Pitchcott-Whitchurch Ridge and one of the special qualities of the Quainton-Wing Hills AAL'*.
- 7.4.21 It is also because the full extent of the Scheme would be visible.

- 7.4.22 In addition, note that the LVIA's photomontages do not show the effects of light on the panels: in most landscape contexts, black is a recessive colour.
- 7.4.23 As noted above, the LVIA assesses effects on views along Outer Aylesbury Ring from LVIA VP30, north of Quinton Hill summit (LVIA VP31 is at the summit but a large proportion of the site is screened by topography), but it is better to stop on the slopes above Hogshaw Hill Farm, and look in an arc from south west to north east. Levels of visual effects would be marginally higher at this VP than at LVIA VP30 as it is closer to the site, and topography and vegetation do not obscure views.
- 7.4.24 Given that on its own, the proposed development would give rise to extensive significant adverse effects on public views and visual amenity, in my opinion there can be no doubt that in combination with other existing and proposed industrial / industrialising developments within the study area, the inter-project cumulative visual effects would also be significant adverse, but levels would be higher due to being even more extensive / widespread. See also BC's position on this matter in their RR [RR-26].

## 7.5 Effects on Private Views

- 7.5.1 The Applicant's RVAA [APP-114] concludes that levels of visual effects at a few residential properties adjacent / in proximity to the site would be significant adverse. I **agree** that effects at certain residential properties would be significant adverse, but my assessment concluded that more properties than assumed would be affected.
- 7.5.2 I believe there may be errors in LVIA Table 10.14, where Major – Moderate Adverse effects at Bernwood Farm and Sion Hill Farm are described as 'not significant' – **perhaps the Applicant could clarify this.**
- 7.5.3 The levels categorised as 'significant' range from Major Adverse (the highest possible level) to Moderate. In some but not all cases, the LVIA concludes that levels would reduce after Year 10 when the LVIA assumes that the proposed mitigation would have become effective – see below – and some but not all would fall below the significance threshold.
- 7.5.4 However, in my opinion, some levels would be higher than predicted mainly because in many cases, a) views are from elevated locations so cannot be screened; b) the proposed screening vegetation would result in the total loss of a fine / pleasant open view; c) in many areas, tall hedges are uncharacteristic, and new hedges would be inappropriate; and d) it is highly unlikely that existing / proposed screening vegetation would remain in place / effective over the longer term.
- 7.5.5 CSAG's WR, and many of those to be submitted by residents, include photographs taken from private properties, which should be referred to as required. Also, several residents have asked whether the Examining Inspectors would visit their properties: CSAG could help to organise this if necessary.
- 7.5.6 Also, there appear to be inconsistencies in the LVIA's assessments of effects on certain public and private views. For example, some of the residential properties identified in the LVIA are on the Bernwood Jubilee Way route, along Weir Lane south of Botolph Claydon.
- 7.5.7 As noted above, the LVIA concludes that even with mitigating measures in place, High – Medium sensitivity users of this route would experience Major – Moderate Adverse significant visual effects for the duration of the operation. Receptors at Bernwood Farm are also predicted to experience Major – Moderate Adverse significant visual effects for the duration of the operation. However, in theory, levels should be higher: a) the RVAA categorises all residential receptors as High sensitivity, and b) receptors would experience the effect for longer durations.

- 7.5.8 NB I have not carried out my own RVAA for this Scheme, but have followed GLVIA3.
- 7.5.9 Notwithstanding the fact that the LVIA predicts significant adverse visual effects at certain residential properties, the RVAA concludes that the levels would not reach / breach the Residential Visual Amenity Threshold.
- 7.5.10 It must be noted that the Landscape Institute is currently reviewing the RVAA TGN, and if an update becomes available during the course of the Examination, it will be provided if helpful.
- 7.5.11 As confirmed in the Applicant's LVIA, the TGN advises that RVAA should assess effects on receptors likely to experience *'the greatest magnitude of change'*, and the footnote to para. 4.18 states, *'it is important for assessors to keep in mind that RVAA is only concerned with those properties in the highest magnitude category'*.
- 7.5.12 However, many practitioners disagree about the interpretation of the 'highest magnitude category'. Does it mean that the RVAA threshold should be set at any effect which is identified as 'significant'? Or, does the TGN mean that the threshold should be set at the highest level of magnitude of effect, or the highest level of overall effect (there may be differences due to varying levels of receptor sensitivity)? Or, does the TGN mean setting the threshold at the highest level of magnitude of effect (or overall effect) that has been identified in the LVIA criteria, or the highest magnitude of effect (or overall effect) identified for receptors affected by the project in question?
- 7.5.13 Also, it is important to note that the TGN does not state that the RVAA threshold only applies to residual effects, ie once proposed screening measures are assumed to have become effective (in this case, Year 10). However, the Applicant's LVIA has adopted this approach. Again, some practitioners disagree about this, but many carry out RVAAs when the threshold is met in Year 1, not Year 10 or later.
- 7.5.14 In addition, as stated previously, it cannot be guaranteed that all existing and / or proposed screening vegetation would remain in place in the longer term. A worst-case vegetation-free scenario should be adopted. If the vegetation was not in place to screen, then levels of adverse visual effects would not reduce, and many effects would remain significant adverse for the duration of the operation.
- 7.5.15 Finally, as with amenity, note that effects on residential visual amenity are of concern to many people living in the area: the WRs which will be submitted by CSAG and other members of the community will explain these effects in more detail.

## 8 Glint and Glare Effects

- 8.1 This section summarises CSAG's concerns about the Applicant's Glint and Glare Assessment (GGA)'s method, and raises questions about the justification for the conclusions which have been reached.
- 8.2 The GGA is ES Volume 4 Appendix 5.4: *Glint and Glare Assessment* [APP-082].
- 8.3 As explained on the Applicant's glint and glare consultants' website, '*The two terms 'glint' and 'glare' refer to the unwanted reflection of the Sun's rays from materials capable of producing specular reflections, such as solar panels or glass*'. Glint and glare are sometimes grouped under the term 'solar reflection', which is what causes them.
- 8.4 Glint is a momentary flash caused when sunlight hits a smooth surface such as water, glass, or a solar panel. Glare is diffused light caused by the reflection of the sky on such surfaces; it is less intense than glint, but the effect may be experienced continuously for long periods throughout the day. The phenomena can affect a variety of receptors in different ways.
- 8.5 Both phenomena are known to at best distract, and at worst, cause brief loss of vision – also known as flash-blindness – in motorists and other road-users, train drivers, and pilots, which can cause serious road, rail and air accidents.
- 8.6 Both are unpleasant / cause visual discomfort when viewed from relatively long distances, and are highly disturbing / disorientating when experienced at close quarters, especially regularly / for long periods of time. In close proximity, there is the potential for ocular damage (people working in solar arrays are supplied with protective eyewear).
- 8.7 The effects can negatively affect the quality of people's lives, and their well-being, including their visual, recreational / social, and residential amenity, and the way the landscape and features such as heritage assets are experienced. They can also indirectly adversely affect the local economy, in terms of people who enjoy visiting unspoilt rural areas being deterred from doing so, with knock-on effects on the businesses which cater for them.
- 8.8 As explained below, the Applicant's GGA considers effects on certain aspects of people's safety, and residential amenity, but not heritage or socioeconomic effects.
- 8.9 Note that the Applicant's LVIA does not appear to consider the effects of glint and glare on character or visual / other amenity at all – at least, glint and glare is not mentioned. It seems that the LVIA was carried out first, and the GGA took the LVIA as the basis for mitigation in the form of planting which the GGA assumes would screen all available views for the duration of the operation.
- 8.10 Glint and glare can also adversely affect certain creatures, for example birds during the day, and bats at night (moon glare). The GGA does not consider ecological effects – in fact, glint and glare are rarely considered in ecological assessments; however, the evidence suggests that adverse ecological effects can arise. Indeed, para. 3.10.4 of the Scoping Opinion issued for the Green Hill solar NSIP (EN010170), which is currently undergoing Examination, states, '*the Planning Inspectorate considers that given the current rural nature of the surrounding area, the ES should assess other receptors such as... ecological receptors*'. The Applicant's comment on this is, '*It is noted that there is no evidence in Glint and Glare guidance or wider literature to suggest that there are ecological impacts of glint and glare as such, ecological receptors have not been included within the modelling assessment*'. The comment is disputed, and evidence of the adverse effects of glint and glare on ecological receptors has been provided.
- 8.11 Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT)'s RR [RR-020] also mentions adverse ecological glint and glare effects.

- 8.12 Here it must be noted that currently, in the UK there is no formal published guidance for carrying out GGAs, only high-level guidelines from the Civil Aviation Authority (CAA) (the USA's Federal Aviation Administration (FAA) also has guidance on the assessment of effects of solar developments near aerodromes). There is, however, informal guidance in the form of a method, produced by a company called Pager Power, ie *Independent Solar Photovoltaic & Building Development – Glint & Glare Guidance*, currently 4<sup>th</sup> Edition (September 2022). Indeed, Pager Power appear to carry out GGAs for the majority of the solar developments proposed in the UK, although I do not know if they carried out the Applicant's GGA.
- 8.13 Analysis of the method confirms that GGAs primarily consider **safety**. They assess the effects of glint and glare on human receptors who, if affected by the phenomena, could potentially cause a major accident resulting in large numbers of casualties, ie pilots and people in air traffic control towers; train drivers; and people driving vehicles along '*major national, national, and regional roads*'.
- 8.14 GGAs usually also consider effects on the safety of people using minor roads and lanes, and sometimes PRowS. The Applicant's GGA has done so: GGA para. 6.5.1 explains that '*Several PRow and bridleways are present within the 1km study area (Annex A, Figures A.4 and A.5). These include two Long Distance Route receptors: Bernwood Jubilee Way (PW1) and North Buckinghamshire Way/Midshires Way (PW2). At the time of undertaking this assessment, there was no published guidance in relation to this type of receptors. Therefore, PRow and bridleways have been considered in an overview assessment*'.
- 8.15 However, as in other GGAs, these people are categorised as **Low** sensitivity receptors, mainly due to the assumption that only low numbers of people use minor roads and PRowS, and therefore, any incidents would result in low numbers of fatalities / casualties. The reasons for this judgement are explained in GGA para. 8.2.2.
- 8.16 In my opinion it is not acceptable to say that because receptor numbers are low, levels of effects would be **Low** because multiple fatalities / casualties would not occur. Surely just one avoidable fatality / serious injury along a local lane or PRow should be of concern.
- 8.17 Also, as explained in previous sections, some of the lanes and PRowS in the study area **are** popular and very well used, especially the long-distance trails, and the footpaths and bridleways which connect them to each other and to the towns and villages. Many of the users are of relatively high visual sensitivity.
- 8.18 GGAs, including this one, do not assess effects on public visual (or social / recreational) amenity, in terms of the adverse changes to the experiences of people using local lanes and PRowS, and visiting heritage assets, equestrian centres, and other attractions.
- 8.19 I assume that the GGA did not account for equestrians' higher eye-level, although **clarification of this point would be helpful**.
- 8.20 GGAs, including this one, also assess effects on residential visual amenity. At para. 9.4, it concludes that for these receptors, the development would '*result in **low impact with no significant adverse** effects, which will therefore require no additional mitigation*' (original emphasis).
- 8.21 What is not clear in the GGA's assessments of effects on ground-based receptors is how much existing and proposed vegetation has been relied on to avoid / reduce levels of glint and glare effects.
- 8.22 GGA para. 6.6.1 states, '*Large elements in the landscape can act as barriers and block solar reflections from view. As a worst-case, only permanent elements of significant size have been included in the analyses. These comprise woods and structures (Annex A, Figures A.2 and A.3)*'. That is a reasonable approach; however, as noted previously, some of the woodlands are mature

coniferous plantations which could be felled at any time, many contain ash which is suffering from dieback disease.

- 8.23 Also, GGA para. 8.1.1 states that '*solar reflections will be **significantly screened by the existing hedges and trees** on the southern edge of the road*' (emphasis added), and references to screening by hedges appear elsewhere. This appears to contradict the previous statement. In addition, it is not clear whether the GGA assumes that vegetation would fully screen all year round, as opposed to just filtering in winter. **Clarification of these points would be helpful.**
- 8.24 In summary, my assessment concluded that many receptors could potentially be **significantly adversely affected** by glint and glare, arising both from the proposed development in isolation, and other existing / proposed solar developments in the wider area.

## 9 Conclusions

- 9.1 In summary, broadly, I **agree** with many of the findings of the Applicant's LVIA ([APP-053]).
- 9.2 In particular, I **agree** with the LVIA's overall conclusion that the proposed development would result in **significant adverse effects on landscape character, and public and residential visual amenity** during construction, the 40-year operational period, and decommissioning.
- 9.3 However, I concluded that the LVIA has **underestimated** levels of many of the adverse landscape and visual effects, and that beneficial effects have been overstated.
- 9.4 This is an **important matter** because the LVIA judges levels of certain adverse effects to be **below** the 'significance' threshold, whereas the higher level would render them 'significant'.
- 9.5 This report has explained in detail i) the steps I undertook to understand and establish why, where and how the underestimations occurred and the implications, with analysis and comparison; and ii) why I consider that levels of beneficial effects have been overstated.
- 9.6 There are several reasons why, in my opinion, the LVIA underestimates levels of landscape and visual effects, but one of the most important is that the LVIA appears to downplay what most people – including decision-makers – would agree is the large-scale industrialisation of a rural landscape.
- 9.7 In the Applicant's *Response to Relevant Representations* [PDA-006], on p. 46 of the PDF, under the Theme heading *General Comment*, the Applicant responds to a landscape issue raised in BC's RR [RR-26] which states that '*the Proposed Development would have an industrialising effect on a rural landscape*'.
- 9.8 The Applicant's response is, '*The Applicant recognises the concerns regarding landscape change but **does not consider the terms 'industrialisation' and 'industrialised' applicable to the Proposed Development***' (emphasis added).
- 9.9 I am very surprised by this comment.
- 9.10 Firstly, although the Applicant's LVIA does not use the term 'industrial', it does recognise that the landscape change would result in significant adverse landscape and visual effects, presumably mainly due to the stark contrast between the existing agricultural land use in a rural context, and the proposed power-generating / -storing use with associated infrastructure / elements. In my opinion, the latter can only be defined as 'industrialisation' – it certainly does not describe the generally-accepted definition of a 'farm'.
- 9.11 Secondly, according to the EIA Regulations, solar projects of this nature are '*Industrial installations for the production of electricity, steam and hot water*'.
- 9.12 The industrialisation would cover an extremely large area, and affect landscapes many kilometres beyond the Order Limits.
- 9.13 The Scheme extends c. 6.5km from west to east, and c. 6km from north to south, and would occupy c. 675ha. It is difficult to fully comprehend the magnitude of the size and scale of the proposal, especially relative to its wider context, and how much land is required to accommodate it (mainly due to solar's inefficiency – see below). Photographs of long-distance views encompassing the whole site are included in the LVIA, and this and other reports, but an appreciation of scale is best established by travelling around the area by car and / or on foot / bicycle / horseback.
- 9.14 However, by way of comparison, the whole of the City of Oxford, which lies c. 22km to the south west, is c. 8.5km long and c. 5km wide. Aylesbury is c. 6km x 4km, and Bicester is c. 3.5km x 3.5km.
- 9.15 In addition, the cumulative effects arising in combination with other similarly industrialising forms of development would be significant and experienced over an even larger area.

- 9.16 My assessment concluded that some of the LVIA's underestimations relate to lack of baseline-gathering and / or granular analysis of the information, leading to levels of landscape receptor sensitivity being reported as lower than they should be. For example, distinctive localised variations in topography are not noted.
- 9.17 This is exacerbated by the use of a three-point scale for reporting levels of sensitivity, which does not make enough allowance for variations in levels of landscape value and susceptibility to change of the type proposed, for example in terms of the differences between designated and 'everyday' landscapes. There are also inconsistencies in this regard, and in some cases, the LVIA's justifications for the judgements are not always clear or easy to follow.
- 9.18 Other underestimations are due to what I consider to be incorrect assumptions, and interpretations of / departures from the relevant guidance eg *Guidelines for Landscape and Visual Impact Assessment* 3<sup>rd</sup> Edition (GLVIA3); also, not factoring in the cause and nature of many of the impacts and effects arising from the Scheme.
- 9.19 In addition, the LVIA relies heavily on planting to screen views and reduce what it concludes would otherwise be 'significant' adverse effects on both landscape character and visual amenity during construction, operation, and decommissioning.
- 9.20 Firstly, it is important to note that not all views could be screened by existing and / or proposed vegetation, for example at elevated public and private viewpoints.
- 9.21 Secondly, the LVIA assumes that all indirect adverse effects on character can be avoided / reduced by screening views; however, screening does not avoid / reduce effects on the non-visual experiential aspects of character, therefore levels of indirect adverse landscape effects would be higher than reported.
- 9.22 Thirdly, the LVIA does not factor in a) the proposed screening measures (tall hedges and woodlands) being uncharacteristic, and reducing characteristic openness; nor b) the high levels of adverse visual effects that result from the total loss of an open view due to screening.
- 9.23 Fourthly, the LVIA assumes that the future landscape and visual baseline would be the same as the current baseline; however, for numerous reasons it is highly unlikely that the same vegetation would continue to screen the same views for the 40+ -year duration of the operation. The worst-case scenario should be assumed, or at least, the likely degree of permanence of the off-site screening vegetation upon which the LVIA relies should be assessed and factored into the studies.
- 9.24 Regarding landscape and visual enhancements / benefits, the LVIA concludes that by Year 10, when it assumes that the planting proposed to mitigate adverse landscape and visual effects had established, matured, and become effective, the Scheme would result in direct and 'permanent' **Moderate Beneficial** effects on what it calls the Scheme's landscape 'fabric'.
- 9.25 Note that taking Year 10 as the point at which new planting would have matured is unusual in NSIPs / other projects: normally it is Year 15 for hedges and woodland, although in some cases, the time allowed for new woodland to establish and successfully filter / screen views is 25 years, which is more realistic.
- 9.26 I do **not agree** with the LVIA's justifications for the beneficial effects for a number of reasons, the main one being that in LVIA, landscape / visual mitigation measures such as screen planting cannot be double-counted as enhancement (GLVIA3 para. 3.39). At best, the effect would be Neutral, but in reality, effects would be adverse for the reasons outlined above (tall hedges uncharacteristic, loss of openness / open views and so on).
- 9.27 Although amenity other than visual is not expressly considered in the LVIA, my own assessment concluded that the development would also result in **significant adverse effects on people's social, recreational and residential amenity, health and wellbeing, and the quality of their lives.**

- 9.28 Pedestrians, equestrians and cyclists are equally well-catered for within the study area, as there is a very good, interconnected network of lanes, long-distance trails, bridleways and other PRowWs, some of which cross parts of the Scheme. Where lanes are lightly trafficked, people say that currently, they can use them for recreational purposes as well as for getting from A to B, and are very concerned about effects on their safety.
- 9.29 In addition, the development is also likely to result in **adverse effects on local businesses** which rely on trade from people who visit with the purpose of enjoying these quiet rural, historic landscapes and the resources they offer, such as shops and hostleries. Local attractions include Hogshaw Farm and Wildlife Park, and historic Claydon House and Park, which is a National Trust property.
- 9.30 I have a number of queries relating to the above and other matters, including certain aspects of the method used for the Applicant's glint and glare assessment, about which I have concerns.
- 9.31 Hopefully, these can be resolved during the Examination, but where clarification from the Applicant would be helpful, it has been highlighted in the report text. In the light of the responses, further assessment may be necessary.
- 9.32 Finally, my assessment considered how high levels of adverse landscape and visual (and other) effects could potentially be reduced, for example through the removal of panels / infrastructure in certain parts of the Scheme (as already suggested by several consultees / respondents). (It may be helpful to arrange for a plan to be drawn up showing the areas / Fields which statutory consultees and other respondents have already recommended for removal, and / or may do so during the course of the Examination.)
- 9.33 It is relevant to note that due to northern latitude and associated climate / variable weather, in the UK, solar is **extremely inefficient** – current estimates are just over 10%. This means that **disproportionately large amounts of land are required to achieve a profitable output**.
- 9.34 This raises the subject of overplanting, which, as far as I could ascertain, is not mentioned by the Applicant. The question is, **could the scheme deliver the same amount of energy using less land**, which could potentially reduce levels of landscape, visual, and other harm?

**Carly Tinkler** CMLI March 2026

PINS Ref: EN010158

# Rosefield Solar Development

Application by Rosefield Energyfarm Limited for an Order granting Development Consent  
for a proposed solar development on land in central Buckinghamshire

# SUMMARY

of

# Landscape & Visual Report

Deadline 1 Written Representations

March 2026

by

Carly Tinkler BA CMLI FRSA MIALE

for

Claydons Solar Action Group

# Summary

- S1.1 I am a Chartered Landscape Architect, instructed by a group of residents called Claydons Solar Action Group (CSAG) to advise on landscape and visual matters relating to the Application, and to act for and advise the Group during the Examination.
- S1.2 I specialise in landscape, environmental and colour assessment and planning in the UK and abroad, and have done so for over 40 years. Since 2021, I have been involved with numerous renewable energy and electricity generation / transmission / storage proposals (wind / solar / pylons / battery energy storage systems (BESS)), some of which are Nationally Significant Infrastructure Projects (NSIPs), working with local planning authorities, parish councils, and community groups at all stages of the planning / Development Consent Order (DCO) process. I am therefore very familiar with the issues associated with the proposed Scheme.
- S1.3 I am also familiar with the landscapes of the area, having advised parish councils on landscape and visual matters at the appeal hearing for the proposed BESS complex on land at Rookery Farm, Granborough (APP/J0405/W/25/3360815), in May 2025.
- S1.4 Preparation for the Rosefield Examination entailed reviewing the Application documents and other material; carrying out desktop studies and research; undertaking fieldwork and surveys; consultation with residents, stakeholders, and experts appointed by CSAG to deal with other environmental topics / planning matters; preliminary assessments of landscape, visual and associated effects; analysing the findings; drawing conclusions; and comparing the findings and conclusions to the Applicant's.
- S1.5 Note that this commission is different from a 'standard' Landscape and Visual Impact Assessment (LVIA), in that it is a 'hybrid' between an assessment of effects, a review of the Application documents, and a response to the Application in the form of a Written Representation (WR) on behalf of CSAG.
- S1.6 In carrying out this exercise, I was greatly assisted by people from the local communities, many of whom have in-depth knowledge and a lifetime's experience of the area's natural and cultural history, features, resources and qualities. The information they gathered and their responses were used to inform my assessment. The material that will be submitted to the Examination by residents provides important details and illustrations of the site and contextual landscapes, the features, resources and qualities which are most highly valued, and the reasons for their concerns, so should be referred to for more detail.
- S1.7 The full account of my assessment and review, and analysis of the findings, is set out in my report. My conclusions have factored in the Applicant's *Response to Relevant Representations* [PDA-006] (the responses did not alter my earlier conclusions as summarised in CSAG's Relevant Representation (RR)), and points raised during Open Floor Hearing (OFH) 1, which I attended.
- S1.8 In summary, broadly, I **agree** with many of the findings of the Applicant's LVIA ([APP-053] ES Volume 2 Chapter 10 *Landscape and Visual*).
- S1.9 In particular, I **agree** with the LVIA's overall conclusion that the proposed development would result in **significant adverse effects on landscape character, and public and residential visual amenity** during construction, the 40-year operational period, and decommissioning.
- S1.10 However, I concluded that the LVIA has **underestimated** levels of many of the adverse landscape and visual effects, and that beneficial effects have been overstated.

- S1.11 This is an **important matter** because the LVIA judges levels of certain adverse effects to be **below** the 'significance' threshold, whereas the higher level would render them 'significant'.
- S1.12 The report explains in detail i) the steps I undertook to understand and establish why, where and how the underestimations occurred and the implications, with analysis and comparison; and ii) why I consider that levels of beneficial effects have been overstated.
- S1.13 There are several reasons why, in my opinion, the LVIA underestimates levels of landscape and visual effects, but one of the most important is that the LVIA appears to downplay what most people – including decision-makers – would agree is the large-scale industrialisation of a rural landscape.
- S1.14 In the Applicant's *Response to Relevant Representations* [**PDA-006**], on p. 46 of the PDF, under the Theme heading *General Comment*, the Applicant responds to a landscape issue raised in Buckinghamshire Council (BC)'s RR [**RR-26**] which states that *'the Proposed Development would have an industrialising effect on a rural landscape'*.
- S1.15 The Applicant's response is, *'The Applicant recognises the concerns regarding landscape change but **does not consider the terms 'industrialisation' and 'industrialised' applicable to the Proposed Development'*** (emphasis added).
- S1.16 I am very surprised by this comment.
- S1.17 Firstly, although the Applicant's LVIA does not use the term 'industrial', it does recognise that the landscape change would result in significant adverse landscape and visual effects, presumably mainly due to the stark contrast between the existing agricultural land use in a rural context, and the proposed power-generating / -storing use with associated infrastructure / elements. In my opinion, the latter can only be defined as 'industrialisation' – it certainly does not describe the generally-accepted definition of a 'farm'<sup>1</sup>.
- S1.18 Secondly, according to the EIA Regulations, solar projects of this nature are *'Industrial installations for the production of electricity, steam and hot water'*.
- S1.19 The industrialisation would cover an extremely large area, and affect landscapes many kilometres beyond the Order Limits.
- S1.20 The Scheme extends c. 6.5km from west to east, and c. 6km from north to south, and would occupy c. 675ha. It is difficult to fully comprehend the magnitude of the size and scale of the proposal, especially relative to its wider context, and how much land is required to accommodate it (mainly due to solar's inefficiency – see below). A photograph of a long-distance view of the whole site is included at the end of this document, but an appreciation of scale is best established by travelling around the area by car and / or on foot / bicycle / horseback.
- S1.21 However, by way of comparison, the whole of the City of Oxford, which lies c. 22km to the south west, is c. 8.5km long and c. 5km wide. Aylesbury is c. 6km x 4km, and Bicester is c. 3.5km x 3.5km.
- S1.22 In addition, the cumulative effects arising in combination with other similarly industrialising forms of development would be significant and experienced over an even larger area.
- S1.23 Some of the LVIA's underestimations relate to lack of baseline-gathering and / or granular analysis of the information, leading to levels of landscape receptor sensitivity being reported as lower than they should be. For example, distinctive localised variations in topography are not noted.
- S1.24 This is exacerbated by the use of a three-point scale for reporting levels of sensitivity, which does not make enough allowance for variations in levels of landscape value and susceptibility to change of the type proposed, for example in terms of the differences between designated and 'everyday'

---

<sup>1</sup> The Cambridge Dictionary defines 'farm' as *'an area of land, together with a house and buildings, used for growing crops and/or keeping animals as a business'*.

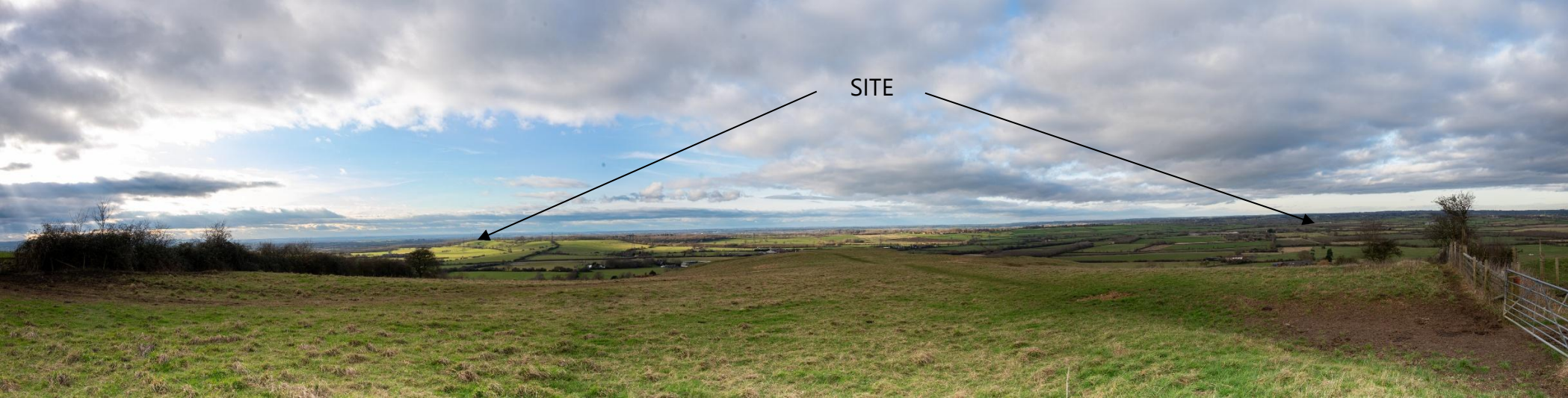
landscapes. There are also inconsistencies in this regard, and in some cases, the LVIA's justifications for the judgements are not always clear or easy to follow.

- S1.25 Other underestimations are due to what I consider to be incorrect assumptions, and interpretations of / departures from the relevant guidance eg *Guidelines for Landscape and Visual Impact Assessment* 3<sup>rd</sup> Edition (GLVIA3); also, not factoring in the cause and nature of many of the impacts and effects arising from the Scheme.
- S1.26 In addition, the LVIA relies heavily on planting to screen views and reduce what it concludes would otherwise be 'significant' adverse effects on both landscape character and visual amenity during construction, operation, and decommissioning.
- S1.27 Firstly, it is important to note that not all views could be screened by existing and / or proposed vegetation, for example at elevated public and private viewpoints.
- S1.28 Secondly, the LVIA assumes that all indirect adverse effects on character can be avoided / reduced by screening views; however, screening does not avoid / reduce effects on the non-visual experiential aspects of character, therefore levels of indirect adverse landscape effects would be higher than reported.
- S1.29 Thirdly, the LVIA does not factor in a) the proposed screening measures (tall hedges and woodlands) being uncharacteristic, and reducing characteristic openness; nor b) the high levels of adverse visual effects that result from the total loss of an open view due to screening.
- S1.30 Fourthly, the LVIA assumes that the future landscape and visual baseline would be the same as the current baseline; however, for numerous reasons it is highly unlikely that the same vegetation would continue to screen the same views for the 40+-year duration of the operation. The worst-case scenario should be assumed, or at least, the likely degree of permanence of the off-site screening vegetation upon which the LVIA relies should be assessed and factored into the studies.
- S1.31 Regarding landscape and visual enhancements / benefits, the LVIA concludes that by Year 10, when it assumes that the planting proposed to mitigate adverse landscape and visual effects had established, matured, and become effective, the Scheme would result in direct and 'permanent' **Moderate Beneficial** effects on what it calls the Scheme's landscape 'fabric'.
- S1.32 Note that taking Year 10 as the point at which new planting would have matured is unusual in NSIPs / other projects: normally it is Year 15 for hedges and woodland, although in some cases, the time allowed for new woodland to establish and successfully filter / screen views is 25 years, which is more realistic.
- S1.33 I do **not agree** with the LVIA's justifications for the beneficial effects for a number of reasons, the main one being that in LVIA, landscape / visual mitigation measures such as screen planting cannot be double-counted as enhancement (GLVIA3 para. 3.39). At best, the effect would be Neutral, but in reality, effects would be adverse for the reasons outlined above (tall hedges uncharacteristic, loss of openness / open views and so on).
- S1.34 Although amenity other than visual is not expressly considered in the LVIA, my own assessment concluded that the development would also result in **significant adverse effects on people's social, recreational and residential amenity, health and wellbeing, and the quality of their lives**.
- S1.35 Pedestrians, equestrians and cyclists are equally well-catered for within the study area, as there is a very good, interconnected network of lanes, long-distance trails, bridleways and other PRoWs, some of which cross parts of the Scheme. Where lanes are lightly trafficked, people say that currently, they can use them for recreational purposes as well as for getting from A to B, and are very concerned about effects on their safety.
- S1.36 In addition, the development is also likely to result in **adverse effects on local businesses** which rely on trade from people who visit with the purpose of enjoying these quiet rural, historic

landscapes and the resources they offer, such as shops and hostelrys. Local attractions include Hogshaw Farm and Wildlife Park, and historic Claydon House and Park, which is a National Trust property.

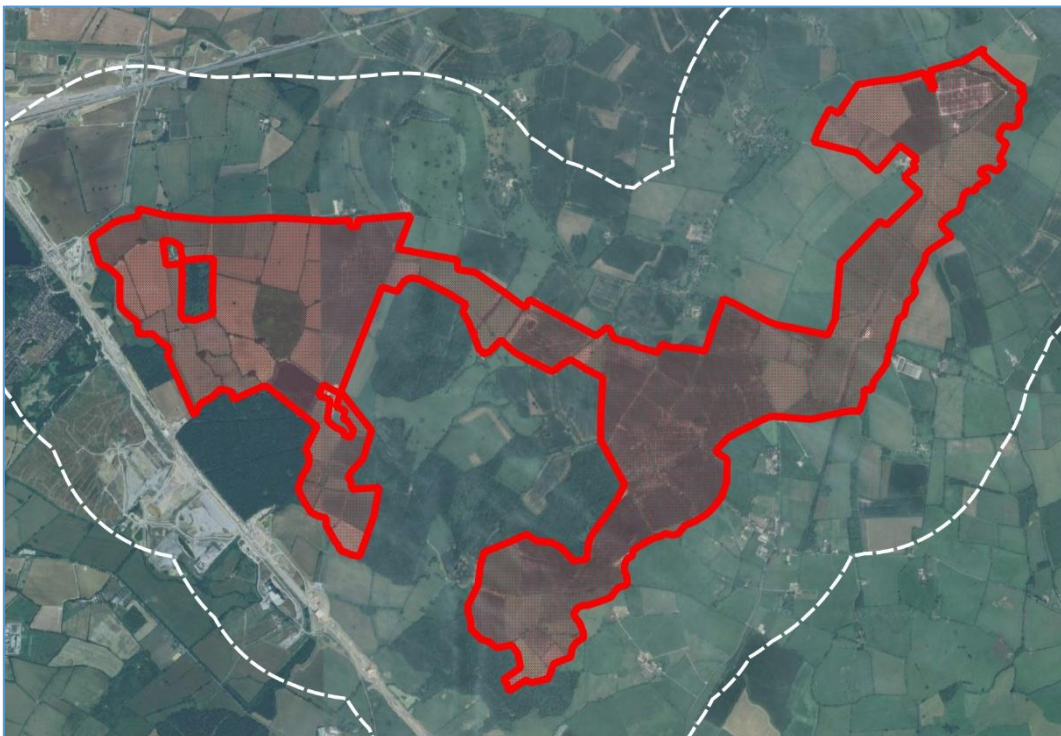
- S1.37 I have a number of queries relating to the above and other matters, including certain aspects of the method used for the Applicant's Glint and Glare Assessment (GGA), about which I have concerns.
- S1.38 Hopefully, these can be resolved during the Examination, but where clarification from the Applicant would be helpful, it is highlighted in the report text (and for ease of reference, along with other queries, listed in doc. ref. CSAG-01). In the light of the responses, further assessment may be necessary.
- S1.39 Finally, my assessment considered how high levels of adverse landscape and visual (and other) effects could potentially be reduced, for example through the removal of panels / infrastructure in certain parts of the Scheme (as already suggested by several consultees / respondents).
- S1.40 It is relevant to note that due to northern latitude and associated climate / variable weather, in the UK, solar is **extremely inefficient** – current estimates are just over 10%. This means that **disproportionately large amounts of land are required to achieve a profitable output**.
- S1.41 This raises the subject of overplanting, which, as far as I could ascertain, is not mentioned by the Applicant. The question is, **could the scheme deliver the same amount of energy using less land**, which could potentially reduce levels of landscape, visual, and other harm?
- S1.42 It is normal but sometimes frustrating that in the planning process, environmental and other topics are kept in silos (heritage, ecology, landscape, transport etc); however, many overlap, and the connections between them are often critical (and where many problems occur but are not recognised). Because the relevant baseline and technical information is so scattered, it can be difficult to establish how one relates to another, and carry out the necessary analysis / assessment.
- S1.43 For this reason, at an early stage in the process, CSAG decided to produce a plan combining baseline and project information, using a 1:25,000 scale OS map as the base. This has proved very helpful to residents and experts whilst preparing their responses, so in case useful for others' reference, CSAG will submit the plan with their WR (ref. CSAG-10 *Combined Baseline and Project Information Plan*).
- S1.44 Also, the photograph overleaf may be helpful for orientation (ref. CSAG-11 *Photograph of Site from Hogshaw Hill*), and a high-resolution version can be provided if required). It is a view from the Outer Aylesbury Ring long-distance trail where it crosses Hogshaw Hill, c. 2km east / south east of the site at its nearest point (on Finemere Hill). This is one of the best places from which to appreciate the project's scale as it shows the full extent of the site from south west to north east.

*View of proposed Rosefield solar development site looking west to north from Hogshaw Hill (image © Bruce Hyde)*



# Heritage Critical Review

## Rosefield Solar Farm



prepared for

Claydons Solar Action Group

March 2026

Richard Hoggett Heritage



Paul Stamper Heritage



## Contents

1	Introduction.....	1
2	The Proposed Scheme.....	3
3	The Site in its Historic Landscape .....	5
3.1	Middle Claydon .....	7
3.2	East Claydon.....	10
3.4	Hogshaw.....	12
3.5	Quinton.....	13
3.6	Landscape Assessment.....	14
4	Heritage Impact Assessment .....	16
4.1	Study Area.....	16
4.2	Scheduled Monuments.....	18
4.3	Registered Parks and Gardens .....	20
4.4	Listed Buildings.....	25
4.4.1	Claydon House Complex.....	25
4.4.2	Other Listed Buildings.....	30
4.5	Conservation Areas.....	35
4.6	Archaeological Features.....	40
5	Conclusion .....	43
6	About the Authors.....	47

## List of Figures

Figure 1. The location of the proposed Rosefield Solar Farm site (red) and 1km buffer (dashed line) at 1:50,000. ....	2
Figure 2. Map showing the landscape of enclosure in Middle Claydon 1600-57. Stippling shows the former open fields. (Reproduced from Broad 2004, p.51). ....	6
Figure 3. The spatial relationship between the Rosefield Solar Farm and surrounding Scheduled Monuments at 1:50,000. ....	19
Figure 4. The spatial relationship between the Rosefield Solar Farm and surrounding Registered Parks and Gardens at 1:50,000. ....	23
Figure 5. The spatial relationship between the Rosefield Solar Farm and surrounding Listed Buildings at 1:50,000. ....	24
Figure 6. The spatial relationship between the Rosefield Solar Farm and the listed buildings at Claydon House at 1:10,000. ....	30
Figure 7. The spatial relationship between the Rosefield Solar Farm and the listed building at Pond Farmhouse at 1:10,000. ....	31
Figure 8. The spatial relationship between the Rosefield Solar Farm, the listed buildings in Botolph Claydon (blue triangles) and the Botolph Claydon Conservation Area (blue) at 1:10,000. ....	35
Figure 9. The spatial relationship between the Rosefield Solar Farm and adjacent Conservation Areas at 1:25,000. ....	37
Figure 10. The spatial relationship between the Rosefield Solar Farm and the proposed East Claydon Conservation Areas at 1:25,000. ....	38

# 1 Introduction

- 1.1 This Heritage Critical Review has been prepared by Drs Paul Stamper and Richard Hoggett for Claydons Solar Action Group (CSAG). It relates to the proposed development of Rosefield Solar Farm on 675 hectares of land in Buckinghamshire (Figure 1). This report has been produced in response to the Development Consent Order application made by Rosefield Energyfarm Limited, currently being examined by the Planning Inspectorate (EN010158).
- 1.2 The Development Consent Order application is supported by a full Environmental Statement (ES), which presents the results of the assessments undertaken by the developer and includes a chapter on Cultural Heritage (APP-052). The ES is supported by an archaeological desk-based assessment and setting assessment included at Appendix 9.1 (APP-106), the results of a geophysical survey included at Appendix 9.2 (APP-107), an archaeological trial-trenching report included at Appendix 9.3 (APP-108) and the results of an aerial investigation and mapping project included at Appendix 9.4 (APP-109). The ES is also supported by a Draft Archaeological Management Strategy (APP-146).
- 1.3 In order to inform the representations made to the examination by the Claydons Solar Action Group, this report critically reviews the Cultural Heritage material presented in the submitted Environmental Statement. It also sets out an outline assessment of the historic environment of the development area and its environs, highlighting what we consider to be the likely archaeological and cultural heritage impacts of the proposed scheme. These are compared with the impact assessments presented by the applicant in the Environmental Statement.
- 1.4 Section 2 of this report presents the details of the proposed solar farm. Section 3 analyses the development of the historic landscape of the application area. Section 4 identifies and assesses the designated and non-designated heritage assets which surround the application area, and reviews the applicant's assessments of the likely heritage impacts of the scheme. Section 5 presents the conclusions of this report.

