13. Other Matters and Planning Balance

Site Selection and Design Evolution

13.1. In 2022, RES accepted a grid connection offer of 49.9MW from UKPN and undertook a preliminary site finding exercise which includes a desk-based exercise and consideration of environmental designated sites, suitably sized sites with proximity to the grid, and landowners willing to host solar projects.

13.2. The grid connection is specifically associated with a point of connection at the existing 132kv overhead lines on the transmission network between Northfleet and Chelsfield. As detailed with the Site Alternatives Study, the full extent of this overhead line within the Sevenoaks District was explored. It is acknowledged that there is a further 132kv overhead line but this is located, in its entirety within the AONB in the far south of the District.

13.3. As identified within the Site Alternatives Study, the North Downs AONB is a designated landscape would be sequentially less preferable to the development site at Chimmens, due to the high degree of policy protection for nationally designated landscapes. Figure 13.1 below, taken from Site Alternatives Study Appendix 2, identifies the North Downs AONB and the location of the existing 132kV overhead line. This designated landscape served to remove large areas of potential development sites from the study area before other potential constraints were then considered.

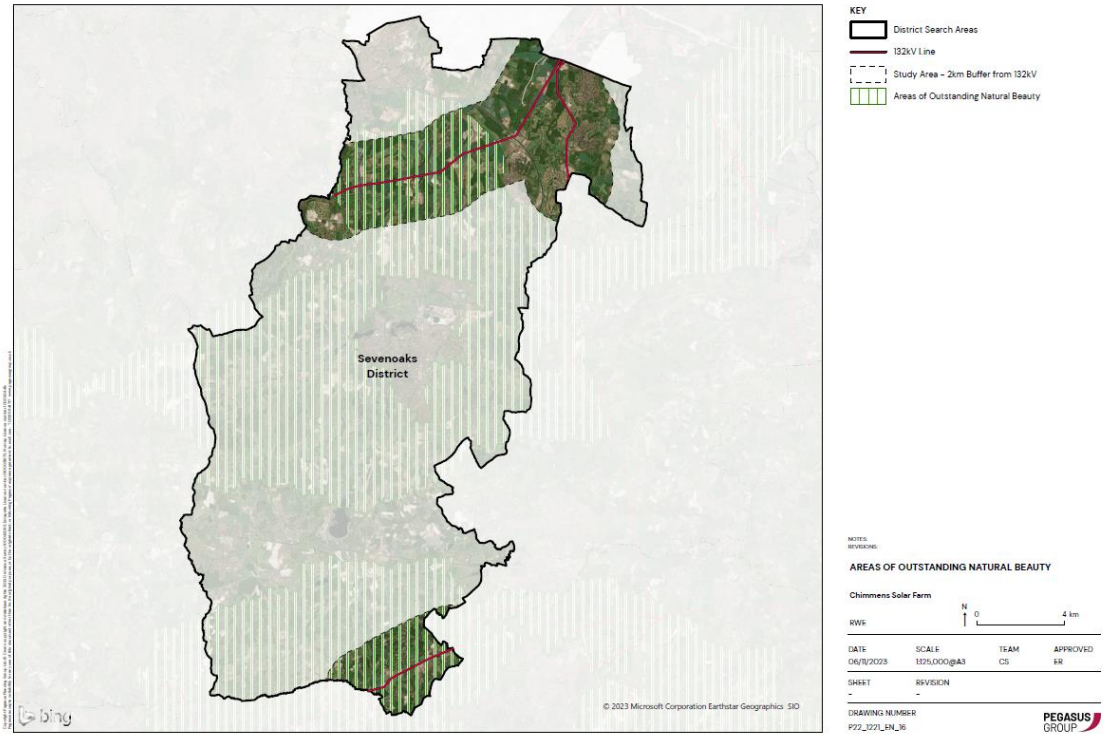

Figure 13.1: Area of Outstanding Natural Beauty (green hatch)

13.4. When conducting the Study, brownfield land was considered and a search of the Council's Brownfield Register conducted. This concluded that there were no parcels of brownfield land of the size required to facilitate this development.

