Meridian Solar Farm

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Volume 6

Environmental Statement

6.3 ES Appendix 9-2: Preliminary Ecology Appraisal Report

APFP Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

March 2026

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Executive Summary

Meridian Solar Farm Limited commissioned a Preliminary Ecological Appraisal (PEA), comprising a habitat survey, protected species assessment and ecological evaluation.

Meridian Solar Farm Limited (hereafter referred to as 'the Applicant') has prepared this PEA as part of its application for a Development Consent Order ('the DCO Application') for the construction, operation and decommissioning of the proposed Meridian Solar Farm ('the Scheme') in Lincolnshire.

The DCO Application is for a Nationally Significant Infrastructure Project (NSIP) comprising the construction, operation (including maintenance) and decommissioning of photovoltaic (PV) solar panels and up to 13km of overhead line connection into National Grid's planned Weston Marsh B substation. The Scheme will also include associated infrastructure, including co-located battery energy storage systems (BESS) and inter-array connections to link together the land parcels where the solar panels are located.

This PEA covers the Solar Development Areas, Inter-Array Connections and Grid Connection Route areas of the Scheme (henceforth referred to as 'the Site'). The PEA is required to provide baseline ecological data to inform the DCO Application for the Scheme. The PEA will also be used to inform development design, and to identify the need for Phase 2 surveys, results of which will be incorporated into the Environmental Impact Assessment (EIA), to be submitted with the DCO application.

The main findings are as follows:

- The Site comprises arable farmland, grazing and grassland, ditches, isolated pockets of plantation woodland, a small number of hedgerows, lines of trees, scattered trees, and small parcels of scrub.
- The Site is not subject to any statutory or non-statutory nature conservation designations. The nearest statutory designated site to the Grid Connection Route is The Wash (Ramsar, Special Area of Conservation (SAC), Special protection Area (SPA) and Site of Special Scientific Interest (SSSI), located 8.4km northeast. The nearest statutory designated site to the Solar Development Area is Baston Fen SAC, located 10km west.
- A Habitat Regulations Assessment (HRA) will be produced due to the Sites proximity to the following statutory designated sites: The Wash, Nene Washes, and Baston Fen.

- The Site features sections that fall within SSSI Impact Risk Zones (IRZ) and may require consultation with Natural England. Further details of this are provided in the Environmental Statement (ES).
- Habitats present are considered of importance within the immediate vicinity of the Site only but may assume higher importance where they support protected and/or notable species.
- Following an extension of the Order Limits at the northern end of the Grid Connection Route, a basic PEA was undertaken from public access roads to assess this new area for any potential ecological constraints prior to planning submission. The survey found this area contained similar habitats and features as the rest of the Site. The survey is considered sufficient for the purposes of informing the DCO Application, however, a more extensive PEA will be undertaken pre-construction. The findings of the more extensive PEA may recommend further protected species surveys.

The following ecological receptors were identified either as present or potentially present:

- Roosting bats – mature trees and farm buildings provide roosting opportunities for a variety of bat species.
- Foraging and Commuting bats – ditches, woodland and hedgerows are all present within the Site and will provide bats with foraging and commuting opportunities.
- Breeding birds – the open arable landscape provides several species of farmland birds, such as declining species of skylark and yellow wagtail with breeding habitat. The trees, hedgerows and ditches also provide habitat for species such as buntings and warblers.
- Wintering birds – the Site features habitats suitable for flocks of wintering common crane, wildfowl and waders, as well as flocks of wintering passerine species.
- Otter – habitat is present to support otters. Drainage ditches may provide foraging and commuting habitats for otter.
- Water vole – habitat is present to support water vole. Drainage ditches may provide burrowing, breeding and foraging opportunities for water vole.
- Reptiles – ditches, grassland verges and arable margins may all be utilised by common reptile species.

- Badgers – ditch banks, arable fields, and woodland may all be utilised by badgers.
- Invasive species – permanently wet ditches may provide habitat for non-native aquatic species.

Further surveys and assessments, for the following were required and the results were documented within the individual protected species report appendices (listed in Table 4-1) in support of the ES:

- Bat Surveys.
- Birds (winter, nesting, and vantage point) surveys.
- Great crested newt (eDNA surveys).
- Otter surveys.
- Water vole surveys.
- Badger surveys.

1. Introduction

1.1. Background to commission

1.1.1. Meridian Solar Farm Limited commissioned a Preliminary Ecological Appraisal (PEA) of land associated with the proposed Meridian Solar Farm development in Lincolnshire,

1.1.2. Meridian Solar Farm Limited (hereafter referred to as 'the Applicant') has prepared this PEA to inform its application for a Development Consent Order ('the DCO Application') for the construction, operation and decommissioning of the proposed Meridian Solar Farm ('the Scheme').

1.1.3. The DCO Application is for a Nationally Significant Infrastructure Project (NSIP) comprising the construction, operation (including maintenance) and decommissioning of photovoltaic (PV) solar panels and up to 13km of overhead line connection into National Grid's planned Weston Marsh B substation. The Scheme will also include associated infrastructure, including co-located battery energy storage systems (BESS) and inter-array connections to link together the land parcels where the solar panels are located.

1.1.4. This appraisal considers land within the planning application site boundary (henceforth referred to as 'the Site') as indicated on the map shown in Appendix 1, Figure 1. It is acknowledged that the site boundary (Order Limits) has changed since the surveys underpinning this PEA were undertaken. In particular, the Grid Connection Route has been extended north by approximately 1.5km to connect to the Weston Marsh B substation. The land within this area has been subject to a basic PEA survey from public access roads. The survey is considered sufficient for the purposes of informing the DCO Application, however, a more extensive PEA is recommended pre-construction. The findings of this PEA may recommend further protected species surveys within this new area.

1.1.5. This report should be read with reference to **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1)[1].

1.1.6. The survey covered land and boundary features of the Grid Connection Route, four land parcels of the Solar Development Area and the Inter-Array Connections (Appendix 1, Figure 1). The land parcels of the Solar Development Areas are

[1] Ramboll (2026a) ES Chapter 9 Ecology and Biodiversity (Doc Ref. 6.1).

identified from west to east and hereafter referred to as Land Parcels A, B, C, and D. Similarly, the Inter-Array Connections are identified from west to east and hereafter referred to as the Underground Inter-Array Connection (between land Parcels A & B), and the Overground Inter-Array Connection (between land Parcels C & D). Some land parcels are further subdivided and are identified numerically, e.g., 'Underground Inter-Array Connection sub parcel B-2'.

1.2. Scope of the report

1.2.1. The aim of this appraisal is to provide baseline ecological information about the Scheme. It refers to, but does not reproduce, the findings of the report **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1)[1]. This appraisal will be used to identify any potential ecological constraints associated with the Scheme and/or to identify the need for additional survey work to further evaluate any impact that may risk contravention of legislation or policy relating to protected species and nature conservation. Where possible, this report outlines any design considerations that may be required to ensure compliance with legislation and policy and provides recommendations for further survey and assessment where required. Since the completion of this PEA and several protected species surveys and reports (listed in Table 4-1), the Order Limits of the Grid Connection Route have been extended northwards. A basic PEA of this new area has been completed, with the findings discussed in the Section 3 of this report. The survey is considered sufficient for the purposes of informing the DCO Application, however, a more detailed PEA of this area will be undertaken pre-construction. The findings of this PEA may recommend further limited protected species surveys within this new area. Although some of these measures may be used to achieve a net gain in biodiversity in line with national and local planning policies, this report does not include a formal Biodiversity Net Gain (BNG) assessment; which can be found within the **BNG Report** (Doc Ref. 7.9)[2], including metric calculations.

1.2.2. This appraisal is based on the following information sources:

- a desk study of the Site and land within a 2km surrounding radius, extending to 15km for international wildlife sites;

[2] Ramboll (2026b) Biodiversity Net Gain Report (Doc Ref. 7.9).

- a habitat survey, based on the UK Habitat Classification method (UKHab Ltd, 2023)[3], to identify and map the habitats present at the Site;
- a Species Assessment of the Site to identify features with potential to support legally protected and/or notable species including those defined by Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC Act 2006) as Species of Principal Importance (SPI); and
- an evaluation of the Site's importance for nature conservation.

1.2.3. This appraisal has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management[4] and as detailed in British Standard 42020:2013 Biodiversity - Code of Practice for Biodiversity and Development[5].

1.2.4. The surveys and assessments were carried out by ecologists with at least three years' experience who are trained and competent in carrying out UK Habitat Classification surveys and protected species assessment.

1.2.5. Habitat map(s) of the Site are presented in Appendix 1, with a botanical species list of plants recorded in Appendix 2 and target notes for features too small to map in Appendix 3. Photographs of the Site are presented in Appendix 4.

1.3. Site context and status

1.3.1. The Solar Development Area is approximately 1,067 ha in size and is centred on Ordnance Survey National Grid Reference TF 29361 14221, approximately 12km west of Wisbech and 11km south of Holbeach, as shown in Appendix 1, Figure 1. The wider area is predominantly a typical Fenland landscape with open, low-lying arable agricultural land with individual field parcels separated by a vast network of ditches and Internal Drainage Board (IDB) main drains. The River Welland lies adjacent to the western-most boundary of the Solar Development Area, at Land Parcel A. The A16 carriageway runs north to south along the west boundary of Land Parcel B in the west of the Solar Development Area. Land

[3] UKHab Ltd. (2023). UK Habitat Classification Version 2.0. Available at: https://www.ukhab.org [accessed 25/09/2025]

[4] CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

[5] British Standards Institution (2013) BS42020:2013 Biodiversity. Code of practice for planning and development: 42020. BSI, London.

Parcels C and D are bisected by minor roads, Martin's Road and Langary Gate Road respectively.

1.3.2. The Grid Connection Route is approximately 510ha in size and is centred on Ordnance Survey National Grid Reference TF 29376 21806, approximately 4km east of Spalding and 3km southwest of Moulton, as shown in Appendix 1, Figure 1. The wider area is predominantly a typical Fenland landscape with open, low-lying arable agricultural land with individual field parcels separated by a network of ditches and IDB main drains, with isolated pockets of woodland, a small number of hedgerows, and small parcels of scrub. The southern end of the Grid Connection Route lies close to the A16, east of the village of Cowbit, with the northern end terminating between the town of Spalding to the west, and the village of Weston to the east.

1.3.3. The Inter-Array Connections areas are approximately 61ha in size and centred on Ordnance Survey National Grid Reference TF 30858 13948, approximately 15km west of Wisbech and 12km south of Holbeach, as shown in Appendix 1, Figure 1. The wider area is predominantly a typical Fenland landscape with open, low-lying arable agricultural land with individual field parcels separated by a vast network of ditches and IDB main drains, with isolated pockets of woodland, a small number of disconnected hedgerows, and small parcels of scrub. The Underground Inter-Array Connection Land Parcel A is immediately to the west of the A16 carriageway, south of Cowbit, whilst the Underground Inter-Array Connection Land Parcel B is adjacent to the village of Whaplode Drove. The Overground Inter-Array Connection Land Parcel C is bisected by Langary Gate Road, to the south of South Holland Main Drain.

1.4. The Scheme

1.4.1. The Scheme comprises the construction, operation (including maintenance) and decommissioning of photovoltaic (PV) solar panels and up to 13km of overhead line connection into National Grid's planned Weston Marsh B substation. The Scheme will also include associated infrastructure, including co-located battery energy storage systems (BESS) and inter-array connections to link together the land parcels where the solar panels are located.

1.4.2. The Solar PV generating station, associated BESS, on-site substations and other associated infrastructure would be located within four Land Parcels (A, B, C and D) referred to collectively as the Solar Development Area.

1.4.3. The Inter-Arrays would be the areas within which 132kV connection cables (the 'Inter-Array Connections') would link the land parcels of the Solar Development

Area. The configuration of the Inter-Array Connections would comprise underground cabling between Land Parcels A and B ('the Underground Inter-Array') and an overhead line between Land Parcels C and D ('the Overground Inter-Array').

1.4.4. The Grid Connection Route would be the area between the Solar Development Area and the National Grid Weston Marsh Substation in which a 400kV overhead line (the 'Grid Connection') would be located. There is one section where the Grid Connection would route underground to avoid conflicts with an existing 132kV overhead line. Cable Sealing End Compounds (CSECs) would join the proposed underground cable at that section with the proposed overhead line.

1.5. Relevant legislation and planning policy

1.5.1. Full details of the legislation, policy, and guidance of relevance to the assessment of Ecology and Biodiversity are provided in **ES Appendix 9-1: Ecology and Biodiversity Legislation, Policy and Guidance** (Doc Ref 6.3)[1].

1.6. Nomenclature

1.6.1. A botanical species list, including scientific names in accordance with Stace[6], is provided in Appendix 2. Common names of species, in accordance with the Natural History Museum Species Dictionary[7] are used throughout this report with scientific names given at first mention only for fauna.

[6] Stace, C.A. (2019). New Flora of the British Isles (4th Ed.). Cambridge University Press, Cambridge.

[7] Natural History Museum (undated). UK Species Inventory. Available at: https://www.nhm.ac.uk/our-science/data/uk-species/index [accessed 05/08/2025]

2. Methodology

2.1. Desk study

2.1.1. The following data sources were reviewed to provide information on the location of statutory designated sites, non-statutory designated sites, legally protected species, Species and Habitats of Principal Importance (SPI and HPI), and other notable species and habitats that have been recorded within a 2-15km radius of the Site:

- Greater Lincolnshire Nature Partnership, the local Biological Records Centre, principally for species records and information on non-statutory sites, as featured in the document **ES Chapter 9 Ecology and Biodiversity** (Doc Ref 6.1)[1], and to which this report refers;
- MAGIC[8] - the Government's on-line mapping service; and
- Ordnance Survey mapping and publicly available aerial photography.

2.1.2. All records have been used to inform the assessment of the likely presence of protected or otherwise notable species at the Site, but these are not presented in full in the report.

2.2. Habitat survey

2.2.1. A habitat survey of the Solar Development Area was carried out on various dates between 30 August 2023 and 22 August 2024. Surveys were undertaken in suitable weather conditions and covered the entire areas, including boundary features where feasible and access was allowed. Dates in 2024 were necessary to account for previous access issues and updates to the Scheme boundary.

2.2.2. Surveys of the Solar Development Area were carried out in February, late August and early September. The survey undertaken in February 2024 was outside of the optimal survey season for many flowering plants. Despite this, dominant grass species, late flowering plants and remnants of early species were identifiable, and accurate identification and condition assessment of habitats was achievable, and the data are therefore considered as suitably robust for the purposes of this appraisal.

[8] MAGIC (2024). Multi-Agency Geographic Information for the Countryside. http://www.magic.gov.uk/ [accessed 26/09/2025]

2.2.3. Habitat surveys were carried out on the Grid Connection Route and Inter-Array Connections on various dates between 15 May 2025 and 19 July 2025. Surveys were undertaken in suitable weather conditions and covered the entire areas, including boundary features where feasible and access was allowed.

