- **Avoid Adverse Effects:** The first priority is to minimise negative impacts on existing habitats within the development site. This is particularly important for areas with medium, high, or very high distinctiveness (scoring 4 or more on the Statutory Biodiversity Metric).
- **Mitigate Unavoidable Effects:** If adverse impacts cannot be entirely avoided, the next step involves minimising and mitigating these impacts as much as possible.
- **Enhance On-Site Habitats:** Once impacts have been minimised, the focus shifts to enhancing the quality of existing habitats within the development site.
- **Create New On-Site Habitats:** If further improvements are needed to achieve the 10% net gain requirement, developers should explore creating new habitats within the development area.
- **Secure Off-Site Biodiversity Units:** If achieving the required net gain on-site proves insufficient, developers can secure **off-site biodiversity units**. ILM excels in facilitating this step for developers, with a diverse portfolio of high-quality Biodiversity Gain Sites that generate these units. These units represent habitat creation or restoration elsewhere, contributing to the overall 10% biodiversity net gain requirement.
- **Purchase Biodiversity Credits:** As a last resort, if all previous options have been exhausted, developers can purchase statutory biodiversity credits. However, this option should only be considered after exploring all other possibilities within the hierarchy.

3.1.2 Irreplaceable Habitats

Irreplaceable habitats are those which are very difficult (or take a very long time) to restore, create or replace once they have been destroyed. This may be due to their age, uniqueness, species diversity and rarity. They include some of England's most ecologically valuable terrestrial and intertidal habitats.

The definition and list of irreplaceable habitats for BNG are set out in the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024. The list includes:

- ancient woodland
- ancient and veteran trees
- blanket bog
- limestone pavements
- coastal sand dunes
- spartina saltmarsh swards
- mediterranean saltmarsh scrub
- lowland fens

The presence of irreplaceable habitats on Assessment Boundary must be recorded in the statutory biodiversity metric. However, the 10% BNG requirement does not apply when irreplaceable habitats are proposed to be lost. Instead, bespoke compensation would be required, and planning permission for development resulting in the loss or deterioration of irreplaceable habitat will only be granted in wholly exceptional circumstances and where a suitable compensation strategy exists. It is therefore best to avoid any adverse impacts on irreplaceable habitat present within a proposed development site.

3.2 Assessment Boundary Survey and Habitat Condition Assessment

A UK Habitat (UKHAB) Classification survey of the solar Site was undertaken in 2024 with the grid connection later surveyed in April 2025 (Figure 1). The condition of the habitats present was assessed using the information available from these surveys to inform the biodiversity calculator.

3.3 Proposed Development Layout

A landscaping plan (Landscape and Ecological Management Plan (LEMP)) has been produced for the Proposed Development (refer to: Figure 2.5 of Chapter 2: Landscape and Visual Impact Assessment). Further enhancements are outlined in the present report.

3.4 Biodiversity Net Gain Calculations

In order to calculate the baseline Biodiversity Unit (BU) value of the Assessment Boundary, the effects of the proposed development and to quantify the proposed mitigation, enhancement and habitat creation measures, a biodiversity metric was populated. This utilised the DEFRA Statutory Biodiversity Metric to calculate the overall net gain achieved by the development. It followed three steps.

1. Firstly, the existing baseline habitat data, in UKHAB format, was entered into the metric by selecting the correct habitat type from the drop-down menu, as well as its extent, condition and strategic significance. Where present, this was done separately for the three habitat modules in the metric, i.e. area-based habitats (such as fields and ponds), hedgerows & lines of trees, and watercourses. This determined the baseline BU value of the Assessment Boundary;
2. Secondly, the amount of each baseline habitat to be retained or enhanced was entered. This therefore also calculated any habitat losses;
3. Thirdly, the proposed habitat enhancements were entered into the metric along with their target condition and strategic significance; and
4. Finally, the proposed habitat creation measures were entered into the metric, along with their proposed extent and target condition, as well as their strategic significance.