13.5. A number of sites were identified as being potentially suitable for development, these are considered in detail within Table 1 of the Site Alternatives Study, these are also shown on the below plan (Site Alternatives Study Appendix 4).

13.6. The three potential sites presented were a similar size to the application site at 100ha. These sites were assessed in comparison to the application site. All sites were considered appropriate for solar development but not sequentially preferable for the reasons identified within Site Alternatives Study Table 1.

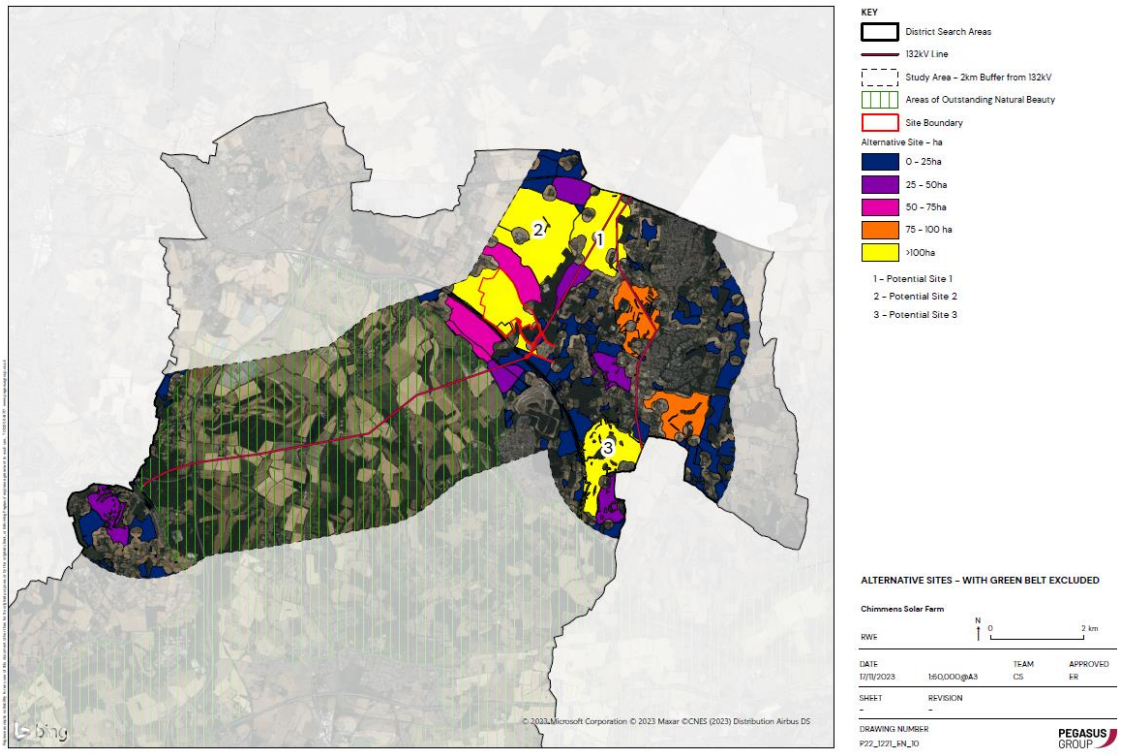

Figure 13.2 Identified Alternative Sites

13.7. The Site Alternatives Study is compliant with the National Planning Practice Guidance (NPPG): Renewable and Low Carbon Energy Paragraph 013 (second bullet):

- The use of agricultural/greenfield land is necessary in the absence of poorer quality agricultural land, previously developed land/brownfield land and barriers to the deployment of large-scale commercial roof-space for solar photovoltaic development;
- There are no potential alternative sites subject to any less environmental constraints than the Application Site within the study area, or located outside of the Green Belt; and
- That the Application Site would allow continued agricultural use and that significant biodiversity net gain would be delivered as part of the Proposed Development.

13.8. The design evolution is set out within the Design and Access Statement which explains how various issues and constraints have been considered to shape a design of a solar farm which is contained physically and visually.