2.2.4. An additional, basic PEA survey from public access roads was undertaken on 13 February 2026, after part of the Order Limits associated with the Grid Connection Route were extended to include an area not previously surveyed. The survey is considered sufficient for the purposes of informing the DCO Application, however, a more detailed PEA of this area will be undertaken in the optimal survey season pre-construction.

2.2.5. Habitats were described and mapped in line with the UK Habitat Classification[1] on a paper base map and subsequently digitised using ESRI ArcGIS software or recorded digitally in the field using ESRI ArcGIS software on a Samsung Galaxy Tab SE Lite tablet. Habitat maps were then generated using ESRI ArcGIS software and GIS Digital Boundary Datasets[9,10].

2.2.6. Habitats were also assessed against descriptions of HPI as set out by the JNCC[11] where appropriate.

2.2.7. The condition of each of these habitats has been recorded in line with the Statutory Biodiversity Net Gain Condition Assessments[12]. Details of condition assessments are not included within this report but are included in the standalone **Biodiversity Net Gain Report** (Doc Ref. 7.9)[13].

2.2.8. Records for dominant and notable plants are provided, as are incidental records of birds and other fauna noted during the course of the habitat survey. The latter have been used to justify the potential presence of important ecological features where applicable.

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[9] Natural England (2024b). GIS Digital Boundary Datasets – Priority Habitat Inventory. Available at: https://naturalengland-defra.opendata.arcgis.com/datasets/Defra::priority-habitats-inventory-england/about [accessed 05/08/2025]

[10] Natural England (2024c). GIS Digital Boundary Datasets – Ancient Woodland Inventory Available at: https://naturalengland-defra.opendata.arcgis.com/datasets/ancient-woodland-england/explore [accessed 05/08/2025]

[11] BRIG (2011). UK Biodiversity Action Plan: Priority Habitat Descriptions. JNCC. Peterborough. Available at: https://hub.jncc.gov.uk/assets/2728792c-c8c6-4b8c-9ccd-a908cb0f1432 [accessed 05/08/2025]

[12] Defra (2023). The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology. Defra, November 2023.

[13] Ramboll (2026b) Biodiversity Net Gain Report (Doc Ref. 7.9).

2.2.9. The Site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)[14]; however, detailed mapping of such species is beyond the scope of this commission and locations on the habitat plan are indicative only.

2.2.10. Target notes are used to provide information on specific features of ecological interest (e.g. a badger sett) or habitat features that were too small to be mapped and are within Appendix 3.

2.3. Protected and/or notable species assessment

2.3.1. The suitability of the Site for protected and/or notable species was assessed on the basis of relevant desk study records combined with field observations from the habitat survey. The likelihood of the Site supporting protected and/or notable species was ranked on a scale from 'negligible' to 'present' as described in Table 2-1 below.

2.3.2. The assessment of habitat suitability for protected and/or notable species was based on professional judgement drawing on experience of carrying out surveys of a large number of urban and rural sites and best practice survey guidance.

Table 2-1: Protected and/or notable species assessment

Category	Description
Present	Presence confirmed by the current survey or by recent and/or desk study records.
High	Habitat present provides all of the known key requirements for a given species/species group. Local records are provided by desk study. The Site is within or close to a national or regional stronghold for a particular species. Good quality surrounding habitat and good connectivity.

[14] Wildlife and Countryside Act (1981). Available at: https://www.legislation.gov.uk/ukpga/1981/69 [accessed 07/08/2025]

Category	Description
Moderate	Habitat present provides some of the known key requirements for a given species/species group. Several desk study records and/or the Site are within known national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, barriers to movement and disturbance.
Low	Habitat present is of relatively poor quality for a given species/species group. Few or no desk study records. Presence cannot be discounted on the basis of national distribution, nature of surrounding habitats or habitat fragmentation.
Negligible	Habitat is either absent or of very poor quality for a particular species or species group. No desk study records. Surrounding habitat unlikely to support wider populations of a species/species group. Outside or peripheral to the known range of a species.

2.3.3. The findings of this assessment help establish the need for further surveys. Surveys may be required where a site is judged to be of suitability for a particular species/species group even if that suitability is deemed to be Low. This is particularly the case where the risk of contravening the relevant conservation legislation is unknown or cannot be quantified on the basis of the information available. However, in some cases there may be opportunities to ensure compliance with the legislation without further survey through precautionary measures prior to and during construction.

2.4. Site evaluation

2.4.1. Where sufficient baseline data are available, the importance of the Site's ecological features has been evaluated following guidance issued by CIEEM[15] which ranks the nature conservation importance of a site according to a

[15] CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. Version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester

geographic scale of reference: international, national, regional (East Midlands), metropolitan, county, vice-county or other local authority-wide area (South Holland District Council); and of importance at the zone of influence of the Sites only. In evaluating the nature conservation importance of the Sites, the following factors were considered: nature conservation designations; species/habitat rarity; naturalness; fragility and connectivity to other habitats. Where no importance has been assigned this is due to insufficient information.

2.4.2. Where potential ecological constraints to development are identified, further survey requirements and/or design considerations that are proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development are described. In addition, in accordance with the Environment Act 2021[16], NPPF and local/regional planning policies, a range of opportunities to enhance or create benefits for wildlife are provided where this is possible based on the information available to date. These measures may be appropriate for the attainment of net gains in biodiversity, although this assessment does not provide a formal measure of BNG.

2.5. Data validity and limitations

2.5.1. Every effort has been made to provide a comprehensive description of the Site; however, the following limitations apply to this assessment.

- The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the Site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if, on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present and potentially affected by the Scheme.
- The ecological evaluation is preliminary and may change subject to the findings of further ecological surveys (should these be required).
- Even where data for a particular species group are provided in the desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest, the area may simply be under-recorded.

[16] Environment Act (2021). Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents [accessed 05/08/2025]

- Where only four figure grid references are provided for protected species by third parties, the precise location of species records can be difficult to determine, and they could potentially be present anywhere within the given 1km x 1km square. Equally, six figure grid references are accurate to the nearest 100m only.
- The habitat survey does not constitute a full botanical survey or provide accurate mapping of invasive plant species.
- Ecological survey data are typically valid for 12-18 months unless otherwise specified.[17] However, due to the nature of the Site's overall land usage (intensively managed farmland with few hedgerows, woodlands, or other Habitats of Principal Importance), and given that surveys of the Site continued up until the end of 2025 without identifying any significant changes to the landscape and land use, it is considered that the earlier surveys for the Solar Development Area remain valid.
- Due to land access restrictions, surveyors were not allowed or unable to access all of the land within the Grid Connection Route and Inter-Array Connections. In these circumstances, habitats were viewed from the closest available point through binoculars in order to identify the habitat/s present. The same limitation applies to the grid connection route extension where a full PEA could not be undertaken.
- Due to the extent of the Solar Development Area, Inter-Array Connections and Grid Connection Route areas, each individual habitat feature will not be detailed in isolation, a more over-arching assessment has been utilised instead; i.e. hedgerows of similar species will be grouped together and discussed as the whole.

2.5.2. Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity importance and the potential of the Site to support protected and otherwise notable species.

[17] CIEEM (2019). Advice note on the life span of ecology reports and surveys. Chartered Institute of Ecology and Environmental Management, Winchester.

3. Results and Evaluation

3.1. Designated sites

3.1.1. The Site is not subject to any statutory nature conservation designations but lies within a 15km radius of the following statutory designated sites: The Wash (Ramsar, SPA, SAC, and SSSI), Nene Washes (Ramsar, SPA, SAC, and SSSI), and Baston Fen (SAC and SSSI).

3.1.2. Baston Fen SAC: Located 10km west of the Solar Development Area, Baston Fen is of international ecological importance, supported by Baston and Thurlby Fens SSSI. It features a large flowing drainage channel that hosts a diverse aquatic and emergent plant community, freshwater invertebrates, and various fish species, including spined loach. Potential constraints include impacts on foraging and roosting for wintering wildfowl and waders, as well as predator evasion due to a reduction in landing sites.

3.1.3. Nene Washes Ramsar Site: Situated 12km south, Nene Washes holds international significance, meeting Ramsar criterion 6 with wintering populations of Bewick's swan and pintail. Additionally, black-tailed godwit populations may qualify as a future species. Constraints include potential impacts on foraging and roosting behaviours of wintering wildfowl and waders and may affect predator evasion by reducing landing sites.

3.1.4. Nene Washes SPA: Located 12km south, this site is recognized internationally and supported by Nene Washes SSSI. It is significant for its wintering population of Bewick's swan under Article 4.1 of the EC Birds Directive and for wintering populations of wigeon, teal, gadwall, and shoveler under Article 4.2. Similar constraints are noted regarding foraging and roosting impacts and predator evasion.

3.1.5. Nene Washes SAC: Also 12km south, Nene Washes SAC is internationally important and supported by Nene Washes SSSI. It consists of inland water bodies, bogs, marshes, and fens, supporting the highest density of Annex II species spined loach in the UK. Constraints involve potential impacts on foraging and roosting behaviours and predator evasion due to fewer landing sites.

3.1.6. The Wash Ramsar Site: Situated 8.4km northeast of the Grid Connection Route, The Wash has international importance and meets Ramsar criterion 1 as the largest estuarine system in Britain. Its large shallow bay features extensive saltmarsh and intertidal banks of sand and mud. It meets criterion 3 due to the inter-relationship between its various habitats, including saltmarshes, estuarine

waters, intertidal sand and mudflats. The saltmarsh and plankton form the basis of the high productivity of The Wash. It meets Ramsar criterion 5 for its internationally significant populations of waterfowl, and Ramsar criterion 6 for the internationally significant populations of particular bird species, including common redshank, oystercatcher, curlew, grey plover, sanderling and dunlin.

3.1.7. The Wash SPA: Located 8.4km northeast of the Grid Connection Route, this area is recognised internationally and supported by The Wash SSSI. It is the most important site in Britain for the numbers of wintering wildfowl it supports. It is significant under Article 4.1 of the EC Birds Directive for its breeding pairs of little and common terns, and for its wintering population of Bewick's swans. Similarly, it is significant under Article 4.2 due to its wetland supporting wintering populations of waders and wildfowl, including dark-bellied brent geese, shelduck, oystercatcher, curlew, knot, redshank, and black-tailed godwits.

3.1.8. The Wash and North Norfolk Coast SAC: Also 8.4km northeast of the Grid Connection Route, this area is internationally important and supported by The Wash SSSI. It consists of sandbanks, mudflats, sandflats, large shallow inlets and bays, reefs, Atlantic salt meadows, Mediterranean and sub-Atlantic halophilus scrubs, and coastal lagoons. These support the largest colony of Harbour seal in the UK.

3.1.9. The Solar Development Area falls partially (Parcels A and B) within the Impact Risk Zone (IRZ) for Deeping Gravel Pits Site of Special Scientific Interest (SSSIs), located 9km south-west of the Site. Parcel A also falls partially within the IRZ for Cowbit Wash SSSI. One other zone of unknown origin, affecting land parcel D. The IRZ development descriptions for the Deeping Gravel Pits SSSI do not match the proposals for the Scheme and is therefore unlikely to be of relevance to this application. The Cowbit Wash SSSI affecting parcel A (Centroid Grid Ref: TF24181301), and the unnamed zone affecting Sub-parcels D1, D-2 and D-3 (Centroid Grid Ref: TF34991700) does however include the description - Wind and Solar: Solar schemes with a footprint > 0.5ha - and may mean that the Local Planning Authority should consult with Natural England regarding the proposals impact on the designated site associated. Natural England were consulted as detailed in both the **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1)[1], and the **Habitat Regulations Assessment** (ES Appendix 9-14)[18].

[18] Ramboll (2026c) Habitat Regulations Assessment (ES Appendix 9-14).

3.1.10. The Grid Connection Route falls partially within the IRZs for Surfleet Lows SSSI, The Wash SSSI, and Cowbit Wash SSSI. Discussions detailing SSSI IRZs are featured within the **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1)[1].

3.1.11. Statutory designated nature conservation sites, non-statutory designated nature conservation sites, habitat inventories and landscape-scale conservation initiatives, ancient woodland, Habitats of Principal Importance, and any other conservation initiatives/designations, are discussed in detail in the **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1)[1], and the **ES Appendix 9-14: Habitat Regulations Assessment** (Doc Ref. 6.3)[18].

3.1.12. The Order Limits intersect or lie immediately adjacent to four Local Wildlife Sites: Slys Connection LWS (parcels D 2/D 3), South Holland Main Drain (West) LWS (parcel B 5), and Wheatmere Drain LWS (within the GCR). The highway works south of Parcel D also cross the Lambert Drain to Highstock Drain Connection LWS. There are 23 LWSs within 2 km of the Scheme in total (see Table 3-1 below).

Table 3-1 Non-Statutory Designated Sites

Site Name	Approximate Distance from Scheme	Ecological Importance	Qualifying Features
Slys Connection LWS	Within Site Boundary Land Parcels D-2 and D-3	County	Canalised drain with rank grassland and ruderal vegetation. Contains diverse aquatic flora and abundance of invertebrates.
South Holland Main Drain, West LWS	Within Site Boundary Land Parcel B-5	County	Artificial watercourse with rank grassland. It supports an abundance of aquatic vegetation but also contains the INNS Nuttall's waterweed. Two species of dragonfly and water vole are present along the watercourse.
Wheatmere Drain LWS	Within GCR	County	Canalised drain with rank grassland and linear reedbed. It links with South Holland Main Drain and contained diverse aquatic flora which supports birds and insects.
Crowland Falls Pit LWS	Approx. 40m south of Land Parcel A-1	County	Two waterbodies supporting a good range of wetland plants, used by anglers.
New River LWS	Approx. 80m to the west and north boundaries of A-1 and partially 80m to the north boundary of B-4	County	A drain which forms the edge of the River Welland floodplain. Habitats along its route include rank grassland, scattered scrub, linear reedbed, native plantation and semi-improved grassland. There are steep south-facing slopes providing niches for a variety of invertebrates.
River Welland Corridor LWS	Approx. 90m to the northwest corner of Land Parcel A-1	County	Large river surrounded by semi-improved neutral grassland, ponds, coarse vegetation with steep south facing slopes. It contains diverse aquatic and marginal vegetation. Four-spotted moth has been recorded. Also present are grass snake *Natrix helvetica*, common tern and sand martin *Riparia riparia*.
Fred's Pit, Crowland LWS	Approx. 110m southwest of Land Parcel A-1	County	Actively managed rich mosaic of shallow ponds, grassland and woody vegetation. Variety of wetland plants and neutral grassland.
High Bank Gull LWS	200m northwest from Land Parcel A-1	County	A small area of woodland, neutral grassland, and open water. The pond is used for fishing but has aquatic and marginal plants present.
Lambert Drain to Highstock Drain Connection LWS	Within highway works footprint south of parcel D.	County	Steeply banked drain that contained diverse aquatic and bank vegetation. The INNS Nuttall's waterweed is present. Supports an array of invertebrates and birds.
Crowland Ponds LWS	370m west of Land Parcel A-1	County	3km linear wetland area located between arable land, grassland and River Welland Corridor. Dominated by coarse vegetation with a variety of aquatic plants.
Lambert Drain LWS	390m south of Land Parcel D-6	County	This is 2.9km of the canalised Lambert Drain. Most of the channel is 5m wide, but this reduces to 2m near the county boundary. A good range of wetland plants have been recorded throughout, while the banks support an abundance of black mustard and common reed.
Pinchbeck Marsh LWS	620m west of GCR	Local	Original LWS here is now a large area of arable land between the Vernatt's Drain and the River Welland. Welland bank is open and true grassland while banksides have limited rank vegetation being mostly grassland.
Vernatt's Drain LWS	830m west of GCR	County	Man-made watercourse. Parts of banksides are coarse/weedy vegetation but with substantial stretched of rich grassland flora. Supports good range of fauna including breeding birds.
Coronation Channel LWS	1km directly southwest from GCR	County	50m wide, 4km long watercourse. Mixed diversity of aquatic plants although multiple non-native species are present. Drier areas of bankside are botanically poor although neutral grassland species are present.