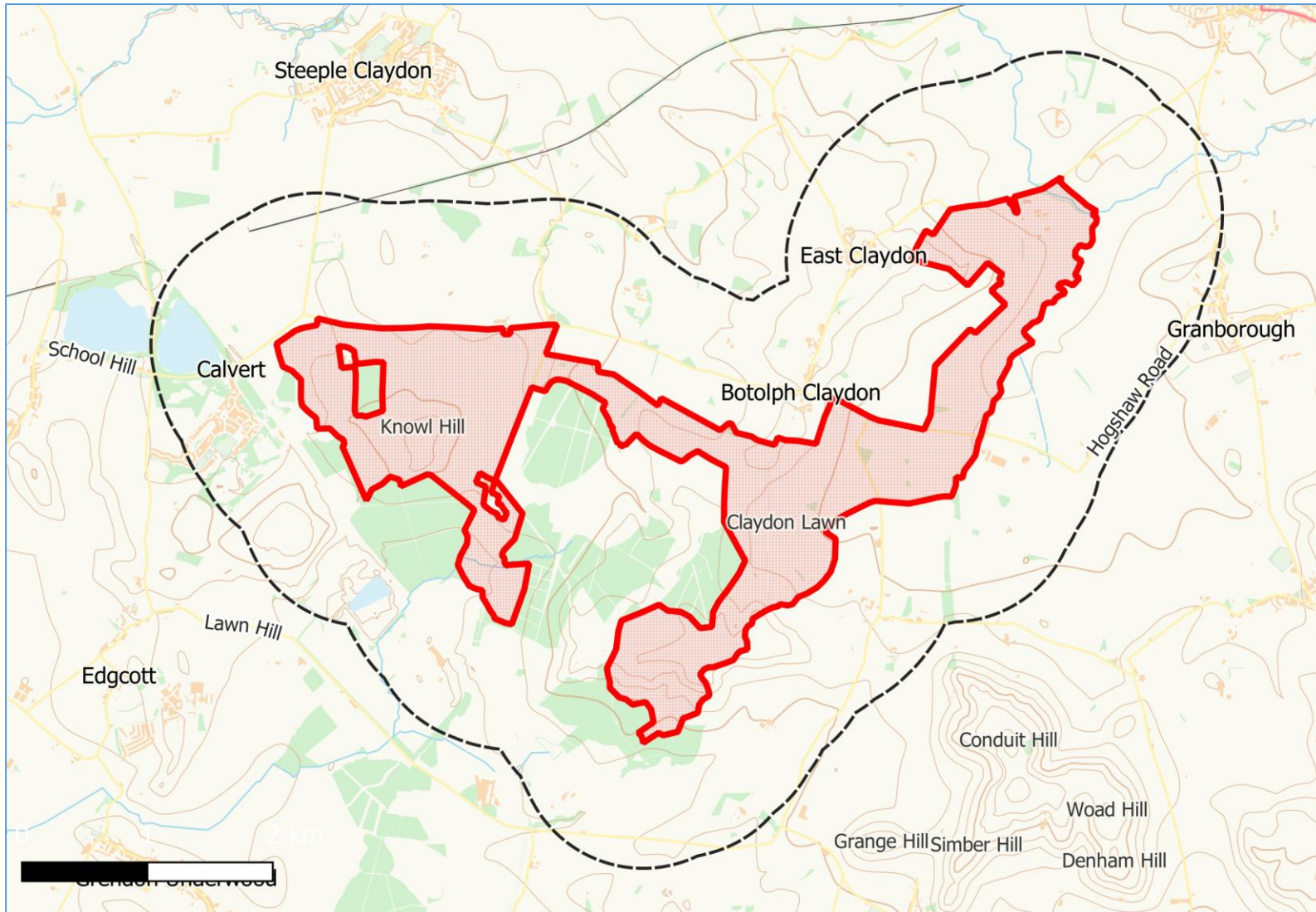


Figure 1. The location of the proposed Rosefield Solar Farm site (red) and 1km buffer (dashed line) at 1:50,000.

## 2 The Proposed Scheme

- 2.1 Rosefield Solar Farm is a proposed solar photovoltaic electricity-generating and battery-storage facility with associated infrastructure, located in Buckinghamshire (Figure 1). Chapters 2 (APP-045) and 3 (APP-046) of the ES indicate that the entire proposed development site is 675 hectares (approx. 1,668 acres), of which the developer proposes that some 280 hectares (691 acres) will be used for solar panels and battery storage, with the rest of the site being used for cable connections, screening landscaping and ecological mitigation.
- 2.2 The export capacity of Rosefield Solar Farm will exceed 50 megawatts. Therefore, Rosefield Solar Farm is classified as a Nationally Significant Infrastructure Project (NSIP), hence the current DCO application under the Planning Act 2008.
- 2.3 Chapter 3 of the ES (APP-046) sets out that the Rosefield Solar Farm will comprise of the following elements:
- Solar Photovoltaic (PV) development consisting of ground-mounted Solar PV generating station and a Balance of Solar System (BoSS);
  - A project substation ('Rosefield Substation') compound;
  - Main Collector Compound and two Satellite Collector Compounds;
  - Battery Energy Storage System (BESS) compound(s);
  - Site-wide operational monitoring and security equipment;
  - 400kV Grid Connection Corridor to connect the Rosefield Substation and National Grid East Claydon Substation;
  - Cabling to connect the Solar PV modules and the BESS to Collector Compounds, the Collector Compounds to the Rosefield Substation, and the Rosefield Substation to the National Grid East Claydon Substation;
  - Ancillary infrastructure works;
  - Green infrastructure, recreation and amenity works; and
  - Highways infrastructure improvements and safety works.

2.4 The Illustrative Layout Plans and Sections (APP-012) submitted as part of the DCO application indicate that the proposed development comprises several discrete parcels of solar PV development, which will be connected by a series of underground cables (Figure 2). Chapter 3 of the ES sets out specifications and provides indicative photographs of the various components. Rosefield Solar Farm will establish a grid connection via underground cables to the National Grid East Claydon Substation, located at the north-eastern extent of the site.

### 3 The Site in its Historic Landscape

- 3.0.1 The Archaeological Desk-Based Assessment (APP-106) which forms Appendix 9.1 of the ES presents a broad overview of the development of the historic landscape of the proposed development site and its environs. That assessment is primarily archaeological in focus and, although there is limited reference to historical mapping and potentially significant hedgerows within the site, it is considered that a more thorough assessment of the character of the historic environment would be appropriate. What follows here offers further insights into the historic character of the proposed development area, following further research and site visits undertaken by the authors.
- 3.0.2 Regarding the landscape of the proposed development site, topographically Parcels 1 and 1a are gently undulating with the highest point being Knowl Hill at around 116m aOD. The rest of Parcel 1 is at an elevation of 80–90m aOD. Parcel 2 is located on a low ridge crest at 136m aOD and Parcel 3 is located on relatively flat ground at 90–94 m aOD on the north-east of the ridge.
- 3.0.3 The landscape character within the proposed development site predominantly consists of agricultural fields and pastureland interspersed with hedgerows, ditches, woodland and farm tracks. The hedgerows within the site range from dense tall vegetation with sporadic shrubs and trees present to much lower, managed, boundaries.
- 3.0.4 Thanks to John Broad (*Transforming English Rural Society: The Verneys and the Claydons, 1600–1820*. Cambridge University Press; 2004) understanding of how the landscapes of Middle, East, and Steeple Claydon evolved in the post-medieval centuries is exceptionally well-developed. Based on his PhD, Broad's study investigated the landholdings of the Verney family here between 1600 and the early 19th century, drawing on what he characterises as 'one of the richest archives for an upper gentry family in Great Britain'.

3.0.5 Broad sets out how, in 1600, all three parishes had similar populations, social structures, and farming patterns, with freeholders and copyholders having their arable lands scattered across open fields. Over the following three centuries, ownership, landscape, and village communities were transformed on different trajectories. The summaries offered below of the Claydons' post-medieval histories, with shorter notices of Quanton and Hogshaw, are based on his 2004 publication.

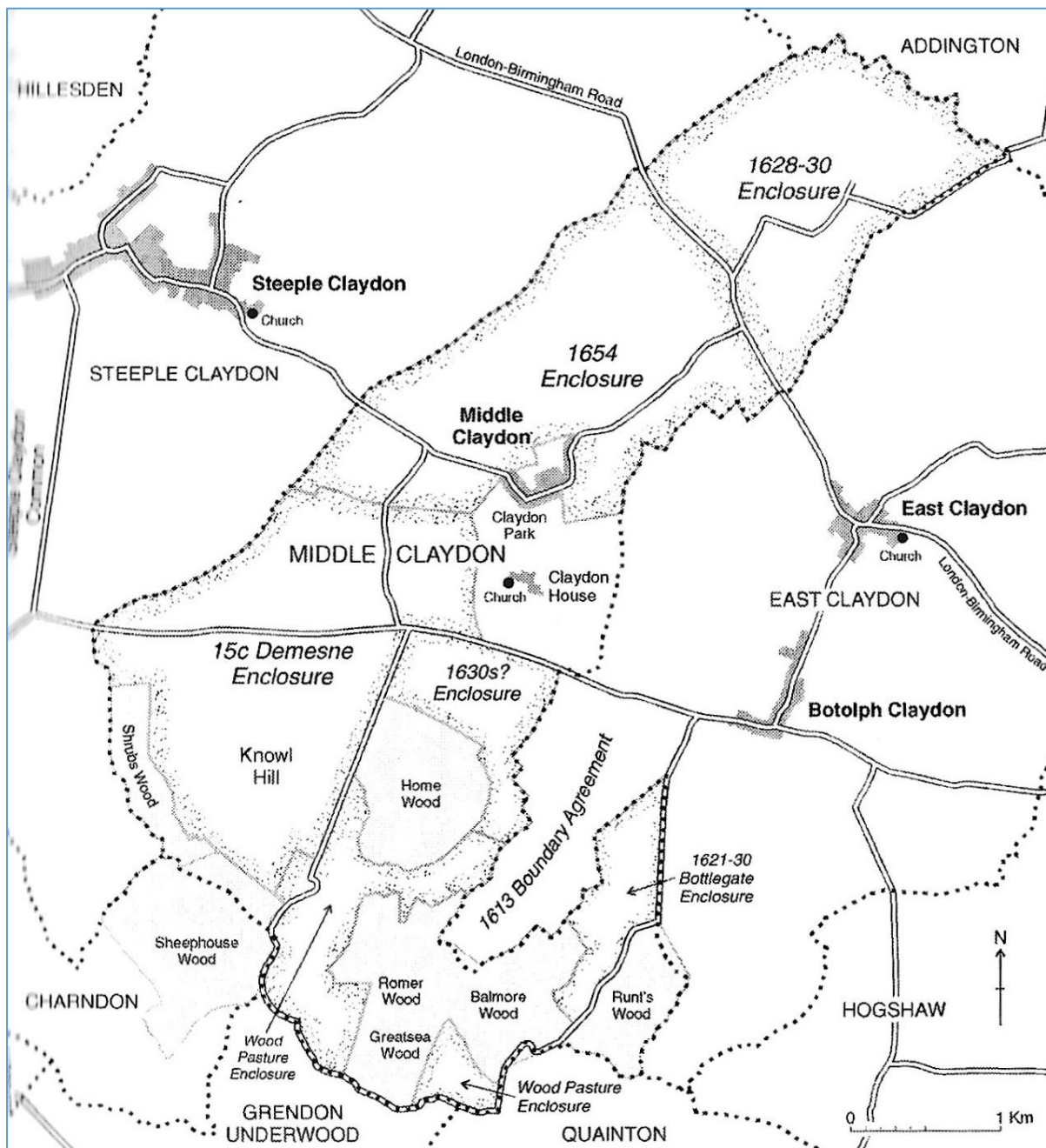


Figure 2. Map showing the landscape of enclosure in Middle Claydon 1600-57. Stippling shows the former open fields. (Reproduced from Broad 2004, p.51).

### 3.1 Middle Claydon

- 3.1.1 The name Claydon derives from the old Anglo Saxon English: clægig + dun meaning 'clay hill'. The Claydons – Steeple, Middle, East and Botolph – were presumably parts of a single later Anglo-Saxon estate, subsequently subdivided. Historically the southern half, at least, of Middle Claydon was clearly heavily wooded, and this was presumably the principal location of the 'woodland for 150 pigs' recorded in Domesday Book in 1086, perhaps equivalent to around 300 acres, at 2 acres per pig.
- 3.1.2 Middle Claydon House became the main seat of the Verney family in 1620. By then they were reshaping and consolidating their Middle Claydon estate, which principally comprised the parish of Middle Claydon. The process is extremely well documented, and gives a rare insight into the creation of the existing agricultural landscape, not just in Middle Claydon but more generally in the locality.
- 3.1.3 In the parish's three medieval open fields – Whittard or Whitey Field, Boughton Field, and Mill Hill Field – the Verneys bought out freeholders. By 1642, just 750 acres of open-field land survived, and a determined effort by the Verneys saw the remainder enclosed in the mid-1650s. Much of the newly-enclosed land was put down to grass for profitable livestock farming.
- 3.1.4 Before 1650 intercommoning with East Claydon on the overlawn (the common) between the parishes had ended, and a six-foot-wide ditch was dug to mark the new boundary, weaving in and out to share the better soils between the two villages.
- 3.1.5 As enclosure proceeded, new farmsteads were built away from the village in the yeomen's new holdings, sometimes with the Verneys' direct assistance. In 1650, five such farmhouses were noted on recently-enclosed land in the north of the parish towards Addington.
- 3.1.6 By buying out freeholders and copyholders the Verneys turned Middle Claydon into a 'closed' village. This accentuated the decline of the village centre which thereafter was occupied primarily by cottagers, labourers and

smallholders. The village's population declined markedly, from c. 250 in the mid-17th century to just 103 – eight farming families – in 1798.

- 3.1.7 Overall, it was the major changes at enclosure in the mid-17th century which largely created the Middle Claydon landscape mapped for the tithe survey in 1839. This reflected similar changes taking place in the surrounding parishes.
- 3.1.8 Another change around the time of enclosure was the felling of large areas of woodland, usually to create productive farmland. Some 150 acres had been cleared in Middle Claydon the years before 1620.
- 3.1.9 As part of the landscaping works undertaken in the park after 1763, the village of Middle Claydon, which until then had stood close to Claydon House and the parish church, was moved c. 400m to the north.
- 3.1.10 At the time of the tithe mapping of the parish in 1839 the parish's fieldscape and woodlands were broadly as today (2026). However, between 1839 and 1880 there were marked changes in the finer detail of the landscape, presumably elements of wider improvements by the Claydon Park estate. The large roughly oval block of wood previously Muxwell Wood (1839) and now (1880) Home Wood was reduced by about a fifth on its north side, while north of that, running up to the southern boundary of Claydon Park, field boundaries were removed to create a more open countryside when seen from Claydon House. In all the larger woods south of Claydon Park broad avenues were opened up, running north–south and all aligned on Claydon House.
- 3.1.11 Elsewhere in the southern half of the parish many of the old, slightly curving, field boundaries were straightened, and new or improved roads laid out. The principal new route from Botolph Claydon to Charndon ran along the south boundary of Claydon Park (where there was a new South Lodge at the park entrance); another, Three Points Lane ran on a dead-straight line south, west of Home Wood, to Knowlhill Farm.

- 3.1.12 Almost contiguous medieval and/or post-medieval ridge-and-furrow cultivation, boundary ditches and furlong boundary banks and remnants of the former open-field system are visible on Second World War-era aerial photographs and via remote modern sensing data as earthworks. This was mapped as part of the North Buckinghamshire Aerial Investigation and Mapping project (EBC18304). The ridge-and-furrow then lay across the north half of Middle Claydon parish.
- 3.1.13 One cautionary note must be raised: it is known that much or even most of the open-field land enclosed in the early-mid-17th century was put down to grass. However, where arable did survive, or was re-introduced, ridging may have been practised to facilitate downhill surface drainage, only coming to an end around the 1840s when pipe field drains became commonplace.
- 3.1.14 Aerial photographs taken in 2019 and Lidar shows the parish's ridge-and-furrow has been almost entirely ploughed out over the last fifty years other than a single block north-west of Home Wood, an outlier of the extensive ridge-and-furrow in Claydon Park. Many of the ridges and furrows of these cultivation blocks are generally aligned south-west to north-east or west-east, with only a few blocks aligned in other directions. Here the ridging is regular and straight, suggesting horse ploughing of a later post-medieval date.
- 3.1.15 The sections of linear earthwork furlong banks are part of a much more extensive system of land division boundaries that extends eastwards through Bedfordshire and beyond into Cambridgeshire. Whilst many of these features originate in the medieval period with the establishment of the open field cultivation system, some of the boundary banks may have earlier origins. They remain visible chiefly as extant, sinuous, parallel, plough-levelled earthwork sections on recent lidar remote sensing data. Whilst some of the linear banks respect the boundaries of the mapped ridge-and-furrow cultivation blocks, others pass through the extant ridge-and-furrow, possibly indicating former medieval cultivation boundaries that were subsequently readjusted.

## 3.2 East Claydon

- 3.2.1 Domesday records four separate holdings in East Claydon and Botolph Claydon. In all twelve plough-teams were recorded, and 140 pigs in its woodlands. At a reckoned 2 acres per pig, this suggests around 280 acres of woodland. In the 13th century and later Botolph Claydon (or sometimes Bottle Claydons) was a manor in East Claydon parish.
- 3.2.2 The Verneys became the dominant landowners here in 1729, with exclusive control from c. 1765. After 1730, they began to enclose the parish as they had Middle Claydon and, by 1820, the whole parish was divided into pasture farms held by specialist dairy farmers. These had extremely regular straight-sided fields, as seen around Sionhill Farm on the east of the parish. This was the countryside mapped later in the century by the Ordnance Survey – essentially the present-day landscape.
- 3.2.3 Levelled earthworks and cropmarks of ridge-and-furrow, probably of medieval date, were mapped as part of the North Buckinghamshire Aerial Investigation and Mapping project (EBC18304). Within grid square SP 72 NE, and centred at SP 75138 25854, clear earthworks of ridge-and-furrow with a furlong boundary and plough headlands, crossed in places by later drainage ditches, are visible on 1940s aerial photographs. Over the last fifty years, modern land use of arable and improved grasslands has levelled almost all earthworks, although very small areas remain in field corners immediately next to Sion Hill Farm and around the National Grid Substation.

## 3.3 Steeple Claydon

- 3.3.1 At Domesday Steeple Claydon had 24 plough-teams, suggesting a well-developed arable landscape. There was also wood for 100 pigs, perhaps indicating around 200 acres of woodland.
- 3.3.2 The medieval village was made up of a number of inter-connected 'Ends' – West End, North End, and Church End – characteristic of the dispersed (as opposed to nucleated) types of settlement found in much of Buckinghamshire in the Middle Ages. These components of the village were

still visible and essentially separate on later 19th-century mapping, although less so today.

- 3.3.3 In the post-medieval period Steeple Claydon followed a different path to the other Claydons. The Verneys had only managed to acquire about a third of the parish by 1795, and it then retained its open fields. As the parish's population grew, more than doubling since the 17th century to 646 in 1801, houses were subdivided and cottages built on the commons in a way typical of 'open' parishes.
- 3.3.4 Before the remainder of the parish was enclosed from the 1790s, much of the south and south-east of the parish had been enclosed, probably (as in Middle Claydon which lay adjacent) in the early to mid-17th century. These lands appeared in later mapping as 'old enclosures'. As elsewhere in the area, new farmsteads were built thereon. Pond Farmhouse, near Shrubs Wood (listed Grade II: List entry number 1214849), with 17th-century origins, is likely to be an example.
- 3.3.5 About 1770 there was a phase of heavy investment by the Verneys in the farm buildings on their estate, and in Steeple Claydon Rosehill Farmhouse, Shepherd's Furze Farmhouse (demolished c. 2020), and Blackmoor Hill Farmhouse were all constructed, or rebuilt (see 4.4.12, below). All were in brick, but with stone to their fronts (or in the case of Rosehill, the rear) facing Claydon House. This is clear evidence that the appearance – as well as the productivity – of the estate landscape was important.
- 3.3.6 The final enclosure of Steeple Claydon came between 1790 and 1814 during the French and Napoleonic Wars at a time of high prices. In all roughly 1,800 acres of the parish's 3,300 acres saw enclosure in this period. As in the other Claydons, after enclosure most of the new fields went down to grass. The vast majority of field boundaries in the parish are notably ruler-straight, suggesting that alongside the new enclosures of the 1790s and later, c. 1800, the field boundaries of the 'old enclosures' were tidied up and the landscape rationalized.

3.3.7 Almost contiguous medieval and/or post-medieval ridge-and-furrow cultivation and furlong boundary banks, remnants of the former common open-field system, are visible on 1940s aerial photographs and remote sensing data as earthworks centred at SP 69956 27303. These were mapped as part of the North Buckinghamshire Aerial Investigation and Mapping project (EBC18304). Aerial photographs taken in 2019 and recent remote sensing data indicate that about two-thirds of the mapped blocks have since been plough-levelled due to changes to post-war agricultural regimes.

3.3.8 The remaining blocks which survive as earthworks lie in fields around North End, Windmill Hill Farm, Kingsbridge Farm, and between Claydon Hill Farm and Prospect Farm. The sections of linear earthwork furlong banks are part of a much more extensive system of land division boundaries that extends eastwards through Bedfordshire and beyond into Cambridgeshire. Whilst many of these features originate in the medieval period (perhaps around the 10th century AD) with the establishment of the common-field cultivation system, some of the boundary banks may have earlier origins. They remain visible chiefly as extant, sinuous, parallel, plough-levelled earthwork sections on recent lidar remote sensing data. Whilst some of the linear banks respect the boundaries of the mapped ridge and cultivation blocks, others pass through the extant ridge-and-furrow, possibly indicating former (early) medieval cultivation boundaries that were subsequently readjusted.

## 3.4 Hogshaw

3.4.1 Hogshaw was historically a parish and manor (and is today a civil parish). In 1086, it was a small place, with a recorded eight householders, 3.5 ploughteams and 40 pigs in its woodland, perhaps suggesting an extent of some 80 acres. However, it lost its population in the later medieval period, being enclosed, in whole or part, in 1486. Its church either fell down or was demolished before the end of the 17th century. Hogshaw Hill Farmhouse is of the mid-late 18th century (Grade II: List entry 1289163).

3.4.2 Lidar shows very faint ridge-and-furrow west of the historic settlement, possibly extending into the red line area. However, it is highly unlikely that this would be visible at ground level.

### 3.5 Quainton

3.5.1 In 1086, there were two holdings in Quainton, where nine ploughteams suggests a substantial area of cultivated land. However, there was still a large amount of woodland. Some '200 pigs' were recorded in all, perhaps equal to some 400 acres of woodland again given the supposition that each pig needed 2 acres of woodland to feed. In the Middle Ages the parish lay within the forest of Bernwood.

3.5.2 In 1588, Quainton was among the places which had seen the enclosure of its woods and wastes over the previous 40 years, although enclosure of its open fields may have (drawing on nearby parishes) taken place largely in the 17th century. Grange Farm, north-west of the village, may have been established during this phase of landscape change. Grange Farmhouse (Grade II; List entry 1117792) has 17th-century origins, while a five-bay barn (Grade II; List entry 1234163) is of the 16th century.

3.5.3 However, much open-field land, especially south of the village, survived until enclosed by Act in 1840 (with the Award in 1843). The 1843 tithe map shows a landscape of mainly large, straight-edged, fields. The Conservation Area review notes that the landscape contains a mixture of pre-18th-century enclosure, parliamentary enclosure and 19th-century enclosure, including that by Parliamentary Act.

3.5.4 Estate buildings in Quainton include Dry Leys Farmhouse (Grade II; List entry 1319271) 2km north-west of Quainton an early 18th-century five-bay brick building of some pretension, supposedly built by Robert Dormer of Ascott (in Wing) for one of his daughters, and Finmerehill House, 3km south of Claydon House (Grade II, List entry 1117815). This was rebuilt by the Verneys in 1875 and the List entry notes that it was designated 'as an unusually late

example of local technique of timber-frame building, and for its picturesque quality.'

### 3.6 Landscape Assessment

- 3.6.1 As across most of midland England, the basic territorial units of the landscape and their boundaries in and around the red line area – that is the ecclesiastical parishes, and the secular estates or manors – were normally established by the time of the Norman Conquest. Those boundaries, often but not always following natural features like streams, are probably the oldest landscape features hereabouts.
- 3.6.2 In terms of the medieval landscape, some village locations, for instance East Claydon, are broadly where they were seven or eight hundred years ago whereas Middle Claydon was moved in the mid-18th century, and Hogshaw was deserted. Most settlements seem to have had open fields around them, giving a prairie-like countryside with few boundaries. However, for the most part these field systems are poorly recorded as enclosure came early, perhaps peaking in the 17th century, but in some cases only being concluded in the 1840s. That last phase of enclosure produced landscapes of fields of a generous size with ruler-straight boundaries. Fields which were the product of earlier enclosures, from around the 17th century, where boundaries often followed and perpetuated the lines of more sinuous furlong edges, were typically tidied up later, often in the 19th century, and given straight boundaries. In summary, while field boundaries can be found within the red line area which are likely to pre-date the 18th or 19th centuries, the great majority are of that era.
- 3.6.3 One of the best types of evidence for medieval and early modern landscapes and farming practices can be ridge-and-furrow, the fossilised, down-to-grass, remains of open-field strip farming. While lidar shows this locally in parishes around the red-line area, within the red line – as rehearsed for individual places above – it has almost entirely been eradicated by later, and probably post-war, ploughing.

- 3.6.4 What survives best from the medieval and early modern countryside are the blocks of woodland in, and adjacent to, the red line area. Independent assessment would be needed to assess whether any of the woodland or individual trees have historic value, or whether features such as wood-banks survive, but irrespective of that the woodlands as landscape blocks do have landscape significance.
- 3.6.5 The proposed solar farm would occupy a substantial area of landscape, which formerly comprised the extensive open fields associated with the surrounding settlements, subsequently modified by enclosure. In this, the Verneys of Claydon House had a formative role. It needs to be recognised that the nature and extent of the existing agricultural landscapes across and around the proposed solar farm are of historical importance in their own right, as are the villages, farmhouses and farm buildings from which they were cultivated. This is not a 'chocolate box' countryside like parts of the Cotswolds, or Devon, or Herefordshire, but it is equally distinctive with its own characteristics arising from its exploitation by local communities over the past millennium.
- 3.6.6 We conclude that, irrespective of any proposed mitigation planting or screening, the fundamental change in landscape character from an agricultural to a semi-industrialised usage which will be brought about by the proposed scheme will have a significant effect on the legibility and coherence of this historic landscape, as well as impacting upon a number of designated and non-designated heritage assets within and surrounding the proposed development area. The impacts on these heritage assets are considered in the next section.

## 4 Heritage Impact Assessment

- 4.0.1 The Development Consent Order application is supported by a full Environmental Statement (ES), which presents the results of the assessments undertaken by the developer and includes a chapter on Cultural Heritage (APP-052). The ES is supported by an archaeological desk-based assessment and setting assessment included at Appendix 9.1 (APP-106), the results of a geophysical survey included at Appendix 9.2 (APP-107), an archaeological trial-trenching report included at Appendix 9.3 (APP-108) and the results of an aerial investigation and mapping project included at Appendix 9.4 (APP-109). The ES is also supported by a Draft Archaeological Management Strategy (APP-146). These documents present a comprehensive assessment of the designated and non-designated heritage assets which lie within the application site and its environs.
- 4.0.2 It is encouraging to note that during and following several periods of public consultation, the applicant has engaged in active dialogue with Historic England, the National Trust and Buckinghamshire Council's archaeological and heritage officers. Such ongoing discussions are to be encouraged and the positions adopted by these statutory advisory bodies supported.
- 4.0.3 It is also encouraging that the Cultural Heritage chapter of the DCO application notes a number of revisions have been made to the scheme which address specific points and particular impacts on heritage assets. It also rehearses certain agreed benefits, such as access to Knowl Hill via a permissive footpath to give a view of Claydon House.

### 4.1 Study Area

- 4.1.1 The Cultural Heritage chapter of the ES and supporting documents indicate that for the purposes of assessment, a 5km buffer has been extended around the site when considering the potential impact upon designated heritage assets, while a 1km buffer has been used for non-designated heritage assets. These boundaries have been agreed with Historic England and Buckinghamshire Council and are considered to be more than sufficient

in order to encompass any relevant heritage assets which might be affected by the proposed development of the solar farm.

- 4.1.2 There are no designated heritage assets within the application site, although the Grade II-listed Pond Farmhouse (NHLE 1214849) is encircled within Parcel 1. Within the 5km radius of the site, there are 532 designated heritage assets: six Scheduled Monuments, four Registered Parks and Gardens, 14 Conservation Areas, and 508 listed buildings. Of the listed buildings, 9 are Grade I listed, 30 are Grade II\* listed and 469 are Grade II listed. There are 27 recorded non-designated heritage assets within the application site red-line boundary, while an additional 937 non-designated heritage assets are recorded within a 1km radius of the development site.
- 4.1.3 Assessments of each of these designated and non-designated heritage assets are set out in the Archaeological Desk-based Assessment and Setting Assessment (APP-106) which forms Appendix 9.1 of the ES. These assessments identify the setting of each heritage asset and the contribution which setting makes to the significance of each, before setting out the likely impact which the construction, operation and decommissioning of the solar farm would have upon them. The conclusions of the Archaeological Desk-Based Assessment inform the fuller analysis of heritage impact presented in the Cultural Heritage chapter of the ES (APP-052)
- 4.1.4 Although the applicant's assessments are thorough, the format of the documents and the manner in which the information within them is presented makes it very difficult to identify which are the most affected heritage assets. The Desk-Based Assessment spans 635 pages, while the Cultural Heritage chapter spans 161 pages, and each contains extensive tabulations of heritage assets and assessment. The vast majority of the heritage assets within the 1km and 5km buffer will not be directly affected by the solar farm, but there is no real summary of the assessment's conclusions or list of those heritage assets which are most affected.

4.1.5 The following sections highlight the heritage assets which the applicant has identified will be impacted upon by the proposed solar farm and presents our own assessment of the level of harm identified in each case.

## 4.2 Scheduled Monuments

4.2.1 There are no Scheduled Monuments within the proposed development site, but two Scheduled Monuments lie within close proximity of the site boundary and have the potential to be impacted upon by its development (Figure 3).

4.2.2 The Scheduled Monument known as the *Preceptory of the Knights Hospitallers, associated fishponds, medieval settlement of Hogshaw and the site of the medieval church of St John the Baptist, 200m south of Hogshaw Farm* (NHLE 1405586) occupies a large area of land situated 425m to the south-east of the proposed development site. The monument includes the visible earthworks and buried remains of the Preceptory of the Knights Hospitallers, the tenements and enclosures of the medieval village of Hogshaw, two fishponds and the buried remains of the Church of St John the Baptist, which served both communities.<sup>1</sup>

4.2.3 Appendix 9.1 of the ES states that 'the surrounding agricultural land contributes to the significance of the scheduled monument as the continued agricultural use reflects the historic land use associated with the settlement and Preceptory' (APP-016, Annex D, para. 2.35.3). The assessment concludes that the proposed development would result in a minor impact on the contribution that the setting makes to the significance of the scheduled monument, equating to 'less than substantial harm'. We agree with this assessment and note that, as a nationally significant designated heritage asset, even 'less than substantial harm' should carry great weight when assessing the impact.

---

<sup>1</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1405586>

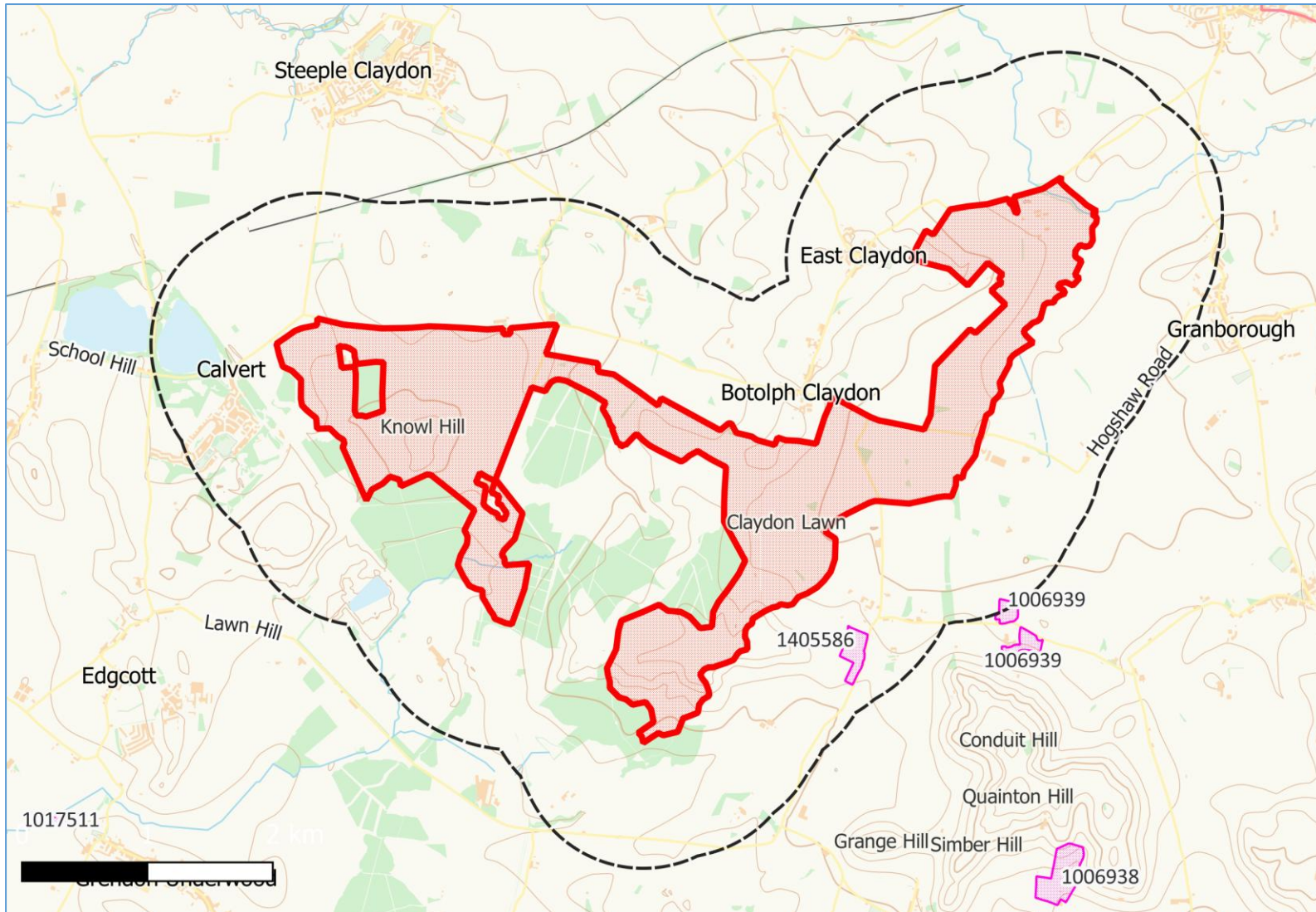


Figure 3. The spatial relationship between the Rosefield Solar Farm and surrounding Scheduled Monuments at 1:50,000.

- 4.2.4 Likewise, a second scheduled monument, known as *Deserted village (site of) at Fulbrook Farm* (NHLE 1006939) lies 900m to the south-east of the proposed development site. The site comprises the earthworks of a moated enclosure, and aerial photography has identified two areas of trackways and enclosure patterns visible.<sup>2</sup>
- 4.2.5 Again, Appendix 9.1 of the ES acknowledges that the surrounding agricultural fields contribute to the significance of the monument as they reflect the original setting of the village within a rural landscape (APP-; Annex D, para 2.36.3–5). The assessment concludes that the proposed development would result in a minor impact on the contribution that the setting makes to the significance of the scheduled monument, equating to 'less than substantial harm'. We agree with this assessment and note that, as a nationally significant designated heritage asset, even 'less than substantial harm' should carry great weight when assessing the impact.
- 4.2.6 It should also be noted that in their original assessment of affected heritage assets, the applicant discounted these two Scheduled Monuments from fuller assessment. The Templar preceptory was only scoped in at the request of Buckinghamshire Council and Historic England, while the inclusion of the deserted village site was requested by Historic England. In both cases, heritage harm has been identified following more detailed assessment by the applicant.