13.9. During the design process between 2022 and 2023, the design team were aware (due to an EIA Screening Opinion Ref 21/00680/RG5) of the "Horton Wood Solar Park" application which received planning permission in February 2023. Therefore, our preliminary design included embedded mitigation by achieving 500m buffer within the landowner boundary between Chimmens Solar Farm and Horton Wood Solar Park to avoid any potential cumulative impacts. The Landscape and Visual Assessment includes the cumulative impact assessment and the key factor is that the landform is uniquely different between the Horton Wood Solar Park which is on a plateau gently facing north and Chimmens Solar Farm which is sloping to the south and enclosed by the M20 to the south and Horton Wood Ancient Woodland to the

east. The design evolution demonstrates that the mitigation for any potential cumulative impacts is embedded in the design with most changes concentrated on the key feedback from the Chimmens Public Exhibition in July 2023 in regard to setbacks from residential receptors, avoiding noise impacts and minimising construction traffic disruption.

13.10. The access strategy for Chimmens Solar Farm is set out in the Construction Traffic Management Plan which commits to the following mitigation measures:

- Construction access via A20/Scratchers Lane, Three Gates Road and Gabriel Spring Road East which avoids HGV traffic on local villages. Through consultation with Kent Highways, construction deliveries will be restricted to outside of the peak morning and evening traffic.

- Furthermore, the operational access will be restricted to the same route via A20/Scratchers Lane, Three Gates Road and Mussenden Lane with entry and exit restricted to approaching site from the south east via Mussenden Lane.

Size of application boundary

13.11. A number of public comments have queried the size of Chimmens Solar Farm, the efficiency of the proposal in comparison to other solar projects and the consenting regime for planning decision making. This section of the addendum provides a summary clarification for these queries.

13.12. Under the Town and Country Planning Act 1990 (TCPA90) S15 PA08 provides that an onshore generating station is a Nationally Significant Infrastructure Project (NSIP) when it has a capacity of more than 50 megawatts (MW). PA08 provides no further definition of generating capacity, however National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) provides guidance on how that figure should be calculated (para 2.10.53) together with further guidance on capacity and size of solar developments (paras 2.10.50 to 2.10.58 and 2.10.17). As set out in Table 3, Chimmens Solar Farm aligns with the guidance set out in the NPS-EN3. Furthermore, as stated in Para 13.1, RES have accepted a grid connection offer from UKPN for a maximum export capacity of 49.9MW. Chimmens Solar Farm is therefore under the correct consenting regime under TCPA to be determined by the local planning authority.

13.13. Consideration has been given to the land coverage and generating capacity for the proposed Chimmens Solar Farm and Horton Wood Solar Park (consented February 2023 Ref 22/02599/FUL). Both applications have a maximum export capacity of 49.9MW. It is acknowledged that the planning application boundary for Chimmens Solar Farm (244acres) exceeds the planning application boundary for Horton Wood (178acres). However in terms of the buildable solar area, the two schemes are comparable. The solar PV buildable area for Chimmens Solar Farm is 167acres and that for Horton Wood is approximately 156acres.

13.14. The planning application boundary for Chimmens Solar Farm is significantly larger than the physical infrastructure proposed and demonstrates the design of the solar farm has sought to develop a solar farm capable of generating 49.9MW of solar electricity whilst allowing for habitat creation, new landscaping biodiversity enhancements, access, retention of recreational horse riding routes, protection of PROW, retention of existing field boundaries, maintaining distances from ancient woodland, offsets from residential receptors and wayleaves from existing gas and electrical infrastructure.

