4 ALTERNATIVES CONSIDERED

4.1 INTRODUCTION

4.1.1 This chapter of the ES identifies the main alternatives to the Proposed Development that have been considered by the Applicant and the reasons why these were rejected.

4.2 ALTERNATIVES CONSIDERED

4.2.1 The EIA Regulations (Schedule 4, Part I (2)) require for inclusion in an ES:

"A description of the reasonable alternatives studied by the developer"

4.2.2 The main alternatives to the Proposed Development which the Applicant has considered include:

- Site Selection;
- The 'No Development' Alternative; and
- Alternative Design Approaches.

Site Selection

4.2.3 A thorough site analysis and evaluation process was carried out as part of the identification of the site by RES Ltd. The key aspect of the site selection process was the existence of a viable grid connection, which is critical to the successful implementation of a solar energy development. Further details are set out in the Alternative Sites Analysis provided as a separate element of the planning application submission.

The 'No Development' Alternative

4.2.4 The 'No Development' Alternative refers to the option of leaving the Application Site in its current use and physical state.

4.2.5 Without the Proposed Development, the land would not be able to contribute to the Government's movement towards a carbon net zero economy by 2050. It is acknowledged that the site in its current form provides value in terms of its agricultural use, however an element of agricultural use would be able to be maintained as part of the proposed development.

Alternative Design Approaches

4.2.6 The Design and Access Statement (DAS) that accompanies the planning application describes in detail the design evolution and concepts. In summary, the design evolved as it took account of the technical and environmental assessment work which was undertaken, in addition to feedback received through public consultation.

4.2.7 In particular, consideration was given to the retention of the established field boundaries on site, along with planting of native hedgerows and trees. This helps to ensure that the development is well contained both physically and visually. In addition, a number of other constraints were considered, and appropriate offsets applied where necessary. Table 4.1 summarises the key constraints that were considered in the development of the the design of the proposed development.

Constraint		Consideration as Part of Design
1	Site Access	Within the site, existing field entrances have been used for internal access tracks. Where necessary, field entrances may require marginal widening to accommodate construction vehicles. The access strategy has been developed with the transport engineers, ecologist and arboricultural surveyors who ensured that all impacts on the existing hedgerows and trees were minimised. Appropriate passing for vehicles during construction on the initial access from the A4074 has also been accounted for within the design.
2	Trees and Hedgerows	A tree survey has been undertaken on the site and appropriate root protection zones have been accounted for within the scheme. Appropriate offsets have been given to hedgerow protection and ecological enhancements incorporated with the finalised scheme.
4	Public Rights of Way	There is a Public Right of Way (Footpath Ref: 317/5/20) that crosses the site from the northwest to south west. Appropriate buffers have been applied to the Public Rights of Way in order to protect and enhance public access and amenity.
5	Agricultural Land Classification	The site has been subject to a formal agricultural land classification. As a result of this survey an area to the south-west of the site has been removed as this constituted Grade 2 best and most versatile land. Furthermore, the northern boundary has been reduced to limit the amount of Grade 3a land included in the site. It is acknowledged that there is still a small section of Grade 2 and 3a within the red line boundary, this has occurred following the use of existing field boundary extents as the definitive boundaries.
6	Surface Water Drainage	It is acknowledged that there are areas of the site susceptible to surface water flooding. All infrastructure (inverters and the proposed substation) have been located outside of these boundaries. Where necessary floor levels have been raised.
7	Existing Ecological Features	A number of existing ecological features have been identified on the site. An appropriate buffer from these features has been applied as part of the design.
8	Noise	A Noise Impact Assessment has been undertaken, the results of which are detailed within the submitted report and summarised within the Planning Statement. The locations of the inverters and associated ancillary equipment have been strategically located away from residential receptors and it is considered that there will be no adverse impacts as a result of this scheme.
9	Archaeology	As part of the iterative process a geophysical survey was undertaken on the site. The survey identified a dense concentration of archaeological features. The red line boundary was therefore realigned to preserve these findings in situ.

Table 4.1 – Summary of Design Constraints

4.2.8 The main changes between the earlier iterations of the scheme and the final scheme can be summarised as primarily being the deletion from the scheme of an area of Grade 2 best and most versatile land and the removal of an area of identified archaeological sensitivity.