### 4.3 Registered Parks and Gardens

- 4.3.1 The designed landscape of Claydon Park is registered at Grade II on the Register of Parks and Gardens of Special Historic Interest (NHLE Entry No. 1000597). It comprises a mid- to late 18th-century landscape park surrounding an 18th- to 19th-century country house, with further garden development in the 19th century and is located adjacent to the northern boundary of the proposed development area (Figure 4).<sup>3</sup>

---

<sup>2</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1006939>

<sup>3</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1000597>

- 4.3.2 The Claydon estate was inherited by Lord Verney in 1752. He set about improving the estate to rival works being carried out at nearby Stowe. He built the stable court c.1754, and began work on the house which continued through the 1770s and 1780s. The park was landscaped by James Sanderson between 1763 and 1776. Changes were made to the park in the 19th century. In 1956 the house and park were given to the National Trust.
- 4.3.3 The National Heritage List description notes the park's setting is largely agricultural. To the south several woodlands also form part of the setting, with rides cut through them aligned on the house and park, of which one is centred on the south front of the house. Low hill ranges to the west and south form a distant rim.
- 4.3.4 In describing the gardens around the house, the listing notes that: 'The long, level, rectangular south lawn is edged on the west by the church on its hillock, with a bank up to the east supporting a flat terrace and lawn. The south lawn ends at the ha-ha, overlooking the south park, with views to the bridge at the south park boundary and out into the countryside beyond, particularly towards a ride cut into the eastern side of Home Wood which aligns exactly on the south front of the house.' At the southern end of the park's lake is a single-arch mid-18<sup>th</sup>-century bridge.
- 4.3.5 On the contribution which the setting of the park makes to its significance, Appendix 9.1 of the ES (APP-016, Annex D, paras 2.2.4–6) states that:

*2.2.4. The significant views out from the registered park and garden are to the west from the terrace of the main house and to the south from the southern lawn. The western view from the terrace focuses on the lake within the park as well as the agricultural landscape beyond. The spire of Steeple Claydon church can also be seen from the western terrace and forms an attractive feature of the borrowed landscape which contributes to the artistic interest of the parkland. The Order Limits do not form part of this view towards the church as they lie south of the registered park and garden. Parts of Parcel 1 can be seen when*

*looking to the south from the terrace and are peripheral to views directly west from the terrace.*

*2.2.5. The southern view looks over the Ha-Ha to the agricultural land and Home Wood to the south of the RPG. Parcel 1 forms part of this view and is most obvious from southern end of the lawn.*

*2.2.6. There is an additional view looking south-east along an access route into the park lined by trees on either side. This avenue of trees extends partially into the Order Limits and indicates a likely intention to create a channelled vista southeast from the house to mirror those to the northwest (towards Steeple Claydon) and southwest (towards Knowl Hill). These borrowed views of the surrounding landscape contribute to the artistic interest of the parkland.*

4.3.6 The applicant's assessment of heritage impact concludes that the construction of the solar farm within the views to and from the park will have a negative impact on the contribution which the existing agricultural landscape makes to the significance of the park and the listed buildings within it (discussed further below). The applicant states that this would result in a low level of 'less than substantial harm' being caused to the Grade II Registered Park and Garden (APP-106, Annex D, paras 2.2.11–12).

4.3.7 We consider that the impact assessment presented in the ES underplays the contribution which the agricultural setting and the designed views and routes across it make to the significance of the park and the impact which the proposed development of the solar farm will have upon the setting of the park. We have better defined (above) how the house and park stand within a much wider estate landscape, modified through successive improvements by the Verneys in the 17th century and later. These saw the open-field landscapes around local villages, with much land farmed in common, transformed by enclosure into the modern hedged landscape around often newly-built farmsteads standing among their own fields. Some farmhouses presented stone frontages towards Claydon House, showing an aesthetic sensibility about the estate landscape.

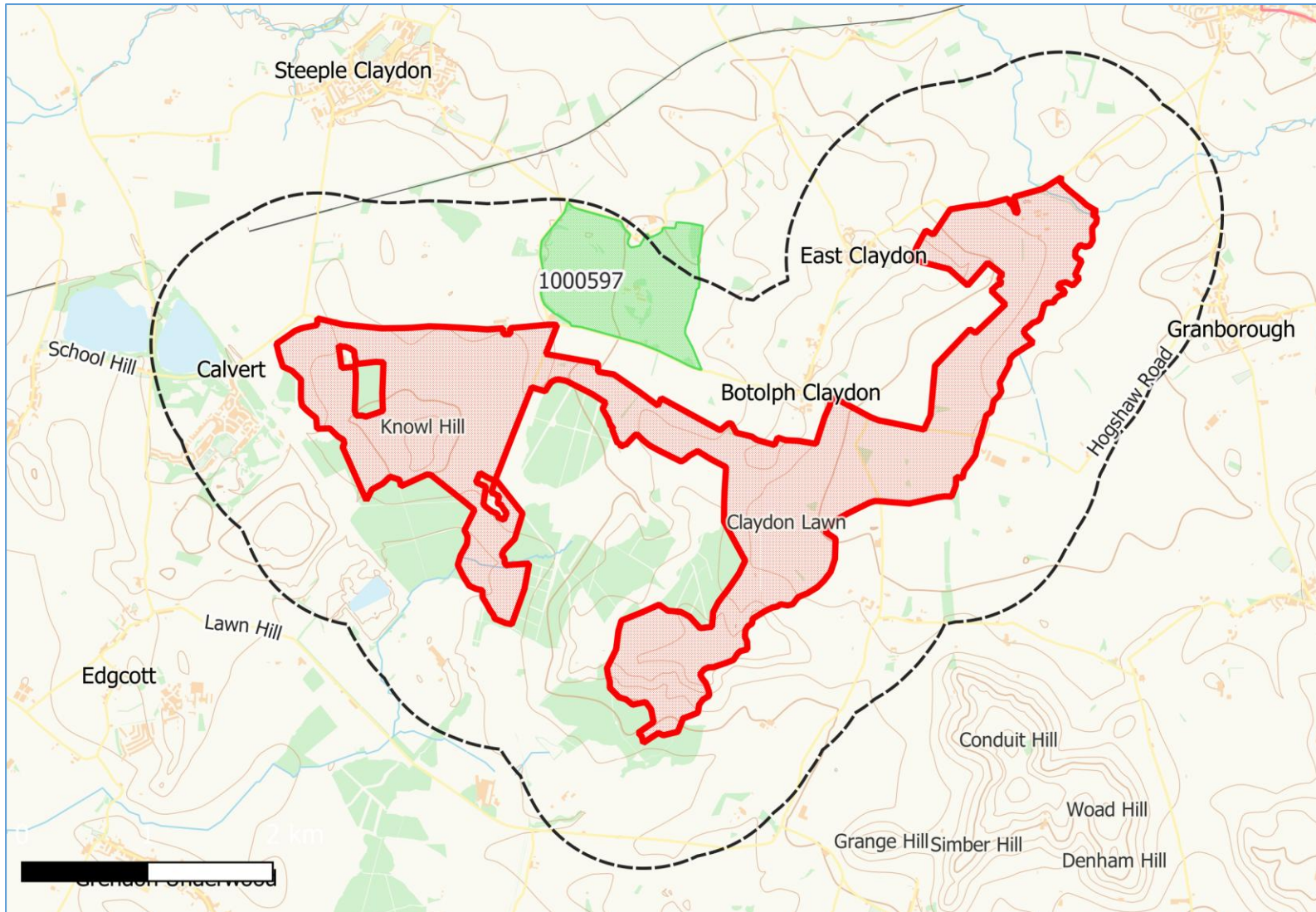


Figure 4. The spatial relationship between the Rosefield Solar Farm and surrounding Registered Parks and Gardens at 1:50,000.

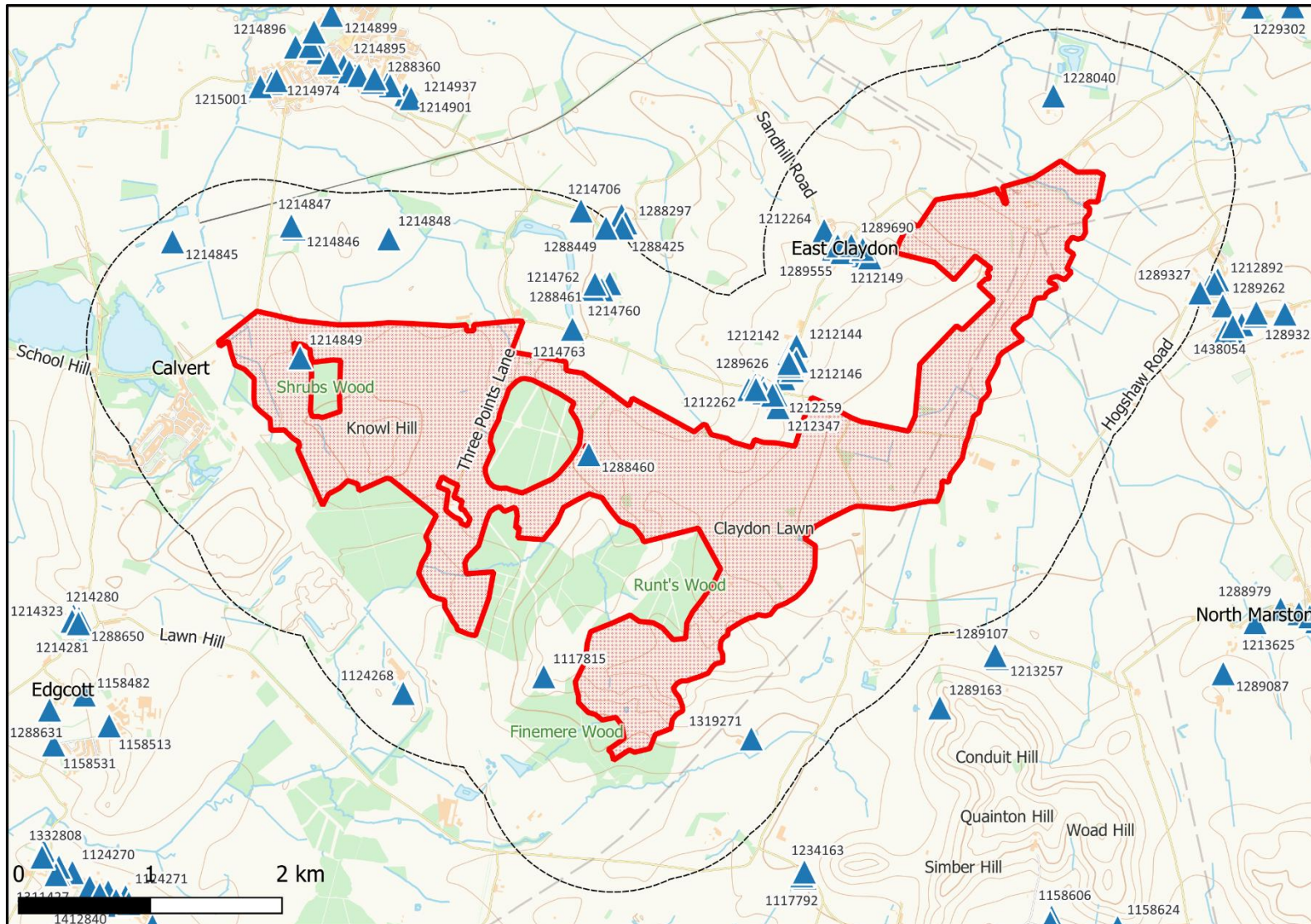


Figure 5. The spatial relationship between the Rosefield Solar Farm and surrounding Listed Buildings at 1:50,000.

4.3.8 We agree that the introduction of an industrial energy production component to the existing landscape will cause 'less than substantial harm' to the significance of the park, but consider that this lies towards the middle of the 'less than substantial' spectrum, rather than at the lower end. We also consider that assessing the harm to the Registered Park and Garden in isolation from the heritage harm caused in the complex of interconnected listed buildings which stand within the park results in a lower perception of the cumulative heritage impact upon the Claydon House and Park complex.

#### 4.4 Listed Buildings

4.4.0.1 There are no listed buildings within the proposed development area and, as such, the development of the proposed solar farm would have no direct impact upon the physical fabric of any listed building. There are, however, several clusters of listed buildings within the landscape surrounding the proposed development area and the proposed development of the solar farm has the potential to impact upon their settings (Figure 5).

##### 4.4.1 Claydon House Complex

4.4.1.1 Interconnected with the assessment of the setting of Claydon Park, the contribution which the agricultural landscape makes to its setting and the impact of the proposed development upon the park is the impact which the construction of the solar farm would have upon the setting of the Grade I listed Claydon House itself, which stands centrally within Claydon Park (NHLE 1288461) (Figure 6).<sup>4</sup>

4.4.1.2 Claydon House is a multi-period country house. The main, west, wing is of ashlar, consisting of a magnificent suite of large public rooms decorated in the rococo style built in the 1760s and 1770s. This is the remaining third of a great west wing which overlooked the newly landscaped park, with extensive views of the countryside to the west. The official list description for the park notes 'the south front overlooks the south garden, with views south across the park towards the distant woodland.' As noted above,

---

<sup>4</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1288461>

between 1880 and 1898, the double lime avenue extending south-east from the house's pleasure grounds was extended in length to c. 1.2km, extending across the countryside as far as a low hill south of Botolph Claydon. By 1950, many of the trees had been lost, but its line can still be traced today in field boundaries.

4.4.1.3 Regarding the contribution which the existing agricultural landscape makes to the significance of Claydon House, Appendix 9.1 of the ES (APP-016, Annex D, paras 2.1.5–9) states that:

*2.1.5. The house forms the principal building within the Claydon registered park, its commanding position in the centre of the estate contributes to its significance and group value with the associated grade II listed stable block and entrance lodges also adds to its significance. From the house there are views to the west from the terrace in front of the 18th century wing although these are partially filtered by trees within the parkland, views southwest from this location take in the sweep of Knowl Hill, and views to the northwest extend to the spire of Steeple Claydon church. Views towards Knowl Hill are likely to have been part of the originally intended designed landscape around the country house which was also never fully realised. A stand of trees on the summit of Knowl Hill serve as an "eye-catcher" and terminus to the views southwest from the house and indicates the design intention of keeping the hill otherwise free of vegetation. Steeple Claydon church spire likewise forms an eyecatcher from the house in views to the northeast. A tree lined avenue extending southwest from the house indicates a likely intent to create a channelled vista in this direction.*

*2.1.6. Views south from the ground floor level south of the 18th century wing are curtailed by the mound on which lies the listed church and surrounding vegetation. Views south from the 19th century part of the house are also obstructed by the church at the west end but become more open when moving towards the east and provide views down a broad avenue to the south over the farmland and towards Home Wood.*

*These designed views from the house itself contribute to its significance as the focus of a designed landscape.*

*2.1.7. The upper floors of the 18th century wing provide more elevated views of the surrounding landscape including Steeple Claydon church and Knowl Hill which are both visible obliquely from the windows on the west façade due to the orientation of the building. The upper floors of the 19th century wing likewise provide more elevated views of the surrounding landscape, allowing views of the fields between the park and Home Wood.*

*2.1.8. The house stands prominently in views from Knowl Hill, which although not currently publicly accessible as no footpaths extend to it, would likely have formed a viewpoint within the estate in the 18th century. Views of the house from Knowl Hill can therefore be considered to contribute to its significance.*

*2.1.9. Views of the house from Orchard Way that runs along the south edge of the registered park allow the prominence of the building to be appreciated and therefore add to its significance. The house is also appreciated from the driveway approaches from the south (not currently publicly accessible) and north (the visitor entrance) when moving through the park.*

4.4.1.4 The applicant's assessment of heritage impact concludes that the construction of the solar farm within the views to and from Claydon House will have a negative impact on the contribution which the existing agricultural landscape makes to the significance of this highly-graded listed building. The applicant states that this would result in a low level of 'less than substantial harm' being caused to the Grade I listed building (APP-106, Annex D, paras 2.1.15–16).

4.4.1.5 As with the assessment of the park, discussed above, we consider that the impact assessment presented in the ES underplays the contribution which the agricultural setting and the designed views and routes across it make to

the significance of Claydon House and the impact which the proposed development of the solar farm will have upon the setting of the house and park complex.

4.4.1.6 We agree that the introduction of an industrial energy production component to the existing landscape will cause 'less than substantial harm' to the significance of Claydon House, but consider that this lies towards the middle of the 'less than substantial' spectrum, rather than at the lower end. As noted above, we also consider that assessing the harm to the Grade I listed building in isolation from the heritage harm caused to the complex of interconnected listed buildings which stand within the park results in a lower perception of the cumulative heritage impact upon the Claydon House and Park complex.

4.4.1.7 The applicant's initial assessment of the heritage impacts on the Claydon House complex were limited to the Grade II Registered Park and the Grade I listed building. However, in response to requests from Buckinghamshire Council, the applicant has also now included additional assessments of the other listed buildings which also stand within Claydon Park and form part of the overall complex (Figure 6). Specifically, these listed buildings are:

- Bridge at south end of lake (Grade II; NHLE1214763)<sup>5</sup>
- Archway and Flanking Walls attached to south-west end of Stables (Grade II; NHLE 1214761)<sup>6</sup>
- The Fernery (Grade II; NHLE 1214760): This mid-18<sup>th</sup>-century structure lies at the northern end of the south garden, close to the house.<sup>7</sup>
- Church of All Saints (Grade I; NHLE 1214762): All Saints', c. 1300, stands close to the south-west corner of the house. Standing on a hillock it dominates the west and south garden areas. Nave of c. 1300, much restored. West tower of c.1500. Chancel of 1519. Restored in 1871 by G.G. Scott. Late 19<sup>th</sup>-century south porch and vestry.<sup>8</sup>

---

<sup>5</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214763>

<sup>6</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214761>

<sup>7</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214760>

<sup>8</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214762>

4.4.1.8 In every case, when the applicant assessed the likely heritage impact of the proposed introduction of the industrialised solar farm to the existing agricultural landscape, they have concluded that this change of landscape character would have an impact upon the significance of those heritage assets. The applicant states that this would result in a low level of 'less than substantial harm' being caused to the Grade I listed church (APP-106, Annex D, para. 2.40.5) and the Grade II-listed archway (APP-106, Annex D, para. 2.37.4), fernery (APP-106, Annex D, para. 2.38.4) and bridge (APP-106, Annex D, para. 2.39.4).

4.4.1.9 Tellingly, the applicant has still not assessed the heritage impact on the following two listed buildings which also form part of the Claydon House complex (Figure 6):

- Stables for Claydon House (Grade II; NHLE1214707): The brick stables (1754) form three sides of a large grass courtyard, with the east front of the house forming the fourth side.<sup>9</sup>
- North Lodges (Grade II; NHLE 1214706)<sup>10</sup>

We consider that these heritage assets, which are both part of the Claydon House complex, would also experience 'less than substantial harm' at the lower end of the scale.

4.4.1.10 Overall, the Claydon House and park complex comprises a Grade II Registered Park and Garden within which stand a significant and interrelated group of listing buildings. These include the Grade I-listed Claydon House and the church of All Saints, together with the Grade II-listed stables, lodges, archway, walls, fernery and bridge. That all of this connected group of heritage assets would be caused 'less than substantial harm' by the introduction of an industrialised energy-producing landscape into their collective setting is considered to be a significant detrimental heritage impact. Given the high grading of the affected assets, it is considered that this should be given great weight in determining the application.

---

<sup>9</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214707>

<sup>10</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214706>

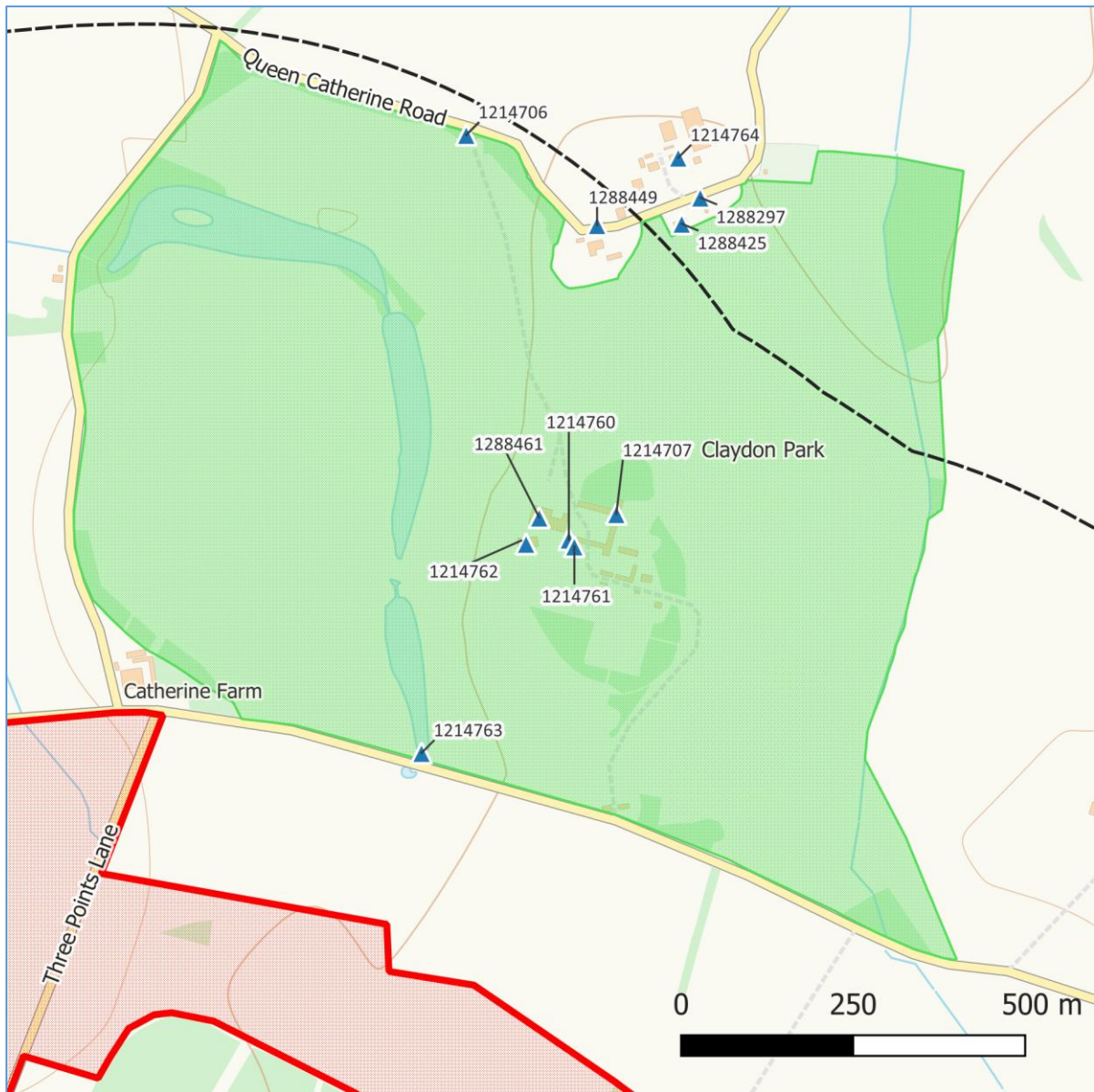


Figure 6. The spatial relationship between the Rosefield Solar Farm and the listed buildings at Claydon House at 1:10,000.

#### 4.4.2 Other Listed Buildings

4.4.2.1 In addition to the listed buildings associated with Claydon Park, there are a number of farmhouses and related buildings which lie in close proximity to the proposed development area (Figure 5). The agricultural land contained within the development area forms an important part of their setting and contributes towards their significance, and the change of landscape character brought about by the proposed development has the potential to harm this significance.

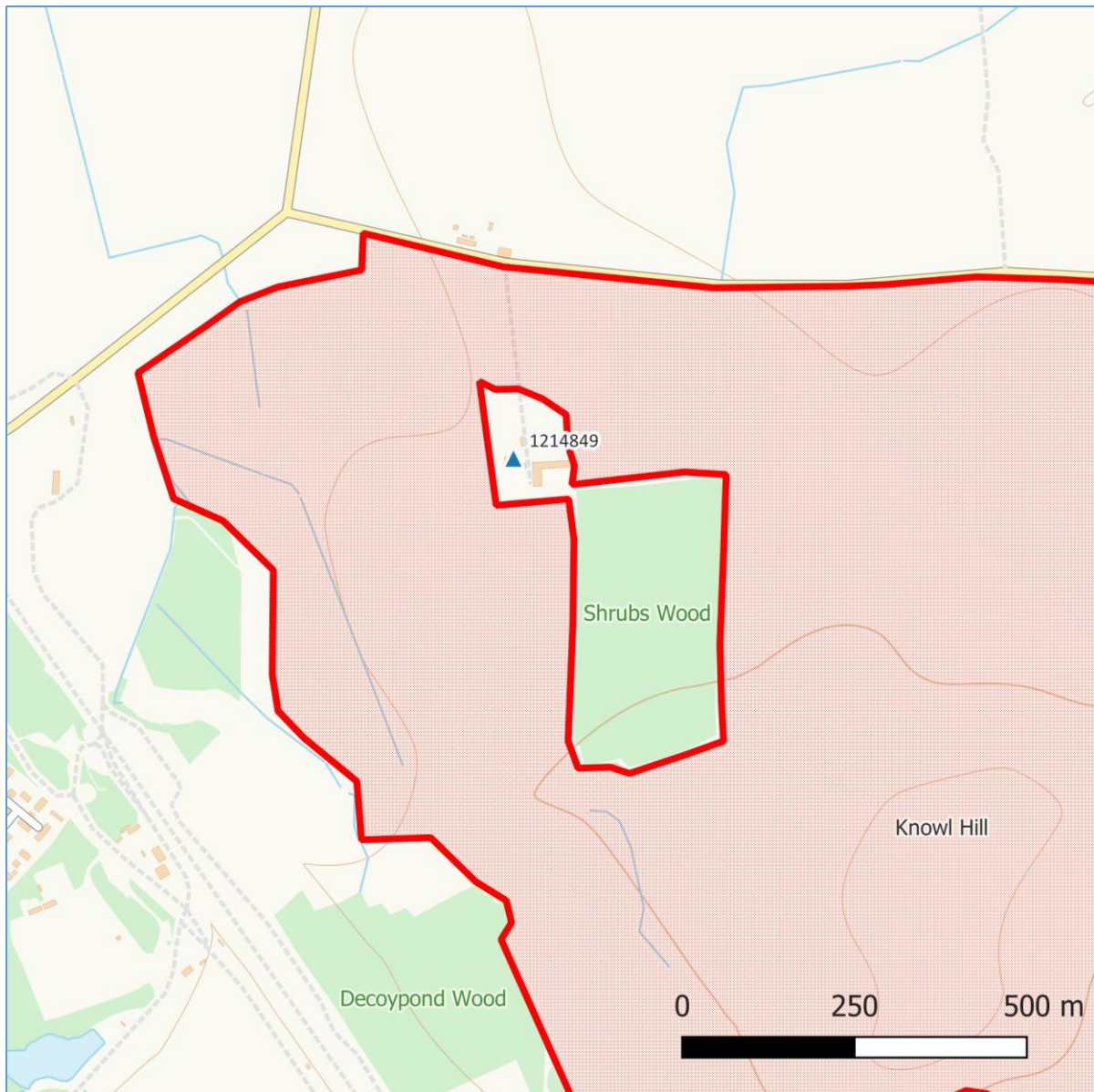


Figure 7. The spatial relationship between the Rosefield Solar Farm and the listed building at Pond Farmhouse at 1:10,000.

4.4.2.2 At the western end of the application site, the Grade II-listed Pond Farmhouse (NHLE 1214849),<sup>11</sup> will be completely encircled by solar panels within Parcel 1 (Figure 7). On the contribution which the setting of the park makes to its significance, Appendix 9.1 of the ES (APP-016, Annex D, para. 2.26.2) states that:

*2.26.2. The surrounding agricultural land contributes to the understanding of the property as a farmhouse within a modern farming*

<sup>11</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1214849>

*landscape. Its association with Claydon is not apparent as there is no visual connection between the farmhouse and Claydon House. The surrounding fields form a post-medieval field system the pattern of which contributes to the significance of the farmhouse.*

4.4.2.3 The applicant's assessment of heritage impact concludes that the construction of the solar farm, which will completely surround the farmhouse, will have a strong negative impact on the contribution which the existing agricultural landscape makes to the significance of the listed buildings. The applicant concludes that this would result in 'less than substantial harm' within the middle of the range, noting that the enclosing effect is a particular factor in this assessment (APP-106, Annex D, para. 2.26.4). We consider that this assessment is too low, given that the construction of the solar farm would change the character of the setting of the farmhouse on all sides, removing it completely from its current agricultural context. As such, we consider that the proposed solar farm would cause 'less than substantial harm' to the Grade II-listed Pond Farmhouse and that this would lie at the upper end of the scale.

4.4.2.4 In addition to Pond Farmhouse, the submitted heritage impact assessment also highlights a considerable number of other listed buildings which surround the application site (APP-106, Annex D, Sections 2.3–34). In many cases, the applicant's own assessment concludes that the change of landscape character which would be brought about by the development would result in an adverse impact on the existing agricultural setting of these buildings. In every instance, the applicant concludes that their proposed development would cause 'less than substantial harm' at the lower end of the spectrum to the listed buildings.

4.4.2.5 Specifically, the applicant identifies that their scheme would cause harm to the significance of the following listed buildings which stand within the landscape surrounding the application site (Figure 5):

- Botolph House (Grade II\*) (NHLE 1212143)
- Stable block at Botolph House (Grade II) (NHLE 1212142)

- Rosehill Farmhouse (Grade II) (NHLE 1214846)
- Outbuildings to the west of Rosehill Farmhouse (Grade II) (NHLE 1214847)
- Tuckey Farmhouse (Grade II) (NHLE 1228040)
- White House Farmhouse, East Claydon (Grade II) (NHLE 1212147)
- Botolph Farmhouse (Grade II) (NHLE 1212146)
- Finemerehill House (Grade II) (NHLE 1117815)
- Muxwell Farmhouse (Grade II) (NHLE 1288460)
- Lower Greatmoor Farmhouse and Barn (Grade II) (NHLE 1124268)

4.4.2.6 In addition, the applicant also identifies that Catherine Farm, a non-designated heritage asset (MBC26340), would also be caused 'less than substantial harm' at the lower end of the spectrum.

4.4.2.7 As well as the isolated farmhouses listed above, the applicant's assessment identifies that the development of the solar farm would also have a negative impact on the following listed buildings located within East Claydon and Botolph Claydon (Figure 8). Again, in every instance, the applicant concludes that their proposed development would cause 'less than substantial harm' at the lower end of the spectrum to the listed buildings.

#### East Claydon

- Church of St Mary (Grade II\*) (NHLE 1289625)
- Fletchers (Grade II) (1289629)

#### Botolph Claydon

- 1 & 3 Orchard Way, Botolph Claydon (Grade II) (NHLE 1212259)
- Orchard Way, Botolph Claydon (Grade II) (NHLE 1289627)
- 23 Orchard Way, Botolph Claydon (Grade II) (NHLE 1212262)
- Botolph Cottage, Botolph Claydon (Grade II) (NHLE 1212144)
- Claydon Cottage, Botolph Claydon (Grade II) (NHLE 1289761)
- Cle des Champs, Botolph Claydon (Grade II) (NHLE 1289626)
- Farthings, Botolph Claydon (Grade II) (NHLE 1212258)
- Hickwell House, Botolph Claydon (Grade II) (NHLE 1212145)
- Pond Cottage, Botolph Claydon (Grade II) (NHLE 1212261)

- Quamby, Botolph Claydon (Grade II) (NHLE 1289628)
- Weir Cottage, Botolph Claydon (Grade II) (NHLE 1212347)

4.4.2.8 In summary, the applicant's own heritage impact assessment submitted as Annex D to the Archaeological Desk-Based Assessment (APP-106), concludes that across the whole of the scheme area the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to two Grade I-listed buildings, two Grade II\*-listed buildings and 24 Grade II-listed buildings. Of the latter, one example, Pond Farmhouse, would be completely enclosed by solar panels and totally severed from its existing agricultural setting.

4.4.2.9 The applicant has noted that every case, with the exception of Pond Farmhouse, they consider the level of 'less than substantial harm' to lie at the lower end of the spectrum, while in the case of Pond Farmhouse this lies towards the middle of the scale. We disagree with this assessment.

4.4.2.10 We conclude that the applicant's assessment of the impact underplays the significance which the complex of interconnected listed buildings within Claydon Park gain from their long-established and deliberately designed relationships with elements of the surrounding agricultural landscape. In our professional opinion, the level of identified 'less than substantial harm' to the Claydon House complex lies in the middle of the scale. Likewise, we conclude that the applicant's assessment of the harm caused to Pond Farmhouse is incorrect and has been underplayed. We conclude that this lie towards the upper end of the 'less than substantial' spectrum.

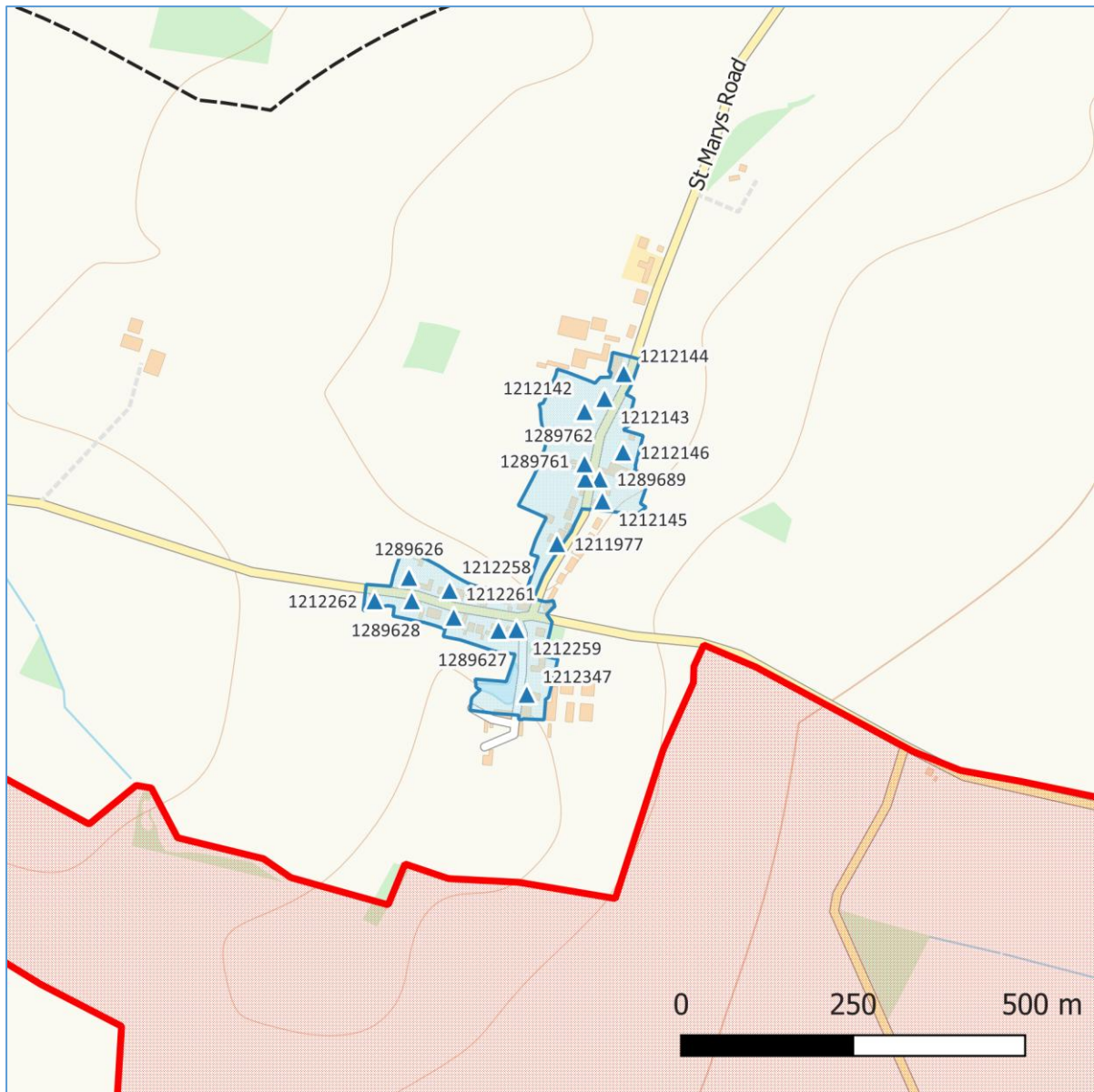


Figure 8. The spatial relationship between the Rosefield Solar Farm, the listed buildings in Botolph Claydon (blue triangles) and the Botolph Claydon Conservation Area (blue) at 1:10,000.

## 4.5 Conservation Areas

4.5.1 Two Conservation Areas lie in close proximity to the proposed development area: Middle Claydon Conservation Area and Botolph Claydon Conservation Area (Figures 8 and 9).

4.5.2 The Middle Claydon Conservation Area was designated in 2002 and is essentially coterminous with the area of Claydon Park, the only differences being the inclusion in the Conservation Area of Home Farm, the Old Rectory,

Almshouses and various cottages in the relocated village to the north, the inclusion of Catherine Farm at the south-western corner of the park and the inclusion of the Old Brickyard to the west.<sup>12</sup> Given the proximity of the Middle Claydon Conservation Area to the proposed development site and its close association with Claydon Park and the complex of listed buildings within it, there will be a considerable overlap between the heritage impacts on Claydon Park (Section 4.3), the listed buildings within it (Section 4.4.1) and the conservation area.

- 4.5.3 On the contribution which the setting of the Middle Claydon Conservation Area makes to its significance, Appendix 9.1 of the ES (APP-016, Annex D, paras 2.32.2-3) states that:

*2.32.2 The surrounding agricultural land contributes to the understanding of the conservation area as a rural settlement and country estate centred on the Grade II Registered Park and Garden and Grade I listed Claydon House.*

*2.32.3 As noted above, key views from Claydon House contribute to its significance and therefore also contribute to the significance of the conservation area.*

- 4.5.4 The applicant's assessment of heritage impact concludes that the construction of the solar farm within the setting of the Middle Claydon Conservation Area would result in a low level of 'less than substantial harm' being caused to the significance of the conservation area (APP-106, Annex D, paras 2.23.5). As with the assessment of the park, we consider that this conclusion underplays the significance of the relationship between Claydon Park, Claydon House and the surrounding agricultural landscape, and that the level of identified 'less than substantial harm' lies nearer to the middle of the scale.