Site Name	Approximate Distance from Scheme	Ecological Importance	Qualifying Features
Blue Gowt Drain West Marsh Road LWS	1.1km directly west from GCR	County	3-6m wide, 1.1km long section of drain. Dominated in areas by common reed but with areas of open water with a variety of aquatic and riparian plants. Drier banks dominated by coarse grassland and woody vegetation but more species adjacent A16 crossing.
Blue Gowt Drain, North	1.1km north of GCR	County	Approximately 1.1 km long section of drainage channel within the River Glen catchment. The site consists of open water with well-developed marginal and emergent vegetation. The site is of particular ecological importance due to records of ribbon-leaved water-plantain.
River Welland in Spalding LWS	1.3km west of GCR	County	3.5km stretch of the River Welland. Not rich in aquatic plants; however, does support mixed aquatic and riparian species. Banksides comprise sparse grassland swards. Variety of tree species present.
Moulton Park & River LWS	1.3km east of GCR	County	Comprises two sections; 9.3ha Moulton Park and 1.6km stretch of 2-3m wide River Moulton. Moulton Park is an area of semi-improved neutral grassland with scattered young and mature trees, planted singly and in groups. Wooded strip on the eastern edge. Multiple native species present on banksides although several non-native species are present. Evidence of herbicide application.
Surfleet Seas End Saltmarsh LWS	1.4km north of GCR	County	Adjacent to tidal River Welland forming part of the floodplain. Habitats include tidal mudflat, tidal saltmarsh and calcareous grassland. Known to be valuable for birdlife.
A16 East Verge South of the River Glen	1.6km west of GCR	County	Linear A16 road verge, characterised by semi-natural grassland alongside the carriageway. Habitats include species-rich neutral and coarse grassland with occasional ruderal and tall-herb communities, together with scattered scrub and ditch features typical of intensively managed fenland landscapes.
South Drove Drain LWS	1.7km west of Land Parcel A-1	County	Major artificial watercourse that flows 14km through south Lincolnshire Fens. Banksides are a variety of unmanaged grassland North of Lucks Bridge. Watercourse supports a diverse variety of aquatic and riparian plants.
Little South Holland Drain LWS	1.8km east of Grid Connection	County	Artificial 9km watercourse flowing through the South Lincolnshire Fens. Diverse aquatic flora mix. Banksides are dominated by coarse and competitive species.
Crowland Wash Lake LWS	1.9km directly south from Land Parcel A-1	County	Linear and former Internal Drainage Board drainage site. Two former flooded former drains form area of 1,248ha of open water. Banksides show a variety of species.

3.2. Habitat survey

Site character:

3.2.1. The Solar Development Area (Appendix 1, Figure 3) is typical of the wider Fenland landscape, comprising large fields in arable production, separated by a network of drainage ditches and IDB main drains. The fertile loamy/peat soils are suitable for a wide range of arable produce including cereals, sugar beet and peas. Hedgerows and woodlands are uncommon and often represented by defunct hedgerows along ditches, and agricultural plantation woodlands.

3.2.2. The Grid Connection Route and Inter-Array Connections are also typical of the wider Fenland landscape, being dominated by large, open arable fields intersected by smaller drainage ditches and larger IDB drains. Hedgerows and woodlands are uncommon, with hedgerows often being defunct and associated with drainage ditches, with woodlands often being of the agricultural plantation type.

3.2.3. Following an extension of the Order Limits at the northern end of the Grid Connection route to connect to the proposed Weston Marsh B Substation, a basic PEA was undertaken in February 2026 from public access roads to assess this new area for any potential planning constraints prior to planning submission. The habitats within this new area are broadly the same as found elsewhere on the Site, consisting of arable fields under cultivation, including a brassica crop grazed by sheep, intersected by a network of interlinked drainage ditches. The larger ditches contain water, whilst the smaller contain stands of common reed. Grass field boundaries and verges were typically close mown and featured occasional semi-mature trees, species included ash, poplar and cherry. One particular tree had a dense covering of ivy with bat roost potential. No ponds were found, but the drainage ditch known as Wykeham Drain featured potential water vole burrows. The fields had the potential to support ground nesting birds such as skylark, meadow pipit, yellow wagtail, grey partridge and red-legged partridge.

3.2.4. A more extensive PEA of this area will be undertaken during the optimal survey season pre-construction. This survey may recommend further protected species surveys within this new area.

3.2.5. UKHab habitat types are mapped in Appendix 1 with UKHab codes and a brief description given in Table 3-2 and Table 3-3 below.

Table 3-2 UKHab Habitat Areas – Solar Development Area

UKHab Habitat	Description
c1 – Arable and horticulture	Ploughed fields with no emergent crop.
c1c6 – Arable fields – wild bird mix	Arable field margins with game bird mix.
c1d8 – Other non-cereal crops	e.g. beans, onions, silage/haylage.
g4 – Modified grassland	Grazing land, grassland, field margins and verges, generally with a dominance of perennial rye-grass and some nutrient inputs.
h3h – Mixed scrub	Patches associated with farmland and urban areas, with no dominant species.
h3j – Willow scrub	Associated with ditches and field boundaries.
r1g – Other standing water	Drainage ditches.
r2b – Other rivers/stream	Large man-made linear watercourses.
u1b5 – Building	Developed land; sealed surface.
u1e – Built linear feature	Developed land; sealed surface.
w1f – Lowland mixed deciduous woodland	Lowland mixed deciduous woodland.
w1g – Other broadleaved woodland	Other woodland; broadleaved.
h2a – Native hedgerow	Linear features typically of less than 4 species associated with ditches, some including lines of trees.
h2a5 – Species-rich native hedgerow	Linear feature with more than five species in a 30m length.
r1g – Other standing water	Drainage ditches.

Table 3-3 UKHab Habitats: Grid Connection Route and Inter-Array Connections

UKHab Habitat	Description
c1 – Arable and horticulture	Ploughed fields with no emergent crop.
c1a – Arable field margins	Field margin with common arable forbs.
c1c – Cereal crops	Crops such as wheat and barley.
c1c6 – Arable fields with wild bird mix	Field margins sown with game bird mix
c1d8 – Other non-cereal crops	e.g. beans, onions, silage/haylage.
f2d – Aquatic marginal vegetation	Vegetation fringing a water body such as a pond or drainage ditch, with species such as common reed and bulrush.
g3 – Neutral grassland	Fields associated with grazing use, field margins and verges. Neutral pH soils, with generally less than 25% cover of perennial rye-grass.
g3c – Other neutral grassland	Grazing land, sileage/haylage, field margins and verges, with typically eight or more species per square metre.
g4 – Modified grassland	Grazing land, grassland, field margins and verges, generally with a dominance of perennial rye-grass and some nutrient inputs.
h3d – Bramble scrub	Areas where bramble is the dominant vegetation, associated with ditches, field boundaries and beneath pylons
h3h – Mixed scrub	Patches of vegetation associated with farmland and urban areas, with no dominant species.

UKHab Habitat	Description
h3j – Willow scrub	Woody vegetation dominated by willow species, located within wetter ditches and field boundaries.
u1b – Developed land, sealed surface	Car parks and other areas of tarmac/concrete.
u1b5 – Other developed land	Roads and pavements
w1g – Other broadleaved woodland	Deciduous woodlands, plantations.
w2c – Other coniferous woodland	Coniferous woodland not predominantly Scots pine.
h2a – Native hedgerow	Linear features typically of less than 4 species associated with ditches, some including lines of trees.
h2a5 – Species-rich native hedgerow	Linear feature with more than five species in a 30m length.
h2a6 – Other native hedgerow	Linear feature with 3 to 4 native species in a 30m length.
h3f – Hawthorn scrub	Defunct and remnants of hedgerows, hawthorn dominant.
u1b – Developed land, sealed surface	Roads, footpaths, etc.
u1b6 – Other developed land	Roads and pavements.
u1c – Artificial unvegetated unsealed surface	Farm tracks and bare-earth field tracks
r1g – Other standing water	Drainage ditches
r2b – Other rivers and streams	Large man-made linear watercourses.
w1g – Other broadleaved woodland	Lines of deciduous trees.

3.2.6. A description of dominant and notable species and the composition of each habitat is provided below, with a species list (including all scientific names) provided in Appendix 2. Target notes, which are used to provide information on specific features of ecological interest, are included in Appendix 3 and photographs are located in Appendix 4.

Habitat description

Aquatic marginal vegetation:

3.2.7. Solar Development Area: This habitat was present within some of the smaller drainage ditches and larger IDB main drains but did not meet the minimum mappable scale to feature on the maps. Regarding South Holland Main Drain, this habitat was either not of sufficient scale at the time of survey to feature on the maps or was judged to be outside of the red line boundary. The habitat was recorded during the Inter-Array Connections surveys on land parcels that bounded some of the Solar Development Area land parcels, see 3.2.9.

3.2.8. Grid Connection Route: This habitat type was present within some of the drainage ditches but did not meet the minimum mappable scale to feature on the maps.

3.2.9. Inter-Array Connections: This habitat type was present along both banks of South Holland Main Drain, towards the northern end of Overground Inter-Array Connections, land sub parcel C-3 (Appendix 1, Figure 3). Dominated by common reed, this habitat was growing within the drain, and up the banks of the drain, before it gave way to grassland species at the top of the banks. Historical satellite images show this vegetation was periodically cleared from the drain, but at the time of survey it was in full growth. This habitat was also present in some of the smaller drainage ditches, but not at a scale to be mappable. It would provide dense cover for species such as warblers, water vole, and grass snake, amongst others to exploit.

Arable and Horticulture:

3.2.10. The Solar Development Area: The dominant broad habitat type of this area, featuring large arable fields which, at the time of the survey, were in various states of arable production (Appendix 4, Photograph 15). Surveys in 2023 found that the majority of fields had been ploughed or were undergoing ploughing to prepare them for autumn and winter sowing. A smaller proportion of fields were in sugar beet crop and harvesting was underway in isolated areas. One field in Sub-parcel D-5 was in a grass fodder crop of perennial ryegrass. August 2024 surveys found a mixture of agricultural stages including some fields in stubble from recent harvest with the majority still in crops of ripe cereal, potatoes and beet. Cover crops featured in several locations across the Solar Development Area, sown as either full or partial field crops. Millet mixes, linseed, phacelia and buckwheat were the predominant species (Appendix 4, Photograph 16). These crops were found in Parcel D and Sub-parcels, B-1, B-2 and C-2.

3.2.11. Grid Connection Route: This broad habitat type dominated the majority of the Grid Connection Route survey area, comprised of arable fields mostly in various stages of crop production. A small number of fields had been ploughed with no apparent emergent crop, but most fields were either in cereal crop production (wheat and barley for instance), or contained cabbages, sugar beet, and other non-cereal crops.

3.2.12. Inter-Array Connections: This habitat type dominated the survey areas, comprised of arable fields mostly in various stages of crop production. Most fields were in cereal crop production of wheat or barley (Appendix 4, Photograph 1), but some contained oil seed rape, onions, beans, and other non-cereal crops (Appendix 4, Photograph 2). One field in the Overground Inter-Array Connection, land sub parcel C2 contained lines of developing agro-forestry growing within a wheat crop (Appendix 4, Photograph 3). Some fields within the Underground Inter-Array Connection B1 and B2 land sub parcels were growing silage/haylage which, at the time of survey, had not been cut. Some fields were temporarily out of crop production; one field in the Underground Inter-Array Connection land sub parcel B1, a former cereal field, had been treated with pesticide to kill a black-grass infestation, whilst another in Overground Inter-Array Connection land sub parcel C2 appeared to be recovering from a similar treatment with creeping thistle becoming established (Appendix 4, Photograph 4).

Arable field margins:

3.2.13. Solar Development Area: Some fields within land parcels B and D contained field margins which were thought to be sown with a wild bird mix (Appendix 1, Figure 3).

3.2.14. Grid Connection Route: There was one 5m wide strip of this habitat at the northern end of the Grid Connection Route. Species included soft brome, knapweed, and oxeye daisy. (Appendix 1, Figure 3).

3.2.15. Inter-Array Connections: A single field within the Underground Inter-Array Connections land sub parcel B2 had a 10m wide strip of common arable forbs. Species included cut-leaved geranium, scentless mayweed, hedge mustard, and cow parsley that ran east to west along its southern boundary. It may have once been more species-rich but appeared to now be neglected. (Appendix 1, Figure 3).

Artificial unvegetated surface:

3.2.16. The Solar Development Area: Two open storage areas in Sub-parcels B-5 and D-3 (Appendix 4, Photograph 17) were made up of compacted gravel and soil and used to store a haystack at B-5, and one haystack and a pile of rubble and spoil at D-3.

3.2.17. Grid Connection Route: There were a number of farm access tracks made of this substrate within the Grid Connection Route area, usually within fields and with attendant drainage ditches adjacent to them (Appendix 1, Figure 3).

3.2.18. Inter-Array Connections: A farm access track of compacted hardcore all within the Underground Inter-Array Connection land sub parcels B1 (Appendix 4, Photograph 5), and A, and a single field within land sub parcel B2 (Appendix 1, Figure 3) with a compacted dirt track that ran east to west along its southern boundary, were the only examples of this feature.