Table 3: Chimmens Solar Farm

	Chimmens Solar Farm	NPS EN-3 Guidance
Planning Application Site Area (redline boundary in acres)	244	
Solar PV Buildable area	167	125 to 200 acres for 50MW (EN-3 para 2.10.17)
No. Solar Panels[4]	103,558	100,000 to 150,000 for 50MW (EN-3 para 2.10.7)
No. Inverters[5]	14	
Maximum Export Capacity (MEC)	49.9MW	
Maximum Inverter Capacity MWac[6]	49.9MWac	
MWdc[7]	63.17MWdc	
MWdc/MEC Ratio	1.27	
Development Density	2.64	2 to 4 acre/MWdc (EN-3 para 2.10.17)

4 No specific panel power rating has been given in the planning application documents. Assuming 610W panels for purpose of comparison only.
5 The exact specification of the inverters will be finalised at the procurement stage due to the technology continually advancing, but in no circumstances will exceed the combined total of 49.9MWac as referred to in footnote 6.
6 No specific capacity for individual inverters has been given in the planning application but the total combined capacity cannot exceed the MEC of 49.9MWac, excluding any capacity to overcome reactive power consumption within the solar farm between the inverters and the connection point, per EN-3 footnote 91: *The combined maximum AC capacity of the installed inverters may only exceed the aforementioned thresholds for the sole purpose of overcoming reactive power consumption within the solar farm between the inverters and the connection point.*
7 The MWdc capacity in excess of 49.9MW is what is described as "overplanting" in EN-3 para 2.10.55 and EN-3 footnote 92: *"Overplanting" refers to the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator's grid connection. This allows developers to take account of degradation in panel array efficiency over time, thereby enabling the grid connection to be maximised across the lifetime of the site. Such reasonable overplanting should be considered acceptable in a planning context so long as it can be justified and the electricity export does not exceed the relevant NSIP installed capacity threshold throughout the operational lifetime of the site and the proposed development and its impacts are assessed through the planning process on the basis of its full extent, including any overplanting.*

Potential Future Solar Applications

13.15. As identified within the Site Alternatives Study, there are three potential sites suitable for solar development based on the methodology and the information available to complete a spatial analysis. The three sites are of a similar size (suitable to host a solar development generating 49.9MW), within the study area (within proximity of a viable grid connection) and outside of the constraints used in the analysis.

13.16. It is acknowledged that a submission has been made as part of the consultation in relation a further potential solar development. This site was considered as a potential alternative site within the Site Alternatives Study Table 1 (referred to as: "Potential Site 1). This site was not considered to be sequentially preferable to the development site due to higher number of desk-based constraints compared to the application site. Furthermore, during initial site search work, the applicant contacted the landowner of Potential Site 1. During these discussions it was advised that they were already committed to working with another developer.

13.17. At the time of planning application submission, validation and writing this planning addendum, no formal planning application has been submitted for any other solar development. Further information presented within this planning addendum and as requested from statutory consultees, demonstrates that Chimmens Solar Farm does not impact landscape, agricultural land or ancient woodland. The findings as presented within the Site Alternatives Report remain valid: Chimmens Solar Farm is the most preferable site for solar development at the time of writing due to other constraints and the availability of the land. This is not to say the other parcels of land are unsuitable for development or that the constraints are insurmountable subject to surveys and consultation with stakeholders.

Planning Balance

13.18. The NPPF as updated in December 2023, outlines at paragraph 156 that:

"*When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include wider environmental benefits associated with increased production of energy from renewable sources.*"

13.19. Weight needs to be afforded to the need of development as UK and international targets strengthen in reducing carbon emissions from energy sources. It is also considered relevant to consider the weight that the Secretary of State and Inspectors have given to the benefit of renewable energy generation in determining recent appeals.

13.20. At Halloughton in February 2022 (Appeal Reference APP/B3030/W/21/3279533, paragraph 55), Inspector Baird afforded 'significant weight' to the early and significant contribution that the proposal could make to the imperative to reduce emissions by generating 49.9 MW of electricity from a clean, renewable source.

13.21. In December 2022, at Langford the Secretary of State allowed a 49.9MW solar farm and considered that weighing in favour of the proposal is the production of electricity which is afforded "significant weight" (Appeal Reference APP/Y1138/W/22/3293104, paragraph 26) .

13.22. Also in December 2022, at Bishops Itchington, 'substantial positive weight' was given by Inspector Major to the provision of clean renewable energy (Appeal Ref APP/J3720/W/22/3292579, paragraph 33).