---

<sup>12</sup> <https://buckinghamshire-gov-uk.s3.amazonaws.com/documents/Updated-Middle-Claydon-document-2009.pdf>

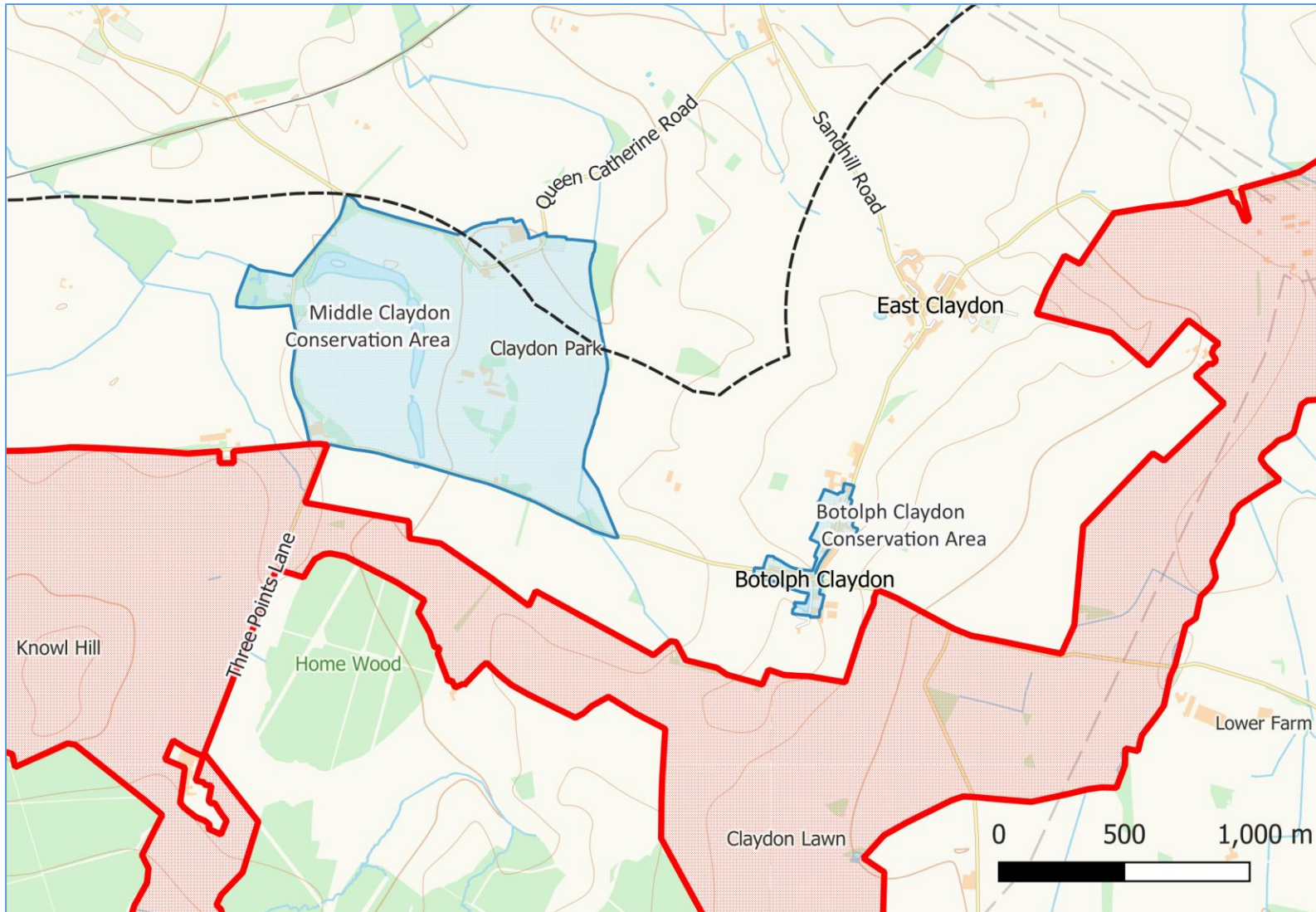


Figure 9. The spatial relationship between the Rosefield Solar Farm and adjacent Conservation Areas at 1:25,000.

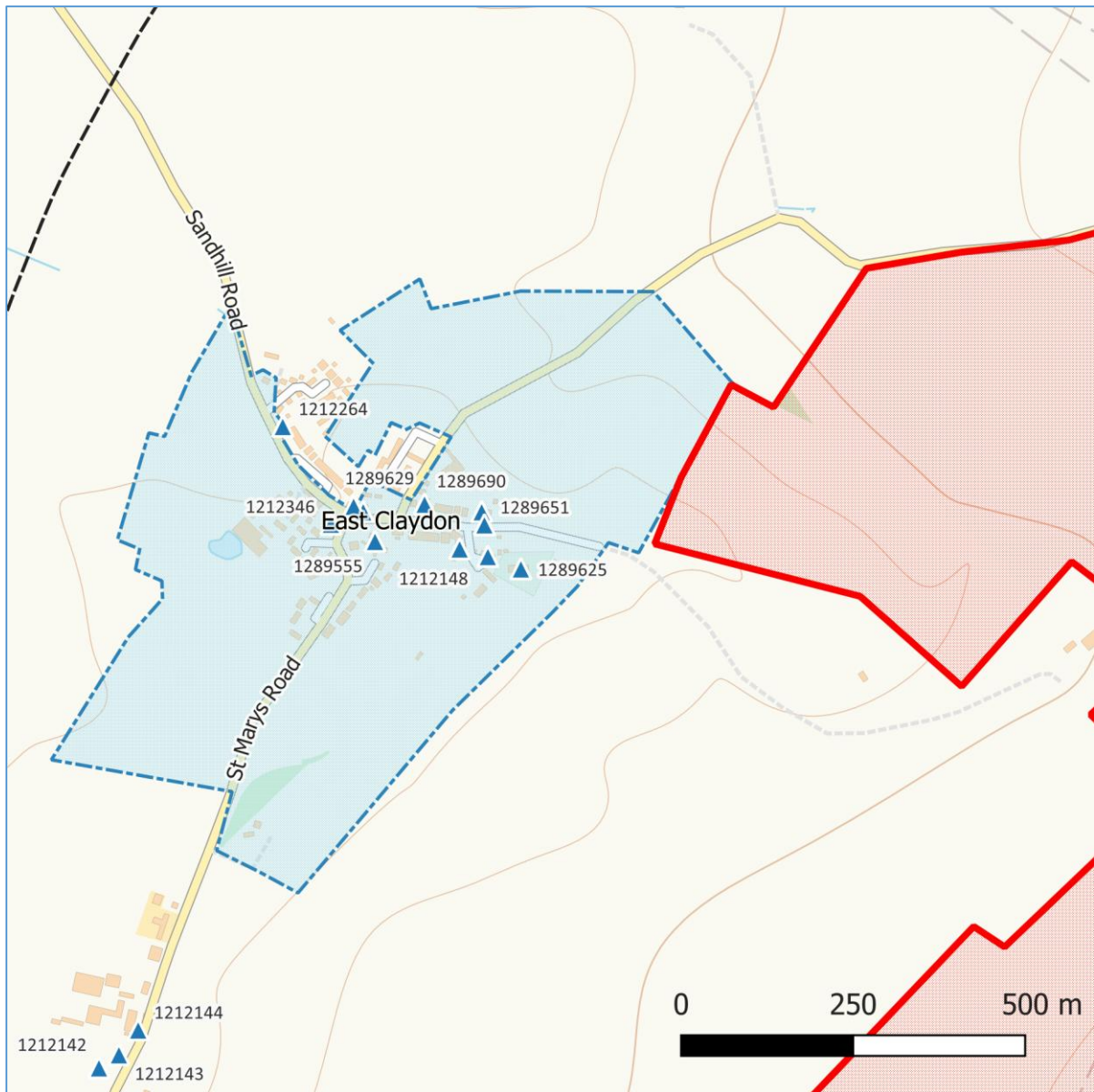


Figure 10. The spatial relationship between the Rosefield Solar Farm and the proposed East Claydon Conservation Areas at 1:25,000.

4.5.5 The Botolph Claydon Conservation Area was designated in 1991 and focusses on the historic settlement core of Botolph Claydon (Figures 8 and 9).<sup>13</sup> On the contribution which the setting of the Botolph Claydon Conservation Area makes to its significance, Appendix 9.1 of the ES (APP-016, Annex D, paras 2.33.3) states that:

<sup>13</sup> <https://www.buckinghamshire.gov.uk/documents/15646/CA-Botolph-Clayton.pdf>

*2.33.3 The village is approached through a largely agricultural landscape which contributes to understanding its significance as a rural settlement, however there are rare opportunities to appreciate this from within the conservation area.*

4.5.6 The applicant's assessment of heritage impact concludes that the construction of the solar farm within the setting of the Botolph Claydon Conservation Area would result in a low level of 'less than substantial harm' being caused to the significance of the conservation area (APP-106, Annex D, paras 2.33.5). We agree with this assessment.

4.5.7 Finally, at the request of Buckinghamshire Council, the applicant was asked to assess the impact of the proposed scheme on East Claydon village, noting that it is of similar character to the villages of Middle Claydon and Botolph Claydon. A draft East Claydon Conservation Area Appraisal and Management Plan has been prepared by Buckinghamshire Council and is due to be consulted upon soon with a view to its being designated. The proposed boundary of the Conservation Area is illustrated in Figure 10, where it can be seen that the eastern boundary of the Conservation Area would be contiguous with the edge of the application site.

4.5.8 On the contribution which the setting of the East Claydon village makes to its significance, Appendix 9.1 of the ES (APP-016, Annex D, paras 2.42.2) states that:

*2.42.2. The earthwork remains around the village contribute to the archaeological and historic interest of the village. The surrounding areas of former ridge and furrow fields and current agricultural use of the surrounding landscape contribute to the understanding of the village as a rural settlement. The existing East Claydon substation is visible from the eastern periphery of the village and in views of the village from the east, slightly diminishing the contribution that the rural character of the surroundings makes to the significance of the village.*

4.5.9 The applicant's assessment of heritage impact concludes that the construction of the solar farm within the setting of East Claydon village would result in a low level of 'less than substantial harm' being caused to the significance of the village as a group of listed and non-listed buildings and earthworks of a former settlement (APP-106, Annex D, paras 2.42.4). We agree with this assessment, but recognise that this harm would carry greater weight should the proposed East Claydon Conservation Area be formally designated.

4.5.10 In summary, the applicant's own heritage impact assessment submitted as Annex D to the Archaeological Desk-Based Assessment (APP-106), concludes that the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to both the Middle Claydon Conservation Area and the Botolph Claydon Conservation Area, as well as causing harm to the significance of East Claydon village, which is in the process of being designated as a Conservation Area. We agree with the applicant's assessment of the harm to the Botolph Claydon Conservation Area, but consider that the level of harm caused to the Middle Claydon Conservation Area would lie towards the middle of the 'less than substantial harm' spectrum given its close relationship with Claydon Park and the Claydon House complex of listed buildings. We also agree with the applicant's assessment of the harm to East Claydon village, but consider that this harm would be of greater magnitude and carry more weight should the proposed East Claydon Conservation Area be formally designated.

## 4.6 Archaeological Features

4.6.1 The application site has been subject to a full suite of non-invasive and invasive archaeological evaluation and the archaeological potential of the site is consequently well understood. The ES is supported by an archaeological desk-based assessment and setting assessment included at Appendix 9.1 (APP-106), the results of a geophysical survey included at Appendix 9.2 (APP-107), an archaeological trial-trenching report included at

Appendix 9.3 (APP-108) and the results of an aerial investigation and mapping project included at Appendix 9.4 (APP-109). The ES is also supported by a Draft Archaeological Management Strategy (APP-146).

- 4.6.2 The Archaeological Desk-Based Assessment identified 198 recorded non-designated heritage assets within the site boundary, including three Archaeological Notification Areas, one locally listed site and 28 non-designated heritage assets. A further 166 non-designated heritage assets were digitised from historic mapping as part of the DBA process (APP-106).
- 4.6.3 The geophysical survey identified areas of likely archaeological remains in Parcel 3, where two areas of possible settlement activity of late-prehistoric to early Roman date were identified (APP-107). These findings were subsequently tested by a programme of archaeological trial trenching. A total of 165 trial trenches was excavated across Parcels 1 to 3, split between nine separate fields. All trenches were 50m long and between 1.8m and 2.0m wide (APP-108).
- 4.6.4 Areas 1 and 2 provided very limited evidence of archaeology and thus appear to represent archaeologically fairly sterile environments. This is likely due to horizontal truncation caused over the years by land use such as agricultural activity. Archaeological features and deposits identified in Area 3 comprised largely Roman activity within Field E11. The majority of the features were ditches and were focussed on the area to the north-west and centre of the field, with a particular concentration of artefacts and ecofacts recovered from the infills of ditches. The network of ditches appeared to form parts of possible rectilinear settlement and field enclosures, as indicated by the geophysical survey dating from the Roman period; not all of the geophysical anomalies were proven to be of archaeological origin.
- 4.6.5 Informed by the results of these surveys, the application is supported by a draft Archaeological Management Strategy which will minimise the impact of the proposed development on the archaeological resource and preserve and record archaeological features (APP-146). The document sets out that

this will be achieved through a programme of post-consent archaeological evaluation and mitigation work.

- 4.6.6 The evaluation will consist of further non-intrusive investigation and targeted archaeological trial-trenching. Following the completion of the archaeological evaluation and dependent on the results of that work, further mitigation by design will be considered or a requirement for further archaeological investigation and recording may be identified where impacts cannot be avoided through the detailed design.
- 4.6.7 The extent of areas requiring archaeological evaluation will first be agreed with the Senior Archaeological Officer for Buckinghamshire Council following a review of the results of the non-intrusive survey and will then be detailed in a WSI submitted to Buckinghamshire Council for their approval.
- 4.6.8 We are confident that this approach to archaeological evaluation and mitigation is robust and support the approach to archaeological evaluation of the site taken by the applicant and Buckinghamshire Council and to date and support the measures set out in the Draft Archaeological Management Strategy.

## 5 Conclusion

- 5.1 This Heritage Critical Review has been prepared by Dr Paul Stamper and Dr Richard Hoggett on behalf of Claydons Solar Action Group (CSAG). It relates to the proposed development of Rosefield Solar Farm on 675 hectares of land in Buckinghamshire. This report has been produced in response to the Development Consent Order application made by Rosefield Energyfarm Limited, currently being examined by the Planning Inspectorate (EN010158).
- 5.2 The Development Consent Order application is supported by a full Environmental Statement (ES), which presents the results of the assessments undertaken by the developer and includes a chapter on Cultural Heritage (APP-052). The ES is supported by an archaeological desk-based assessment and setting assessment included at Appendix 9.1 (APP-106), the results of a geophysical survey included at Appendix 9.2 (APP-107), an archaeological trial-trenching report included at Appendix 9.3 (APP-108) and the results of an aerial investigation and mapping project included at Appendix 9.4 (APP-109). The ES is also supported by a Draft Archaeological Management Strategy (APP-146).
- 5.3 The proposed solar farm would occupy a substantial area of landscape, which formerly comprised the extensive open fields associated with the surrounding settlements, subsequently modified by enclosure. In this, the Verneys of Claydon House had a formative role. It needs to be recognised that the nature and extent of the existing agricultural landscapes across and around the proposed solar farm are of historical importance in their own right, as are the villages, farmhouses and farm buildings from which they were cultivated. This is not a 'chocolate box' countryside like parts of the Cotswolds, or Devon, or Herefordshire, but it is equally distinctive with its own characteristics arising from its agricultural exploitation by local communities over the past millennium.
- 5.4 We conclude that, irrespective of any proposed mitigation planting or screening, the fundamental change in landscape character from an agricultural landscape to a landscape of industrialised energy production

which will be brought about by the proposed scheme will have a significant effect on the legibility and coherence of this historic landscape, as well as impacting upon a number of designated and non-designated heritage assets within and surrounding the proposed development area.

5.5 In summary, the applicant's own heritage impact assessment submitted as Annex D to the Archaeological Desk-Based Assessment (APP-106), concludes that the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to a large number of designated heritage assets which surround the site. These comprise:

- 2 Scheduled Monuments
- 1 Grade II Registered Park and Garden.
- 2 Grade I-listed buildings,
- 2 Grade II\*-listed buildings and
- 24 Grade II-listed buildings.
- 2 Conservation Areas

5.6 In their assessment, the applicant has noted that in every case, with the exception of Pond Farmhouse, they consider the level of 'less than substantial harm' to lie at the lower end of the spectrum; in the case of Pond Farmhouse this lies towards the middle of the spectrum.

5.7 We agree with the submitted assessment of the impact on the pair of Scheduled Monuments, but note that as nationally significant designated heritage assets this 'less than substantial harm' should carry great weight when assessing the overall heritage impacts of the scheme.

5.8 The introduction of an industrial energy production component to the existing landscape will cause 'less than substantial harm' to the significance of the Grade II-registered Claydon Park, and we consider that this lies towards the middle of the 'less than substantial' spectrum, rather than at the lower end as suggested by the applicant. We also consider that assessing the harm to the Registered Park and Garden in isolation from the heritage

harm caused complex of interconnected listed buildings which stand within the park results in a lower perception of the cumulative heritage impact upon the Claydon House and Park complex.

- 5.9 Likewise, we consider that the introduction of an industrial energy production component to the existing landscape will cause 'less than substantial harm' to the significance of the Grade I-listed Claydon House, but consider that this lies towards the middle of the 'less than substantial' spectrum, rather than at the lower end. As noted above, we also consider that assessing the harm to the Grade I listed building in isolation from the heritage harm caused to the complex of interconnected listed buildings which stand within the park results in a lower perception of the cumulative heritage impact upon the Claydon House and Park complex.
- 5.10 Overall, the Claydon House and park complex comprises a Grade II Registered Park and Garden within which stand a significant and interrelated group of listed buildings. These include the Grade I-listed Claydon House and the church of All Saints, together with the Grade II-listed stables, lodges, archway, walls, fernery and bridge. That all of this connected group of heritage assets would be caused 'less than substantial harm' by the introduction of an industrialised energy-producing landscape into their collective setting is considered to be a significant detrimental heritage impact. Given the high grading of the affected assets, it is considered that this should be given great weight in determining the application.
- 5.11 The applicant's own heritage impact assessment concludes that, including the Claydon House complex, the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to two Grade I-listed buildings, two Grade II\*-listed buildings and 24 Grade II-listed buildings. Of the latter, one example, Pond Farmhouse, would be completely enclosed by solar panels and totally severed from its existing agricultural setting. The applicant has noted that in every case, with the exception of Pond Farmhouse, they consider the level of 'less than substantial harm' to lie at the lower end of the spectrum, while

in the case of Pond Farmhouse this lies towards the middle of the scale. We consider that the applicant's assessment of the impact is incorrect and underplays the significance which the complex of interconnected listed buildings within Claydon Park gains from their long-established and deliberately designed relationships with elements of the surrounding agricultural landscape. In our professional opinion, the level of identified 'less than substantial harm' to the Claydon House complex lies in the middle of the scale, rather than at the lower end as stated by the applicant. Likewise, we conclude that the level of harm caused to Pond Farmhouse has also been underplayed and we conclude that this lies towards the upper end of the 'less than substantial' spectrum.

- 5.12 The applicant's heritage impact assessment concludes that the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to both the Middle Claydon Conservation Area and the Botolph Claydon Conservation Area, as well as causing harm to the significance of East Claydon village, which is in the process of being designated as a Conservation Area. We agree with the applicant's assessment of the harm to the Botolph Claydon Conservation Area, but consider that the level of harm caused to the Middle Claydon Conservation Area would lie towards the middle of the 'less than substantial harm' spectrum given its close relationship with Claydon Park and the Claydon House complex of listed buildings. We also agree with the applicant's assessment of the harm to East Claydon village, but consider that this harm would be of greater magnitude and carry more weight should the proposed East Claydon Conservation Area be formally designated.

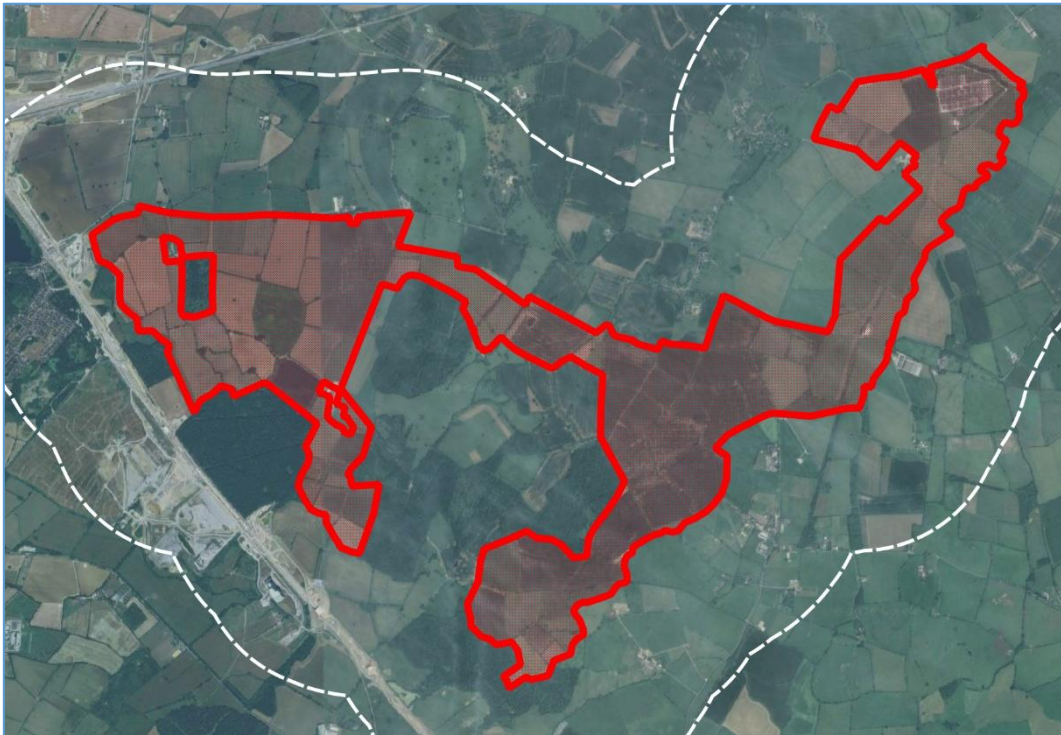
## 6 About the Authors

- 6.1 Dr Paul Stamper is a specialist in the English landscape and its buildings. He is a Fellow of the Society of Antiquaries, was formerly a Visiting Fellow at the Centre for English Local History at the University of Leicester, and is a Visiting Faculty at the Oak Spring Garden Foundation (Virginia, USA). He has taught landscape history at the universities of Oxford, Bristol and Cambridge. He is a former Vice President of the Society for Medieval Archaeology and of the Royal Archaeological Institute, and a former President of the Medieval Settlement Research Group. Since 1981 he has been directly employed in researching and managing England's historic environment, first with the Victoria County History and for 20 years with English Heritage/Historic England. After leaving Historic England in 2016, he set up his own consultancy, Paul Stamper Heritage, and focusses on assessing the significance of historic buildings and landscapes, and the likely impact of proposed changes.
- 6.2 Dr Richard Hoggett is a freelance heritage consultant with over 20 years' experience in the academic, commercial and local authority heritage sectors. As a consultant he assesses the heritage implications of planning applications and provides specialist advice to Local Planning Authorities, developers and landowners across the eastern region. An acknowledged authority on the landscape archaeology of the Anglo-Saxon and medieval periods, in which field he has researched, published and taught extensively. He is a Fellow of the Society of Antiquaries of London and a Member of the Chartered Institute for Archaeologists.

# Heritage Critical Review

Rosefield Solar Farm

## Summary



prepared for

Claydons Solar Action Group

March 2026

Richard Hoggett Heritage



Paul Stamper Heritage



## Summary

This Heritage Critical Review has been prepared by Dr Paul Stamper and Dr Richard Hoggett on behalf of Claydons Solar Action Group (CSAG). It relates to the proposed development of Rosefield Solar Farm on 675 hectares of land in Buckinghamshire. This report has been produced in response to the Development Consent Order application made by Rosefield Energyfarm Limited, currently being examined by the Planning Inspectorate (EN010158).

The Development Consent Order application is supported by a full Environmental Statement (ES), which presents the results of the assessments undertaken by the developer and includes a chapter on Cultural Heritage (APP-052). The ES is supported by an archaeological desk-based assessment and setting assessment included at Appendix 9.1 (APP-106), the results of a geophysical survey included at Appendix 9.2 (APP-107), an archaeological trial-trenching report included at Appendix 9.3 (APP-108) and the results of an aerial investigation and mapping project included at Appendix 9.4 (APP-109). The ES is also supported by a Draft Archaeological Management Strategy (APP-146).

The proposed solar farm would occupy a substantial area of landscape, which formerly comprised the extensive open fields associated with the surrounding settlements, subsequently modified by enclosure. In this, the Verneys of Claydon House had a formative role. It needs to be recognised that the nature and extent of the existing agricultural landscapes across and around the proposed solar farm are of historical importance in their own right, as are the villages, farmhouses and farm buildings from which they were cultivated. This is not a 'chocolate box' countryside like parts of the Cotswolds, or Devon, or Herefordshire, but it is equally distinctive with its own characteristics arising from its agricultural exploitation by local communities over the past millennium.

We conclude that, irrespective of any proposed mitigation planting or screening, the fundamental change in landscape character from an agricultural landscape to a landscape of industrialised energy production which will be brought about by the proposed scheme will have a significant effect on the legibility and coherence of this historic landscape, as well as impacting upon a number of designated and

non-designated heritage assets within and surrounding the proposed development area.

In summary, the applicant's own heritage impact assessment submitted as Annex D to the Archaeological Desk-Based Assessment (APP-106), concludes that the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to a large number of designated heritage assets which surround the site. These comprise:

- 2 Scheduled Monuments
- 1 Grade II Registered Park and Garden.
- 2 Grade I-listed buildings,
- 2 Grade II\*-listed buildings and
- 24 Grade II-listed buildings.
- 2 Conservation Areas

In their assessment, the applicant has noted that in every case, with the exception of Pond Farmhouse, they consider the level of 'less than substantial harm' to lie at the lower end of the spectrum; in the case of Pond Farmhouse this lies towards the middle of the spectrum.

We agree with the submitted assessment of the impact on the pair of Scheduled Monuments, but note that as nationally significant designated heritage assets this 'less than substantial harm' should carry great weight when assessing the overall heritage impacts of the scheme.

The introduction of an industrial energy production component to the existing landscape will cause 'less than substantial harm' to the significance of the Grade II-registered Claydon Park, and we consider that this lies towards the middle of the 'less than substantial' spectrum, rather than at the lower end as suggested by the applicant. We also consider that assessing the harm to the Registered Park and Garden in isolation from the heritage harm caused complex of interconnected listed buildings which stand within the park results in a lower perception of the cumulative heritage impact upon the Claydon House and Park complex.

Likewise, we consider that the introduction of an industrial energy production component to the existing landscape will cause 'less than substantial harm' to the significance of the Grade I-listed Claydon House, but consider that this lies towards the middle of the 'less than substantial' spectrum, rather than at the lower end. As noted above, we also consider that assessing the harm to the Grade I listed building in isolation from the heritage harm caused to the complex of interconnected listed buildings which stand within the park results in a lower perception of the cumulative heritage impact upon the Claydon House and Park complex.

Overall, the Claydon House and park complex comprises a Grade II Registered Park and Garden within which stand a significant and interrelated group of listing buildings. These include the Grade I-listed Claydon House and the church of All Saints, together with the Grade II-listed stables, lodges, archway, walls, fernery and bridge. That all of this connected group of heritage assets would be caused 'less than substantial harm' by the introduction of an industrialised energy-producing landscape into their collective setting is considered to be a significant detrimental heritage impact. Given the high grading of the affected assets, it is considered that this should be given great weight in determining the application.

The applicant's own heritage impact assessment concludes that, including the Claydon House complex, the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to two Grade I-listed buildings, two Grade II\*-listed buildings and 24 Grade II-listed buildings. Of the latter, one example, Pond Farmhouse, would be completely enclosed by solar panels and totally severed from its existing agricultural setting. The applicant has noted that every case, with the exception of Pond Farmhouse, they consider the level of 'less than substantial harm' to lie at the lower end of the spectrum, while in the case of Pond Farmhouse this lies towards the middle of the scale. We consider that the applicant's assessment of the impact is incorrect and underplays the significance which the complex of interconnected listed buildings within Claydon Park gains from their long-established and deliberately designed relationships with elements of the surrounding agricultural landscape. In our professional opinion, the level of identified 'less than substantial harm' to the

Claydon House complex lies in the middle of the scale, rather than at the lower end as stated by the applicant. Likewise, we conclude that the level of harm caused to Pond Farmhouse has also been underplayed and we conclude that this lies towards the upper end of the 'less than substantial' spectrum.

The applicant's heritage impact assessment concludes that the construction, operation and decommissioning of the proposed solar farm would cause a degree of 'less than substantial harm' to both the Middle Claydon Conservation Area and the Botolph Claydon Conservation Area, as well as causing harm to the significance of East Claydon village, which is in the process of being designated as a Conservation Area. We agree with the applicant's assessment of the harm to the Botolph Claydon Conservation Area, but consider that the level of harm caused to the Middle Claydon Conservation Area would lie towards the middle of the 'less than substantial harm' spectrum given its close relationship with Claydon Park and the Claydon House complex of listed buildings. We also agree with the applicant's assessment of the harm to East Claydon village, but consider that this harm would be of greater magnitude and carry more weight should the proposed East Claydon Conservation Area be formally designated.

**Situation Report:  
Rosefield Solar  
Farm.  
Impact on Soils and  
Agriculture**

**EN010158**

March 2026



# **Rosefield Solar Proposal – Impact on Soils and Agriculture.**

## **Executive Summary**

This report sets out the main agricultural issues of concern regarding the proposed Solar Energy Park at Rosefield.

### **Loss of Productive Agricultural Land**

Agricultural land classification reports reveal that all the farmland affected by this scheme is better and more productive than the Natural England ALC maps of the wider area. In reality, land of 3b and 3a quality has been identified, which is described as moderate to good quality. Much of the land is farmed in an arable rotation and the loss to the local farming economy will be significant. Potatoes, cereals and wider combinable crops are grown locally on similar soils.

Other solar farms in the vicinity only go to compound the loss of agricultural productivity and land. Supposed ongoing agricultural production through low intensity livestock grazing, is unlikely to generate much farming income and government support subsidies are prohibited once the panels are in place. Recent scientific studies have shown that there are more efficient ways of sequestering CO<sub>2</sub> with non-tillage farming and rock dust on active farmland rather than using solar.

### **Historical Land Use**

The land is within a wider agricultural estate with operation and business extending over large area of the locality. 675 hectares are proposed to be used as part of the solar project. Most of the land is farmed in arable with livestock operations.

The general area is famed for sheep farming, dairying/beef and for arable crops such as wheat and potatoes. There has been a long tradition of farming in the Vale of Aylesbury and the largest sheep fair in Europe is held locally at Thame Market. These farms as others locally, have traditionally fed into the Thame market, providing good local employment opportunities in agriculture, and supporting trades/industries - such as Farols machinery dealers who have their largest John Deere dealership close by.

### **Food Security**

At a time when there are both food shortages across the globe and issues of food security, related to climate change and the weaponizing of food during the Ukraine conflict, the loss of productive farmland should be avoided, wherever possible. The NFU confirm that the UK is only 58% self-sufficient in food and the loss of this large area of mainly arable production is therefore significant. The NFU believes that productivity should increase on UK farms. As land is taken for environmental, renewable energy and leisure uses, the government envisages a significant increase in output and production from agricultural land remaining in cultivation. As such productive land should be protected from non-agricultural uses in order to meet the aspirations of the nation going forward.

The entire land block is moderate to good quality land well suited to mainly arable and livestock agriculture and the loss to the local farming economy would be significant, it is generally of a higher ALC grade than locally. Supposed ongoing limited agricultural production through low intensity livestock grazing, is unlikely to generate much farming income for such a large land block and is also a poor substitute for large scale arable farming. Some solar farms are grazed with sheep, but many are simply managed by cutting, offering no agricultural benefit whatsoever. Cattle grazing is only practised on sites with raised panels to prevent damage to infrastructure. The applicant proposes to recreate habitat for the Bechstein's bats that would be affected by the development, using cattle, but this seems impracticable with the height arrangement of panels.

### **Damage During Construction and Operation**

Whilst the soils are productive and important locally and nationally, due to the high clay content these soils damage easily particularly during the construction phase, or by heavy trafficking. The pressure to complete construction of the solar farm is likely to take priority over any damage to the soil. However, evidence shows that these soils are difficult to repair and remedy once seriously damaged and the supposed benefits of 50 years of 'resting' may well not materialise, once damaged. Further those soils on land that is under drained run the risk of the metal piles fracturing or puncturing land drains, especially where they are shallow.

### **Government and Local Policy**

National policy seeks to protect farmland from development of any sort, whether permanent or temporary. For solar projects, brownfield sites and low value land should be prioritised. There has been no effort with this proposal to identify alternative sites that would consider poorer land quality in the district, let alone brownfield sites. This despite the presence of large amounts of Grade 4 land in the vicinity.

The applicant does not appear to have demonstrated any detailed assessment of alternative sites to show that poorer land is not available, whereas a cursory assessment of the 10km radii from the substation shows the areas of Grade 4 land on the ALC mapping.

## **Contents**

1. Introduction and Background
2. Loss of Productive Agricultural Land
3. Historical Use
4. Food Security
5. Damage During Construction and Operation
6. Government Policy
7. Conclusions

Appendices

Biographical

## **1. Introduction and Background**

- 1.1. Land at Rosefield solar has been submitted for planning consideration under **EN010158**. This report addresses some of the agricultural land quality issues of relevance to the application and the wider farming holdings.
- 1.2. The proposal affects approximately 675 hectares (ha). The fields are currently mainly arable farmland and have been used for mainly combinable crops. There is some grassland
- 1.3. The cropping of the land has been arable cropping, with mixed livestock, the loss of this land from cropping to solar would restrict its use to only livestock grazing under the panels. Hay and silage making are not practicable on the grassland between panels and sheep grazing is the only realistic agricultural activity that could occur.
- 1.4. The applicant suggests that cattle grazing can take place on the site, but it is unlikely that this would occur amongst the panelled areas as cattle may damage the panels. Many solar sites are not actively grazed and even where grazed, it is usually at very low grazing densities.

## **2. Historical Land Use Locally**

- 2.1 The area has been important to the historical agriculture practised locally. Farming is widely practiced in the area, and it is still very rural. Arable land has been improved through drainage and mechanised farming. Indicative of this is the presence of large machinery dealerships in the area, such as Farols, who have their largest John Deere outlet, just outside Thame.
- 2.2 Widespread solar projects in the area jeopardize the integrity of those support industries, the processors, transport and supply industries that operate in the locality in response to such an important market are all threatened by any reduction in agricultural output. WMS 2024 specifically mentions the impact of wider solar farm projects, particularly on food security.
- 2.3 The farms make full use of modern machinery and the soil has good bearing topsoil with a firm -base that is drained and the fields are generally level large and with similar clay based soil types.
- 2.4 It is recognised that the soils are vulnerable to compaction during farming operations, moderate rainfall and low Field Capacity Days means that the land can be farmed effectively for a wide range of arable crops without damage, when undertaken carefully.
- 2.5 There is some concern at the likelihood of increased run-off from the panels on this land and the risk of soil erosion, sedimentation and associated problems. I share these concerns.
- 2.6 Improper handling and storage of excavated soil may degrade its quality, reducing its fertility and biological activity. Additionally, exposed and excavated soils are more vulnerable to erosion by wind and water, which can result in sediment runoff and potential contamination of nearby watercourses.

## **3. Food Security and Food Imports**

- 3.1 Nearly half of what we eat in the UK comes from abroad, and two-thirds of that has in recent years come from the EU. The NFU confirm that UK self-sufficiency is only at 58%. With the recent war in Ukraine and the uncertainty of supply of core commodities such as wheat, there have been both supply issues and huge price fluctuations.
- 3.2 This has refocused attention on food security in the UK and the need to protect productive farmland from development and long-term decline.
- 3.3 "There are three cornerstones on which a prosperous farming sector must be built and which any government should use to underpin its farming policy. They are boosting productivity, protecting the environment, and managing volatility (source Minette Batters, when NFU president). The country must "never take our food security for granted," she said.
- 3.4 The United Kingdom Food Security Report states:-

*Food security is a complex and multi-faceted issue. It is structured around five principal 'themes', each addressing an important component of modern-day food security in the UK. They are as follows:*

- *Global food availability, which describes supply and demand issues, trends and risk on a global scale, and how they may affect UK food supply;*
- *UK food supply, which looks at the UK's main sources of food at home and overseas;*
- *Supply chain resilience, which outlines the physical, economic, and human infrastructure that underlies the food supply chain, and that chain's vulnerabilities;*
- *Household-level food security, which deals with issues of affordability and access to food; and*
- *Food safety and consumer confidence, which details food crime and safety issues.*

3.5 The UK has a productive agricultural sector and a domestic agri-food manufacturing industry that produces food to high standards. The amounts and types of food produced are driven by market forces and consumer demand for goods, rather than by assessment of overall quantity of food or of self-sufficiency. Many factors affect the output of domestic production, including:-

- The availability and suitability of land for particular forms of production.
- Inputs such as labour, water, fertiliser, pesticides, and seeds.
- Climate and environmental factors such as soil health and rainfall.

3.6 In 2020, 71% of UK land area was used for agricultural production, the majority of this being grassland for grazing rather than crops. Much of the Rosefield area is rotational grassland with arable and, because not all UK land is suitable for cereal cropping the loss of any of this site is likely to be significant, having an impact on local farms and the wider agricultural community.

3.7 The report notes that the biggest medium to long term risk to the UK's domestic production comes from climate change and other environmental pressures like soil degradation, water quality and biodiversity. Wheat yields dropped by 40% in 2020 due to heavy rainfall and droughts at bad times in the growing season. This is an indicator of the effect that increasingly unreliable weather patterns may have on future production. When UK production is reduced, we are more dependent on imported commodities. The war in Ukraine has highlighted the vulnerabilities of such a strategy.

3.8 In 2020, 71% of UK land area was used for agricultural production, the majority of this being grassland for grazing rather than crops.

3.9 The United Kingdom Food Security Report notes:-

*Domestic production faces a number of long-term and short-term risks, including soil degradation, drought and flooding, diseases, risks to fuel and fertiliser supplies, and changing labour markets. In the long term, climate change impacts are likely to have a negative effect on the proportion of high-grade arable farmland available in the UK.*

3.10 A recent report *UK Food Security – Outlook to 2050* report has been published by Science for Sustainable Agriculture and authored by Dr Derrick Wilkinson, a former chief economist at the CLA. It raises the concern that up to 23% of land currently farmed could be lost from agriculture by 2050 due to competing land-use demands including housing, solar infrastructure, tree planting and carbon offsetting. It warns that, unless agricultural productivity is significantly boosted, these trends could lead to a 32% fall in domestic food production, exposing the UK to increased import reliance and food price volatility.

3.11 Far from taking farm land out of production for 60 years, efforts should be made to increase food production from this land.