Bramble scrub:

3.2.19. The Solar Development Area: This habitat type was not present.

3.2.20. Grid Connection Route: There were a few small and isolated patches of bramble scrub, they were associated with ditches, field boundaries, and within the footprint of existing pylons. Dominated by bramble, the margins often also contained tall grasses such as cocksfoot, and tall ruderal forbs like common nettle, dock sp., and willowherb sp. (Appendix 1, Figure 3).

3.2.21. Inter-Array Connections: A single area of bramble scrub was present within the Underground Inter-Array Connection land sub parcel B1, adjacent to Cooper's farm on Chapel Gate. The scrub appeared to be unmanaged and had begun to encroach on the adjacent area of unmanaged grassland (Appendix 1, Figure 3).

Buildings:

3.2.22. The Solar Development Area: Buildings were present centrally in the west section of Land Parcel A and in the central area of Sub-parcel B-1. Old farm sheds featured in Sub-parcel A-1. These sheds featured recently replaced roofs and were in use storing farm machinery. Three jackdaw nests were observed inside the sheds. The building in Sub-parcel B-1 was a derelict brick-built barn (Appendix 4, Photograph 18).

3.2.23. Grid Connection Route: There were very few buildings within the Grid Connection Route, they were all on the outskirts of the village of Weston, near the A151. One was part of a commercial building that lay partially within the red

line boundary. Two portacabin type structures associated with the car boot sale site, were assessed as of negligible suitability for bats (Appendix 1, Figure 3).

3.2.24. Inter-Array Connections: No buildings were present within the Inter-Array Connections, buildings adjacent to or nearby with potential bat features were detailed in Appendix 3, Target Notes.

Built linear features:

3.2.25. The Solar Development Area: Sub-parcels A-1, B-1, B-5 and C-1 were served by tracks of a built quality. All tracks were patchy in their composition but largely featured areas of concrete, asphalt and aggregates. Central untracked strips were colonised by farmland herb species and grasses such as common mallow, common stork's-bill, annual meadow-grass and greater plantain (Appendix 4, Photograph 19). The north section of the track in A-1 had become colonised with herb species including dominant lesser burdock and common mallow.

3.2.26. This feature was not recorded within the Grid Connection Route, or the Inter-Array Connections.

Developed land: sealed surface:

3.2.27. The Solar Development Area: This habitat type was not recorded within this area.

3.2.28. Grid Connection Route: These were all car parking areas near the A151 on the outskirts of Weston (Appendix 1, Figure 3).

3.2.29. Inter-Array Connections: This habitat type was not recorded within this area.

Developed land: sealed surface and other developed land:

3.2.30. The Solar Development Area: This habitat was not recorded within this area.

3.2.31. Grid Connection Route: This consisted of metalled roads/lanes with associated pavements and pedestrian walkways if present, throughout the corridor.

3.2.32. Inter-Array Connections: This consisted of metalled roads/lanes with associated pavement if present within all parcels of the Inter-Array Connections.

Hawthorn scrub:

3.2.33. The Solar Development Area: This habitat was not present within this area.

3.2.34. Grid Connection Route: Small sections of hawthorn scrub were present towards the north of the Grid Connection Route and appeared to be the remains of a defunct hedgerow (Appendix 1, Figure 3).

3.2.35. Inter-Array Connections: Sections of hawthorn scrub were present within the Underground Inter-Array Connection land sub parcel B2 (Appendix 1, Figure 3).

They all appeared to be the gappy remains of now defunct hedgerows, with hawthorn being the dominant species (Appendix 4, Photograph 6).

Individual trees:

3.2.36. **ES Appendix 12-8: Arboricultural Impact Assessment**[19] (Doc Ref. 6.3) classified seven trees as veteran, and four trees as ancient across the Order Limits of the Site. In Section 5.3.1 the AIA states 'There are a range of definitions for ancient and veteran trees with no universally accepted system of classification'. Whilst no trees were viewed to be ancient or veteran during the surveys that inform this appraisal, subsequent detailed assessment during the arboricultural survey has deemed some trees to be ancient or veteran. These designations are, of course, accepted, but arboricultural and ecological surveys are undertaken to different methodologies.

3.2.37. The Solar Development Area: Standalone trees were uncommon on the Site, and the survey returned records of eleven trees. Species included poplar species (Appendix 4, Photograph 20), Norway maple, oak and hawthorn. All trees were classed as mature. The trees appeared to be self-seeded and/or likely hedgerow remnants.

3.2.38. Grid Connection Route: There were several individual trees present, which were generally isolated features associated with field boundaries and roadsides and were often growing near or out of ditches. Most were alive, although there were occasional dead trees, such as one with potential bat roost suitability on Delgate Bank, within close proximity to the only area with a small network of connected hedgerows. Species included ash, sycamore, lime species, white, and crack willow (Appendix 1, Figure 3).

3.2.39. Inter-Array Connections: There were very few isolated trees present, although three mature sycamore species were present located on farmland within the Underground Inter-Array Connection sub parcel B1 (Appendix 1, Figure 3, Target Note (TN3)), with no clear evidence of natural regeneration. There was a dry ditch present, and it was likely the trees were originally associated with a nearby hedgerow. A barn owl nestbox had been fixed to one of the trees (Appendix 4, Photograph 14).

[19] AECOM (2025) ES Appendix 12-8 Arboricultural Impact Assessment.

Line of trees:

3.2.40. The Solar Development Area: There were six lines of trees across the Solar Development Area. Three of these were present in Sub-parcel D-3, one in Sub-parcel B-2, one in Sub-parcel B-5 and one in Sub-parcel C-2. The three lines of trees in Sub-parcel D-3 were along Langary Gate Road and were semi-mature examples of a variety of species including field maple, bird cherry, ash and oak (Appendix 4, Photograph 21). The line of trees in Sub-parcel B-1 is c. 20m long and comprises willow species and elder. The line of trees at B-5 was a roadside line of trees along Queen's Bank, featuring species of common lime and Norway maple; the line of trees in Sub-parcel C-2 comprises sycamore, ash and hawthorn.

3.2.41. Grid Connection Route: There were several examples of this feature-type (Appendix 1, Figure 3), associated with field boundaries or sited along roadsides. They were often associated with hedgerows and drainage ditches and helped to provide screening and windbreaks. They were generally a sparse feature with poor connectivity to other similar habitat or larger areas of trees. The ages of the trees varied from young to semi-mature and mature. Species included ash, lime, oak, sycamore, field maple, and white poplar.

3.2.42. Inter-Array Connections: There were nine examples of this feature across the Inter-Array Connections land parcels, which were all along field boundaries, often with associated hedgerows and drainage ditches, and were generally a sparce feature with poor connectivity to other similar habitat. Most examples were concentrated along Langary Gate Road, within the Overground Inter-Array Connection sub-parcels C1, C2, and C3, with C2 having the greatest concentration (Appendix 1, Figure 3), with the best connectivity. The ages of the trees varied from young to semi-mature and mature. Species included Lombardy poplar, ash, sycamore, horse chestnut, hybrid black-poplar, and lime (Appendix 4, Photograph 13).

Mixed scrub:

3.2.43. The Solar Development Area: There were six areas of mixed scrub within the Solar Development Area, four of which featured in parcel B-1 with the remaining areas in Sub-parcels A-1 and D-5. Elder, willow species and blackthorn were abundant in the area of scrub at Sub-parcel A-1 which surrounded agricultural sheds. Hawthorn was the dominant species in Sub-parcel B-1 and D-5 with the exception of one area in B-1 which comprised elder, box, wild privet, and blackthorn (Appendix 4, Photograph 22).

3.2.44. Grid Connection Route: There were a few small and isolated patches of mixed scrub, they were predominantly associated with field boundaries, but some

mixed scrub was present on the roadside verges and a roundabout on the outskirts of the village of Weston (Appendix 1, Figure 3).

3.2.45. Inter-Array Connections: This habitat type was not present.

Modified grassland:

3.2.46. The Solar Development Area: All grassland field margins were uncultivated and classed as modified grassland. Species compositions altered very little over the Solar Development Area's entirety. Commonly occurring species included grasses of false-oat grass, cock's-foot grass and rough meadow-grass (Appendix 4, Photograph 23). Common couch and perennial ryegrass were occasional throughout, becoming more frequent in Parcel D Frequently evidenced herb species included bristly oxtongue, hogweed, cow parsley, ribwort plantain and common nettle. Occasional species included common mallow and hoary plantain. Locally frequent species included grasses of tufted hair-grass, small wood reed, and false wood-brome with herbs of common stork's-bill and common vetch.

3.2.47. Margin widths varied considerably with some fields ploughed to the crest of their adjacent ditches. Most others presented widths of between 1-3m. As an exception, Sub-parcel C-1 featured consistently wider and well managed grassland margins, many of widths in excess of 6m (Appendix 4, Photograph 24).

3.2.48. Grid Connection Route: This habitat consisted of road verges, horse paddock, gardens, and amenity grassland. The verges, gardens and amenity grassland were all managed and regularly cut, with a generally short, even sward. The paddocks were grazed or recovering from grazing. Common species included perennial rye-grass, meadow grass sp., creeping thistle, hogweed, cow parsley, cocksfoot, common nettle, ribwort and greater plantain, and dock sp. (Appendix 1, Figure 3).

3.2.49. Inter-Array Connections: Modified grassland was present within fields, on verges, field boundaries, and also as a component of some of the linear features, such as hedgerows and ditches. In the fields modified grassland was either being utilised for grazing or appeared outside of active use other than occasional mowing (Appendix 4, Photograph 7). The verges and field boundaries had evidence they were being cut at least annually. Common species included perennial rye-grass, cocksfoot, false oat-grass, barren brome, soft brome, creeping thistle, greater plantain, hogweed, cow parsley, common nettle, and cleavers (Appendix 1, Figure 3).

3.2.50. Field margin widths varied considerably, with some fields ploughed to the crests of the adjacent ditches. Most others had widths of between 1-3m, although some did occasionally have stretches approaching 5m wide.

3.2.51. There was an area of unmanaged modified grassland adjacent to Cooper's Farm on Chapel Gate, within the Underground Inter-Array Connections sub parcel B1. This area was becoming dominated by tussocky grasses such as cocksfoot and perennial rye-grass, and tall forbs such as dock sp. and willowherb sp. (Appendix 1, Figure 3).

Native hedgerow (Priority habitat):

3.2.52. The Solar Development Area: Native hedgerows within the Solar Development Area were occasional and generally poorly connected. Intact species-poor hedgerows featured in Sub-parcels C-2 and D-4. The hedgerow in Sub-parcel C-2 (Appendix 4, Photograph 25) was species poor (blackthorn and hawthorn, with occasional hazel and elder) and formed the boundary to a paddock. The hedgerow at Sub-parcel D-4 was newly planted species-rich with caned and guarded whips.

3.2.53. Defunct species-poor hedgerows were present in Sub-parcels A-1, B-2, C-2 and D-6. Hedgerows at Sub-Parcel A-1 were on either side of Cloot Drove, a road that bisects this site. The hedgerow on the west side was defunct, denser in the north section of the site, becoming more gappy to the south. Similarly, the Hedgerow on the east side of Cloot drove was a defunct hedgerow with trees, denser to the north becoming more gappy to the south. The hedgerow at Sub-parcel B-2 ran along Queen's Bank and a ditch and was species-poor (Hawthorn). The hedgerow at Sub-parcel C-2 was also species-poor (Hawthorn) and ran along a ditch on two sides of a grazing pasture. The hedgerow in Sub-parcel D-6 ran along Langary Gate Road and was species-poor (Hawthorn) (Appendix 4, Photograph 26).

3.2.54. Grid Connection Route: There were 12 sections of this habitat, concentrated in the northern to central area of the corridor. Sections were associated with drainage ditches, and some also contained lines of trees. Most sections were isolated and unconnected, but one area of sheep grazed fields close to Delgate Bank towards the centre of the Grid Connection Route, contained four connected hedgerows over 1.5m high (Appendix 1, Figure 3). Hawthorn was the dominant species of this habitat-type, with some dog rose, elder, field maple, and crab apple present.

3.2.55. Inter-Array Connections: All hedgerows within these areas were recorded as Other native hedgerow, see listing below.

Native species-rich hedgerow (Priority habitat):

3.2.56. The Solar Development Area: Two lengths of hedgerow were classed as native species-rich. A hedgerow in Sub-parcel D-2 was a species-rich hedgerow

(containing field maple, blackthorn, elder, dog rose, willow and hawthorn) that ran along a ditch on one side and a wide margin on the other. Sub-parcel D-3 was a double hedge on Langary Gate Road (Appendix 4, Photograph 27).

3.2.57. Grid Connection Route: There were two isolated sections of this habitat, one was adjacent to Stone Gate in the northern end of the Grid Connection Route and provided an edge habitat between the surrounding arable fields and the lane. The feature was associated with a drainage ditch which was dry at the time of survey. The hedgerow was gappy in places with some sections clearly showing recent replanting, and it was not particularly high or wide, which suggested it had been planted within the last few years (Appendix 1, Figure 3). The other section was a newly planted hedgerow, between a recently planted woodland on former arable land, and Delgate Bank. Species included hawthorn, hazel, field maple, dogwood, and dogrose. (Appendix 1, Figure 3).

3.2.58. Inter-Array Connections: This habitat was not present.

Other native hedgerow (Priority habitat):

3.2.59. The Solar Development Area: This habitat was not recorded within this area.

3.2.60. Grid Connection Route: There were 11 sections of this habitat present, concentrated towards the central and northern sections of the corridor. Overall, they were occasional and poorly connected, with evidence of some cutting management. Most were associated with field boundary drainage ditches which were mostly dry at the time of survey, due to the particularly dry summer, and some also had additional lines of trees. Hawthorn was the most common species, with dogrose, field maple, and elder (Appendix 1, Figure 3).

3.2.61. Inter-Array Connections: There were 12 hedgerows of this habitat type, which were present within Underground Inter-Array sub parcels B1, B2, C1 and C2 (Appendix 1, Figure 3), (Appendix 4, Photograph 9). Overall, hedgerows were occasional and poorly connected, most had evidence of at least annual cutting/flailing, and varied in height and width. Most were associated with ditches that were dry at the time of survey, and were dominated by hawthorn, with occasional elder, bramble, blackthorn, plum and dog rose. Two of the hedgerows in sub parcel B1 (Appendix 1, Figure 3), were also associated with lines of trees (Appendix 4, Photograph 5).

Neutral grassland:

3.2.62. The Solar Development Area: This habitat was not identified as present.

3.2.63. Grid Connection Route: This habitat was present towards the northern end of the grid connection. A particular area of this habitat was on farmland on the

outskirts of the village of Weston. It consisted of sheep grazing pasture with scattered trees, and a strip of grassland between two parallel drainage ditches. Common species included cocksfoot, Yorkshire fog, false oat-grass, smooth meadow-grass, knapweed, hogweed, bristly ox-tongue, and vetch sp. (Appendix 1, Figure 3).