The habitat enhancement and creation measures, when compared to the baseline minus the habitat loss, indicate the overall biodiversity net gain (or loss). Further details, including the assumptions and metric results, are provided in Section 3 and Appendix A and Appendix B.

4. Results

4.1 Habitat Baseline

The habitats present within the Site and their condition are summarised in the tables below. The calculations can be found in the accompanying Statutory Biodiversity Metric file (Yardley The_Statutory_Biodiversity_Metric_Calculation_Tool_-_V2)

4.2 Area-based Habitats

The area-based habitats present within the Site are summarised in the Table below.

Table 1: Area-based Habitats in Baseline

Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Baseline BU
Cereal crops	63.99	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	127.98
Developed land; sealed surface	10.58	V.Low	N/A - Other	Area/compensation not in local strategy/ no local strategy	0.00
Mixed scrub	0.02	Medium	Poor	Area/compensation not in local strategy/ no local strategy	0.06
Modified grassland	14.29	Low	Poor	Area/compensation not in local strategy/ no local strategy	28.58
Modified grassland	0.92	Low	Good	Area/compensation not in local strategy/ no local strategy	5.49
Total	**89.8**				**162.12**

4.3 Linear-based Habitats

The linear-based habitats present within the Site are summarised in the Table below.

Table 2: Linear-based Habitats in Baseline

Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Baseline BU
Line of trees	0.32	Low	Moderate	Area/compensation not in local strategy/ no local strategy	1.29
Line of trees	0.28	Low	Poor	Area/compensation not in local strategy/ no local strategy	0.56
Native hedgerow	3.22	Low	Moderate	Formally identified in local strategy	14.81
Native hedgerow	2.95	Low	Good	Formally identified in local strategy	20.37
Native hedgerow	0.03	Low	Poor	Formally identified in local strategy	0.07
Species-rich native hedgerow	0.17	Medium	Good	Formally identified in local strategy	2.40
Species-rich native hedgerow - associated with bank or ditch	0.23	High	Moderate	Formally identified in local strategy	3.17
Species-rich native hedgerow with trees	0.78	High	Good	Formally identified in local strategy	16.23
Total	**7.99**				**58.91**

4.4 Watercourse-based Habitats

The watercourse-based habitats present within the Site are summarised in the Table below.

Table 3: Watercourse-based Habitats in Baseline

Habitat Type	Length (km)	Distinctiveness	Condition	Strategic Significance	Watercourse encroachment	Riparian Encroachment	Baseline BU
Ditches	0.2	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	Major/Major	0.6
Other rivers and streams	0.05	High	Moderate	Formally identified in local strategy	No Encroachment	No Encroachment/ No Encroachment	0.69
Total		**0.25**					**1.29**

The calculations above included both default assumptions (that are inbuilt into the Biodiversity Metric) and criteria which were selected from a series of drop-down menus. The condition criteria passed for each habitat are shown within Appendix A.

4.4.1 Irreplaceable Habitats and Habitat Distinctiveness

There are no irreplaceable habitats located within the Site or adjacent areas. The highest distinctiveness area habitat on Site was 'mixed scrub' that are classified as having 'Medium' distinctiveness. The highest distinctiveness linear habitat on the Site was 'Species-rich native hedgerow - associated with bank or ditch' and 'Species-rich native hedgerow with trees both of which are classified as having 'High' distinctiveness. The highest distinctiveness watercourse habitat on the Site was 'other rivers and streams' which are classified as having 'High' distinctiveness.

4.5 Proposed Habitats

The Site post-development is shown in Appendix B.

4.5.1 Biodiversity Calculations

The proposed habitat creation, retention and enhancement measures outlined in the landscaping design for the Site (Appendix B) were entered into the Biodiversity Metric.

The results for area-based habitats are summarised in Table 4, overleaf. The results for hedgerows/lines of trees are summarised in Table 5. The results for watercourse based habitats are summarised in Table 6.