#### 4. Loss of Productive Agricultural Land

- 4.1 The ALC report produced by Rosefield (APP-126) - **Appendix 1** is a copy of the ALC map from the report, describes the land as clay or heavy clay loams. The survey was not conducted at the full density of 1 per hectare as is recommended by Natural England and there is evidence from other ALC surveys of the presence of more BMV than found in these surveys. Part of the site was surveyed for the HS2 route and some additional Grade 3a land was found (**Appendix 2**). Further the Rosefield ALC suggests that the Provisional Map identifies Grade 5 land within the DCO limits, but this is not the case. There is a small area of non-agricultural land (woodland) which is shown coloured orange.
- 4.2 Buckinghamshire has a very high percentage of non BMV, which is not typical for Southern England - where around 42% of land is considered BMV. The presence of high quantities of poor Grade 4 farmland questions the appropriateness of siting a solar farm in this location on better land.
- 4.3 The accompanying plan also shows the Likelihood of Best and Most Versatile land in the area. It is clear that this site is on land quality where its use for solar should be avoided. The proposed development would take this agricultural land from productive use for 60 years.
- 4.4 As a significant site over 20ha, the applicant is required to demonstrate that there is not 'poorer quality land' available for the development. It is for the applicant to justify the use of higher quality land with the most compelling evidence.
- 4.5 As recently as May 2024, government produced a Written Ministerial Statement (WMS) specifically with regard to renewable energy, best and most versatile land and food security.

*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.*

*For all applicants the highest quality agricultural land is least appropriate for solar development and as the land grade increases, there is a greater onus on developers to show that the use of higher quality land is necessary. Applicants for Nationally Significant Infrastructure Projects should avoid the use of Best and Most Versatile agricultural land where possible.*

- 4.6 In a recent letter 15/2/2025 the Minister of State for Energy and Net Zero (**Annex A**) stated:-

*"There has been no change to the policy on the weight attached to the use of BMV land. Planning policy and guidance makes clear that, wherever possible, developers should utilise brownfield, industrial, contaminated, or previously developed land. Where the development of agricultural land is shown to be necessary, lower-quality land should be preferred to higher-quality land (including 'Best and Most Versatile' land)."*

- 4.7 The impacts of the proposed development on the agricultural land resource assume that the development is judged to be merely a temporary use, despite a projected, lengthy 50+ year plus timespan. The construction and operational phases of the development are considered in this context.
- 4.8 The supporting planning report does not address the loss to the farm holdings or the local area of an important group of farming operations with good productivity, nor the cumulative effect. The area of land taken is significant for the local farming community and will have a major impact on the tenants and farmers and their ability to continue in agricultural production due to the loss of flexibility and for the rotational cropping of certain crops.

## Livestock Grazing Under Panels

- 4.9 Whilst it is perfectly possible to graze the areas under and between the panels, it is unlikely to be very cost effective for a grazer. The difficulties of rounding up livestock and handling them, together with finding sick or wounded animals amongst the panels, makes the graziers workload harder and more complex. Shepherds have found that some sheepdogs will not work well under panels as the low-level humming and buzzing irritates their acute sense of hearing. The applicant proposes to preserve habitat for the Bechstein's bats that would be affected by the development, using cattle, but this seems impracticable with the arrangement of panels. There are few if any cattle-based-grazing solar farms operating in the UK.
- 4.10 The economics of moving livestock to and from the site will be more marginal. Most examples of livestock grazing are by sheep farming and the solar operators do not charge much or anything for the grazing and this may make it sufficiently attractive for a local farmer perhaps with a 'flying flock' of sheep, but it is no substitute for the existing arable operations. It is widely acknowledged in the industry that many solar farms are not actively grazed and many of these only at low intensity, for ecological benefits, such that far from retaining the land in agricultural use, it is little more than a tidying up exercise. It will be even harder to achieve any ecological effect using cattle given the practicalities. BRE guidelines consider that larger farm animals such as horses and cattle are unsuitable since they have the weight and strength to dislodge standard mounting systems.



Figure 4 Sheep and cattle grazing under solar panel arrays. Support structures, and the height of panels, would need to be substantial in order to allow cattle grazing and would not ordinarily be recommended. Images courtesy of Steve Edmunds, Mole Valley Renewables.

- 4.11 Land in use for solar panels is ineligible for the normal agricultural subsidies, such as the Sustainable Farming Incentive (SFI) and the Environmental Land Management Scheme (ELMS). It does not prevent land from being managed in similar ways, but there will be no payments available to farmers (eg graziers) for compliance and this would make farming less financially attractive going forward.
- 4.12 The site will have to be (re)seeded to species rich grassland, but this will probably occur after the panels have been sited on the land. Species rich grassland is difficult to establish on nutrient rich former arable land as set out in TIN 066 Arable Reversion (**Annex B**). In my experience grass does not grow well under the panels themselves and there are often areas that are dry and barren or that only host weeds species, due to heavy shading and patchy wetness.



The Reality is that often 'nothing' grows under the panels,...



....or that weeds grow and must be cut or sprayed.

## 5. Damage During Construction and Operation

### Soils

- 5.1 The soils locally are mainly clay and heavy clay loam soils over clay at depth. Typically, these soils are affected by compaction, especially during the construction phase of the project. Experience from other solar sites built during poor conditions demonstrates the extent of damage that can be done. Contractors are often under severe time pressure to complete construction and will sacrifice soils to complete their works.
- 5.2 Compacted layers within the soil will affect drainage and it may cause areas of surface ponding across a field. Soil aggregate stability can be reduced by the construction resulting in a degradation of soil physical quality. **Appendix 5** shows a timelapse series of photos of a solar farm during construction.

- 5.3 As work progresses, so the soil conditions deteriorate. In more extreme circumstances, due to the need to complete works within a deadline, serious soil damage can occur. Far from improving the status of land by taking it out of production, this soil damage can permanently harm the soil's productive capacity into the longer term, which cannot be remedied and may affect the land quality in the future.
- 5.4 Compaction caused during construction damages the soil structure and means that soil remains wet due to poor drainage. This in turn affects the fertility of the land, the type of grass and other plants that can grow and makes long term predictions about improved fertility and soil health due to taking land out of production, much less likely. **Appendix 6** shows a series of photographs of a large solar site during construction and sort of severe damage that can occur.



**Soil Damage**

- 5.5 The ALC and environmental assessments have failed to consider impacts on the existing land drainage, which could be severely damaged by the insertion of piles into the ground and from other construction operations, particularly trenching works. The damage to drainage systems has potential impacts on agricultural soil quality, including the risk of permanent lowering of ALC quality following decommissioning restoration.

#### **Damage During Management**

- 5.6 As water washes off solar panels, it collects on the grassy areas between the panels, along with the normal rainfall falling. As such, the un-panelled areas receive most of the rainwater, whilst the areas under the panels remain much drier. **Appendix 7**



**Flooding due to construction compaction and subsequent run off**

5.7 When machinery is used to cut the grass or clean the panels, damage to the soil can occur through excessive trafficking when wet. Again, contractual obligations and time pressure encourages operatives to work in less-than-ideal conditions, and this can cause soil damage that persists long into the project's life.



**Use of Machinery in Inappropriate Conditions on silty clay based soils**

- 5.8 Traditionally soils would be ploughed or subsoiled to help to improve drainage or soil damage. However, once the solar farm is constructed it is not possible to remedy any damage under the panels. Between the panels, cultivations are limited due to the risk of damage to buried cables, the general narrowness and unsuitability for larger farm machinery.
- 5.9 As such once layers of soil are compacted this damage can persist for much of the life of the project and even beyond, with only limited opportunity to remedy problems. Far from resting the land and improving its status, soil quality will suffer in such circumstances.
- 5.10 Poor construction practices cannot easily be controlled by condition on such a large-scale operation, where contractors may have financial deadlines to meet. The soils at this site are acknowledged to be vulnerable to compaction damage and adequate safeguards are necessary. Soil Heath advice such as within The Environment Agency's (EA) 2019 *State of the Environment* report also estimated that, in England and Wales, soil degradation was putting 4 million hectares of soil at risk of compaction (alone).

## 6. Government Policy

### National Policy Statement for renewable energy infrastructure (EN-3), 2025

- 6.1 Government policy with regard to agricultural land is set out in EN-3, 2025 which states that:

***Agriculture land classification and land type:***

*2.10.20 Solar is a highly flexible technology and as such can be deployed on a wide variety of land types.*

*2.10.21 While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. 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. "Best and Most Versatile" agricultural land is defined as land in grades 1, 2 and 3a of the Agricultural Land Classification (ALC).*

- 6.2 *2.10.23 It is recognised that at this scale, it is likely that applicants' developments will use some agricultural land. Applicants should explain their choice of site, noting the preference for development to be on suitable brownfield, industrial and low and medium grade agricultural land.*
- 6.3 *2.10.26 Applicants are encouraged to develop and implement a Soil Resources and Management Plan which could help to use and manage soils sustainably and minimise adverse impacts on soil health and potential land contamination. This should be in line with the ambition set out in the 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. This should include consideration of mitigation against impacts to peat soils where these are present.*
- 6.4 Soil is considered a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution.
- 6.5 The Written Ministerial Statement in March 2015 advises that where a proposal of a solar farm involves the best and most versatile agricultural land, it will need to be justified by "the most compelling evidence". This high bar has not been achieved in this instance.

6.6 The WMS of May 2024 (which may become withdrawn) clearly states:

*Protecting the Best Agricultural Land*

*The new National Policy Statement that we published in January makes clear that “applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. 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.*

6.7 The developer recognises that the WMS supports that brownfield and low agricultural quality land should be used first but then fails to justify why the proposal is using higher quality land. The onus is placed on the applicant to demonstrate that there is no non-agricultural land available and that poorer quality land should be preferred, where it is clearly available.

6.8 Indeed, the Govt’s Solar Roadmap, 30th June 2025 says ‘This Roadmap sets out how, alongside ground mounted projects, we plan to drive forward deployment of solar across multifunctional uses of space such as rooftops, car parks and water bodies whilst maintaining planning protections for our best agricultural land.’ It also sets out that where agricultural land is shown to be necessary, lower-quality land should be preferred to higher-quality land.

## **7. Conclusions**

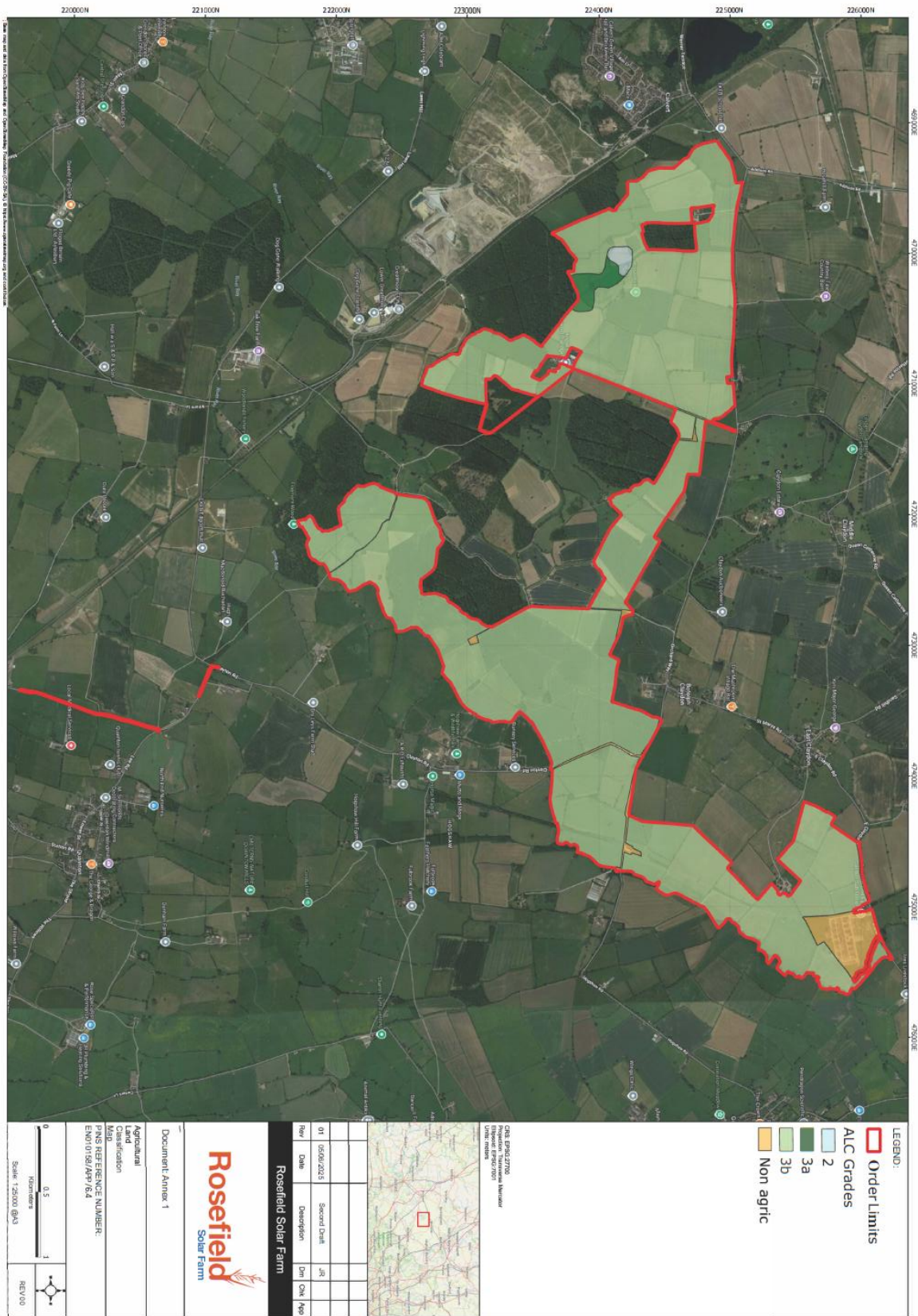
- This report concludes that the entire site proposed should be protected from development on the basis that the area is valuable productive farmland. Developers are asked to try and use areas of poorer quality land and seek alternative sites including brownfield land first.
- The ALC Reports confirm that the land has only moderate agricultural limitations. The evidence confirms this site should be actively producing high-value food.
- Given the quality of land in this immediate area, it is questionable if solar is an appropriate alternative land use on this site or in this location, when there is so much poorer land available locally.
- There will be an impact on the local agricultural industry if this land is lost to production. The loss of productive capacity undermines UK food security and sets an unacceptable precedent for the loss of agricultural capability. This site is precisely the type of farmland government policy intends to protect from development.
- The risk to soil structure, compaction, drainage and erosion on this site is also significant, with little opportunity to remedy any problems once they occur. Once damaged there is a real threat of long-term problems occurring to the soil and its productive capacity. The use of the site for low intensity livestock grazing, does little to address these concerns and will not prevent the significant loss of the arable agricultural capability. The supposed environmental benefits of the scheme are minimal and should be ignored compared to the loss of agricultural land and capability.
- The reliance on food imports to the UK must be addressed and home production on farms now needs to be a priority. The loss of a sizeable parcel of productive farmland, by this Solar Farm should be avoided.
- National policy requires poorer quality and brownfield land to be prioritised, and examples exist locally that show alternatives are available. Development here would be in contradiction with government advice.

**SJ Franklin**

**Landscape Land and Property Ltd**

**March 2026**

ALC Map





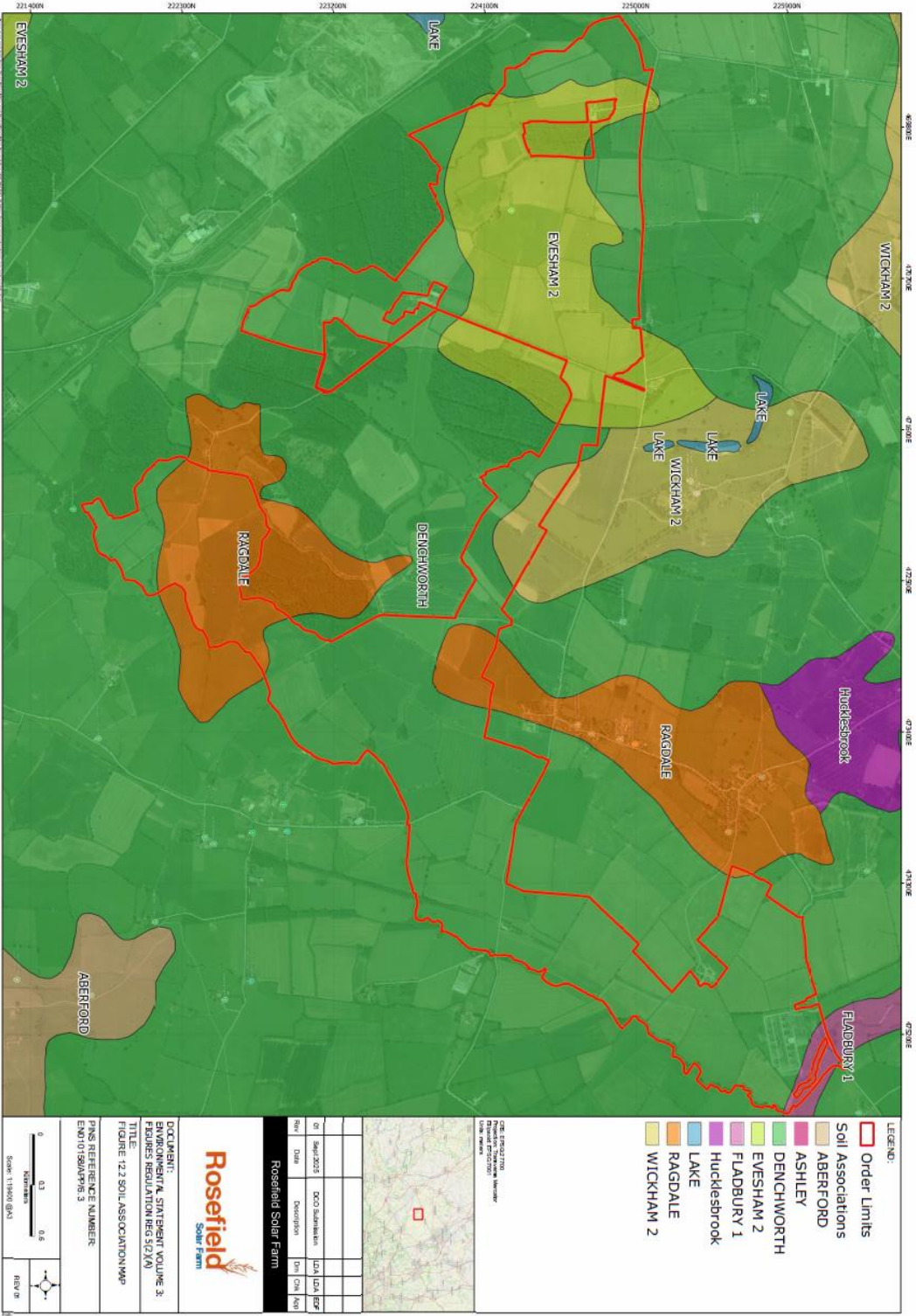
Inset of same area surveyed as part of HS2, compared to Rosefield showing different results

**Area Surveyed as 3a for HS2.**

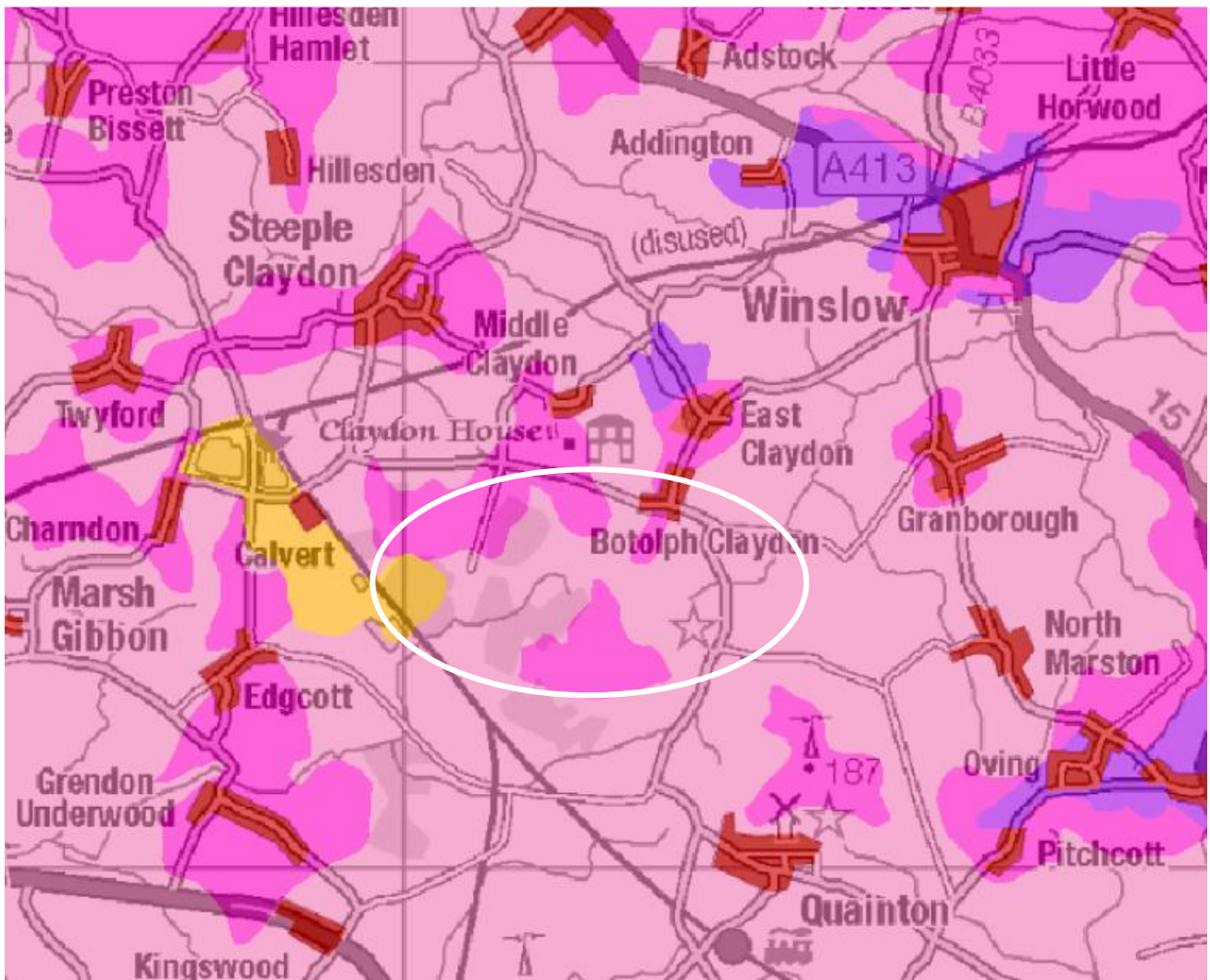


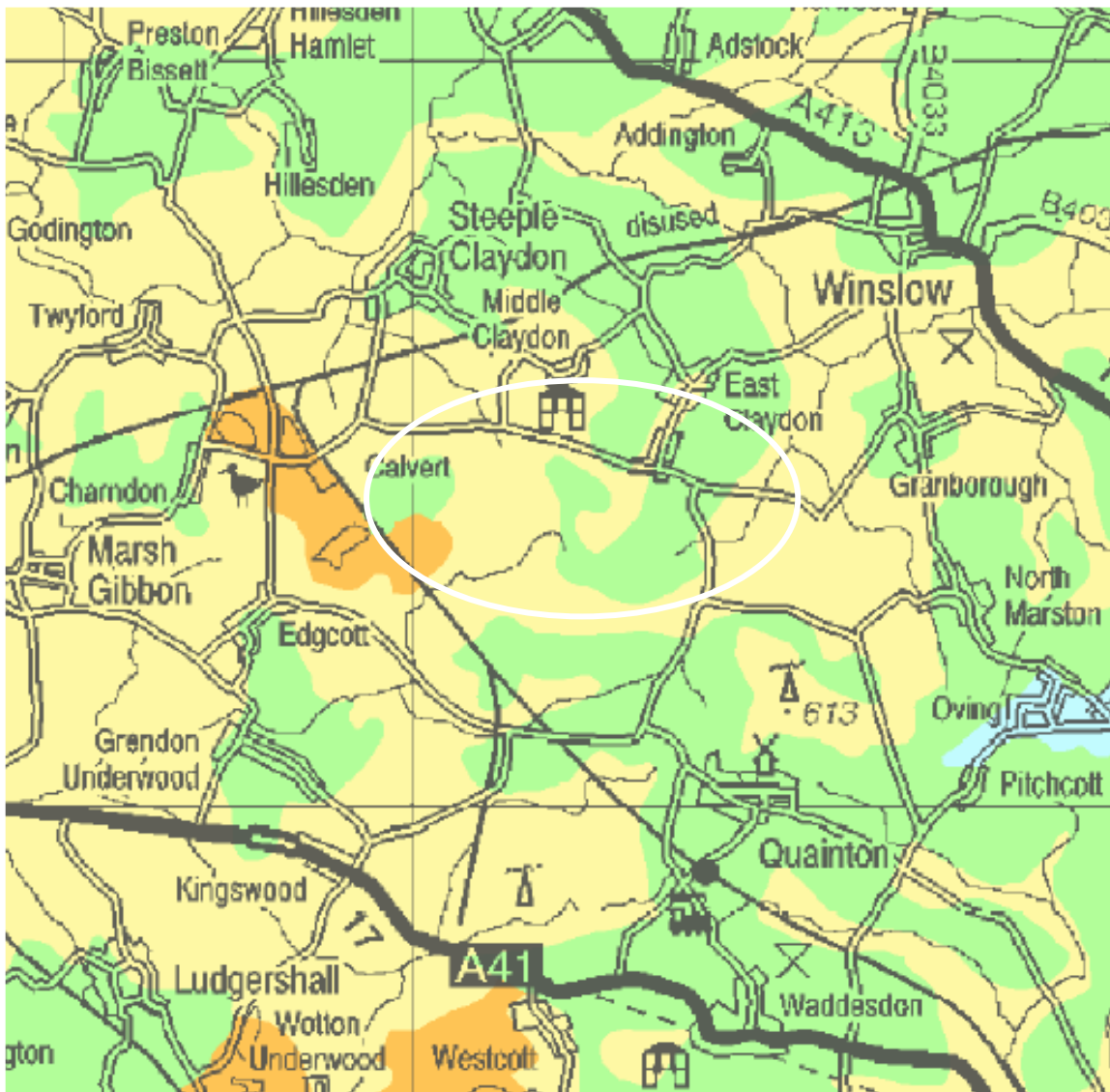
**Same Area as 3b by Rosefield**





Soil Map







Near commencement



Mid construction



Near completion





**Kinetic compaction & rivulets forming**







## Biographical

### Sam Franklin BSc (Hons) MSc MISoilSci PIEMA FBIAC

#### A Panel Member of the Agricultural and Land Drainage Tribunal

- Sam is a Member of the Institute of Professional Soil Scientists and a Life Member of the British Society of Soil Science. He undertakes soil survey and land management work for private clients, developers, local authorities and government agencies and has worked on soil restoration, flood risk, drainage and land improvement projects, as well as Agricultural Land Classification for roads, development sites, renewable energy projects and EIA. He has been a Professional Practitioner of The Institute of Sustainability and Environmental Professionals (ISEP), since 2001.
- He has an MSc from Cranfield University, attending Cranfield advanced training in Soil Matters, Land Evaluation, Soil & Water: Principles and Management in Production Systems and soil science courses of IPSS and Lancaster University. He has given talks, demonstrations and on-farm advice on ALC, soil and water management, land drainage, rainwater harvesting and soil husbandry. Sam has worked overseas in dryland climates and is familiar with land drainage, irrigation scheduling and reservoir design.
- From a family farm, Sam has a BSc (Hons) in Agriculture from Newcastle University and has considerable practical, farm-based agricultural, horticultural and soils management experience gained on mixed, livestock, horticultural and arable units and international work. Sam is a Fellow of the Society of Agriculture (FSAG) and holds the Royal Horticultural Society Certificate in Horticulture.
- As a qualified chartered surveyor (MRICS, FAAV) and agricultural consultant he has over 35 years of experience across a wide range of property matters including both commercial and housing planning projects, compulsory purchase, new roads, pipelines and rail projects, development land, farming, property management, renewable energy, minerals, land restoration, archaeological surveys, and EIA.
- Sam has been managing director of a surveying and rural planning business since 2001 ([www.landscape.co.uk](http://www.landscape.co.uk)). Previous employment includes five years at the RSPB, work for other environmental and conservation organisations, regarding landscape restoration & management, habitat creation, minerals restoration and woodland management; all requiring detailed soils, water and environmental knowledge.
- He has undertaken soil and water management, soil husbandry and Catchment Sensitive Farming work for Natural England and since 2003 has given regular rural planning consultancy advice to Local Planning Authorities, mainly across southern, eastern and midland England; acting as agricultural, equestrian and rural resource expert, regularly attending planning committees, public inquiries, hearings and examinations in public.



Department for  
Energy Security  
& Net Zero

Rt Hon Ed Miliband MP  
Secretary of State  
Department for Energy Security & Net Zero  
55 Whitehall  
London  
SW1A 2HP

Richard Fuller MP  
House of Commons  
London  
SW1A 0AA

[www.gov.uk](http://www.gov.uk)

Our ref: MCB2025/02094  
Your ref: RF33724

17 February 2025

Dear Richard,

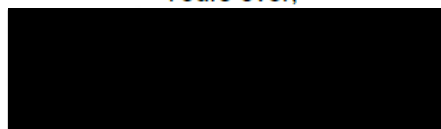
Thank you for your letter dated 3 February, regarding the use of agricultural land for solar projects.

There has been no change to the policy on the weight attached to the use of BMV land. Planning policy and guidance makes clear that, wherever possible, developers should utilise brownfield, industrial, contaminated, or previously developed land. Where the development of agricultural land is shown to be necessary, lower-quality land should be preferred to higher-quality land (including 'Best and Most Versatile' land). This was the policy of the last government. There are no plans to change this policy.

As you point out the proposed NESO connections reform also requires projects to demonstrate 'readiness' and 'strategic alignment' before receiving a firm connection offer. These criterion will be used for the purpose of allocating grid capacity.

Thank you for taking the time to write. I hope this reply is helpful.

Yours ever,



**RT HON ED MILIBAND MP**  
Secretary of State for Energy Security & Net Zero



# Acoustics Report



**Reference:** 5372R01SWPK  
**Your reference:** -  
**Client:** Claydon Solar Action Group  
**Project:** Rosefield Solar Farm, Buckingham MK18  
**Revision:** -  
**Author/ Approver:** Sam Williams MIOA / Miles Woolley MIOA  
**Date:** Thursday, 11 December 2025



# Table of Contents

1	Introduction .....	3
1.1	Overview .....	3
1.2	Documents Reviewed.....	3
1.3	Scope of Assessments .....	3
2	Peer Review – Construction Phase.....	5
2.1	Assessment Criteria.....	5
2.2	Assessment Methodology .....	5
2.3	Results .....	6
2.4	Noise Mitigation Measures .....	7
3	Peer Review – Operational Phase .....	8
3.1	Assessment Criteria.....	8
3.2	Operational Noise Sources.....	10
3.3	Results .....	12
3.4	Noise Mitigation Measures .....	12
4	Conclusion .....	13
4.1	Construction Phase – Noise .....	13
4.2	Construction Phase – Vibration .....	13
4.3	Operational Phase – Noise.....	13



Appendix A: Operational Noise Source Data..... 15

References..... 16

This document has been prepared by Environoise Consulting Limited for sole use of the Client named in this report in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between Environoise Consulting Limited and the Client. Any information provided by third parties and referred to herein has not been checked or verified by Environoise Consulting Limited, unless otherwise expressly stated in this document. No third party may rely upon this document without the prior and express written agreement of Environoise Consulting Limited.



# 1 Introduction

## 1.1 Overview

- 1.1.1 Environoise Consulting Ltd has been instructed by Claydon Solar Action Group to review noise-related information submitted for a Development Consent Order (DCO) for the construction, operation (including maintenance) and decommissioning of Rosefield Solar Farm proposed on four parcels of land to the south and west of East Claydon substation, Buckinghamshire. The review is required to inform the client's input into the planning consultation period.
- 1.1.2 The application includes a solar photovoltaic ('PV') development and battery energy storage system (BESS), together with associated infrastructure and an underground cable connection to the National Grid East Claydon Substation.

## 1.2 Documents Reviewed

- 1.2.1 The following documents, all prepared in September 2025, have been peer reviewed in this report:
- Rosefield Solar Farm Environmental Statement Volume 2 Chapter 13: Noise and Vibration (ref: EN010158-000279-6.2)
  - Rosefield Solar Farm Environmental Statement Volume 3 Chapter 13: Noise and Vibration Figures (ref: EN010158-000302-6.3)
  - Rosefield Solar Farm Environmental Statement Volume 4 Appendix 13.1: Baseline Noise Survey (ref: EN010158-000255-6.4)
  - Rosefield Solar Farm Environmental Statement Volume 4 Appendix 13.2: Construction Noise Plant Tables and Results (ref: EN010158-000256-6.4)
  - Rosefield Solar Farm Environmental Statement Volume 4 Appendix 13.3: Operational Phase Assessment Details (ref: EN010158-000257-6.4)

## 1.3 Scope of Assessments

- 1.3.1 The noise and vibration sources included and excluded from the scope of the assessments done by others on behalf of Rosefield Energyfarm Limited are given in Table 1.1.



**Table 1.1:** Scoping of noise and vibration sources.

Source	Scoped
Construction and decommissioning noise and vibration	
Change in road traffic during construction and decommissioning	Included
Operational noise	
Operational vibration	
Change in road traffic during operation	Excluded

1.3.2 The scope of the noise and vibration assessment is suitable. The included scope has been reviewed in sections 2 and 3 for the construction and operational phases respectively.



## 2 Peer Review – Construction Phase

### 2.1 Assessment Criteria

#### Noise

- 2.1.1 The 'ABC Method' given in BS 5228-1:2009+A1:2014 '*Code of practice for noise and vibration control on construction and open sites. Noise*<sup>i</sup> has been used. This approach takes the ambient noise level at existing noise sensitive properties, rounded to the nearest 5dB integer to determine the appropriate threshold category value either A (65dB  $L_{Aeq,T}$ ), B (70) or C (75). In the noise impact assessment, Category A has been assumed to be applicable which is almost certainly the case given the largely agricultural nature of the existing sites.
- 2.1.2 Criteria have been taken from Design Manual for Roads and Bridges, LA 111 Noise and Vibration<sup>ii</sup> to determine the magnitude of impact based on the change in noise levels caused by construction vehicles using the local road network. This approach is suitable.

#### Vibration

- 2.1.3 Peak particle velocity (PPV) vibration criteria have been taken from BS 5228-2:2009+A1:2014 '*Code of practice for noise and vibration control on construction and open sites. Vibration*<sup>iii</sup> to determine the magnitude of impact for construction vibration which is suitable.

### 2.2 Assessment Methodology

#### Noise

- 2.2.1 Construction plant noise data has primarily been sourced from the appendices of BS 5228-1 which is standard practice for early-stage noise impact assessments done before exact plant specifications are known.
- 2.2.2 Although appropriate at this stage of the project, the use of the non-specific plant noise data introduces the likelihood that actual construction plant noise levels will vary from that considered and should be further assessed once known. The developer or main contractor bringing forward the specification of such plant would facilitate the project acoustician to prepare a more representative assessment. This would feed into the recommendation of specific noise mitigation measures (as discussed in section 2.4).



2.2.3 In relation to the assessment of the change in road traffic noise levels, the following is stated in section 13.6.30 of Volume 2 Chapter 13: Noise and Vibration:

*'The traffic assessment focuses on the change in noise levels that are likely to occur on road links as a result of the construction phase works. Traffic noise predictions have been carried out at notional receptors located 10m from the edge of the carriageway and 1.5m above ground level to determine the change in noise level. Notional receptors are used because it is the change in traffic noise level that is of interest, not the absolute noise levels at any given receptor.'*

2.2.4 This approach is suitable so long as dwellings are not situated within 10m of the considered roads. The change in road traffic noise level would be underestimated if receptors are closer than 10m.

### **Vibration**

2.2.5 Ground compaction works can generate relatively high noise levels of vibration during the construction phase and an outline assessment has been included for these works.

2.2.6 Piling works are referenced in section 13.6.16 (assessment methodology section) of Volume 2 Chapter 13: Noise and Vibration and also in, section 13.9.7 (piling noise mitigation section) and, in Volume 4 Appendix 13.2: Construction Noise Plant Tables and Results, piling is considered in the assessment of solar panel installation works. However, no vibration impact assessment has been provided for piling works, which depending on piling methodology, has the potential to generate high levels of vibration. Either an assessment of piling vibration impact, or robust substantiation for omitting this assessment should be provided.

## **2.3 Results**

### **Noise**

2.3.1 The 65dB  $L_{Aeq,T}$  threshold value was predicted to be exceeded at several receptors by up to 10dB across the different construction activities.

### **Vibration**

2.3.2 A minimum distance between ground compaction works and receptors of 45m has been predicted before the 1.0mm/s 'low' magnitude of impact threshold is reached. No compaction works are expected within 45m of receptors and therefore the magnitude of impact is expected to be 'negligible' or 'low'.



## 2.4 Noise Mitigation Measures

### Noise

- 2.4.1 A list of *potential* noise mitigation measures is given including localised screens and managerial measures such as vehicle engines being turned off when not in use, maintaining equipment in a good working order and construction workers not shouting. It is stated that these measures '*may be employed where reasonably practicable*' and does not qualify which measures are likely to be appropriate for specific construction noise sources and which receptors will benefit.
- 2.4.2 In Volume 4 Appendix 13.2: Construction Noise Plant Tables and Results, calculations are not provided for the residual level of noise impact once mitigation is implemented. Moreover, in section 13.10.1 of Volume 2 Chapter 13: Noise and Vibration, the following is stated:
- 'By adopting the additional control measures outlined above, it is considered that noise levels from all construction activities would not exceed the daytime threshold criterion of 65dB  $L_{Aeq,T}$  at any of the receptors considered.'*
- 2.4.3 The lack of assigning construction noise mitigation measures to specific works and the omission of corresponding residual noise impact calculations prevents verification of this statement at this design stage within this review.

### Vibration

- 2.4.4 Vibration mitigation has not been proposed as the magnitude of impact of ground compaction works was predicted to be 'negligible' or 'low'. A discussion of piling vibration mitigation has not been provided as the assessment was omitted as discussed in section 2.2.6 of this report.



## 3 Peer Review – Operational Phase

### 3.1 Assessment Criteria

3.1.1 The magnitude of impact criteria for operational noise taken from Table 13.10 of Volume 2 Chapter 13: Noise and Vibration is given in Table 3.1.