3.2.64. Inter-Array Connections: This habitat was not identified as present.

Other neutral grassland:

3.2.65. The Solar Development Area: This habitat was not present.

3.2.66. Grid Connection Route: This habitat was mainly towards the northern end of the Grid Connection Route, predominantly on farmland. It consisted of fields used for silage/haylage, or otherwise mown, with grass verges, and field edges often associated with drainage ditches. Common species included cocksfoot, Yorkshire fog, false oat-grass, smooth meadow-grass, knapweed, hogweed, bristly ox-tongue, and vetch sp. (Appendix 1, Figure 3). There was one section of this habitat at the southern end of the Grid Connection Route, which appeared to be a former railway line. It had a tall sward, with scattered scrub of mainly hawthorn, and was likely utilised as a wildlife corridor for commuting/foraging bats, etc. (Appendix 1, Figure 3).

3.2.67. Inter-Array Connections: This habitat was not present.

Other broadleaved woodland:

3.2.68. The Solar Development Area: Woodlands within the Solar Development Area generally were agricultural plantation woodlands of uniform age and sizes of species. There were nine such woodlands on the site, one in Sub-parcel A1, four in Sub-parcel B-1, one in each of Sub-parcels D-1, D-2, D-3 (Appendix 4, Photograph 28) and D-4. Species compositions were largely the same throughout with frequent field maple, oak, ash, and Norway maple. One woodland to the north of B-1 was predominantly white willow with occasional ash, oak, sycamore and hazel coppice (Appendix 4, Photograph 29). Standing deadwood also featured in this woodland.

3.2.69. Grid Connection Route: A single, isolated narrow strip of woodland within farmland north of the B1165 in the central area of the Grid Connection Route (Appendix 1, Figure 3) was the only mature/semi-mature area of this habitat. Species included ash, oak, sycamore and lime with some hawthorn and hazel. This woodland had potential to be utilised by nesting birds, foraging/commuting bats, and as cover for reptile and mammal species. There was also a former agricultural field, partially within the Grid Connection Route boundary which had quite

recently been converted to a plantation with a variety of species of native broadleaf deciduous trees. Species included rowan, pedunculate oak, field maple, bird cherry, alder, hornbeam, grey willow, and whitebeam. The ground layer had been planted with an appropriate wildflower mix and was partially enclosed by a recently planted native hedgerow with a drainage ditch along its boundary with Delgate Bank. (Appendix 1, Figure 3).

3.2.70. Inter-Array Connections: Two small, isolated examples of this habitat were present, both with potential to be utilised by nesting birds, foraging/commuting bats, and as cover for reptile and mammal species. One located on farmland within the Underground Inter-Array sub parcel B1 (Appendix 1, Figure 3) had two age classes of tree present, with no clear evidence of natural regeneration. Species included beech, sycamore, ash, silver birch, copper beech and cherry laurel (Appendix 4, Photograph 8). The second was a small triangular shaped woodland within the Overground Inter-Array sub parcel C2 (Appendix 1, Figure 3), on a field boundary, adjacent to Langary Gate Road. It was likely utilised as game bird cover, with two age classes of tree present, and some shrub understorey. Species included sycamore, field maple, ash, alder, and hawthorn. Target Note 10 (Appendix 3) referred to a small, planted woodland of this type adjacent to the inter-array boundary within sub parcel C2, with potential for nesting birds, roosting bats, and cover for reptiles/mammals.

Other standing water:

3.2.71. The Solar Development Area: The farmland was intersected by a network of ditches and IDB main drains, with the habitat and profile of the ditches as described in the Inter-Array Connections section below.

3.2.72. Grid Connection Route: See description in the Inter-Array Connections below. The habitats are the same.

3.2.73. Inter-Array Connections: Individual fields and some roads/lanes within the land parcels were largely separated and bordered by a network of ditches and IDB main drains. The ditches were typical of this type of lowland agricultural landscape (Appendix 4, Photograph 10). The ditches were generally V-shaped in profile and often substantial, with bank heights of between 0.5-2m. Most of the ditches were dry at the time of survey, except for some shallow water remaining in some of the IDB drains (Appendix 4, Photograph 11). Common reed was the dominant species present with great willowherb, common nettle, and hogweed also locally frequent. Grassland species such as cocksfoot, false brome, false oat-grass, and perennial rye grass generally succeeded towards the top of the ditch banks. Despite being predominantly dry at the time of survey due to the

particularly dry summer, it was most likely that the ditches would retain water drained from the fields during late autumn, winter and early spring. Warbler species were frequently heard singing within this habitat with reed bunting *Emberiza schoeniclus*, also seen on occasion.

Other river/stream:

3.2.74. The Solar Development Area: Some small, scattered willow scrub was evident in watercourses at Sub-parcels B-5 and C-2. Three of the IDB main drains showed and signs of retaining water. These were a drain that runs through the west section of Sub-parcel A-1, Lambert Drain and Sly's Connection Local Wildlife Site (LWS) in Sub-parcels D-2 and D-3 respectively (Appendix 4, Photograph 30).

3.2.75. Grid Connection Route: This habitat was not recorded.

3.2.76. Inter-Array Connections: A section of the South Holland Main Drain passed east to west across the top of the Overground Inter-Array Connection sub parcel C3 (Appendix 1, Figure 3), where Langary Gate Road crossed over it via a bridge (Appendix 4, Photograph 12). This substantial water course was approximately 15m wide, although there was common reed growing from the banks of the watercourse and narrowing it somewhat. There was an accompanying steep bank on both sides of the watercourse, which presumably acted as some sort of flood defence. Common reed was dominant, with frequent common nettle, tussocky grasses such as cocksfoot and false oat-grass, along with soft brome, and perennial ryegrass. Grassland species such as cow parsley and hogweed succeeded the common reed towards the top and sides of the banks, with oil-seed rape also present.

Scattered trees:

3.2.77. The Solar Development Area: No scattered trees were recorded within the Solar Development Area.

3.2.78. Grid Connection Route: There were few examples of this feature, with the prevalent area being within two fields used for sheep grazing near Weston towards the north of the Grid Connection Route, which had several semi-mature to mature scattered trees within the fields (Appendix 1, Figure 3).

3.2.79. Inter-Array Connections: A single small, isolated example of this habitat was present located within sheep pasture within the Underground Inter-Array sub parcel B1. There were two age classes of tree present, with no clear evidence of natural regeneration. Species could not be accurately identified due to the unwillingness of the landowner to allow the surveyor full access due to livestock disturbance, although sycamore was present (Appendix 1, Figure 3).

Willow scrub:

3.2.80. The Solar Development Area: Areas of this habitat were recorded as growing in watercourses, see 3.2.73.

3.2.81. Grid Connection Route: There were two small patches of this habitat, isolated within cropland or other neutral grassland, both were associated with drainage ditches (Appendix 1, Figure 3).

3.2.82. Inter-Array Connections: This habitat type was not present.

Summary:

3.2.83. The Solar Development Area: The following habitats/features of bramble scrub, hawthorn scrub, other native hedgerow, neutral grassland, scattered trees and other neutral grassland, were not present.

3.2.84. Grid Connection Route: The habitat other river/stream was not present.

3.2.85. Inter-Array Connections: The following habitats/features; buildings, mixed scrub, native hedgerow, native species-rich hedgerow, neutral grassland, other neutral grassland and willow scrub, were not present.

3.3. Protected and/or notable species assessment

3.3.1. The suitability of the Site for protected and/or notable species, as set out in Table 3-4 below, has been assessed using criteria provided in Table 2-1 and is based on the results of the desk study and observations made during the survey of habitats at the Site. Those legally protected species not referred to have been scoped out as it is considered that the Site does not contain habitats suitable to support them.

Table 3-4 Protected, notable and invasive species assessment: Solar Development Area, Grid Connection Route and Inter-Array Connections

Ecological Feature	Status	Likelihood of occurrence	Ecological importance	Potential constraint likely
Bats	HR WCA S5 S41 NERC	There are no current or historic European Protected Species licences for bats within 2km of the Site boundary. The nearest (licence number - 2018-33941-EPS-MIT) is an expired licence located approximately 6km to the south of the Site. This licence was for the destruction of a roost for brown long-eared bat and common pipistrelle and ran between 01/04/2018 and 31/10/2019. **Roosting – Solar Farm Development Areas: Moderate:** There are 40 records of bat roosts within the search area with four species identified: Daubenton's bat, common pipistrelle, soprano pipistrelle, and brown long-eared bat. The other records had not been identified down to species level. Four figure grid references only are provided for these records, as such accurate locations cannot be established. However, all the records are sited outside the Site boundary. The most recent roost record was from a brown long-eared bat near Gedney Hill in 2021. Suitable habitat is present on the Site in the form of trees and buildings with bat roost suitability. During the PEA survey, at least three trees were identified as having potential roost features (PRF) and historic farm buildings within the Site also present roosting opportunities. **Roosting – Grid Connection Route: Moderate.** Suitable habitat was present as areas of woodland, lines of trees, scattered, and individual trees. During the PEA survey several trees were identified as having bat roost potential. **Roosting – Inter-Array Connections: Moderate.** Suitable habitat was present in the form of trees and buildings with bat roost suitability. During the PEA survey several trees were identified as having potential roost features (PRFs), or due to trees being in full leaf so some PRFs may be obscured, further assessment required (FAR). Some trees and buildings adjacent to but not within the survey boundary, were also deemed to have potential for roosting bats. (Included as Target Notes, Appendix 3). **Foraging/commuting – Solar Farm Development Areas: High.** 401 records were returned for bats within the search area of which 160 were identified to species level. These included Daubenton's bat, Noctule, Nathusius's pipistrelle, common pipistrelle, soprano pipistrelle, and brown long-eared bat. The most recent record was from 2020 of pipistrelle bats near Holbeach Drove, which is within 1 km south of Land parcel B of the Underground Inter-Array Connection. **Foraging/commuting – Grid Connection Route & Inter-Array Connections: High.** The hedgerows, hedgerows with trees, lines of trees, woodland, and ditches all provide suitable habitat for foraging/roosting bats.	Moderate for roosting bats, and High for foraging/commuting. If any trees with bat roost potential will be affected by the Scheme, then further surveys will be required and European Protected Species Mitigation Licence will need to be obtained prior to any works.	Yes
Hazel dormouse	HR WCA S5 S41 NERC	**Solar Farm Development Area, Grid Connection Route & Inter-Array Connections: Negligible.** No records were returned within the data search for this species. Suitable habitat for dormouse is present on the site, however, typical of the Fenland landscaped, these habitats are small, isolated and poorly connected and therefore highly unlikely to support a population. There are no current or historic European Protected Species licences for dormouse in the area.	N/A	No

Ecological Feature	Status	Likelihood of occurrence	Ecological importance	Potential constraint likely
Great crested newt	HR WCA S5 S41 NERC	**Solar Farm Development Area: Low.** There are no current or historic European Protected Species licenses for great crested newts within 2km of the Site boundary. The nearest (licence number - 2014-2802-EPS-MIT) is an expired licence located approximately 9km to the south of the site. The licence ran between 25/09/2014 and 31/07/2018. No ponds are present on the Site and the nearest ponds lie at approximately 300m east of Sub-parcel D-5. Two ponds appear to be present in part of Gedney Hill Golf Course. Three further ponds are at approximately 450m southeast of Sub-parcel D-5 although these ponds are large and in use as fishing lakes. Due to management and the presence of stocked fish these ponds are unlikely to support the species. No records of great crested newt were returned within the data search. However, they cannot be discounted due to the presence of watercourses throughout the Site and ponds outside, but near to the site boundary. **Grid Connection Route & Inter-Array Connections: Low.** A suite of eDNA surveys were recently undertaken on ponds located within or close to the Inter-Array Connections areas, with preliminary results being negative. However, they cannot be completely discounted due to some ponds being inaccessible or unsafe to survey, and the presence of the drainage ditches which were not tested.	Local.	Precautionary
Otter	HR WCA S5 S41 NERC	**Solar Farm Development Area: Moderate.** 18 records of positive otter sightings were returned within the data search with the most recent being from 2020. These are located on the River Welland (adjacent to Sub-parcel A-1) and South Holland Main Drain of which a small section runs adjacent to Sub-parcel D-1. A potential otter holt was noted just off-site as a burrow in a spoil pile within a ditch adjacent to the western boundary of Parcel A. An old spraint was also observed just on-site near to the spoil pile. During previously conducted breeding bird surveys (15/05/2023), an otter spraint was found on the north boundary in Sub-parcel B-5, on a bridge over the South Holland Main Drain West LWS. However, the remainder of the Site is wide open, and the internal ditches are dry rendering the Site as largely unsuitable. Three fishing lakes lie at approximately 450m south-east of Sub-parcel D-5 and may attract otters to the area via the Fleet drain that runs adjacent to the east boundaries of Sub-parcel D-5. **Grid Connection Route: Moderate.** Some of the larger IDB drains such as Wheat Mere Drain were adjacent or in close proximity to the Grid Connection Route area and may be suitable for otter. **Inter-Array Connections: Moderate.** South Holland Main drain which lay within the northern boundary of Overground Inter-Array Connection sub parcel C3 was suitable habitat to support otter and spraint had been previously found along this watercourse. Fleet Drain which was just outside of the eastern boundary of the Overground Inter-Array Connection sub-parcels C1 to C3, might also be suitable for otter to utilise when holding more water than was present during the surveys.	Local. If Scheme proposals impact any habitats suitable for otter, then further surveys will need to be undertaken (see **ES Appendix 9-7: Otter and Water Vole Survey Report** (Doc Ref. 6.3))	Yes