13.23. In Chelmsford, also allowed in February 2023, the level of renewable energy generation arising from a 49.9MW solar farm in the Green Belt 'weighs strongly in favour of the scheme' (Appeal Reference APP/W1525/W/22/3300222, paragraph 86), and later in the decision, that the benefits of renewable energy 'raise substantial benefits' in favour of the proposal (paragraph 91).

13.24. At New Works Lane, Telford, the Secretary of State allowed a 30MW solar farm in March 2023 and considered that significant weight should be given to the production of electricity (Appeal Reference APP/C3240/W/22/3293667, paragraph 23).

13.25. At Wellington Telford, the Inspector in allowing the appeal for up to 49.9MW in May 2023 afforded "substantial weight" to the clean and secure energy offer (Appeal Reference APP/C3240/W/22/3308481, paragraph 43).

13.26. In June 2023, a 49.9MW solar farm was allowed at Scruton, Hambleton and the Inspector afforded "substantial weight" to the renewable energy benefit of the proposal (Appeal Reference APP/G2713/W/23/3315877, paragraph 46).

13.27. At Crays Hill, Basildon the Inspector allowed a 25.6MW solar farm in the Green Belt in August 2023 and in so doing applied "very significant weight" to the renewable energy generation and carbon savings (Appeal Reference APP/V1505/W/23/3318171, paragraph 25).

13.28. In September 2023 at Sherbourne, a solar farm of about 20MW was also allowed in the Green Belt and the Inspector considered that the proposal would provide a 'very significant environmental benefit" given the clear support given to renewable energy development from a number of sources (Appeal Reference APP/T3725/W/23/3317247, paragraph 34).

13.29. In November 2023, the Inspector afforded "very significant weight" to renewable energy production at Halse Road, Greatworth in respect of a 49.9 MW solar farm (Appeal Reference APP/W2845/W/23/3315771, paragraph 122).

13.30. Most recently Graveley Lane, Hertfordshire the Secretary of State allowed a 49.9MW solar farm and overruled the Inspector and placed "substantial weight" on the developments contribution towards renewable energy generation (Appeal Reference APP/X1925/V/23/3323321, paragraph 18).

13.31. In reviewing these appeal decisions, there is very clearly a consistent approach from the Secretary of State and appointed inspectors in determining solar farm appeals over the last two years that either 'significant' or 'substantial' weight should be given to this benefit.

13.32. This clearly outlines that the provision of renewable energy development can be considered as very special circumstances in the determination of an application. It is them a matter of whether the benefits of Chimmens Solar Farm significantly outweigh the impacts on the openness of the Green Belt.

13.33. It is considered that the following benefits can be associated with the proposed development:

- Chimmens solar farm would provide 49.9MW of clean and renewable (low carbon) energy, enough to power 19,194 homes and saving up to 32,000 tonnes/year of CO_2 compared to electricity from fossil fuels.

- Biodiversity Net Gain of 45.15% in area habitats and a 39.93% net gain in hedgerow habitats as a result of the proposed development.

- Retention of existing recreational (non-designated) horse riding routes within the site for continued use in association with the current activity at Speedgate Farm.

- Retention and enhancement of the existing Public Rights of Way running through and adjacent to the site in line with the proposal outlined at Section 2 of this report.

- Provision of a scheme of heritage and ecological interpretation boards adjacent to the Public Rights of Way and Ancient Woodland.

- Economic benefits associated with investment and support for on-site employment during the construction period and with associated management and maintenance of the scheme.

13.34. Whilst it is accepted that there will be an inevitable temporary change of land use within the Green Belt to facilitate this development, and thus a reduction in the openness, the LVIA submitted with the development outlines that the visual impacts of this are likely to be localised and limited in nature. Furthermore, the development is temporary in its nature and reversible following its operational lifetime of 40 years.

13.35. It is therefore considered that the very special circumstance presented by the means of renewable energy generation and the benefits associated with the scheme outweigh the limited impact to the openness of the Green Belt in line with the NPPF.