**Table 3.1:** Magnitude of impact criteria for operational noise.

Impact (relevant guidance)	Magnitude of Impact			
	Negligible	Low	Medium	High
Operation phase – daytime noise (BS 4142/BS 8233/ WHO Guidelines for Community Noise)	Rating level >5dB below background sound level, or rating level ≤35dB(A)	Rating level between 5dB below and 5dB above background sound level, or rating level >35 but ≤40 dB(A)	Rating level between 5 and 10dB above background sound level, or rating level >40 but <50 dB(A)	Rating level >10dB above background sound level, or rating level ≥50dB(A)
Operation phase – night-time noise (BS 4142/BS 8233/ WHO Guidelines for Community Noise)	Rating level >5dB below background sound level, or rating level ≤30dB(A)	Rating level between 5dB below and 5dB above background sound level, or rating level >30 but ≤35 dB(A)	Rating level between 5 and 10dB above background sound level, or rating level >35 but <45 dB(A)	Rating level >10dB above background sound level, or rating level ≥45dB(A)

3.1.2 The following is stated in section 11 of BS 4142:2014+A1:2019 ‘Methods for rating and assessing industrial and commercial sound’<sup>iv</sup>:

*The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.*

3.1.3 This statement from BS 4142 suggests that the highest rating noise level for operational noise to be classified as a ‘low’ magnitude of impact should be equivalent to the existing background level whereas the criteria in Table 3.1 permits a level 5dB above the background level to be classified as ‘low’, depending on the context.



3.1.4 The numerical comparison between existing background levels and the predicted rating levels are an 'initial estimate' only, as stated in BS 4142. A fundamental part of a BS 4142 assessment is the consideration of the context in which the proposed noise source is introduced; no such contextual discussion has been provided in the assessment. It is stated in BS 4142 that all pertinent factors should be taken into consideration, including those factors reproduced from the standard below. Comment is provided after each contextual factor relating these to the proposal site.

*1) The absolute level of sound. For a given difference between the rating level and the background sound level, the magnitude of the overall impact might be greater for an acoustic environment where the residual sound level is high than for an acoustic environment where the residual sound level is low. Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night. Where residual sound levels are very high, the residual sound might itself result in adverse impacts or significant adverse impacts, and the margin by which the rating level exceeds the background might simply be an indication of the extent to which the specific sound source is likely to make those impacts worse.*

This has been considered in the assessment to substantiate absolute limits adopted with reference made to the Association of Noise Consultants 'BS 4142:2014+A1:2019 Technical Note' which states that a very low background level and low rating level could be defined as 30dB  $L_{A90(T)}$  and 35dB  $L_{A,T}$  respectively.

*2) The character and level of the residual sound compared to the character and level of the specific sound. Consider whether it would be beneficial to compare the frequency spectrum and temporal variation of the specific sound with that of the ambient or residual sound to assess the degree to which the specific sound source is likely to be distinguishable and will represent an incongruous sound by comparison to the acoustic environment that would occur in the absence of the specific sound. Any sound parameters, sampling periods and averaging time periods used to undertake character comparisons should reflect the way in which sound of an industrial and/ or commercial nature is likely to be perceived and how people react to it.*

A comparison of the spectral levels of the proposed noise sources in relation to those of the background noise environment has not been done. For that reason, it is not possible to conclusively state the extent of which the proposed plant will be distinguishable. However, it is expected that introducing industrial equipment into a largely agricultural environment will contrast with the existing noise environment; particularly where the background noise level is predicted to be exceeded at receptors which is the case here.

*3) The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate design measures that secure good internal and/or outdoor acoustic conditions, such as:*



- i) facade insulation treatment;*
- ii) ventilation and/or cooling that will reduce the need to have windows open so as to provide rapid or purge ventilation; and*
- iii) acoustic screening.*

Comment is not provided on the likely noise reductions afforded by the façade design of existing receptor buildings. Considering the existing low ambient noise levels, it can be reasonably assumed that houses in the vicinity are specified with glazing and ventilation methods offering a standard (i.e. not high) level of sound insulation performance.

## 3.2 Operational Noise Sources

### Sound Data

3.2.1 The following is stated in section 13.6.8 of the noise and vibration assessment:

*The precise details of operational plant and equipment have not been determined. This will be the subject of a future design exercise, in order to make best use of battery and solar related technology that is evolving over time. The operational assessment has therefore been based on indicative plant and equipment*

3.2.2 It is common for the specification of plant not to be finalised at the stage of preparing an Environmental Statement. However, the sound power level of plant is fundamental to the outcome of a noise impact assessment and the subsequent decision made by the Planning Inspectorate. Therefore, we have compared the noise levels considered for the BESS compound in the proposed development against levels used in assessments for other BESS sites to enable comment on the likely robustness of the data used, see Table 3.2. Specific reports reviewed for noise data are listed in Appendix A.



**Table 3.2:** Comparison of operational noise levels for the BESS compound against data used for other sites.

Source	Sound level data considered		
	Rosefield Farm sound pressure level (dB L <sub>pA</sub> at 1m)	Rosefield Farm approximate sound power level (≈dB L <sub>WA</sub> )	Other reviewed BESS sites (dB L <sub>WA</sub> )
Bess Compound			
Battery container	65	73	70 - 91
Inverter / PCS	Not included	-	81 - 90
Medium Voltage (MV) Station	59 (front) 52 (right) 71 (back)	67 (front) 60 (right) 79 (back)	67 - 84
Transformer	61 (left) 62 (top)	69 (left) 70 (top)	74 - 85
Auxiliary Transformers	40	48	71

3.2.3 As shown in Table 3.2, other reviewed noise impact assessments consider inverters, (typically at a rate of one inverter per two BESS containers) and are usually the highest noise generating components of a BESS set up. In addition, the following is stated in section 1.3.4 of Volume 4 Appendix 13.3: Operational Phase Assessment Details:

*Battery Energy Storage System (BESS) compound comprising: batteries and associated Inverters...*

3.2.4 The above statement mentions that inverters will be situated in the BESS compound but no reference<sup>1</sup> or noise data is given in the assessment.

3.2.5 The battery container level considered is within the range of other reviewed sites; however, is towards the bottom end of this range. Sound data for auxiliary transformers were only given in one further report. However, this report referenced a value approximately 23dB higher than considered for the proposed development. The medium voltage (MV) station / transformers considered for the proposed development are within the range of the other reviewed sites.

<sup>1</sup> Inverters and string inverters are referenced as part of the solar PV modules, but it is expected that separate inverters are required in the BESS compound which are not referenced.



- 3.2.6 To summarise, the considered sound data for the battery container and auxiliary transformer may be underestimated and the absence of Inverter / PCS data may be a significant omission considering that this is typically a dominant noise source in BESS compounds.

### Directivity

- 3.2.7 The BESS containers have been modelled with '*noise emitting from one side and one end*' and with '*noise emitting faces orientated inwards*'. It is typical for two sides to emit greater noise than the other two and roof due to discharging of cooling fans. However, the differential between the higher noise emitting sides, and lower noise emitting sides has not been confirmed. If the differential is less than 10dB then these sides should also be considered; particularly as these lower noise emitting sides are facing outwards, assumedly towards receptors in some instances.

## 3.3 Results

- 3.3.1 Excesses of the assigned lowest observed adverse effect level (LOAEL) of 35dB(A) by up to 5dB are predicted at receptors. The measured background noise levels are predicted to be exceeded by up to 15dB. With noise mitigation measures, the LOAEL is predicted to be met for all receptors, but the existing background noise level is exceeded by up to 11dB.
- 3.3.2 The residual noise levels at some of the receptors are very close to the adopted LOAEL limit, with predicted noise levels of 35dB(A) at two receptors and a total of eight receptors having noise levels of within 3dB of the limit (i.e. 32 - 35dB(A)). This does not consider the Statera Battery Energy Storage System development which is approved on land immediately adjacent to the north-east edge of the proposed development. As the aforementioned development is permitted, the assessment should consider the cumulative effects of the two developments operating simultaneously.

## 3.4 Noise Mitigation Measures

- 3.4.1 Noise mitigation measures are proposed in the form of acoustic barriers of varying heights to the noise generating areas which is acceptable in principle. It is stated in section 13.9.18 of the report that these '*would be constructed using a suitably dense material*'. The surface mass of the material would need to be sufficient to mitigate the lowest of the frequencies of concern i.e. a greater surface mass will be required for lower frequencies.
- 3.4.2 In addition to the acoustic barriers, a 5dB reduction at source is required for the main transformers through '*refinement of the engineering requirements*'. This approach is vague and indicates that the LOAEL is not met with the current design. The design of the transformer, and other plant, the noise level of which has potentially been underestimated (as discussed in section 3.2), needs to be developed further before targets can be demonstrated to be met.



## 4 Conclusion

### 4.1 Construction Phase – Noise

4.1.1 Adopted construction noise criteria is suitable.

4.1.2 It has not been demonstrated in the reports that noise from construction plant will achieve a 'negligible' or 'low' impact at all receptors once mitigation measures have been implemented. In lieu of this, the assessment demonstrates that without noise mitigation measures, the 'low' magnitude of impact threshold of 65dB  $L_{Aeq,T}$  will be exceeded by up to 10dB which is a 'medium' impact in accordance with the adopted criteria.

### 4.2 Construction Phase – Vibration

4.2.1 Ground compaction works are predicted to achieve a negligible or low magnitude of impact. No vibration impact assessment has been provided for piling works, which depending on piling method, has the potential to generate high levels of vibration. Either an assessment of piling vibration impact, or robust substantiation for omitting this assessment should be provided.

### 4.3 Operational Phase – Noise

4.3.1 A contextual discussion regarding the character of proposed noise sources in relation to the existing noise environment has not been included which is an integral part of determining the level of noise impact in accordance with BS 4142:2014+A1:2019.

4.3.2 Source data considered in noise impact assessments for other BESS sites have been compared to the noise data considered for the proposed development. The considered data for the battery container and auxiliary transformer may be underestimated, and the absence of Inverter / PCS data may be a significant omission considering that this is usually a dominant noise source in BESS compounds.

4.3.3 Mitigation measures include an unspecified measure for reducing transformer noise by 5dBA which is insufficient to demonstrate that the LOAEL target of 35dBA can be met at receptors.

4.3.4 An adjacent approved development has not been considered in the assessment of operational noise. A cumulative assessment should have been provided to determine the noise impact of both sites operating simultaneously.



E: [info@environoise.co.uk](mailto:info@environoise.co.uk) T: 0151 705 7188 W: [REDACTED]

---

4.3.5 The points made above introduce uncertainty which, arguably, precludes the Planning Inspectorate from making a well-informed decision on whether factors relating to noise give grounds for refusal.



## Appendix A: Operational Noise Source Data

The noise source data for other, similar noise impact assessments has been sourced from the following publicly available reports:

- Proposed Battery Energy Storage Scheme - Calder Works, Simonstone by NoiseAssess (ref: 13251.01.v5, dated January 2024)
- Noise Impact Assessment - Downiebrae BESS by Atmos Consulting (ref: 72356-04 R1 v1, dated 27<sup>th</sup> February 2024)
- Noise Assessment – Swansea North BESS (no ref, dated 15<sup>th</sup> May 2025)
- Noise Impact Assessment – Bess, Flushing, Peterhead (ref: R-10011B-ST1-EK, dated 23<sup>rd</sup> June 2025)
- Noise Impact Assessment for Planning Application - Pentir Battery Energy Storage System (no ref, dated 16<sup>th</sup> April 2024)
- Noise Impact Assessment - Port Dundas Battery Energy Storage System (no ref, dated 24<sup>th</sup> October 2024).



## References

---

- <sup>i</sup> BS 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites. Noise' (2014).
- <sup>ii</sup> Design Manual for Roads and Bridges, LA 111 Noise and Vibration, 2020.
- <sup>iii</sup> BS 5228-2:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites. Vibration' (2014).
- <sup>iv</sup> BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound', 2019.

# Transport and Traffic Concerns & Comments

---

## Introduction

The proposed development site is situated in a rural area served largely by narrow, country lanes. Bus services are extremely limited and so personal transport is heavily reliant on use of cars. Local roads are busy during commuting hours and school runs.

There is significant use of local roads by pedestrians and cyclists, both for commuting and recreation, and by equestrians. Most roads do not have footpaths or street lighting.

The nature of the area is that roads are also used by agricultural vehicles of varying size. Some of the roads are subject to flooding. Untreated roads during winter become icy.

## Baseline Road Conditions

The rural road network has developed from tracks and carriage routes and so road substructures and stability of road margins are highly sensitive to damage by HGV traffic. The area has experienced extensive and serious harm to road structure during construction of the HS2 and EWR projects to the point where private vehicles have suffered damage and roads have become effectively impassable. Some road repairs have been undertaken but damage to the substructure remains.

Para. 4.6.6 of **6.4 Environmental Statement Volume 4 Appendix 15.1: Transport Assessment (APP-131)** notes that at the time of inspection, Snake Lane was in poor condition. The road has been subject to closure for extended periods. Its condition is the result of damage caused by HS2 and EWR construction traffic which made it impassable for cars and LGVs. This exemplifies the extensive damage that results from the inappropriate use of country lanes by large numbers of HGVS. The proposed construction traffic route includes similarly vulnerable roads whose demise will threaten the safety and convenience of other road users.

Paras 4.6.4-8 fail to state the width of the carriageway for Snake Lane/Fidlers Field, Claydon Road and Quainton Road. Are they sufficiently wide along their entire length for two HGVs to pass safely without destroying road margins?

***What surveys has the Applicant undertaken in order to establish the effective width and structural suitability of roads for HGV traffic on the proposed construction traffic route?***

The proposed site entrance on Claydon Road (107130\_SK\_003) is at the location of well-known but unresolved flooding issues.

***What plans does the Applicant have to resolve those issues before commencing any construction works?***

## Baseline Traffic Information - Traffic surveys

Site visits and traffic surveys were undertaken in 2023 and between 18-24<sup>th</sup> January 2024 respectively, except for Granborough Road which was surveyed from 5-11 July 2024.

# Transport and Traffic Concerns & Comments

---

We have been unable to locate the data source that informed summary tables in the Applicant's submission and so have not been able to interrogate this..

## Baseline Traffic Flows

Baseline traffic flows are reported in Table 1 of the Applicant's **PEIR document, Appendix 14.1 Transport Assessment**. These are presented as gross figures without any breakdown of variations by day, or through the day. Estimates of 2029 baseline values are presented in Table 15.4 of **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)**.

*What consideration has the Applicant given to variations in traffic flows during the day and between days and the impacts of construction traffic on peak flows?*

There appears to be no assessment of the number of pedestrians, cyclists or equestrians using the proposed construction route. This is a particularly vulnerable group, especially when faced with large numbers of HGVs with no footpaths as refuge.

*What is the evidence base for the Applicant's assessment of the nature and extent of impacts on this vulnerable group of road users?*

Estimated increases in baseline traffic for a nominal start date for construction (2029) are presented at Table 15.4 of **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)**. Projected traffic for two other infrastructure projects (Grendon Springhill Prison and HS2) is added at Table 15.5. No provision has been made for the Statera BESS (Planning application 23/03875/APP, approved on appeal 25/00013/REF) or the National Grid replacement substation on which the Applicant's development is wholly dependent.

## Transport and Traffic Concerns & Comments

### Road Closure Data Analysis

Evidence derived from the analysis of the impacts of Local Road Closures must be included to help inform any planning decisions and traffic management schemes.

### Bucks Council Road Closures

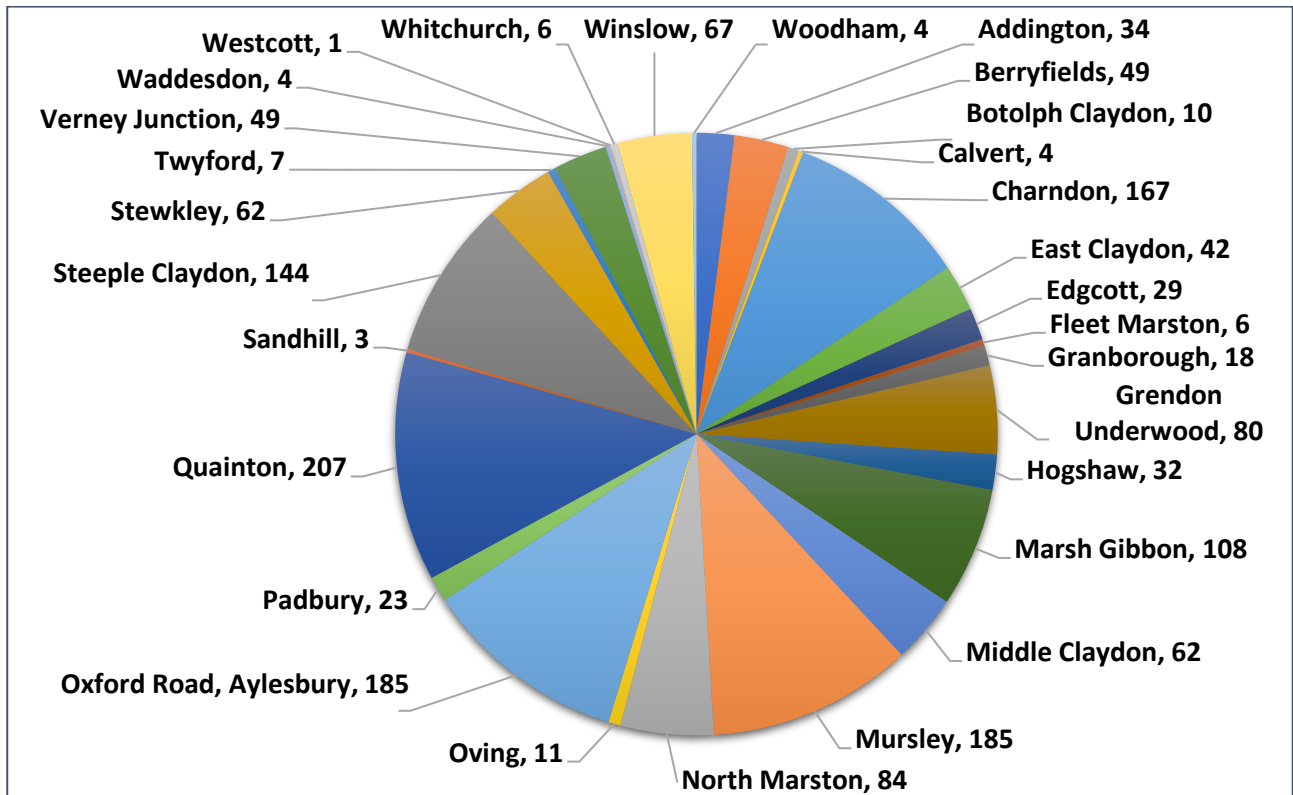
Data has been obtained from Buckinghamshire Council for the area in and around the location of the proposed development. The closures reported are for both planned works and emergency works. The date range for the data is from 15th January 2020 to 14th March 2025.

Location	Events / Days	Comments
Addington	34	
Berryfields	49	
Botolph Claydon	10	
Calvert	4	
Charndon	167	EW Rail Bridge Construction
East Claydon	42	
Edgcott	29	Bucks Council Road Repairs
Fleet Marston	6	
Granborough	18	
Grendon Underwood	80	
Hogshaw	32	
Marsh Gibbon	108	Thames Water New Connection Works
Middle Claydon	62	
Mursley	185	
North Marston	84	
Oving	11	
Oxford Road, Aylesbury	185	
Padbury (Steeple Calydon Rd)	23	EW Rail Safety Audits ?
Quanton	207	
Sandhill	3	
Steeple Claydon	144	
Stewkley	62	Anglian Water New Stop Tap?
Twyford	7	
Verney Junction	49	
Waddesdon	4	
Westcott	1	
Whitchurch	6	
Winslow	67	
Woodham	4	

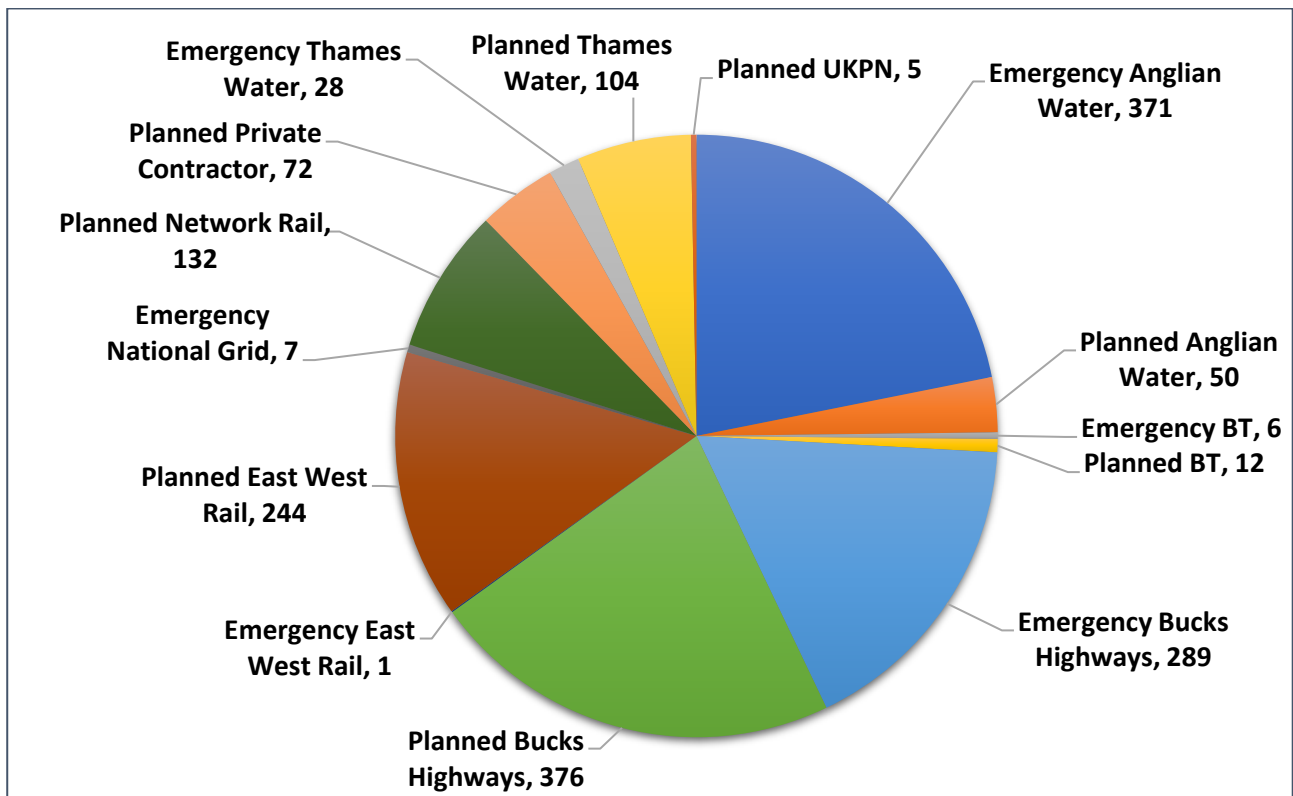
**During this period there were a total of 1,683 days of road closures.**

# Transport and Traffic Concerns & Comments

**Roads Closed: Days by Location (Bucks Council Data)**

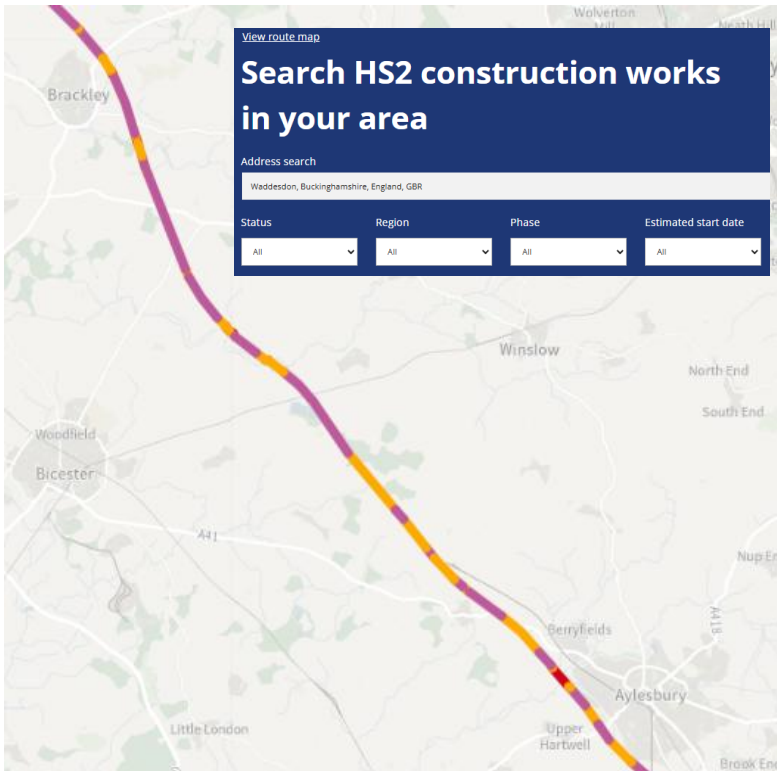


**Roads Closed: Days by Company and Type (Bucks Council Data)**



# Transport and Traffic Concerns & Comments

## HS2 Road Closures



In addition to the road closure data from Bucks Council, CSAG has also carried out an assessment of the impacts on road closures by HS2 and this is summarised below.

The table below has been compiled using data obtained from the HS2 website.

Summary of HS2 Road Closures 5 Year Period (January 2021 - February 2026)					
Location Name	Closures per Location	Total Days of Closure	Average Duration of Closures (Days)	Closures in Months	Maximum Closure Duration (Days)
Aylesbury	43	6007	140	200	87
Calvert	71	6282	88	209	936
Finmere	59	2774	47	92	601
Grendon	6	741	124	25	701
Quainton	60	4827	80	161	914
Steeple Claydon	66	5770	87	192	936
Tingewick	15	1859	124	62	626
Turweston	56	4026	72	134	900
Waddesdon	84	5131	61	171	914
<b>Totals:</b>	<b>460</b>	<b>37417</b>	<b>823</b>	<b>1247</b>	

The key points of note here are:

**A total of 37,417 days of road closures directly relating to HS2.**

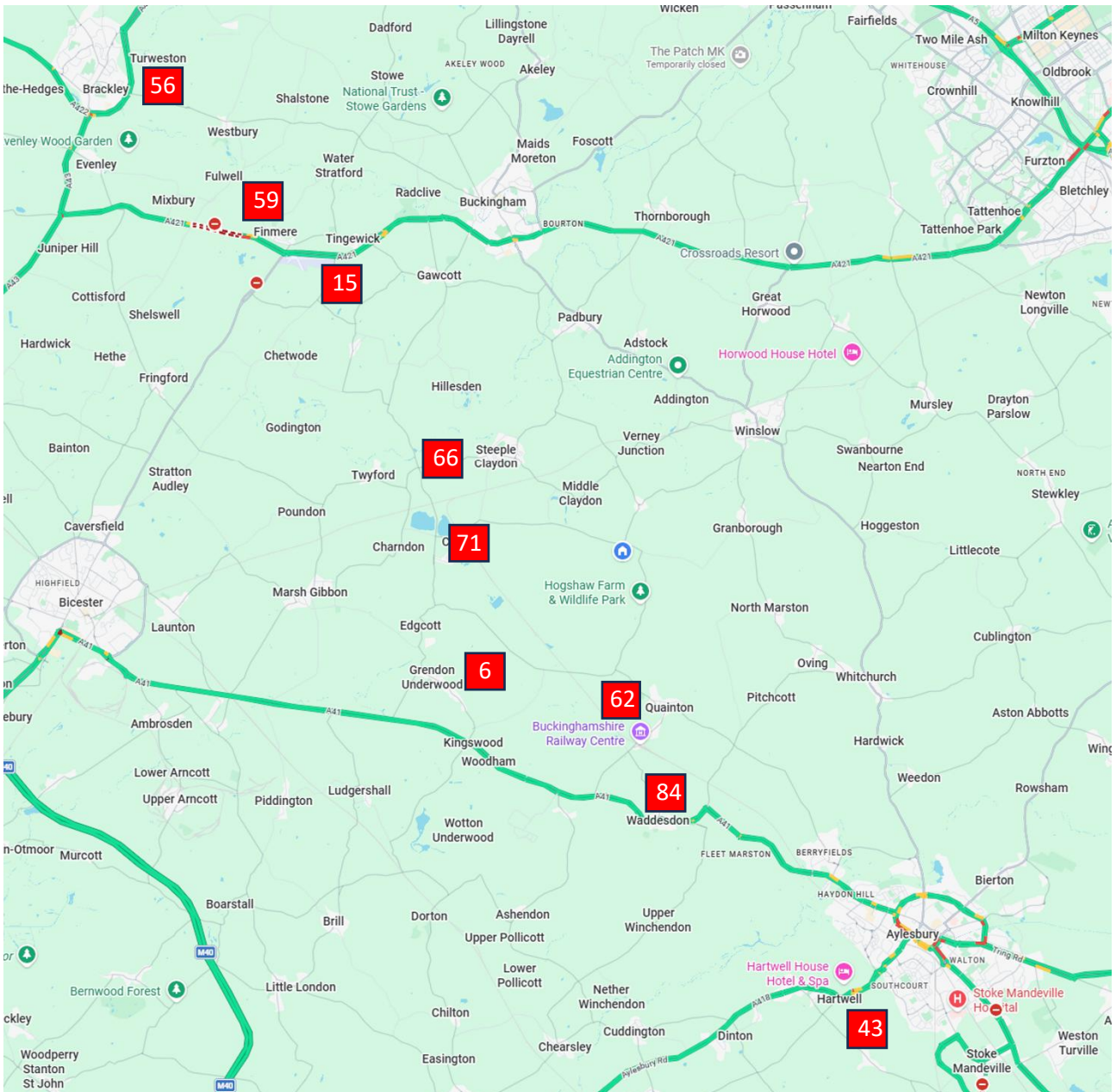
**This equates 1,247 months, or 103 years**

## Transport and Traffic Concerns & Comments

. Many of the HS2 road closures overlap at various point in time. They contribute to a significant cumulative impact on highway users in the area.

CSAG would suggest that this information should inform assessment of cumulative impacts arising from the construction period

The image below shows the geographical influence of HS2 in the area.



## Transport and Traffic Concerns & Comments

### Baseline Traffic Flows and Impact of the Proposed Development

	2024			+ Rosefield					
	Car/ LGV	HGV	Total	Car/LGV		HGV		Total	
				Abs.	% inc.	Abs.	% inc.	O'all	% inc.
A34	61,141	8,386	69,527	10	0.02	0	0.00	69,537	0.01
M40 North	92,727	14,952	107,679	10	0.01	18	0.12	107,707	0.03
M40 South	61,909	7,495	69,404	10	0.02	24	0.32	69,438	0.05
A41	31,169	2,137	33,306	29	0.09	100	4.68	33,435	0.39
A41 Bicester	21,267	1,906	23,173	109	0.51	100	5.25	23,382	0.90
A41 West	10,509	2,326	12,835	109	1.04	138	5.93	13,082	1.92
A41 East	9,471	2,308	11,779	109	1.15	3	0.13	11,891	0.95
Station Road/Dewes Lane	821	250	1,071	218	26.55	141	<b>56.4</b>	<b>1,430</b> <b>(391</b> <b>HGV)</b>	<b>33.5</b>
Snake Lane/Fidlers Field	91	30	121	218	239.56	141	<b>470.0</b>	<b>480</b> <b>(171</b> <b>HGV)</b>	<b>296.7</b>
Claydon Road	1,241	238	1,479	218	17.57	141	<b>59.2</b>	<b>1,838</b> <b>(379</b> <b>HGV)</b>	24.3
Granborough Road*	264	81	345	74	28.03	31	<b>38.3</b>	<b>450</b> <b>(112</b> <b>HGV)</b>	<b>30.4</b>

**Abs. = Absolute increase relative to baseline; % inc. = percent increase relative to baseline;  
O'all = overall increase; \* Baseline data for 2025. [Data from Tables 4.1 and 5.5 in APP-131].**

This analysis shows that, compared to current baseline flows;

- HGV 2-way journeys would increase by **more than 30%** on Station Road/Dewes Lane, Snake Lan/Fidlers Field, Claydon Road and Granborough Road.
- Total HGV numbers on each of these roads would increase substantially;
- There would be an **increase of 141 2-way HGV journeys** involving the hazardous junction between Lee Road and Claydon Road;
- There would be an **increase of 141 2-way HGV journeys** along Claydon Road serving the visitor attraction at **Hogshaw Farm**.

### Traffic flows across the day

Para. 5.4.5 of **6.4 Environmental Statement Volume 4 Appendix 15.1: Transport Assessment (APP-131)** anticipates up to 141 HGV round-trip journeys per day. Para. 3.2.1 of **2.6 Illustrative Layout Plans and Sections (APP-012)** indicates deliveries will occur between 08:0-18:00 Monday-Friday or 08:00-13:00 on Saturday, although there is an undertaking to avoid school journey periods. Even assuming that deliveries were spread over an 8-hour period, this amounts to a minimum of 35 HGV movements per hour along narrow country lanes.

# Transport and Traffic Concerns & Comments

---

## Management of Construction Traffic

Para. 4.10-11 of **7.5 Outline Construction Traffic Management Plan (APP-141)** notes some of the factors that contribute to the vulnerability of pedestrians, cyclists and equestrians as users of local roads. Safety is of particular concern with the proposed overall increase in traffic on local roads and, in particular, the number of HGVs. The Applicant's approach of "*ensuring that speed limits will be adhered to*" does not give confidence that safety of these road users has received appropriate consideration. It should be noted that parts of the local roads would not be subject to the proposed new speed limits at Schedule 8, Traffic Regulation Measures Part 1; Temporary Speed Limits of **3.1 Draft Development Consent Order (APP-013)** and so the national speed limit applies.

It is not simply a matter of adhering to speed limits; it is the number and size of vehicles on narrow country lanes with numerous bends. The proposed construction traffic route would present significant hazards to this group of road users. Fear and intimidation in close proximity to HGVs is a well-recognised issue for non-motorised road users that may influence whether they feel able to use these routes. The Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement notes at Para. 3.9 "*The determining factors that need to be taken into account when assessing the impact of traffic and movement will vary for each type of impact. In the case of noise, for example, traffic volume, the percentage of HGVs and the distance from the road will be major factors. During night-time periods, peak noise events may also require careful consideration. In the case of pedestrian fear and intimidation, the speed and size of vehicles and width of pavement will be important. Key factors that are to be considered for each impact should be described at the initial stages of the assessment.*"

The minor, rural roads are narrow and have no footpath or streetlighting making the impact greater.

Para. 3.33 goes on to note that, "The extent of fear and intimidation is dependent on:

- The total volume of traffic
- The heavy vehicle composition
- The speed these vehicles are passing
- The proximity of traffic to people – and/or the feeling of the inherent lack of protection created by factors such as a narrow pavement median, a narrow path or a constraint (such as a wall or fence) preventing people stepping further away from moving vehicles.

Thus, the increased volume, HGV element, speed (national speed limit) and narrow roads leading to close proximity of vehicles would all contribute to raised levels of fear and intimidation for these road users.

Para 6.1.2 of **7.5 Outline Construction Traffic Management Plan (APP-141)** suggests that remediation of public footpaths damaged during construction work would not be left until completion of construction work. This could result in footpaths becoming impassable. We would expect that remediation would be undertaken on a rolling basis.

The proposed site entrance on Claydon Road (107130\_SK\_003) is at the location of well-known but unresolved flooding issues.

***What plans does the Applicant have to resolve those issues before commencing any construction works?***

## Transport and Traffic Concerns & Comments

---

### Traffic Flows During Construction

Table 15.7 of **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)**, provides estimated peak daily construction traffic. A better impression of the impact of construction traffic on traffic flows is obtained by comparison with present day levels. The Applicant's baseline values for 2024 (2025 for Granborough Road) are shown in the table below together with the projected increases associated with construction traffic.

### Temporary Speed Limits

Within Schedule 8 of APP-013 (EN010158-000175-3.1 Draft Development Consent Order) there is a reference to - Traffic Regulation Measures that sets a requirement to establish a Temporary Speed Limit of 20 MPG along ***Three Points Lane, from its connection with public right of way MCL/17/1 (TTM01) in a generally north-south direction to point TTM02 at its junction with Calvert Road for a distance of 1,320 metres and coloured black on sheets 2 and 3 of the traffic regulations plans.***

***CSAG require clarity of the rationale for imposing this speed limit. Is the developer proposing to use Three Points Lane for construction traffic access?***

## Transport and Traffic Concerns & Comments

---

### Abnormal Indivisible Loads (AIL)

The proposed route for AILs through Winslow and along East Claydon Road is the same as that proposed for AILs associated with the approved Statera BESS installation. It is assumed that the proposed replacement National Grid substation would require AIL deliveries along the same route.

*What provision would be made in order to move AILs over field SA56 and then across the Claydon Brook to E10, E11 and E20? (see Sheet 7 of 2.6 Illustrative Layout Plans and Sections (APP-012)?*

The Applicant judges the number of Abnormal Indivisible Load movements to be “very low at 14 inbound” (Para. 15.6.15 **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)**). The scale of the vehicles and the need to dismantle street furniture means that the level of disruption is disproportionate to the number. The cumulative impact with similar loads serving other projects is likely to be substantial and should be included in the assessment of AIL impacts

*What assessment has been made of the cumulative impacts of AIL deliveries for these three programmes?*

### Road Safety

Para. 4.8.7 of **6.4 Environmental Statement Volume 4 Appendix 15.1: Transport Assessment (APP-131)** notes that “*No accidents have involved vulnerable road users such as pedestrians, cyclists, children or young drivers.*”

Para. 15.6.15 of **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)** notes, in relation to non-motorised user amenity, the IEMA Guidelines (2023) advises that, “The 1993 Guidelines suggest that a tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow (or HGV component) is halved or doubled. Although these thresholds no longer appear in Department for Transport guidance, they have not been superseded by subsequent changes to guidance and are established through planning case law.”

The Applicant notes further that, for ‘Fear and intimidation’, there are no commonly agreed thresholds for estimating levels of fear and intimidation from known traffic and physical conditions. However, as the impact is considered to be sensitive to traffic flow, changes in traffic flow of 30%, 60% and 90% are regarded as producing minor, moderate and substantial changes respectively in the IEMA Guidelines (2023) (Para 2.19). As such, this has been used to assess the potential impacts associated with construction activities around fear and intimidation on people near Rosefield Solar Farm.

It is clear from the projected traffic flows in the Table above, that increases in HGV traffic approach 60% on Station Road and Claydon Road and more than 4-fold on Snake Lane, meaning the fear and intimidation threshold is surpassed, substantially in the case of Snake Lane

Para. 4.10-11 of **7.5 Outline Construction Traffic Management Plan (APP-141)** notes some of the factors that contribute to the vulnerability of pedestrians, cyclists and equestrians as users of local roads. Safety is of particular concern with the proposed overall increase in traffic on local roads and, in particular, the number of HGVs. The Applicant’s approach of “*ensuring that speed limits will be adhered to*” does not give confidence that safety of these road users has received appropriate consideration. It should be noted that parts of the local roads not subject to the proposed new speed

## Transport and Traffic Concerns & Comments

---

limits at Schedule 8, Traffic Regulation Measures Part 1; Temporary Speed Limits of **3.1 Draft Development Consent Order (APP-013)** and so the national speed limit applies.