Ecological Feature	Status	Likelihood of occurrence	Ecological importance	Potential constraint likely
Birds: Breeding & Wintering	WCA Sections 1-8 S41 NERC (some)	**Solar Farm Development Area – Breeding: High.** The Site provides opportunities for nesting birds on the Site, including hedgerows, watercourses, scattered trees, and arable land. Species returned in the desk study include Local (Lincolnshire) Biodiversity Action Plan (LBAP) priority species and Birds of Conservation Concern (BoCC) Red List species and Local Species of Conservation Concern such as skylark, house sparrow, tree sparrow, cuckoo, linnet, lapwing, and snipe. **Solar Farm Development Area – Wintering: High**. The habitat on Site such as the open arable land provides opportunities for wintering birds to flock together. Species recorded in the area include Bewick's swan, whooper swan, little egret, starlings, redwing, and fieldfare. **Grid Connection Route – Breeding: High.** The survey area provided suitable habitats for arboreal and ground nesting species including hedgerows, scattered and lines of trees, watercourses, and arable land. **Inter-Array Connections – Breeding: High.** The area provided suitable habitats for arboreal and ground nesting species including hedgerows, scattered and lines of trees, watercourses, and arable land. Species such as lapwing *Vanellus vanellus*, partridge sp., skylark (Alauda arvensis) and warblers were either seen or heard during surveys. **Grid Connection Route & Inter-Array Connections - Wintering: High.** The open arable land provides opportunities for flocks of common crane *Grus grus*, wildfowl and waders to gather. The scattered hedgerows may provide some food for wintering migrants such as redwing *Turdus iliacus* and fieldfare *Turdus pilaris*.	**Breeding:** Local (estimated, subject to further survey) **Wintering:** Local (estimated subject to further survey) Further surveys for breeding and wintering birds should be undertaken in order to establish the value of the Site for these species.	**Breeding:** Yes **Wintering:** Yes
Birds – Schedule 1	WCA S1 S41 NERC	**Solar Farm Development Area: High.** 17 Schedule 1 birds appear within the data search although accurate locations are not provided. These include kingfisher, bittern, stone-curlew, marsh harrier and barn owl. The habitat on site is suitable for many of these species. During previously conducted breeding bird surveys, Schedule 1 hobby were confirmed as probable breeding birds on the Site. **Grid Connection Route: High.** Habitats such as watercourses, woodland, lines of trees, owl boxes, and field margins were all suitable of supporting schedule 1 species such as kingfisher *Alcedo atthis*, marsh harrier *Circus aeruginosus*, and barn owl *Tyto alba*. **Inter-Array Connections: High.** Habitats such as watercourses, lines of trees, field margins and adjacent buildings were all suitable to support Schedule 1 species such as kingfisher, marsh harrier, and barn owl. During previously conducted breeding bird surveys, Schedule 1 hobby (Falco Subbuteo) were confirmed as probable breeding birds in the Solar Development Area.	Local (estimated subject to further survey).	Yes
Rare and notable plants	WCA S8 S41 NERC (some)	**Solar Farm Development Area: Low.** Three native plants were returned within the data search, which are cornflower, bluebell, and tubular water-dropwort. These are listed as priority or protected species. The habitat on site is suitable for the species, however actively managed farmland will reduce likelihood of establishment. **Grid Connection Route: Low.** Three priority or protected species were returned within the data search, and some habitats within the survey area were suitable to support these species, but they were unlikely to be present in any numbers, with habitats being actively managed meaning a reduced likelihood of establishment. **Inter-Array Connections: Low.** Three native plants were returned within the data search, which were cornflower, bluebell, and tubular water-dropwort. These are listed as priority or protected species. Some habitats on site were suitable for these species; however, actively managed farmland will reduce likelihood of establishment.	Site	No

Ecological Feature	Status	Likelihood of occurrence	Ecological importance	Potential constraint likely
Reptiles	WCA S5 S41 NERC	**Solar Farm Development Area and Grid Connection Route: Low.** Same as comment below. **Inter-Array Connections**: **Low**. Rough grassland margins, hedgerows, ditches, drains and woodland were suitable habitats for grass snake *Natrix helvetica* and other reptiles such as common lizard *Zootoca vivipara* and slow worm *Anguis fragilis*. However, these habitats are supplementary in the intensive arable agricultural landscape and not connected to any suitably sized or composed, optimal reptile habitat. Therefore, these habitats were unlikely to support reptiles other than grass snake.	Site	Precautionary
Water vole	WCA S5 S41 NERC	**Solar Farm Development Area: Moderate.** The desk study revealed water vole has been recorded 420 times within the search area. 44 of these were from 2022 which comprise records from the nearby watercourses, including South Holland Main Drain which runs adjacent to Sub-parcel D-1. However, the remainder of the internal ditches on the Site are dry rendering the site as largely unsuitable. No ponds are present on the Site and the nearest ponds lie at approximately 300m east of Sub-parcel D-5 plus. Two ponds appear to be present in part of Gedney Hill Golf Course. Three further ponds are at approximately 450m southeast of Sub-parcel D-5 although these ponds are large and in use as fishing lakes. Due to management and the presence of stocked fish these ponds are unlikely to support the species. **Grid Connection Route: Moderate.** Due to the network of smaller and IDB drains across the Grid Connection Route area, the presence of water vole cannot be ruled out. One surveyor did record potential burrows within the survey area. **Inter-Array Connections: Moderate.** South Holland Main Drain does have recent species records for water vole and is within the C3 inter-array zone. The majority of the other ditches and drains within the survey area, were either dry or holding very little water, at the time of survey, rendering them as largely unsuitable.	Not known until further surveys have been undertaken (see **ES Appendix 9-7: Otter and Water Vole Survey Report** (Doc Ref. 6.3)	Yes
White-clawed crayfish	WCA S5	**Solar Farm Development Area: Low.** There were no records returned for white-clawed crayfish from within the search area. The few watercourses holding water on the Site are too silted to be favourable and are heavily managed which excludes rocks and deadwood in the channel that the species prefers for refuge. Therefore, habitats are regarded as sub-optimal. **Grid Connection Route & Inter-Array Connections: Negligible.** The few watercourses holding water in the inter-array zones are too silted and potentially polluted with fertiliser and pesticides to be favourable and are heavily managed which excludes rocks and deadwood in the channel that the species prefers for refuge. Therefore, habitats are regarded as sub-optimal.	Site	No
Invasive plants	WCA S9	**Solar Farm Development Area: High.** A number of invasive non-native species were returned within the data search. Many of these are found within watercourses and can spread easily. Terrestrial species include Japanese rose and variegated yellow archangel. Aquatic species include water fern, New Zealand pygmyweed and two species of Elodea. One of these, Nuttall's waterweed has a record within Lambert Drain to Highstock Drain Connection LWS and South Holland Main Drain which runs adjacent to Sub-parcel D-1. Given how quickly these species can spread, and the habitat present around the site area, there is a high chance of them being present in any watercourses that permanently hold water. **Grid Connection Route & Inter-Array Connections: High.** Aquatic invasive species such as Nuttal's waterweed has been found within nearby watercourses. Given how quickly these species can spread and the habitat present within the Grid Connection Route and Inter-Array Connections, it is highly likely that they are present within any of the watercourses that permanently hold water.	Site	Precautionary

Ecological Feature	Status	Likelihood of occurrence	Ecological importance	Potential constraint likely
Badger	PBA	**Solar Farm Development Area, Grid Connection Route & Inter-Array Connections: High.** Please refer to annexe document PEA_ConfidentialAnnexeReport_V1.0[20], for an overview of badger activity within the PV array areas. A badger survey of the Grid Connection Route corridor is recommended.	Site	Precautionary
Brown hare	S41 NERC	**Solar Farm Development Area, Grid Connection Route & Inter-Array Connections: High.** There were 109 records of brown hare returned from within the search area. These date from 1977 to 2019. Wide grassland margins and arable/silage fields on the inter-array zones provide suitable habitat for breeding and foraging brown hare. The species was frequently observed during the PEA survey visit and previously conducted breeding bird surveys.	Site	Precautionary
Hedgehog	S41 NERC	**Solar Farm Development Area, Grid Connection Route & Inter-Array Connections: High.** There were 64 records of hedgehog returned from within the search area. These date from 1976 to 2023. This species is highly mobile and the site area provides suitable habitat for shelter, foraging and commuting.	Site	Precautionary
Terrestrial invertebrates	S41 NERC (some)	**Solar Farm Development Area: High.** Four butterfly species were returned from the data search which are listed on the S41 NERC Act, and these include small heath, wall, large tortoiseshell and swallowtail. A further 19 records were of moth species with the majority of records occurring near Holbeach St Johns. There was one record of a large garden bumblebee from 2022 which is listed as an LBAP species. This was recorded at Holbeach Drove. The grassland margins provide several grass species as larval foodplants for butterfly species including small heath and wall, and offer flowering plants such as vetch species, ragwort and knapweed for adult butterflies, moths and other pollinating insects. **Grid Connection Route & Inter-Array Connections: High.** The grassland margins and ditch/drain banks provide several grass species as larval foodplants for butterfly species including small heath *Coenonympha pamphilus* and wall *Lasiommata megera*, and offer flowering plants such as vetch species, ragwort and thistle for adult butterflies, moths and other pollinating insects.	Site	No
Aquatic invertebrates	S41 NERC (some)	**Solar Farm Development Area, Grid Connection Route & Inter-Array Connections: High.** There are several records of Northern River crangonyctid which, although not listed on Schedule 9 of the Wildlife and Countryside Act, is classed as a non-native crustacean species in the UK. Due to the interconnected nature of the ditches/drains, it is likely this species is present within drains that hold water for much of the year. Records show that this species is present within South Holland Main Drain, a section of which lies within the northern boundary of zone C3 and sub-parcel D-1.	Site	No

[20] Temple (2024) PEA_ConfidentialAnnexeReport_V1.0 Unpublished. Norwich.

3.4. Nature conservation evaluation

Designated sites

3.4.1. The Order Limits intersect or lie immediately adjacent to four Local Wildlife Sites: Slys Connection LWS (parcels D 2/D 3), South Holland Main Drain (West) LWS (parcel B 5), and Wheatmere Drain LWS (within the Grid Connection Route). The highway works south of Parcel D also cross the Lambert Drain to Highstock Drain Connection LWS. These features also qualify as a Lincolnshire BAP habitat (LBAP)[21] under Rivers, canals and drains.

3.4.2. Habitats of Principal Importance (HPI) listed on the priority habitats inventory (MAGIC) include approximately 55 areas of coastal and floodplain grazing marsh, 19 areas of deciduous woodland and two traditional orchards within 2km of the Site. These are largely scattered across the wider area, though there are areas of: coastal and floodplain grazing marsh centred on the land between parcels C and D, partially within the Overhead Inter-Array Connection, and the Grid Connection Route near Wool Hall Farm; and deciduous woodland within the most northerly section of the Grid Connection Route.

3.4.3. Coastal and floodplain grazing marsh is the most frequent HPI within 2km of the Site and areas centred on the land between parcels C and D, partially within the Inter-Array Connections. However, surveys noted that habitats within these areas were not indicative of coastal or floodplain grazing marsh, nor contained: a mosaic of wet features (shallow pools/scrapes), varied sward structure with tussocky and damp areas, high ditch botanical quality, or sustained water levels through the bird breeding season.

3.4.4. During surveys of the Site, the following HPI were identified: species-rich hedgerows and arable field margins. The Grid Connection Route and/or the Inter-Array Connections lie within a 15km radius of the following internationally designated sites: The Wash (Ramsar, SPA, and SAC), Nene Washes (Ramsar, SPA, and SAC), and Baston Fen (SAC). A **HRA**[18] (Doc Ref. 6.3) has been prepared to evaluate the potential impact of the project on these sites.

3.4.5. The Solar Development Area, Grid Connection Route Corridor and the Inter-Array Connections feature sections that fall within SSSI Impact Risk Zones (IRZ)

[21] Lincolnshire Biodiversity Partnership (2011) Lincolnshire Biodiversity Action Plan [online] Available at: https://www.nelincs.gov.uk/wp-content/uploads/2016/02/201110- LincolnshireBAP-3rd-edition.pdf [Accessed 10/09/2025]

and may require consultation with Natural England. This is discussed within the **ES Chapter 9: Ecology and Biodiversity** (Doc Ref. 6.1)[1].

Habitats

3.4.6. The Solar Development Area is dominated by an arable field system with ditches and grassland margins with occasional scattered trees and small pockets of plantation woodland, scrub and hedgerow. The fields and grassland margins provide nesting and foraging opportunities for red and amber listed farmland species of Birds of Conservation Concern and LBAP species such as skylark, yellow wagtail and reed bunting. The ditches provide further nesting opportunities for birds such as reed warbler and foraging routes for bats and other terrestrial mammals. IDB main drains provide suitable habitat for otters and water voles. Otters will be able to utilise these for foraging, dispersal and commuting, and water voles will be able to burrow into the banks and forage along the vegetated banks. Trees, woodland, scrub and hedgerows all provide nesting opportunities for other passerine species of birds as well as shelter and foraging for a wide range of mammals and terrestrial invertebrates.

3.4.7. Fly tipping was evident in ditches and on verges which can lead to the colonisation of Schedule 9 invasive species. However, no infestations of Japanese knotweed, cotoneaster or similar species were encountered during the survey.

3.4.8. The Grid Connection Route and Inter-Array Connections areas were dominated by agricultural fields with ditches and grassland margins with occasional lines of trees, scattered trees and small isolated pockets of plantation woodland, scrub and hedgerow, common within this area of South Lincolnshire. There were scattered villages, farms, and private residential properties in and around the Grid Connection Route and Inter-Array Connections areas. The fields and grassland margins provide nesting and foraging opportunities for red and amber listed farmland species of Birds of Conservation Concern[22] and LBAP species such as skylark, yellow wagtail *Motacilla flava flavissima* and reed bunting. The ditches provide further nesting opportunities for birds such as reed warbler *Acrocephalus scirpaceus* and foraging routes for bats and other terrestrial mammals. IDB main drains provide suitable habitat for otters and water voles, and

[22] Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Dowse, A., Lindley, P., McCulloch, N., Noble, D., & Win, I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114, 723–747 https://britishbirds.co.uk/sites/default/files/BB_Dec21-BoCC5-IUCN2.pdf [accessed 06/08/2025].

commuting/foraging habitat for bats. Otters would be able to utilise these main drains for foraging, dispersal and commuting, and water voles would be able to burrow into the banks and forage along the vegetated banks of both the larger and smaller drainage ditches. Trees, woodland, scrub and hedgerows all provide nesting opportunities for other passerine species of birds as well as shelter and foraging for a wide range of mammals, reptiles, and terrestrial invertebrates. Farm buildings and mature trees (whether in woodland, a line, or scattered), had potential for roosting bats and nesting birds. Grassland field margins and drainage ditches were also suitable habitat for common species of reptiles, amphibians, mammals, and terrestrial invertebrates. Badgers are a highly mobile species, and there is suitable habitat across both the Grid Connection Route corridor, and the Inter-Array Connections areas to support this species.

Ecosystem Services

3.4.9. Ecosystem services are also provided by habitats on the Site such as provisioning services (food production), supporting services (e.g. soil formation) provided by crops, trees, woodland, scrub and hedgerows; regulating (e.g. climate, flood hazard, noise, and air and water quality regulation) provided by ditches, woodlands, lines of trees and hedgerows; and cultural (e.g. amenity, health, recreation).

Protected and Notable Species

3.4.10. The habitats within the Site are suitable for a range of noteworthy species, including Species of Principal Importance and LBAP species, as reported in the desk study or recorded during the survey, as follows:

- bats including LBAP species, barbastelle, noctule, soprano pipistrelle and brown long-eared bat;
- great crested newt;
- otter;
- skylark and other widespread but declining species of birds that are also species of conservation concern and LBAP species;
- Schedule 1 breeding birds (hobby);
- grass snake and common lizard;
- water vole;
- badger;
- brown hare;

- hedgehog; and
- invertebrates associated with widespread habitats such as small heath butterfly and wall butterfly.