## Transport and Traffic Concerns & Comments

---

It is not simply a matter of adhering to speed limits; it is the number and size of vehicles on narrow country lanes with numerous bends. The proposed construction traffic route would present significant hazards to this group of road users.

Para 6.1.2 of **7.5 Outline Construction Traffic Management Plan (APP-141)** suggests that remediation of public footpaths damaged during construction work would be left until completion of construction work. This could result in footpaths becoming impassable. We would expect that remediation would be undertaken on a rolling basis.

Table 15.8 of **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)** assigns 'High Sensitivity' to a minor rural road, not constructed to accommodate frequent use by HGVs.

The Applicant assesses Users of Snake Lane and Granborough Road as High Sensitivity but those in Station Road and Claydon Road as Medium. This is based on a counter-intuitive approach to sensitivity in Table. 1, which decides that small rural settlements with few facilities are of low sensitivity. (Public rights of way and access to them do not appear in the criteria).

Para. 15.8.6 states, "*it is considered possible that adverse effects such as severance, driver delay, pedestrian delay, non-motorised amenity, and fear and intimidation may occur on or be experienced by users of Station Road/Dewes Lane, Snake Lane/Fidlers Field and Granborough Road.*" We agree with this statement but it omits Claydon Road where the same risk of adverse effects apply.

Table 15.15 concludes that the magnitude of impact on each of the local roads and PRowS considered is Minor and that residual effects during construction on these High Sensitivity receptors is Minor (Not Significant) in all cases.

It is not clear how the criteria for determining magnitude of impact described in Paras. 15.6.14-15.6.17 of **APP-058** have been translated into the descriptions set out in Table 15.10.

It is self-evident that the nature of the road will determine the extent to which the various criteria apply. For example, the minor roads Snake Lane, Leed Road, Claydon Road and Granborough Road are narrow country lanes with no footpath and bordered by banks, hedges and ditches and are subject to the national speed limit. For a pedestrian, cyclist or equestrian, factors such as fear and intimidation, non-motorised user amenity, pedestrian delay and safety are impacted to a very considerable degree by increases in traffic flows, especially where this involves large numbers of HGVs.

Critical junctions with limited visibility (e.g. Lee Road/Claydon Road) can lead to driver delays.

The particular case of the Hogshaw Farm visitor attraction is likely to suffer severance as a result of the increased traffic on Claydon Road and the movement of large agricultural vehicles, such as combine harvesters, would be made difficult with large numbers of HGVs using narrow roads.

The Applicant has provided no explanation as to how each of these criteria has contributed to each assessment of individual roads, nor what is meant by "*material in the decision-making process*" in the descriptions corresponding to the levels of magnitude in Table 15.10.

The methodology, as described, leaves the impression that the assessment is based on opinion rather than any independent analysis.

Against this background, it is difficult to see how the Applicant has arrived at the conclusions at Table 15.15 where roads identified as High sensitivity are all judged to having Minor Impact and Minor (Not significant) Residual effect.

## Transport and Traffic Concerns & Comments

---

We submit that the process is flawed and that an alternative, independent analysis of the true impact of construction traffic should be adopted.

It is suggested in Para. 15.7.1 and Table 15.12 that 'embedded mitigation' would avoid or reduce potential significant effects. However, none of the steps described would reduce the impact on local rural roads since, clearly, the impact is the result of increased traffic flows, especially those associated with HGVs.

There is the further concern that one of the entries in Table 15.12 states "*The proposed access route avoids passing through villages as far as is possible and reduces its potential impact on sensitive receptors.*" (Our emphasis). This is interpreted under 'Function' as "*Removes construction traffic from villages, reducing adverse impacts in sensitive areas.*" However, it is clear that villages are included in the construction traffic route. Experience with other local infrastructure projects is that, despite assurances of strict controls, construction traffic regularly follows non-designated routes through villages.

***We request that the Applicant justifies their assessment of receptor sensitivity and defines Magnitude of Effect in accordance with the guidance and thus provide evidence to support the conclusion that residual impacts on Station Road, Snake Lane, Claydon Road and Granborough Road are Minor and Not Significant.***

### Cumulative Impacts - Roads

In terms of cumulative impacts, (Para. 15.5.18 of **6.2 Environmental Statement Volume 2 Chapter 15: Transport and Access (APP-058)**), the Applicant has restricted consideration to:

- 22/00125/REF: New Category C Prison, known at Grendon Springhill 2; and
- High Speed Rail 2 ('HS2')
- 23/03875/APP | Development of a battery energy storage system (BESS), connected directly to the national Grid with associated infrastructure including access, drainage and landscaping (amended plans received). | Rookery Farm Granborough Buckinghamshire MK18 3NJ

23/03875/APP (Development of a battery energy storage system (BESS)) was approved on Appeal and so should be included in the analysis. This development proposes construction traffic access via East Claydon Road at the same point as the Rosefield access for AILs.

Development of the Rosefield solar installation is linked to wholly contingent the construction of a replacement National Grid substation

***The Applicant should include this in the analysis of cumulative impacts.***

Two further applications for electrical infrastructure projects are under consideration by Buckinghamshire LPA. Were these to be approved, they would have significant, cumulative impacts with the present proposal.

### Cumulative Impacts – PRow Closures

The data in the table below is taken from the HS2 website.

## Transport and Traffic Concerns & Comments

CSAG would suggest that this information should be used to inform assessment of cumulative impacts on PRow.

### Summary of HS2 PRow Closures 5 Year Period (January 2021 - February 2026)

Area	Duration (Days)	Duration (Months)	Duration (Years)
Aylesbury	1769	59	4.8
Fleet Marston	927	31	2.5
Grendon Underwood	6319	211	17.3
Quainton	6771	226	18.6
Steeple Claydon	6783	226	18.6
Twyford	7564	252	20.7
Waddesdon	4348	145	11.9
<b>Totals:</b>	<b>34481</b>	<b>1149</b>	<b>94</b>

The key points of note here are:

**A total of 34,481 days of PRow closures directly relating to HS2.**

**This equates 1,149 months, or 94 years**

## PRoW Impacts & General Comments

---

This document outlines CSAG's general comments and concerns regarding the overall impacts of the application on the local PRoW network.

The primary focus when preparing this document has been to consider the permanent impacts of the development on PRoW. This will start during the construction phase and through to the operation period of the development.

The area earmarked for the proposed development is covered by a well-connected network of footpaths and bridleways and many of these routes will be affected. The impacts of either the construction activities, the permanent loss of views and the forever negative experience for any users of the PRoW network will be highly significant.

The PRoW network provides a highly-valued and well used connection with our local countryside and its eco-systems. A number of these footpaths are heavily used by both the local community and by visitors from the surrounding communities and villages.

In addition to footpaths and bridleways, the following long-distance recreational routes will be impacted by the Proposed Development:

- A section of Bernwood Jubilee Way – The Claydons & Claydon Wood Walk - which passes through East and Botolph Claydon.
- North Buckinghamshire Way/Midshires Way, and part of the Sustrans National Cycle Network across Fields E21, E22 and E23.

CSAG's overriding assessment is that 2000 acres of wonderful countryside - a much-loved area of natural beauty, and a walkers paradise - will be permanently spoiled beyond recognition by the proposed development.

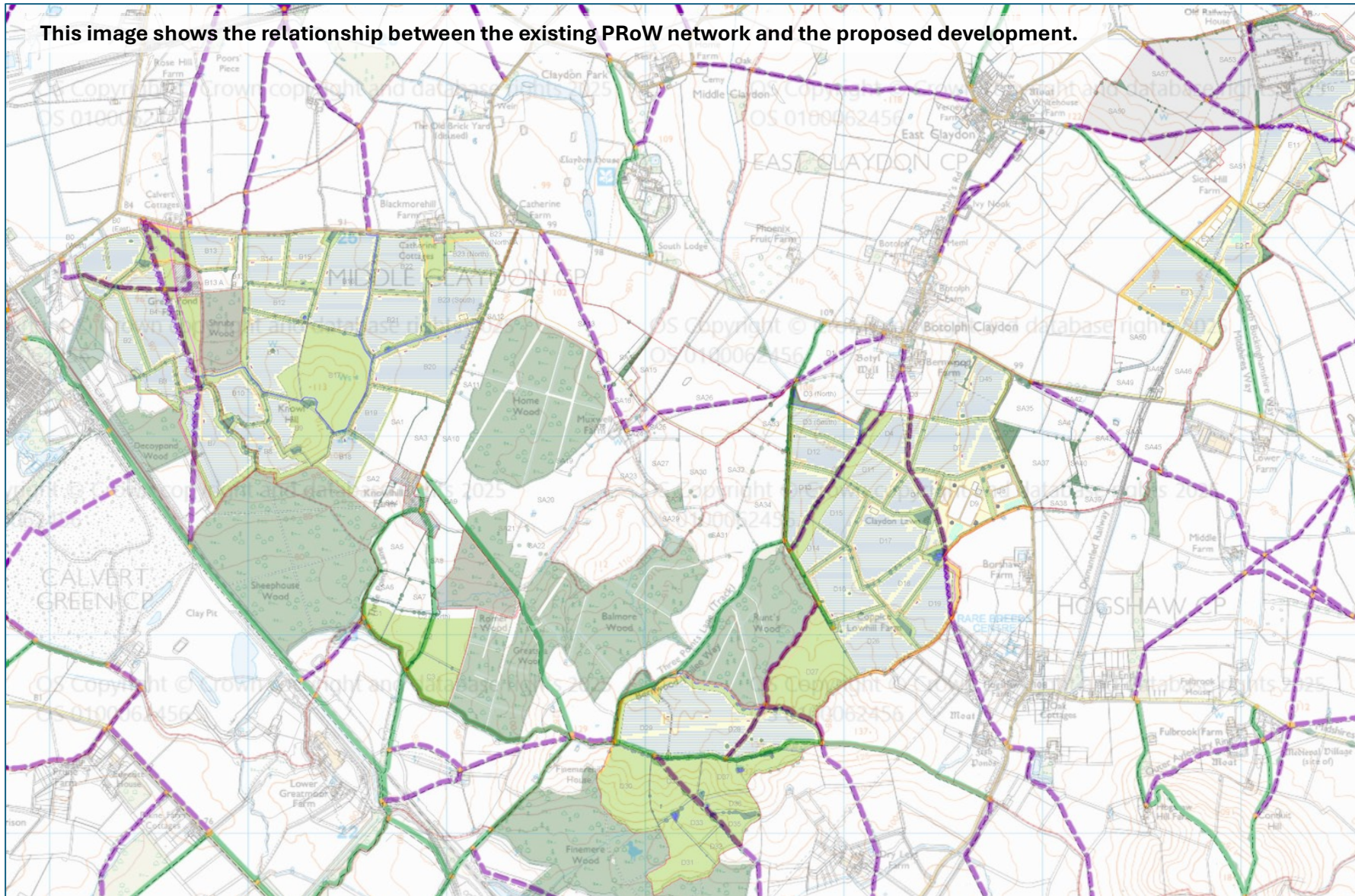
CSAG has undertaken detailed assessments of the impacts on ECL/4/2, ECL/7/2, ECL/8/2 & QUA/41/1 & SCL/12/2, SCL/13/1 & SCL/13/2, and these are attached as Appendices to this document.

In many cases the walking experience will be akin to walking within an exercise yard of a prison or around the perimeter of an industrial site.

A country walk along any footpath requires a view, with open countryside and a degree of tranquillity. Every footpath affected by this development will have its view and sense of tranquillity removed – for the duration of the development at least.

Given that this choice of location impacts such a huge amount of our PRoW network it just reinforces that this is the wrong location for a development of this size.

## PRoW Impacts & General Comments



## PRoW Impacts & General Comments

---

A total of 58 PRoW's are impacted by this proposed application, as listed on the following 3 pages.

### Existing PRoW within and directly adjacent to the Order Limits

PRoW	Type	Location within Site
ECL/10/1	Bridleway	To the north of Order Limits, connecting to ECL/9/1 and ECL/10/2
ECL/10/2	Bridleway	Parcel 2
ECL/10/3	Bridleway	Immediately to the south of Order Limits, connecting to ECL/10/2
ECL/10/4	Bridleway	Immediately to the south of Order Limits, connecting to ECL/10/5
ECL/10/5	Bridleway	Parcel 2
ECL/5/1	Bridleway	Parcel 3
ECL/3/1	Footpath	West of National Grid East Claydon Substation (Grid Connection Cabling Corridor)
ECL/3/2	Footpath	West of National Grid East Claydon Substation (Grid Connection Cabling Corridor)
ECL/3A/1	Footpath	West of National Grid East Claydon Substation (Grid Connection Cabling Corridor)
ECL/4/1	Footpath	West of National Grid East Claydon Substation (Grid Connection Cabling Corridor)
ECL/4/2	Footpath	Parcel 3
ECL/6/1	Footpath	Between Parcel 2 and Parcel 3 (Interconnecting Cabling Corridor)
ECL/7/1	Footpath	To the north of Order Limits, connecting to ECL/8/1 and ECL/7/2
ECL/7/2	Footpath	Parcel 2
ECL/8/1	Footpath	Parcel 2
ECL/8/2	Footpath	Parcel 2
ECL/9/1	Footpath	Between Parcel 1 and Parcel 2 (Interconnecting Cabling Corridor)
ECL/9/2	Footpath	To the north of Order Limits, connecting to ECL/9/1
GRA/2/1	Footpath	To the east of Order Limits, connecting to ECL/4/2

## PRoW Impacts & General Comments

### Existing PRoW within and directly adjacent to the Order Limits

PRoW	Type	Location within Site
GUN/28/1	Bridleway	South of Parcel 1a
GUN/30/1	Footpath	South of Parcel 1a
GUN/33/1	Bridleway	South of Parcel 1a
GUN/33/2	Bridleway	South of Parcel 1a
HOG/4/1	Footpath	Immediately to the east of Order Limits, connecting to ECL/6/1
HOG/6/1	Bridleway	Immediately to the east of Order Limits, connecting to ECL/5/1
HOG/7/1	Footpath	Parcel 2
MCL/13/1	Footpath	Immediately north of Parcel 1
MCL/14/1	Footpath	Immediately north of Parcel 1
MCL/15/1	Footpath	Between Parcel 1 and Parcel 2 (Interconnecting Cabling Corridor)
MCL/16/1	Footpath	Immediately to the south of Order Limits, joining ECL/9/1 and MCL/15/1, between Parcel 1 and Parcel 2
MCL/17/1	Bridleway	Between Parcel 1 and Parcel 1a (Interconnecting Cabling Corridor)
MCL/18/1	Bridleway	Between Parcel 1 and Parcel 1a (Internal access corridor)
MCL/18/2	Bridleway	Parcel 1a/Internal access corridor
MCL/19/1	Bridleway	Immediately to the west of Order Limits, connecting to QUA/42/2
MCL/20/1	Bridleway	South of Parcel 1a
MCL/20/2	Bridleway	Parcel 1a/Internal access corridor
MCL/21/1	Footpath	Immediately north of Parcel 1
MCL/22/1	Footpath	Immediately to the west of Order Limits, connecting to QUA/42/2

## PRoW Impacts & General Comments

---

### Existing PRoW within and directly adjacent to the Order Limits

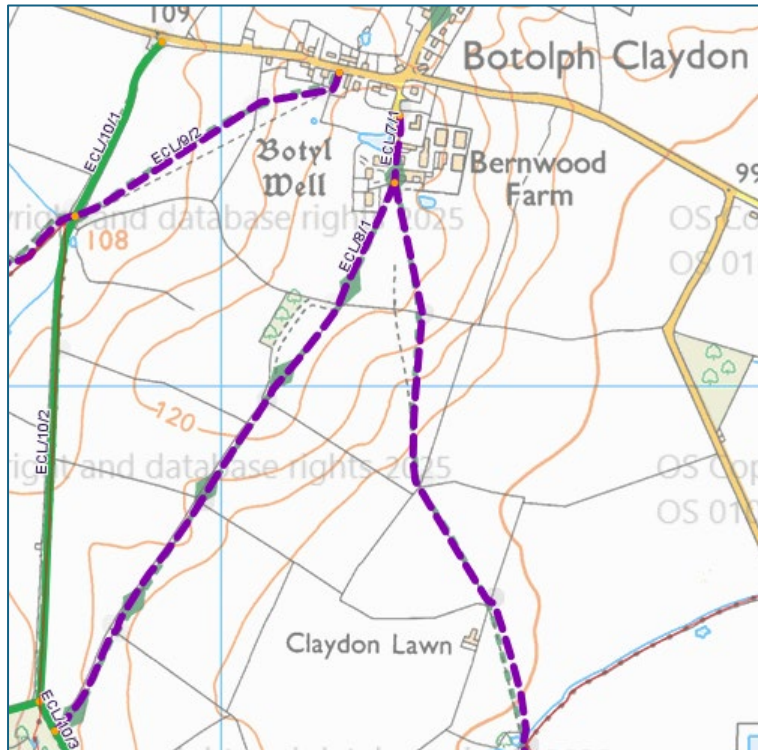
PRoW	Type	Location within Site
MCL/23/1	Footpath	South of Parcel 1a
QUA/22A/1	Footpath	To the east of Order Limits at Snake Lane/Fidlers Field
QUA/23/1	Footpath	To the east of Order Limits at Snake Lane/Fidlers Field
QUA/24/1	Footpath	To the west of Order Limits at Snake Lane/Fidlers Field
QUA/27/2	Footpath	To the west of Order Limits at Snake Lane/Fidlers Field
QUA/38/1	Footpath	Parcel 2
QUA/38/2	Footpath	Immediately to the south of Order Limits, connecting to QUA/38/1
QUA/39/1	Footpath	Parcel 2
QUA/40/1	Bridleway	Parcel 2
QUA/40/2	Bridleway	Parcel 2
QUA/40/3	Bridleway	Parcel 2
QUA/40/4	Bridleway	Immediately to the southeast of Order Limits, connecting to QUA/40/3
QUA/41/1	Footpath	Parcel 2
QUA/42/1	Bridleway	Immediately to the west of Order Limits, connecting to QUA/40/1
QUA/42/2	Bridleway	Parcel 2
SCL/12/1	Footpath	Parcel 1
SCL/12/2	Footpath	Parcel 1
SCL/13/1	Footpath	Parcel 1
SCL/13/2	Footpath	Parcel 1
SCL/8/1	Footpath	Immediately north of Parcel 1

## PRoW Impacts & General Comments

### ECL/10/1 & ECL/10/2 (Splash Lane)

It is important not to underestimate the value of this particular route to local residents and to visitors from a wider area. It is the single most frequently used footpath/bridleway in the area and draws large numbers of visitors, attracted by the open views, rich wildlife and the ambience of Runts Wood.

It also leads on to other important footpaths. In spring, the permissive path around the southern margins of Runts Wood allows extensive views of a woodland floor, carpeted in bluebells and other flowers. In summer, large numbers of butterflies are to be seen. Surrounding this hugely important community asset with an industrial landscape would result in a major adverse impact on users.



East Claydon Parish Council conducted a survey of visitors to Splash Lane (**ECL/10/1**) between 08:00 and 13:00 on Sunday 21<sup>st</sup> February 2026, and the findings are shown below:

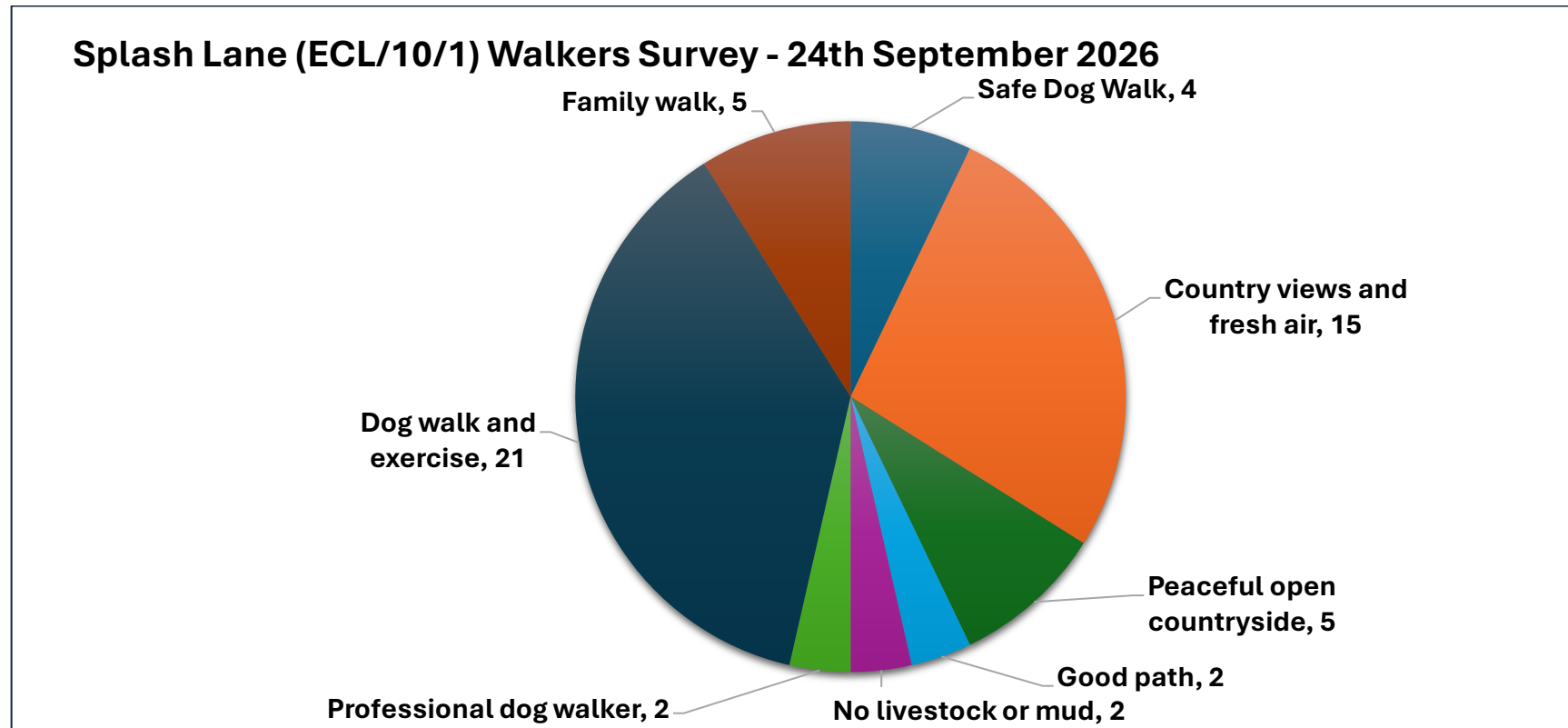
Adults	Children	Dogs
71	4	70

Frequency of Visit to this location	Duration of Walk
From Daily to Once per Week	Between 60 & 90 minutes

Most Common Reasons for Walking Here?							
Safe Dog Walk	Country views and fresh air	Peaceful open countryside	Good path	No livestock or mud	Professional dog walker	Dog walk and exercise	Family walk

In summary, CSAG found that 75 people – and 70 dogs- used just one footpath within 5 hours on Sunday 21<sup>st</sup> February 2026.

## PRoW Impacts & General Comments



It should also be noted that around 40% of those surveyed confirmed that they had walked to Splash Lane from either East or Botolph Claydon.

This is already a dangerous walk as there is currently no safe path that leads to Splash Lane from Botolph Claydon, and walkers must walk in the road, along Orchard Way.

Anyone walking this route is likely to be impacted by any construction traffic that will also use this route. This reinforces the importance of ensuring that no construction traffic passes through the villages.

On a more general point, since many of the PRoWs are approached from country lanes, additional traffic associated with construction will present a significant hazard.

## PRoW Impacts & General Comments



### **ECL/8/1, Botolph Claydon (Part of Bernwood Way)**

This is a frequently used PRoW, by both walkers and dog walkers. This route is along Weir Lane, past Bernwood Farmhouse and then on towards Runts Wood. The proposed development will fundamentally alter the nature of the walk in its entirety. The scale of change in relation to this proposal is highly significant and would be unrelenting over the lifetime of the development.

CSAG questions the proposal to install solar panels on north-facing slopes in fields D13 & D15. Orientation of the panels to face south in order to maximise irradiance means that users of this PRoW would be faced with walls of supporting structures bounded by security fences as they ascend the hill. (Presumably, it also implies less efficient use of land since rows of panels will have to be spaced further apart to avoid shading).

### **EP-A1 to EP-A2**

Walkers using the permissive pathway along the southern margins of Runts Wood, again, would be faced with a wall of the solar panel supporting structures behind security fencing. The suggestion of planting hedges to minimise the negative visual impact would create a tunnel effect and further destroy the openness of the landscape. CSAG do not agree with the Applicant's assessment that the scale of the change after 10 years would be 'Medium'.

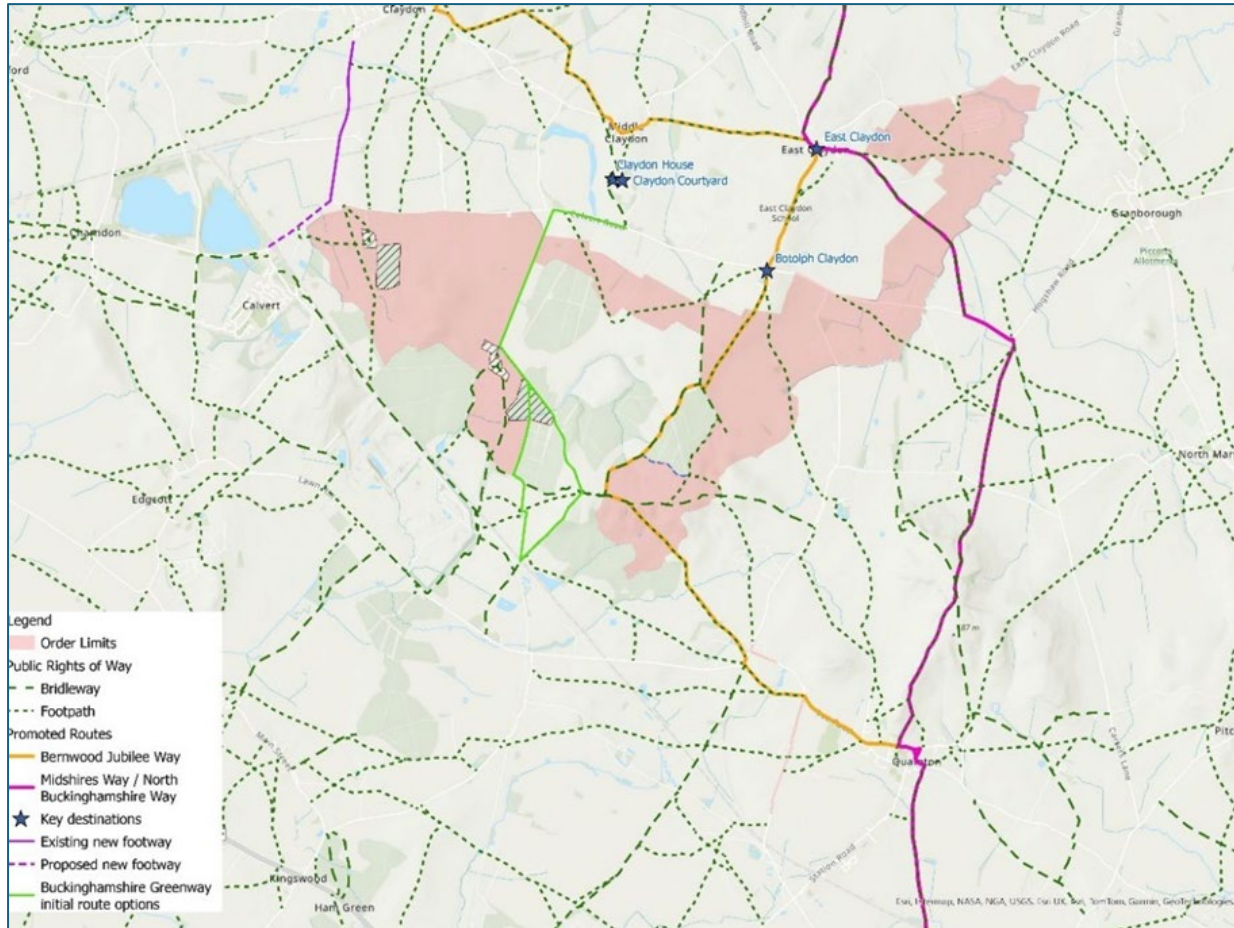
### **Hogshaw Rare Breeds Farm**

The industrial infrastructure would have major adverse effects on the amenity value of an important tourist attraction for the area. The farm park and wildlife zone covers 44 acres of land in the beautiful Buckinghamshire countryside. The Rare Breeds Farm plays a positive role in connecting people with the countryside, farming and wildlife.

### **Bridleway ECL/5/1, North Buckinghamshire Way/Midshires Way**

ECL/5/1 is another key PRoW that will be significantly impacted by the impacts of the proposed infrastructure.

## PRoW Impacts & General Comments



### **Buckinghamshire Greenway**

This image shows the intended route for the Buckinghamshire Greenway.

This is part of an initiative to improve access across the county.

It is part of Buckinghamshire Council's vision for a continuous walking, wheeling and cycling route that goes through the length of Buckinghamshire (over 50 miles).

The route is split into sections which will provide useful local links, create access to community amenities and connect to local public transport networks.

When complete, it will connect the entire county from the north (Silverstone) to the south (Colne Valley).

**CSAG asks that the applicant provides details of proposed mitigation of the development in relation to this initiative.**

## PRoW Impacts & General Comments

---

### Further Considerations for PRoW

Local communities, have limited local amenities, with few shops or bus services, while many pubs have closed.

But they do have access to the countryside, principally through the PRoW network. This raises the value of the PRoW network to these communities, in addition to providing a positive attribute in terms of mental health.

As is evidenced by the results of the Splash Lane survey, there were as many dogs as humans using the PRoW. A very real benefit of public rights of way is the high probability that fellow dog walkers will engage with one another whilst walking.

For some individuals that may be the only conversation they have that day; for others it will provide opportunities for exchange of information and cementing a sense of community. These benefits can make a significant positive contribution to mental health

***From the Population Chapter of the ES (APP-057) (14.8.81). It is noted that construction noise may change the experience of users of PRoW across and adjacent to the construction works. ES Volume 2, Chapter 13: Noise and Vibration [EN10158/APP/6.2] reports that:***

- It could be expected that users of PRoW within or adjacent to the Order Limits may be subject to construction noise levels which exceed the typical pre-construction ambient noise levels.*
- However, the construction activities affecting an individual route would often be localised, and the transitory nature of PRoW users would mean that they are not exposed to construction noise for an extended period of time or length of wider walking route, albeit if users are regular users, then they would be affected more frequently.*

CSAG disagrees with this assessment.

The nature of the landscape is such that noise travels over substantial distances. This has been evident during construction of HS2 and EWR which caused noise disturbance across the area. Contrary to 14.8.81, it is highly likely that users of PRoW's would be affected across the area, not simply at a local level.

## PRoW Impacts & General Comments

---

Below is the conclusion of the Population section of the Environmental Statement (APP-057) as to the significance of impacts on PRoWs:

**non-significant effects (negligible or minor/minor to moderate adverse)** for eight PRoWs (including North Buckinghamshire Way/Midshires Way, NCN Route No. 51, PRoW between Three Points Lane and Splash Lane (Three Points Lane Bridleway), and PRoW between Finemere Hill and HS2/Claydon Road, PRoW between Steeple Claydon and Calvert Road, PRoW, lanes and roads between East Claydon Road/Parcel 3 and Granborough/Hogshaw Road, Three Points Lane and the PRoW extending to HS2, Swan's Way/Outer Aylesbury Ring); and

**significant effects (moderate or moderate/major adverse)** for 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).

**CSAG would like to request that the applicant provide clarity regarding exactly which parts of the PRoW's were included in the summaries above and confirm what methodology was used to arrive at the impact assessments.**

**The site impacts a total of 58 PRoW, and CSAG considers that these impacts will be as much about the views and the vistas, as it is about proximity to the development.**

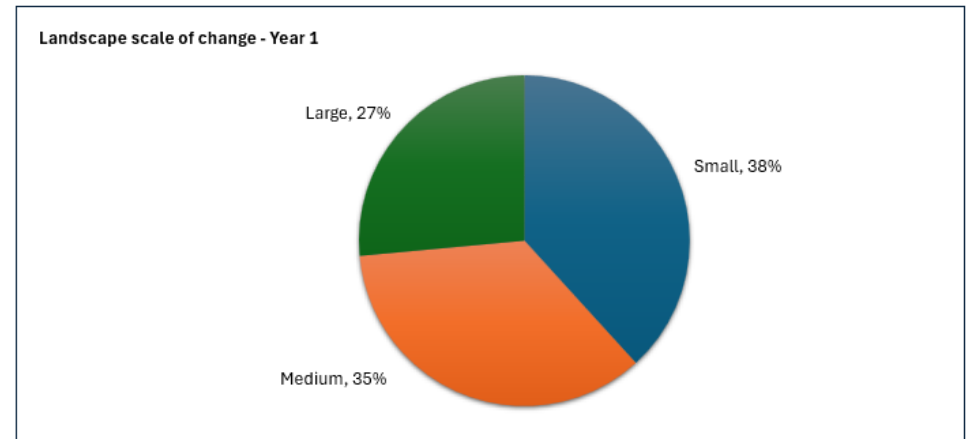
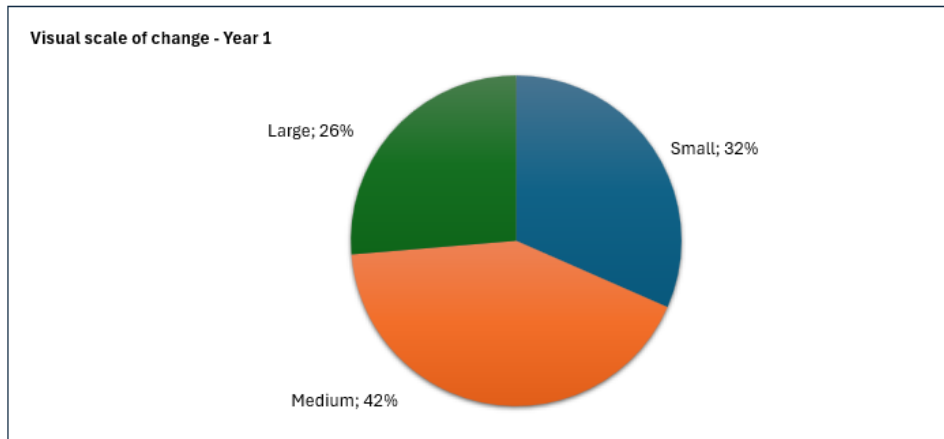
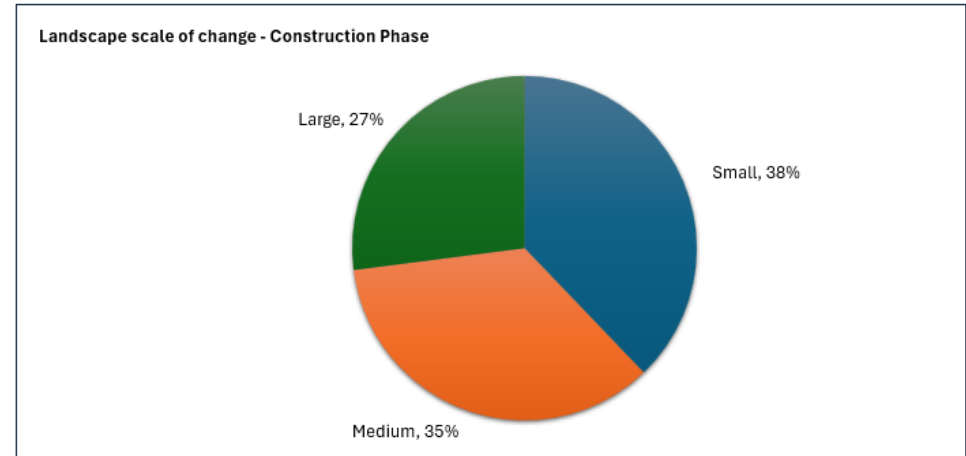
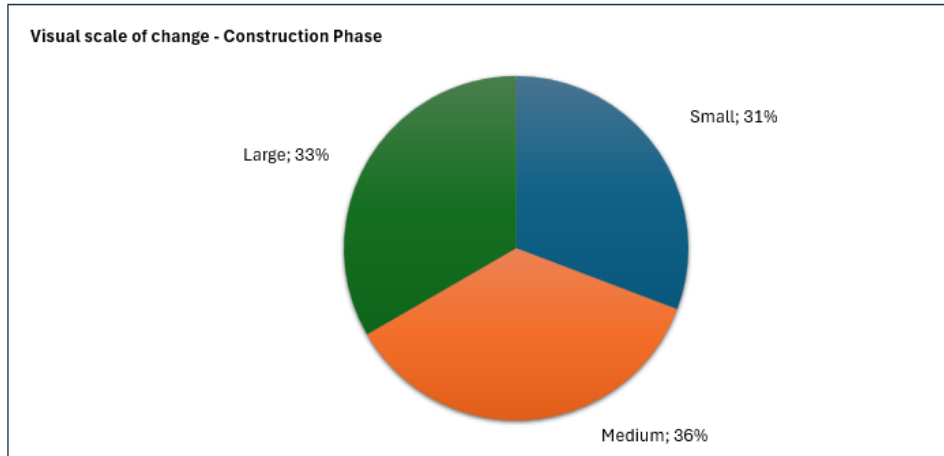
**This opinion is reinforced with the data included in the ZTV documents provided by the applicant.**

**CSAG would like to request that the applicant provide additional clarity regarding the assessments given to the following aspects for all PRoW's:**

- **Landscape Value:** National, Regional or Community
- **Landscape Susceptibility:** High, Medium or Low
- **Magnitude of Landscape Change:** Large, Medium, Small or Negligible
- **Geographic Extent:** Wide, Intermediate, Localised or Limited
- **Duration and Reversibility:** Short Term, Medium Tem, Long Term or Permanent
- **Value of Views:** National Regional or Community
- **Susceptibility of Visual Receptors:** High, Medium or Low
- **Scale of Change:** Large, Medium, Small or Negligible
- **Geographic Extent:** Wide, Intermediate, Localised or Limited
- **Tranquillity, Noise & Vibration**

## PRoW Impacts & General Comments

From the data included in Table 10:12 within EN010158-000276-6.2 Environmental Statement Volume 2 Chapter 10 - Landscape and Visual (APP-053), CSAG has determined that the impacts on the PRoW can be summarised as follows:



This supports our view that the impacts on the PRoW Networks – when viewed as a whole - cannot be assessed as anything less than significant (major adverse).

## PRoW Impacts & General Comments

---

### **CSAG concur with the following comments made by Bucks Council in their Relevant Representations that were submitted on the 12<sup>th</sup> December 2025:**

The effect will be particularly acute on the Aylesbury Vale Area of Attractive Landscape. The southern portion of the Proposed Development, and particularly fields D28 and D29 are situated within this area (the purpose of this designation being ‘to protect and enhance the visual and ecological quality of these specific areas within the Vale of Aylesbury’).

The BESS is also located in close proximity to this area and is likely to be visible nearby. The industrialising effect of the solar installation will be substantial within this area, which is recognised and protected for its rurality.

CSAG have made further comments that outline our desired changes in a number of areas where we believe that solar panels should not be located in areas where the impact on wildlife and ecological receptors will be harmful and must be avoided.

The BESS facility should also be moved to a more appropriate location.

### **CSAG are also in agreement with the comments made by Bucks Council regarding the following points:**

Concerns that public rights of way, which are particularly sensitive receptors to landscape and visual amenity impacts, are especially impacted. In some locations, this will also extend to other sensory impacts on users on such PRoWs, including the noise of the BESS.

Concerns that these impacts have been underestimated, and that such effects do not protect and enhance public rights of way.

The impact of the development on the Aylesbury Vale Area of Attractive Landscape is **significant**.

Currently, Bucks Council considers that the opportunity to avoid and mitigate harms has not been sufficiently taken, in particular by solar infrastructure not being built in these fields.

In conjunction with Bucks Council, CSAG would like to request the ExA have particular regard to this issue throughout the examination.

## PRoW Impacts & General Comments

---



Allocation of fields to meet the requirements of the proposed development by Rosefield and their proximity to the already consented BESS facility by Statera. This development will also impact the views and the experience from ECL/4/1, ECL/4/2, the North Buckinghamshire Way / Midshires Way (ECL/5/1) and gentle sloping walk down from East Claydon in the direction of Sion Farm.

## PRoW Impacts & General Comments

---



Allocation of fields to meet the requirements of the proposed development by Rosefield. A BESS facility is proposed in fields D8 & D9.

## PRoW Impacts & General Comments

---



View from Runts Wood / Coppice Lowhill Fram across to Botolph Claydon, as at February 2026.

This is a major viewpoint from which key views will be reduced to seas of solar panels.

## PRoW Impacts & General Comments

---



View from Runts Wood / Coppice Lowhill Farm across to Botolph Claydon, at some point in the next five years (*Artists Impression using AI*)

## **PRoW Impacts & General Comments**

---

### **Appendices:**

**PRoW Impacts ECL/4/2**

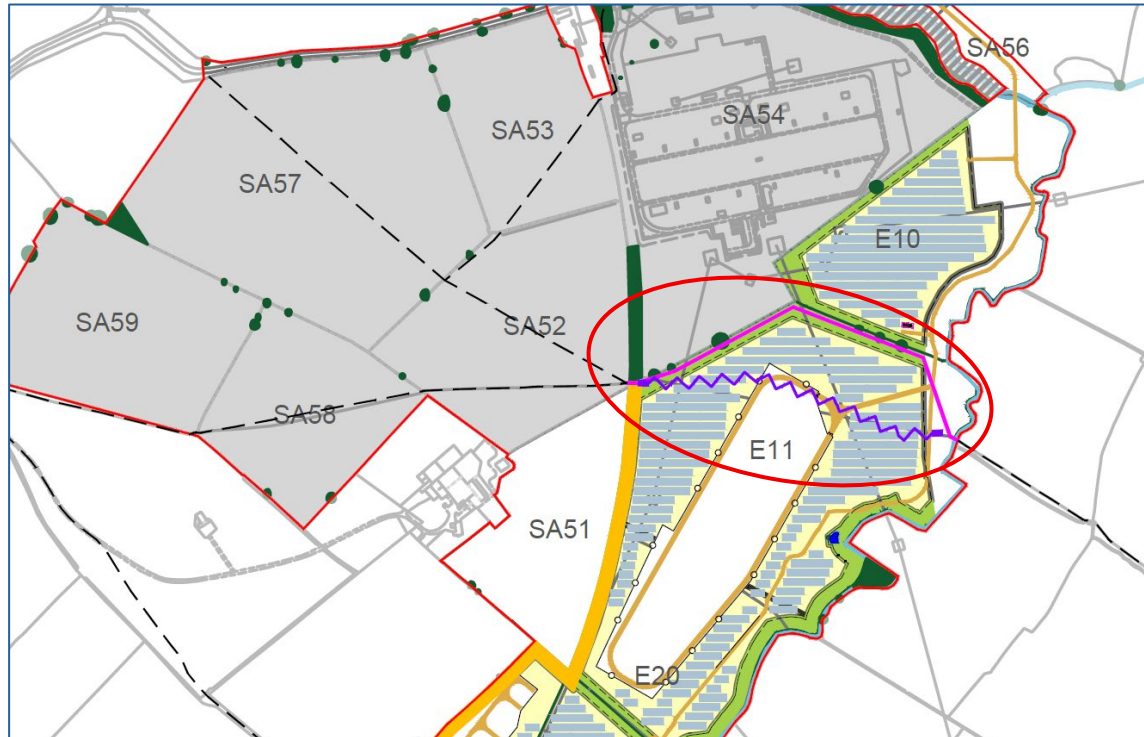
**PRoW Impacts ECL/7/2**

**PRoW Impacts ECL/8/2 – QUA/41/1**

**PRoW Impacts SCL/12/2, SCL/13/1 & SCL/13/2**

## PRoW Impacts

### ECL/4/2



A diversion to the existing PRoW Footpath (reference 'ECL/4/2') (463m to be stopped up) to the north of Parcel 3 to align the PRoW Footpath with the field boundaries of Fields E10 and E11, rather than crossing Field E11 (new length 559m), resulting in a 21% increase in length of this section of the link.

The current footpath lies to the south of the existing East Claydon Substation.

There is evidence (footprints) of recent use seen at the time of preparing this document.

The eastern end of this footpath connects to footpath GRA/2/1 that leads to Granborough. GRA/2/1 runs along the boundaries of the fields earmarked for the Statera BESS site.

The views from this route extend across open fields along the low-lying farmland to the east of East Claydon.

Once the impact of the Statera BESS development is factored in then the entire experience along this route will be

transformed from open countryside into that of an industrial site.

**Our preferred solution in this location is to see a reduced amount of land take associated with solar panels in field E11, reshape the collector compound to maintain the required compound footprint, and then retain and maintain the existing footpath route. The land between the edge of the collector compound and the field boundary should be retained to create an area for BNG / natural habitat enhancement.**

**How is construction traffic on the access track controlled where it crosses the footpath at the northeastern edge of the field?**

# PRoW Impacts

## ECL/4/2

---



End of ECL/3/1 at the point it joins East Claydon Road



View along ECL/3/1 towards East Claydon Road



View along ECL/3/1 towards East Claydon Substation

# PRoW Impacts

## ECL/4/2

---



View from junction of ECL/3/1 and ECL/3A/1 towards East Claydon Substation



Footpath stiles at the junction of ECL/3/2 and ECL/4/2



View of disused railway cutting at the junction of ECL/3/2 and ECL/4/2

## PRoW Impacts

### ECL/4/2

---



View from junction of ECL/3/2 and ECL/4/2 towards Botolph Claydon.



View from proposed diverted route of ECL4/2 towards Botolph Claydon.



View along route of proposed diverted route of footpath ECL/4/2 towards Granborough



## PRoW Impacts

### ECL/4/2

---



View of proposed diverted route of ECL4/2 towards Winslow.



View from proposed diverted route of ECL4/2 behind E/Claydon substation.



View of proposed diverted route of ECL4/2 towards Winslow.



View from proposed diverted route of ECL4/2 behind E/Claydon substation.

## PRoW Impacts

### ECL/4/2

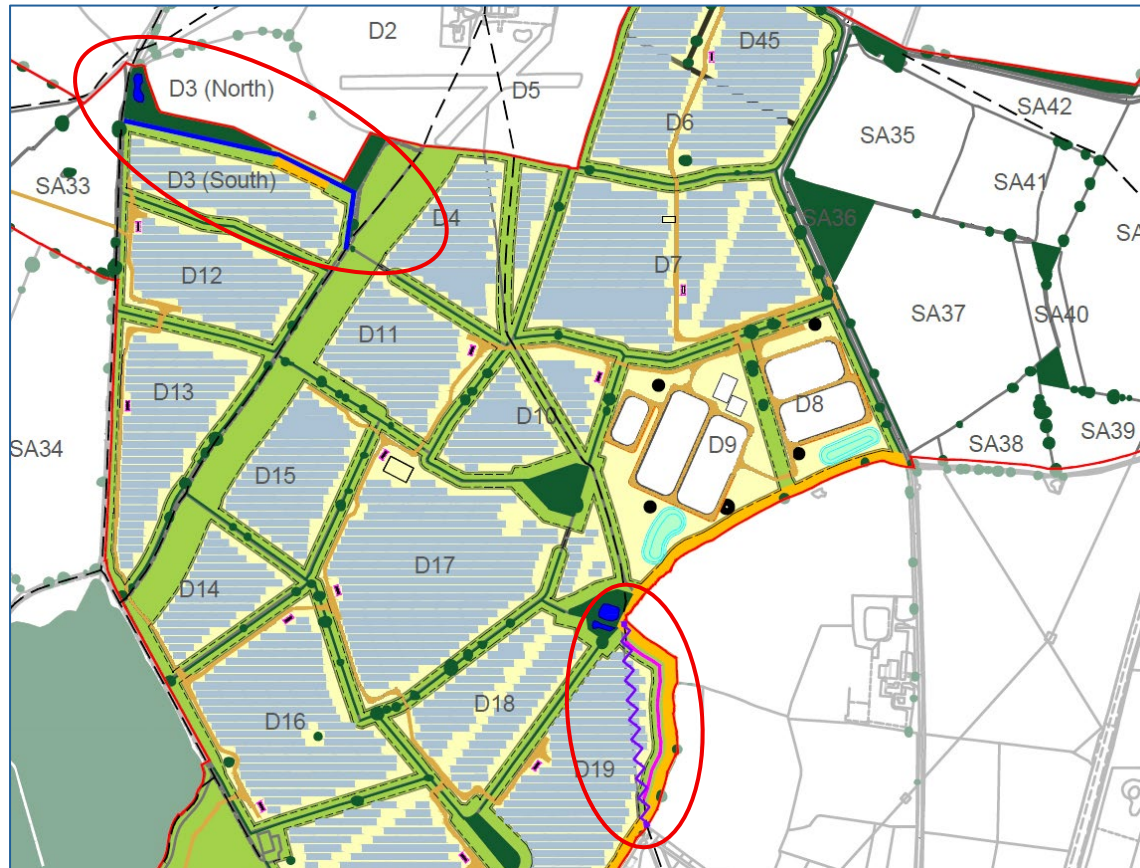
---



Views from proposed diverted route of ECL4/2 behind E/Claydon substation.

## PRoW Impacts

### ECL/7/2 & PP-A1/PP-A2



A diversion to the existing PRoW Footpath (reference 'ECL/7/2') (243m to-be stopped up) to the east of Parcel 2 to align the PRoW Footpath with the field boundary of Field D19 (new length 274m), resulting in a 12% increase in length of this section of the link.

The diversion of ECL/7/2 includes the provision of a new permissive path PE-A1 ~ PE-A2.

With the Proposed Diversion of ECL/7/2, the following factors are to be considered:

Walking through the middle of a field can feel more scenic, with a greater sense of connection with the countryside.

Footpaths at the edges of fields may run closer to roads, traffic, fences, hedges and ditches and this can create a sense of risk and dilute the enjoyment of the route.

Field edges are often ecologically richer (hedgerows, field margins, wildlife corridors) so moving a footpath can cause damage to established flora and fauna.

Footpaths at the edges of fields are often more prone to overgrown hedges, waterlogging and leaf litter.

**Our preferred solution in this location regarding the footpath is to retain the route of the existing footpath by reducing the number of solar panels in this location and using the area between the existing footpath and the field boundary to create an area for BNG / natural habitat enhancement.**

## PRoW Impacts

### ECL/7/2 & PP-A1/PP-A2

---

The experience and enjoyment of walking the entire route of ECL/7/2 will be significantly negatively impacted by virtue of having to pass in very close proximity to the proposed location of the BESS facility in field D9. This will be experienced by all walkers that use this route from Botolph Claydon to Hogshaw Rare Breeds Farm as they pass across fields D10 and D19.

**Our preferred solution in this location is to relocate the BESS facility to a more suitable location within the site.**

CSAG acknowledge the creation of the new permissive path (PP-A1 to PP-A2) that is to be located along the boundary of field D3 (North) & D3 (South).

CSAG consider that this will enhance the existing connectivity across the PRoW network in this location.

**The images on the following pages give the views experienced from both the existing and proposed routes for this footpath.**

# PRoW Impacts

## ECL/7/2 & PP-A1/PP-A2

---



- Existing route of PRoW Footpath ECL/7/2 from Claydon Lawn to Hogshaw Rare Breeds Farm
- Proposed Diversion route of footpath with new permissive path PE-A1 ~ PE-A2.

# PRoW Impacts

## ECL/7/2 & PP-A1/PP-A2

---



— — — Existing route of PRoW Footpath ECL/7/2 from Hogshaw Rare Breeds Farm to Claydon Lawn

— — — Proposed Diversion route of footpath with new permissive path PE-A2 ~ PE-A1.

# PRoW Impacts

## ECL/7/2 & PP-A1/PP-A2

---

The following images provide 360° views from the existing PRoW Footpath ECL/7/2



View towards Quainton Hill.



View towards Coppice Lowhill Farm

**PRoW Impacts**  
**ECL/7/2 & PP-A1/PP-A2**

---



# PRoW Impacts

## ECL/7/2 & PP-A1/PP-A2

---



View towards East Claydon Substation



View towards Granborough

**PRoW Impacts**  
**ECL/7/2 & PP-A1/PP-A2**

---



View towards Quanton Hill

## PRoW Impacts

### ECL/7/2 & PP-A1/PP-A2

---

The following images provide 360° views from the route of PROPOSED DIVERSION along the new permissive path PE-A1 ~ PE-A2.



View along the proposed diversion route at the edge of Field D19, towards Hogshaw Rare Breeds Farm

# PRoW Impacts

## ECL/7/2 & PP-A1/PP-A2

---



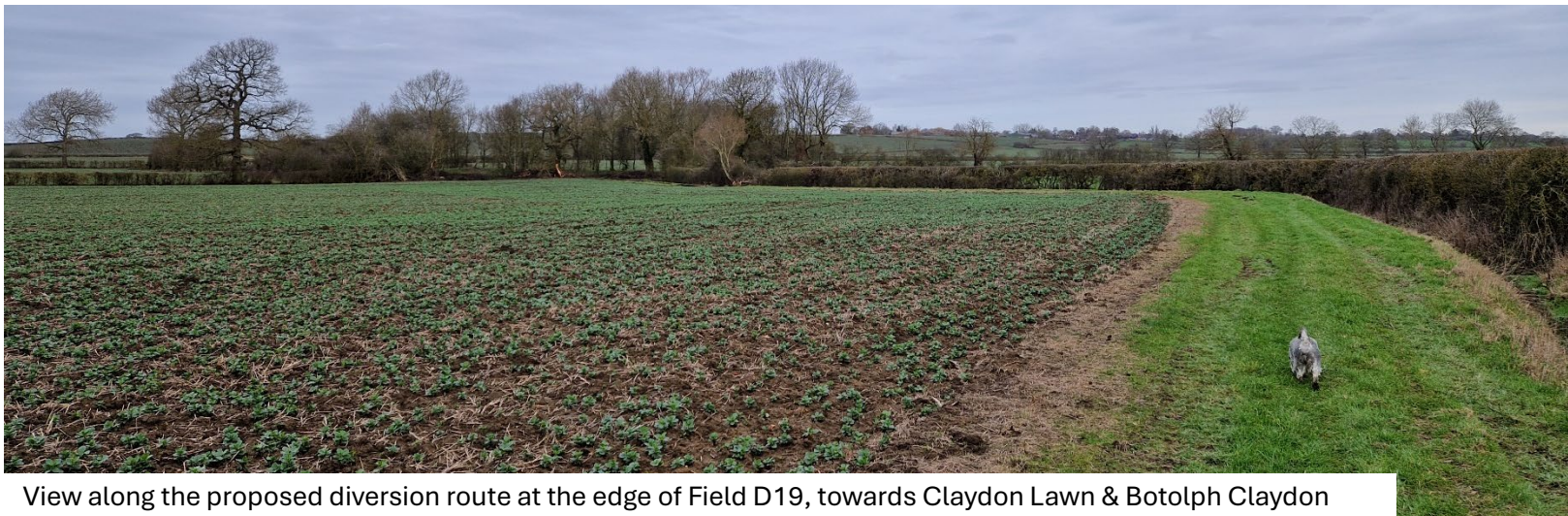
# PRoW Impacts

## ECL/7/2 & PP-A1/PP-A2

---



View from the proposed diversion route at the edge of Field D19, towards Claydon Lawn & Botolph Claydon



View along the proposed diversion route at the edge of Field D19, towards Claydon Lawn & Botolph Claydon

**PRoW Impacts**  
**ECL/7/2 & PP-A1/PP-A2**

---



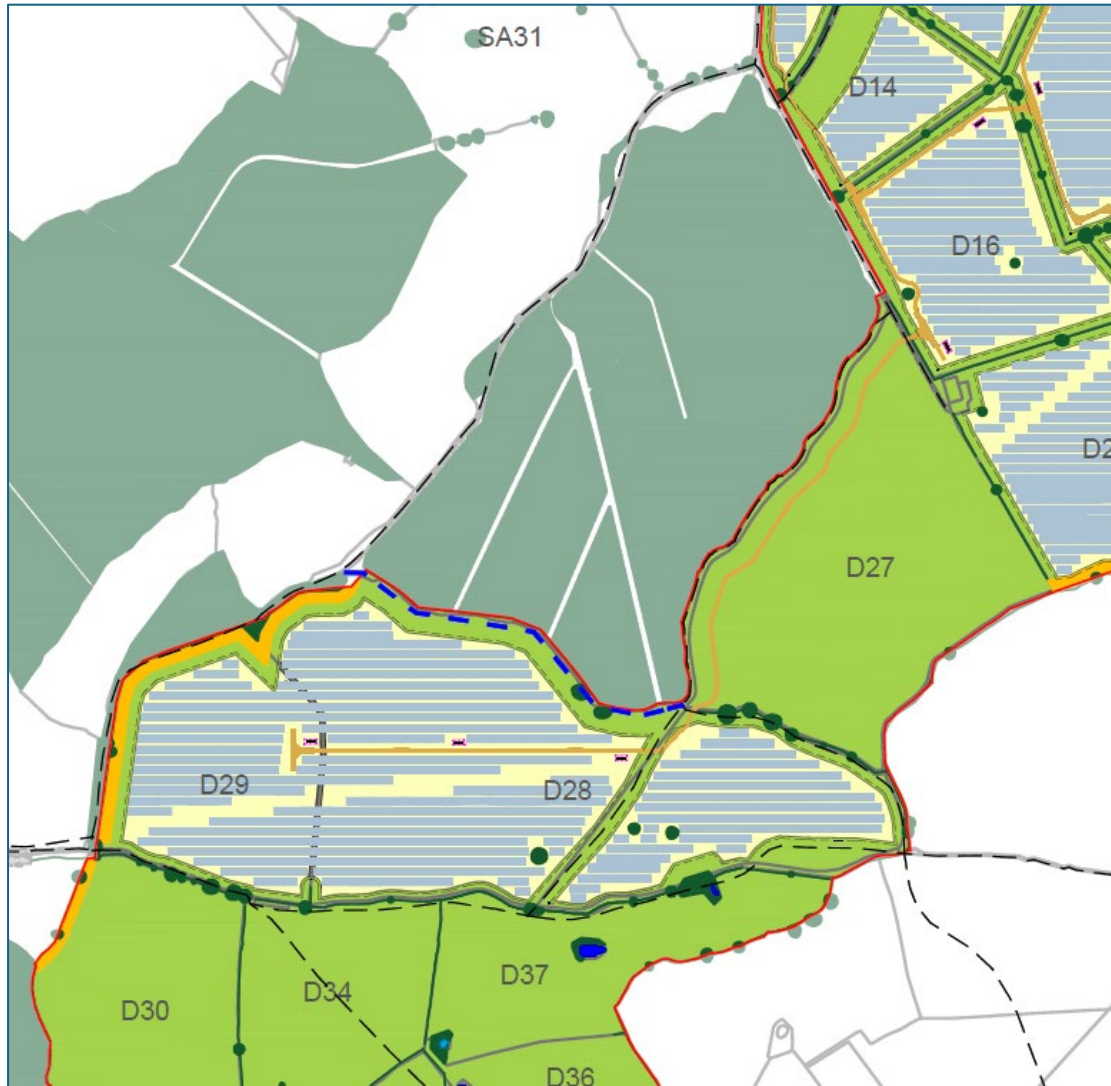
View from the proposed diversion route at the edge of Field D19, towards Granborough



View from the proposed diversion route at the edge of Field D19, towards Quinton Hill

## PRoW Impacts

### ECL/8/2 & QUA/41/1



ECL/8/2 and QUA/41/1 connect with each other at the southern-most corner of Runts Wood.

The northern end of ECL/8/2 connects to an existing bridleway (ECL/10/4) at the southern end of Splash Lane.

QUA/41/1 is currently a footpath that cuts across open farmland, across field D28 from Runts Wood and connects to QUA/40/2, connecting fields D27 and D37.

CSAG are concerned that it is currently proposed to have solar panels in fields D28 & D29.

This is a highly sensitive area for wildlife and CSAG consider that the impact of this development will be significant on the wildlife in this location.

**Our preferred solution in this location is to remove the solar panels from fields D28 & D29 to retain the enjoyment that is currently provided by the numerous PRoW routes that exist in this location.**

**CSAG see no benefit to deleting the dead-end bridleway to Coppice Lowhill Farm.**

**This would only serve to benefit the developer and to better enable their use of the proposed site access track route in this location.**

# PRoW Impacts

## ECL/8/2 & QUA/41/1

---



Within the same location there is also EP-A1 - EP-A2 which is an existing permissive footpath.

It is specifically designated as a “Permissive Footpath” and not a bridleway.

Existing signage conveys that no horses or bicycles are permitted.



View from ECL/8/2 & EP-A2 across to QUA/41/1, field D28.

## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7



A diversion to the existing PRoW Footpath (reference 'SCL/13/2' and SCL/13/1) (1210m to-be-stopped up) to the south of Parcel 1 (between Shrubs Wood and Decoypond Wood) to align the PRoW Footpath with the field boundary of Field B7 (total new length 1240m), resulting in a 2.5% increase in length of this section of the link; and

CSAG are concerned that it is currently proposed to have solar panels in fields B3, B6, B7, B8 & B10.

This is a highly sensitive area for wildlife and CSAG consider that the impact of this development will be significant on the wildlife in this location.

**Our preferred solution in this location is to remove the solar panels from fields B3, B6, B7, B8 & B10 and to retain the existing route of SCL/13/2 across field B7, connecting to the proposed diverted route for SCL/13/2 in field B6 at the western end of PP-A4.**

**The proposed diversion of SCL/13/2 between field B4 & Shrubs Wood, along the western boundary of the farmhouse at Pond Farm and on towards the northern end of field B5 where it meets Calvert Road can be considered an enhancement to this walking route.**

CSAG acknowledge the creation of the new permissive path (PP-A4, PP-A5, PP-A6 & PP-A7) that is to be located along the southern end of Shrubs Wood and along the boundaries of fields B10, B11, B17, B16 and B20. CSAG acknowledge that this will enhance the existing connectivity across the PRoW network in this location.

**How is construction traffic on the access track controlled where it crosses the footpath at Three Points Lane?**

**The images on the following pages give the views experienced from both the existing and proposed routes for these footpaths.**

## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7

---



View along access track - existing route of SCL/12/2 - from Pond Farm to Calvert Road. This part of SCL/12/2 will be stopped up and relocated to the opposite side of Pond Farmhouse.



Access to SCL/12/1 & SCL/13/1 at Pond Farm



Route of SCL/12/2 through Pond Farm

## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7

---



View adjacent to SCL/13/1 across field B5 towards Steeple Claydon.



View from proposed new footpath route SCL/13/1 towards Steeple Claydon



Footpath stile along SCL/13/1 within field B5.  
This will be redundant with the proposed diversion of this footpath.

## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7

---



View towards Pond Farm from the proposed diverted route of SCL/13/1



View towards Pond Farm from the current end of SCL/13/1



View from Pond Farm across field B5 towards HS2 Compound.



View from existing route of SCL/13/1 across to HS2 Compound

## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7

---



End of current route of SCL/13/1 & SCL/13/2 at junction with Calvert Road viewed from within field B5.



End of current route of SCL/13/1 & SCL/13/2 viewed from Calvert Road



## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7

---



Calvert Road towards Botolph Claydon



Calvert Road towards Calvert & Steeple Claydon

Red pointer indicates the approximate point at which the end of the diverted SCL/13/1 will emerge onto Calvert Road. This proposed new route will better align the end of SCL/13/1 with the existing footpath MCL/21/1 adjacent to Calvert Cottages.



View along proposed route of diverted footpath SCL/13/2.



SCL/13/2 is currently closed by HS2.

## PRoW Impacts

### SCL/12/2, SCL/13/1 & SCL/13/2 & PP-A4, PP-A5, PP-A6, & PP-A7

---



Views from the proposed diversion route of SCL/13/2 at the edge of Field B4, towards Calvert and the HS2 Compound.



Views from the proposed diversion route of SCL/13/2 at the edge of Field B4, towards the HS2 Compound and Steeple Claydon



**KEY**

- Application site boundary / extent
- Existing / proposed solar / BESS sites
- Existing National Grid substation
- Proposed National Grid substation
- Parish boundary
- Scheduled Monument (SM)
- ✳ Listed Building (LB) (Grades I and II\* only shown)
- Registered Park & Garden (RPG)
- Ancient Semi-Natural Woodland (ASNW) & SSSI
- Conservation Area (CA)
- National Cycle Network (NCN)
- Long-distance cycle trail
- National Character Area (NCA) boundary
- Local Landscape Character Type (LCT) boundary
- Area of Attractive landscape local designation boundary
- Applicant's public viewpoints 1-43 (34 & 36 off map)
- Applicant's residential viewpoints (R1-R18)
- All construction traffic apart from AILs
- Construction route for AILs
- Land owned by Claydon Estate
- Roman road (proposed route)
- Flood zones

PINS Ref: EN010158

## Rosefield Solar Development Combined Baseline & Project Information Plan

Claydons Solar Action Group  
Deadline 1 Written Representations March 2026

Do not scale off this drawing  
\* Mapping © Ordnance Survey Crown Copyright 2026 \* Licence No. 100019980

*View of proposed Rosefield solar development site looking west to north from Hogshaw Hill (image © Bruce Hyde)*



<b>Queries from Part 1 – CSAG-01</b>	
1	CSAG would like to see inter and intra-project cumulative impact assessments for the project, encompassing likely significant impacts in-combination with permitted and ongoing development in the surrounding area: Assessments should include, but not be limited to, the following receptors: Habitats and species Residents Highway users Users of public rights of way Local businesses Tourism
2	Assessment of potential risks of the development - to TCS Biosciences, Hogshaw Wildlife Park, Claydon Park should be provided – including from noise, vibration, risk of fires and thermal runaway, loss of visual amenity and road closures/HGV traffic.
<b>Residential Visual Amenity Assessment</b>	
3	The use of ZTV mapping to determine buffer zones – based on vegetation-free scenario
4	It would be helpful if the RVAA conclusions were revisited to assume that existing vegetation may not persist for the full lifetime of the development and that mitigation planting may not be fully (or at all) effective.
5	Visualisations or wire frame representations would also be helpful in illustrating potential visual impacts.
6	RVAA of Borshaw Farm, taking into account that existing vegetation screening may not last for the lifetime of the development
<b>Landscape and Visual</b>	
7	In the LVIA carried out by the applicant for the East Claydon BESS scheme mentioned above, the sensitivity of that project’s host LCA 5.7 Hogshaw Claylands was judged to be Medium. The LVIA categorises LCA 5.7’s sensitivity as Medium – Low (in the LVIA it is not clear why LCA 5.7 is of higher sensitivity than other LCAs in LCT 5. <b>Clarification of this point would be helpful.</b>
8	In terms of landscape susceptibility to change, it is not clear what differentiates LCA 5.7 from the mother LCT 5 (Medium – Low), and sister LCA 5.4 Twyford Vale (Low). <b>Clarification of this point would also be helpful.</b>
9	It would be very helpful if assessments of effects on LCAs 7.1, 7.2 and 7.4 could be added to the LVIA, with levels of landscape value, susceptibility and sensitivity recorded in the same way as for other LCAs. This would allow comparison to help with understanding why the LVIA categorises LCA 7.3’s levels of landscape value, susceptibility to change, and sensitivity as <b>Medium</b> , when the mother LCT 7’s levels are <b>Medium - Low</b> .
10	The presence of Claydon House and Park is noted in the LVIA, but it is not clear whether the sensitivity judgements factored in that the Park and associated

	landscapes are of higher value and susceptibility than other parts of LCA 7.3. <b>Clarification of this point would be helpful.</b>
11	It is not clear why LCA 7.3's level of sensitivity (Medium in the LVIA) is the same as that of LCA 9.1 Finemere Hill and 9.2 Quainton Hill, when large parts of these LCAs are within a designated Area of Attractive Landscape (AAL) which is of higher value. <b>Clarification of this point would be helpful.</b>
12	It is not clear why the LVIA's highest level of landscape sensitivity within the study area is only Medium, ie LCT 9 Low Hills and Ridges, and LCAs 9.1 Finemere Hill and 9.2 Quainton Hill. <b>Clarification of the point would be helpful.</b>
13	One of the best places from which to gain panoramic long-distance views of the site and its wider character context is from the Outer Aylesbury Ring long-distance trail on the northern slopes of Quainton Hill, the summit of which lies c. 2.5km east of the southern part of the site at Finemere Hill. <b>Perhaps this viewpoint could be included in the future Accompanied Site Visit (ASI).</b>
14	In LVIA Table 10.8 (note the table title should be 'level' not 'significance' of effect), the overall levels of effects do not step up consistently: sometimes a split category is included, sometimes not. For example, the left-hand Magnitude column steps up from Negligible, to Minor – Negligible, to Minor, but the top row steps up from Negligible, to Minor, to Moderate – Minor, ie the half-step is omitted. <b>It would be very helpful if the Applicant could explain why this approach was adopted, and check whether it skews the results.</b>
15	<b>Another point on which clarification would be helpful</b> is that the Applicant's LVIA reports levels of operational effects on landscape character at Years 1 and 10. I do <b>not agree</b> with this approach, in fact I am surprised the LVIA assumes that by Year 10, all the proposed screen planting would have become fully effective. For projects such as this, Year 15 is the norm for hedges at least – woodlands often take decades to form substantial screens (some Examining Inspectors have preferred 25 years). <b>Perhaps the Examination will establish whether this approach is acceptable</b>
16	it is not clear whether the LVIA has actually assessed effects on the basis of them being 'permanent' – in fact, it would appear not. The key at the top of LVIA Table 10.14: <i>Summary of the landscape and visual assessment</i> includes duration, where ' <i>P = permanent or T = temporary</i> '. In all cases apart from one, effects on landscape (and visual) receptors are categorised as (T), ie <b>Temporary</b> (and Adverse). Evidently, and as LVIA Plate 10.1 confirms, the magnitude of temporary effects is lower than that of permanent effects. The exception is effects on landscape 'fabric', which are judged to be (P) <b>Permanent</b> (and Beneficial, whilst all other effects are adverse – see previous section). <b>It would be helpful if the Applicant could clarify this point.</b>
17	Regarding construction and decommissioning effects, in many cases (but not all), the levels of adverse effects on character are <b>lower</b> than between Years 1 and 10 of operation, whereas they are often at their highest. It is possible that the LVIA has

	factored the relatively short-term duration of the works into judgements about overall levels, whereas the overall level of effect should be reported and the period during which it would be experienced noted separately. <b>Clarification of this point would be helpful.</b>
18	The LVIA reports that generally, throughout the study area, the landscape ‘fabric’s’ level of sensitivity is <b>High - Medium</b> (para. 10.10.25); however, I could not find the judgements about levels of a) landscape value, and b) landscape susceptibility to change. It is important to know these, as levels of sensitivity are derived from the combination of levels of value and susceptibility. High – Medium could be the result of High value and Medium susceptibility, or <i>vice versa</i> , or other combination. I note that the <i>Landscape Sensitivity Appraisal [APP-112]</i> refers to the ‘fabric’ in the study area being in ‘good’ or ‘fair to good’ condition. <b>It would be helpful if the Applicant could state the fabric’s levels of landscape value and susceptibility to change.</b>
19	<b>It would be helpful if the Applicant could explain why the LVIA concludes that the landscape ‘fabric’ is of a higher level of sensitivity than the landscape character receptors</b> (NCAs, LCTs, and LCAs), which range from Low to Medium, especially given that the nature, quality, condition etc. of the ‘fabric’ is an important factor in judgements about levels of overall landscape sensitivity
20	The LVIA does not report or summarise effects on receptors at each viewpoint (VP) identified; rather, it assesses effects on views along roads and PRowS along which the VPs are located. However, I was unable to find a plan showing the highlighted routes and VPs in one place: <b>it would be helpful if the Applicant could provide this.</b>
21	The LVIA does not illustrate the worst-case visual scenario. <b>Additional photomontages from viewpoints along PRowS crossing the site should be produced</b> , at locations to be agreed through consultation, especially with local residents. For example, at VP42, VP10, and where the North Buckinghamshire Way / Midshires Way cross Parcel 3 between Fields E21 / 22, and E23.
22	Regarding visual effects on users of the Bernwood Jubilee Way long-distance trail: The LVIA concludes that between Years 1 and 10 of operation, the development ‘ <i>would result in a moderate magnitude of effect on visual amenity</i> ’. However, it appears that this level has been applied to all sections of the route, regardless of a) proximity to the Scheme, and b) intervening screening.... <b>It would be helpful to know whether the LVIA’s Moderate Adverse level of magnitude is an average, or only experienced at certain VPs.</b>
23	In terms of the level of overall visual effect, the LVIA concludes that between Years 1 and 10 of operation, ‘ <i>there would be a major/moderate adverse effect on views from the Bernwood Jubilee Way, which is considered to be significant</i> ’. Again, it is not clear whether this applies to the whole of the route or specific VPs, so <b>perhaps the Applicant could confirm.</b>

24	The Applicant's Glint and Glare Assessment (GGA) does not appear to have accounted for equestrians' higher eye-level, although <b>clarification of this point would be helpful.</b>
	<b>Noise and Vibration</b>
26	No vibration impact assessment has been provided for piling works, which depending on piling method, has the potential to generate high levels of vibration. Either an assessment of piling vibration impact, or robust substantiation for omitting this assessment should be provided.
27	Cumulative effects of the proposed BESS operating simultaneously with the approved Statara BESS should be considered.
28	A contextual discussion regarding the character of proposed noise sources in relation to the existing noise environment has not been included which is an integral part of determining the level of noise impact in accordance with BS 4142:2014+A1:2019.
29	Mitigation measures include an unspecified measure for reducing transformer noise by 5dBA which is insufficient to demonstrate that the LOAEL target of 35dBA can be met at receptors. Details of mitigation measures should be provided.
	<b>Public Rights of Way</b>
30	The Applicant is asked to provide details of proposed mitigation in relation to the proposed Buckinghamshire Greenway, which would pass through the Order Limits
31	How is Construction Traffic controlled where it crosses the northern edge of field E11?
32	Additional clarity is sought regarding the assessments of impacts on Public Rights of Way in relation to the matters listed on Page 11 of CSAG-09
	<b>Highways</b>
33	What surveys has the Applicant undertaken in order to establish the effective width and structural suitability of roads for HGV traffic on the proposed construction traffic route?
34	What plans does the Applicant have to resolve flooding issues on Claydon Road before commencing construction works?
35	What consideration has the Applicant given to variations in traffic flows during the day and between days and the impacts of construction traffic on peak flows?
36	What is the evidence base for the Applicant's assessment of the nature and extent of impacts vulnerable road users?
37	CSAG require clarity of the rationale for imposing a speed limit on Three Points Lane. Is the developer proposing to use the lane for construction traffic access?

38	What provision would be made to move ALLs over field SA56 and then across the Claydon Brook to E10. E11 and E20?
39	What assessment has been made of the cumulative impacts of AIL deliveries for the three programmes?
40	Request for justification of assessment of receptor sensitivity and definition of Magnitude of Effect in accordance with the guidance to support the conclusion that residual impacts on Station Road, Snake Lane, Claydon Road and Granborough Road are Minor and Not Significant.
41	Include construction of new East Claydon substation in analysis of cumulative impacts.

**Planning Act 2008 – section 55**

**Application by Rosefield Energy Farm Limited for an order  
granting development consent for the Rosefield Solar Farm**

**(EN010158)**

**EXPLANATORY NOTE TO WRITTEN REPRESENTATION**

**on behalf of the**

**Claydons Solar Action Group (CSAG)**

**Reference** [REDACTED]

All Figures are in the main document

The Written Representation on behalf of the Claydons Solar Action Group is in 11 parts

as follows:

Part 1 – Overview and consideration of site selection/alternatives (CSAG-01)

Part 2 – Ecology (CSAG-02)

Part 3 – Landscape and Visual (CSAG-03)

Part 4 – Heritage (CSAG-04)

Part 5 – Soils (CSAG-05)

Part 6 – Fire risk and safety (CSAG-06)

Part 7 – Noise and vibration (CSAG-07)

Part 8 – Highways (CSAG-08)

Part 9 – Public Rights of Way (CSAG-09)

Part 10 - Combined Baseline and Project Information Plan (CSAG-10)

Part 11 - Photograph of Site from Hogshaw Hill (CSAG-11)

Part 12 – Requests for clarification/further information (CSAG-12)

Summaries are numbered CSAG-01S etc.

The following Appendices are attached:

CSAG-001 Email Rosefield to CSAG re. connection agreement

CSAG-002 Annex to Clean Power 2030 Action Plan

CSAG-003 – General Practitioner Report on risk to elderly/disabled residents

CSAG-004 – GP Presentation North Bucks PCN CVD Champions Project

CSAG-005 – Views from dwellings overlooking the Order Limits

CSAG-201 – Bioscan letter to CSAG responding to Statutory pre-application consultation  
2024

CSAG-202 – Bioscan letter to CSAG concern works carried out within

CSAG-501 - Natural England Technical Information Note TIN066