3.4.11. The habitats within the Site and populations of the above species are likely to be of importance within the immediate vicinity of the Site only, although breeding bird populations and Schedule 1 species hobby, are likely to be of importance at a local scale. It is unlikely that the Site would support rare species, or diverse assemblages or large populations of any noteworthy species.

3.4.12. Records for bat species including soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, and brown long-eared *Plecotus auritus* bats, which are all SPI, were provided in the desk study. It is not possible to confirm the importance of bat populations that may be present within the Site until further surveys have been undertaken. Recommendations for further survey are provided in Section 4.

4. Recommendations

4.1. Further survey

4.1.1. The following additional surveys and/or assessments are recommended for the Site (Table 4-1). Where these surveys have now been undertaken, the title of each survey report and it's reference, has been included within the table under recommendations.

4.1.2. Since these surveys and PEA have been written, the Order Limits to the Grid Connection Route have been extended northwards. A provisional PEA of this area (from public access roads) has been undertaken, (as discussed in the Section 3 Results and Evaluation of this assessment). The survey is considered sufficient for the purposes of informing the DCO Application, however, a more detailed PEA survey will need to be undertaken pre-construction. The findings of this survey may recommend further protected species surveys.

Table 4-1 Further survey or assessment requirements

Ecological Feature	Further Requirement	Recommendations
Internationally designated sites (Ramsar, SAC, SPA)	Consultation and further assessment	Contained within the Habitat Regulations Assessment (Doc Ref. 6.3)[18], which has been produced.
Designated sites (SSSI, IRZs)	Consultation and further assessment	Discussed within the Environmental Statement[1]

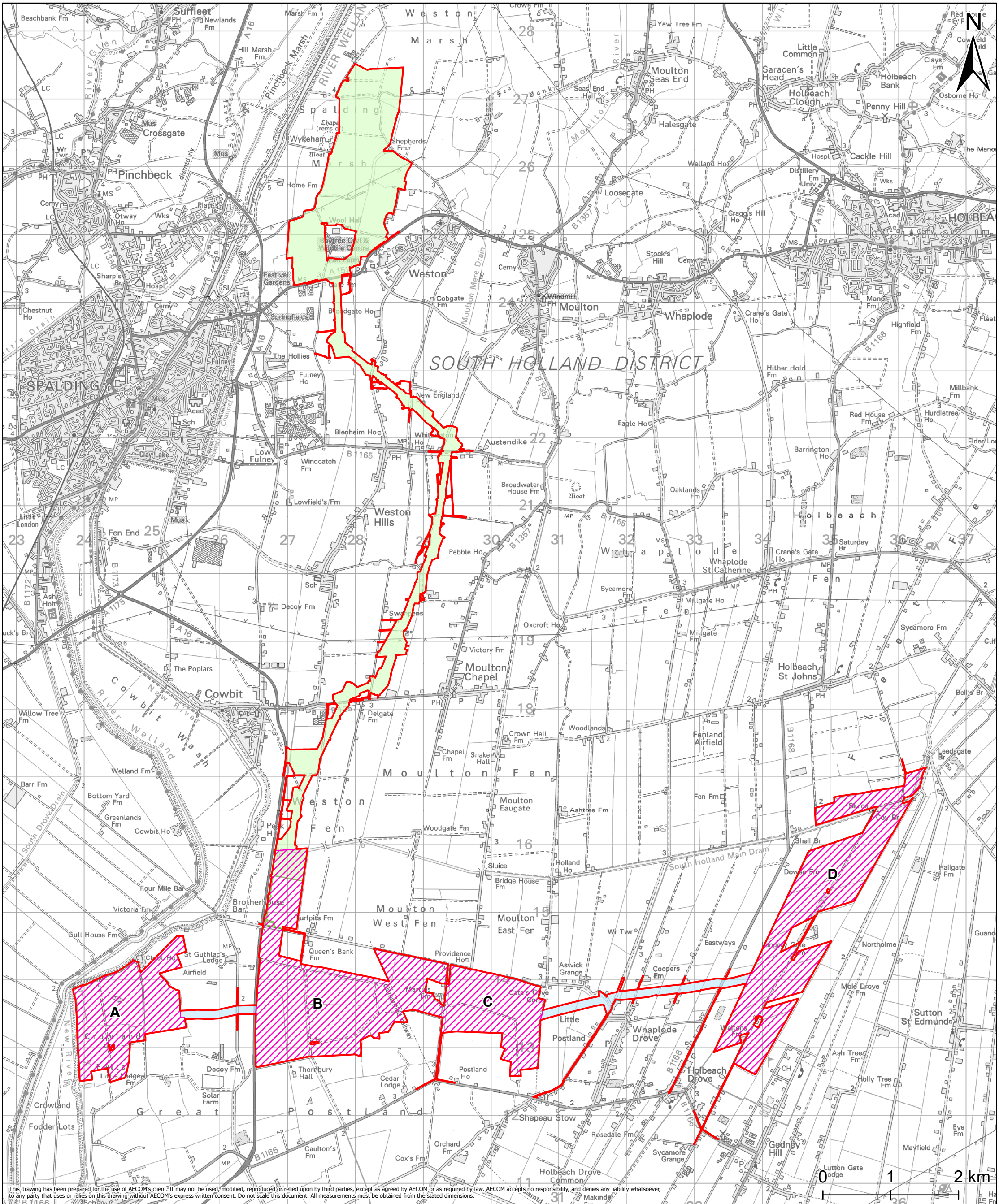
Ecological Feature	Further Requirement	Recommendations
Roosting bats	Ground Level Tree Roost Assessment and Preliminary Roost Assessment of buildings	Roost assessments of all of the trees and buildings across the Scheme that may be directly or indirectly impacted by the proposals should be carried out (any time of year although winter/early spring is optimal for tree assessments). If any potential is recorded on any features, further surveys, such as emergence surveys, may be necessary. Static detection and transect surveys (April-September inclusive) may also be necessary to provide information on commuting and foraging bats. Results from any bat surveys undertaken so far can be found here: **ES Appendix 9-11: Bat Activity Survey Report 2024** (Doc Ref. 6.3) **ES Appendix 9-12: Bat GLTA Survey Report Technical Note 2025** (Doc Ref. 6.3)
Great crested newt	eDNA surveys	eDNA surveys of selected waterbodies within the Scheme boundary and any ponds within 250m should be undertaken to identify the likelihood of great crested newt presence/likely absence, were undertaken in 2025. The results are presented in **ES Appendix 9-9: Great Crested Newt Survey Report 2025** (Doc Ref. 6.3)

Ecological Feature	Further Requirement	Recommendations
Birds	Breeding and wintering bird surveys. Nesting bird checks	Breeding and wintering bird surveys to fully evaluate the bird assemblages and assess impacts, and to inform **ES Appendix 9-14: Habitats Regulations Assessment** (Doc Ref. 6.3). These surveys have been undertaken, please refer to: **ES Appendix 9-3: Breeding Bird Survey Report** (Doc Ref. 6.3) **ES Appendix 9-4: Wintering Bird Survey Report 2022-2023** (Doc Ref. 6.3). **ES Appendix 9-5: Wintering Bird Survey Report 2023-2024** (Doc Ref. 6.3). **ES Appendix 9-6: GCR Wintering Bird Survey Report 2023-2024** (Doc Ref. 6.3). **ES Appendix 9-13: Summer 2025 Vantage Point Survey Report** (Doc Ref. 6.3). Any habitats removed within the nesting bird season (March to September inclusive) must only proceed following a nesting bird check within 48 hours prior to the works commencing.
Birds WCA S1	Walkover survey	To check for the presence of breeding Schedule 1 birds. Typical and known breeding habitats will be searched thoroughly for the species and for evidence of breeding, prior to any removal, if undertaken within the bird breeding season.
Reptile	Hand searches	Any hedgerow, brash & log piles, or woodland removal should only proceed following hand searches for reptiles. Ditch crests with dry dredgings should also be checked for basking reptiles. Removal should only be carried out only on warm days of 10 degrees Celsius or above to reduce the risks of moving hibernating animals.

Ecological Feature	Further Requirement	Recommendations
Otter	Walkover survey	If necessary – subject to design. A pre-construction check of watercourses for signs such as feeding remains, spraints, slides, and couches. Camera trapping may also be considered. Two surveys to be conducted, one during late spring/early summer and the other in late summer/early autumn to avoid higher water levels. Please also refer to: **ES Appendix 9-7: Otter and Water Vole Report 2024-2025** (Doc Ref. 6.3).
Water vole	Water vole survey	If necessary – subject to design. A water vole survey should be carried out on both the Grid Connection Route and Inter-Array Connections areas to establish baseline populations and to inform design, with regard to bridging or any other works affecting potential water vole burrowing habitat. A minimum of two surveys in one year will be necessary. Ideally one in mid to late spring, and the other in late summer. Please refer to: **ES Appendix 9-7: Otter and Water Vole Report 2024-2025** (Doc Ref. 6.3).
Badger	Badger survey	Badger surveys are recommended to ensure the locations of any setts are known prior to design and construction, so they can be avoided. Preferred survey timing would be February to April and late September to November, when vegetation has died back or is at a minimum, allowing for the easier discovery of setts and other badger field signs, such as latrines, tracks, and hairs. Please refer to: **ES Appendix 9-8: Badger Report (Confidential) 2024-2025** (Doc Ref. 6.3), which details all currently known information.

Ecological Feature	Further Requirement	Recommendations
Hedgehog	Hand searches	Any hedgerow, brash & log piles, or woodland removal should only proceed following hand searches for reptiles. Ditch crests with dry dredgings should also be checked for basking reptiles. Removal should only be carried out only on warm days of 10 degrees Celsius or above to reduce the risks of moving hibernating animals. Any tunnels, trenches or excavations should be blocked, covered and an access ramp installed if left overnight.
Invasive plant species	Walkover survey	A pre-construction walkover should be carried out to check that invasive species had not colonised the Grid Connection Route or Inter-Array Connections areas. This could be combined with nesting bird checks.

Appendix 1: Maps



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 1: Site Context Map

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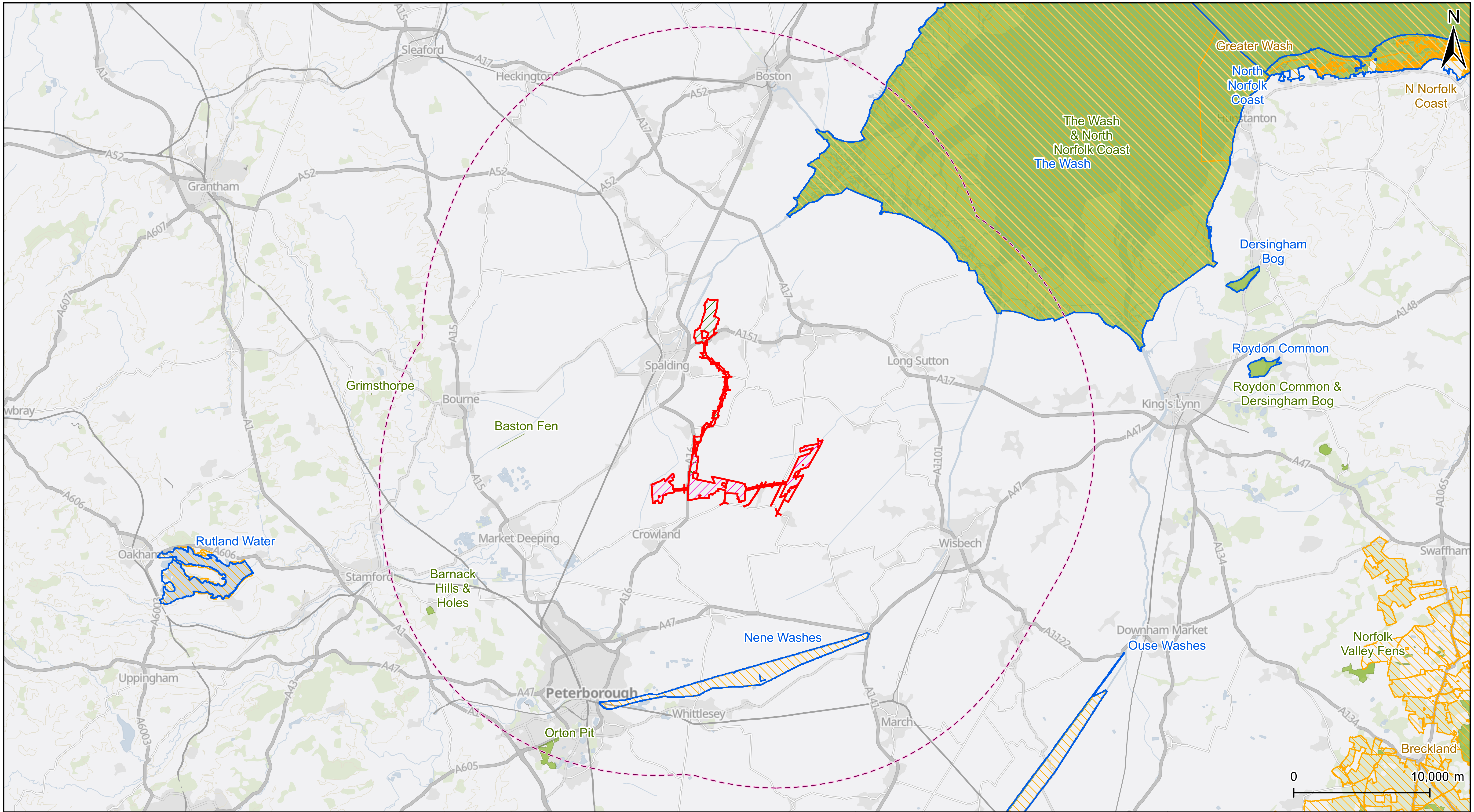
Legend

- Order Limits
- Solar Development Areas
- Inter-Array Connections
- Grid Connection Route

Date: 20/03/2026

Meridian Solar



Project Title			
Meridian Solar Farm			
Map Title			
Preliminary Ecological Appraisal Figure 2: Internationally Important Wildlife Sites (IIWS) within 20km			
Scale @ A3	Version	Drawn	Reviewed
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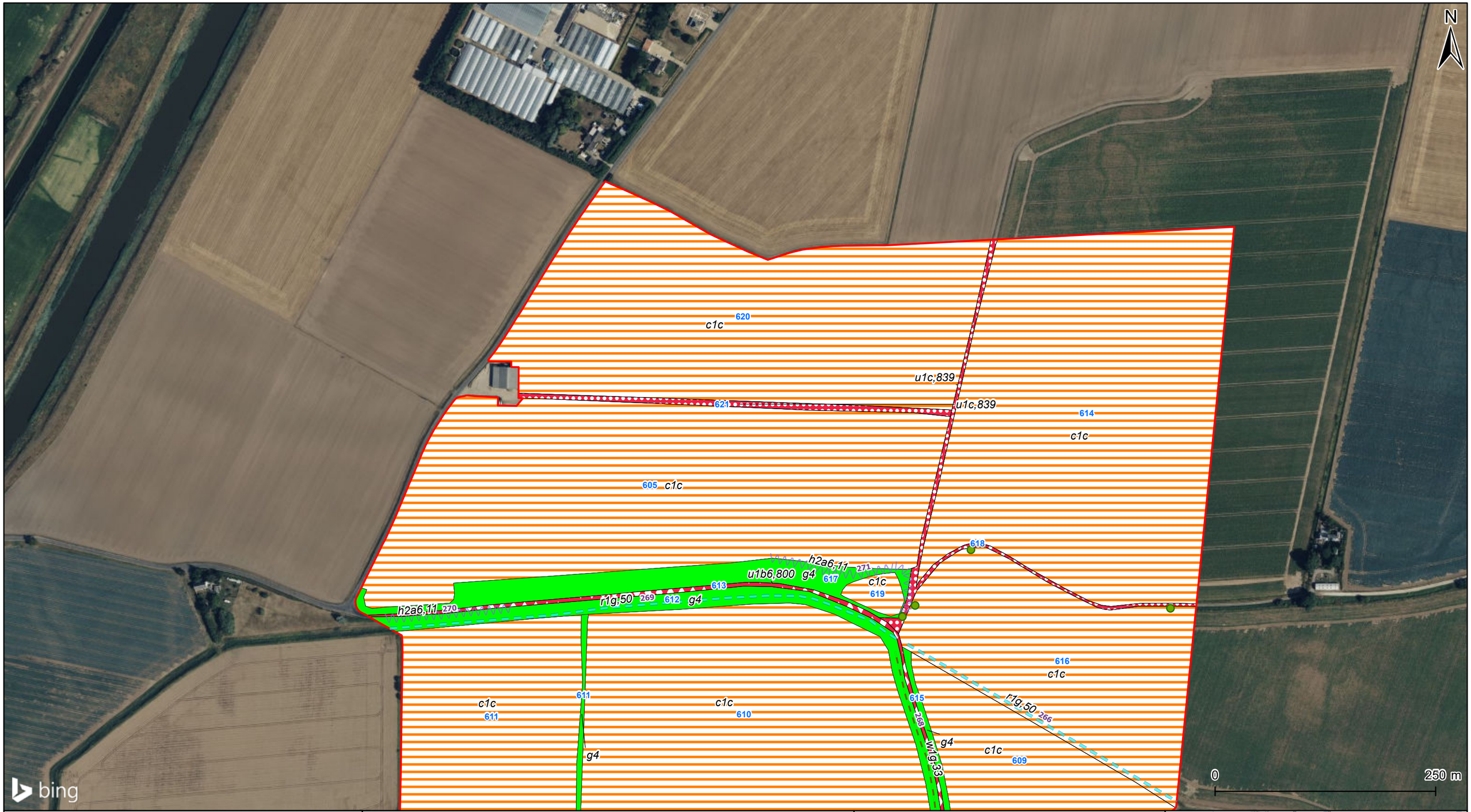
Legend
- Order Limits
- Order Limits - 20km buffer
- Solar Development Areas
- Inter-Array Connections
- Grid Connection Route
- Ramsar
- Special Protection Area (SPA)
- Special Areas of Conservation (SAC)

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 1

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

- Order Limits

Primary habitat

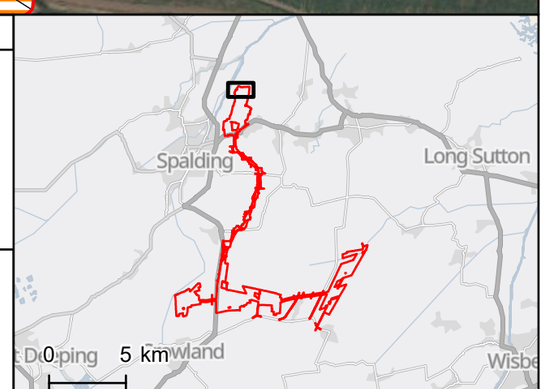
- c1c - Cereal crops
- g4 - Modified grassland
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- h2a6 - Other native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

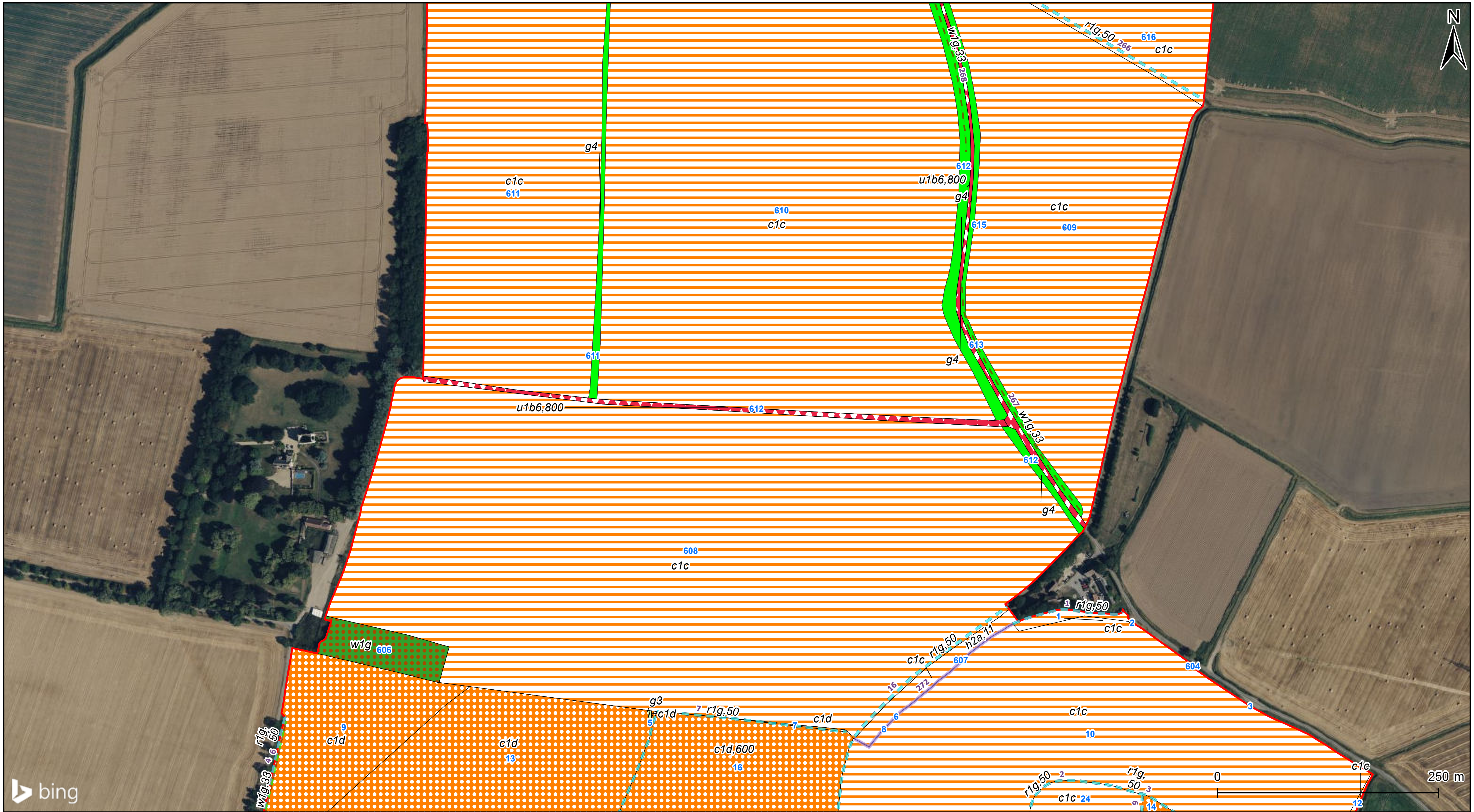
Secondary code

- 800 - Road
- 839 - Track

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 2

Scale @ A3	Version	Drawn	Reviewed
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Legend

Order Limits

Primary habitat

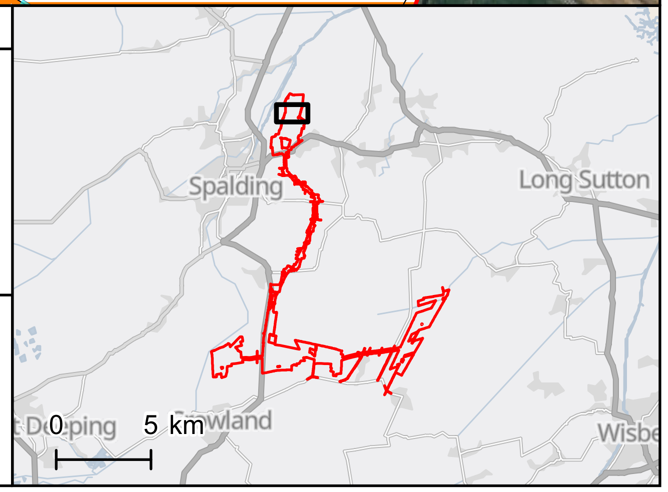
- c1c - Cereal crops
- c1d - Non-cereal crops
- g3 - Neutral grassland
- g4 - Modified grassland
- h3f - Hawthorn scrub
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- w1g - Other broadleaved woodland
- h2a - Native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland

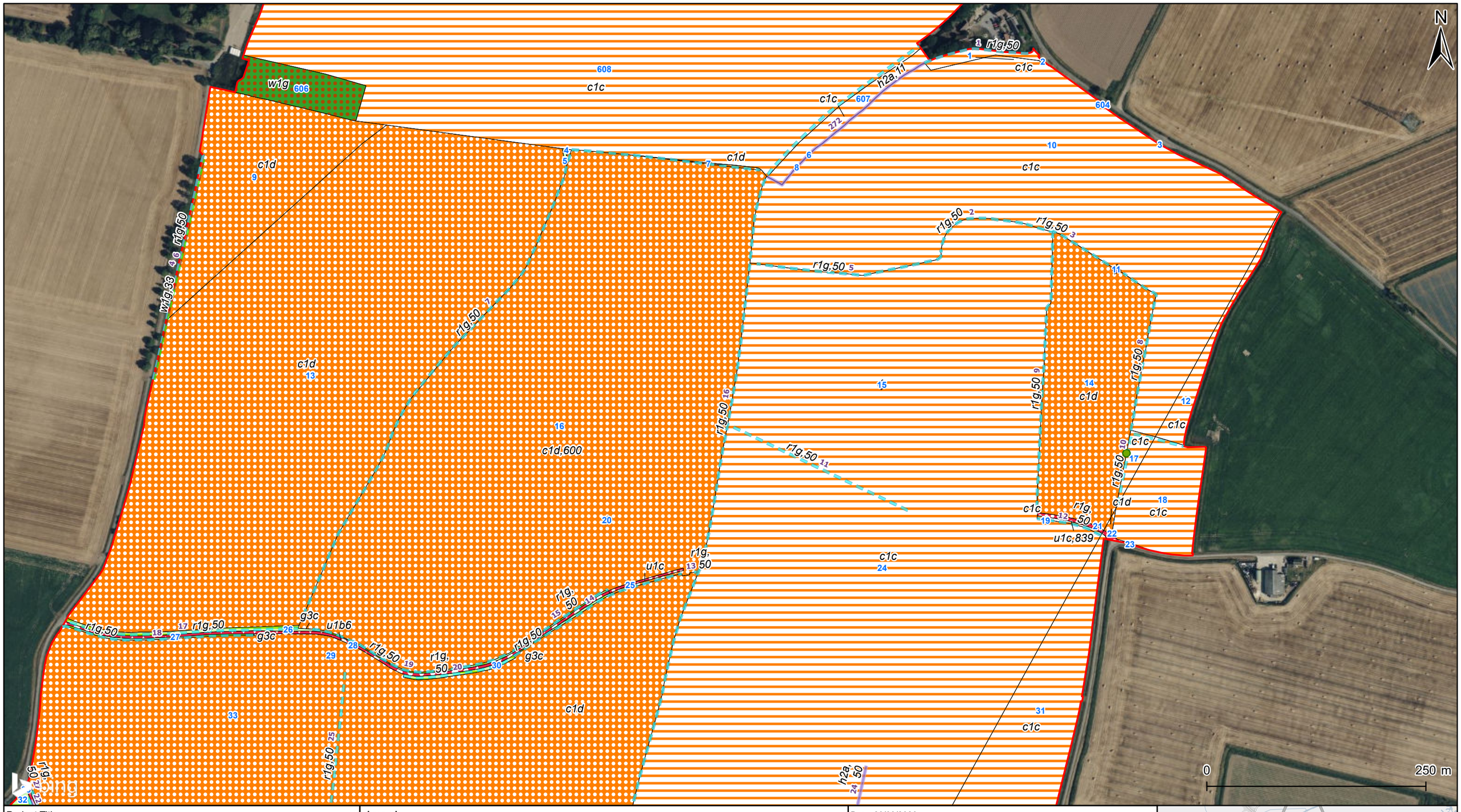
Secondary code

- 10 - Scattered scrub
- 600 - Ploughed
- 800 - Road
- 33 - Line of trees
- 50 - Ditch

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 3

Scale @ A3	Version	Drawn	Reviewed
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Legend

Order Limits

Primary habitat

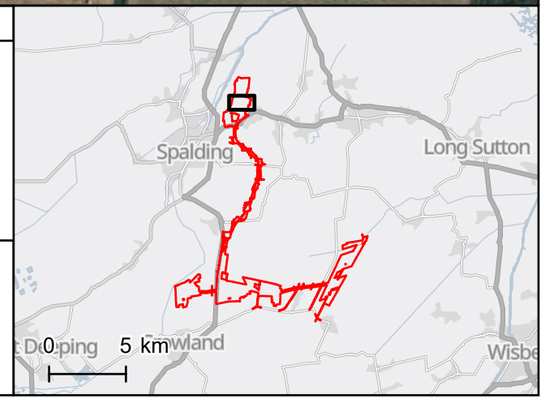
- c1c - Cereal crops
- c1d - Non-cereal crops
- g3 - Neutral grassland
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3d - Bramble scrub
- h3f - Hawthorn scrub
- h3h - Mixed scrub
- h3j - Willow scrub
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- w1g - Other broadleaved woodland
- h2a - Native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

Secondary code

- 10 - Scattered scrub
- 106 - Mown
- 600 - Ploughed
- 839 - Track
- 33 - Line of trees
- 50 - Ditch

Date: 20/03/2026

Meridian Solar



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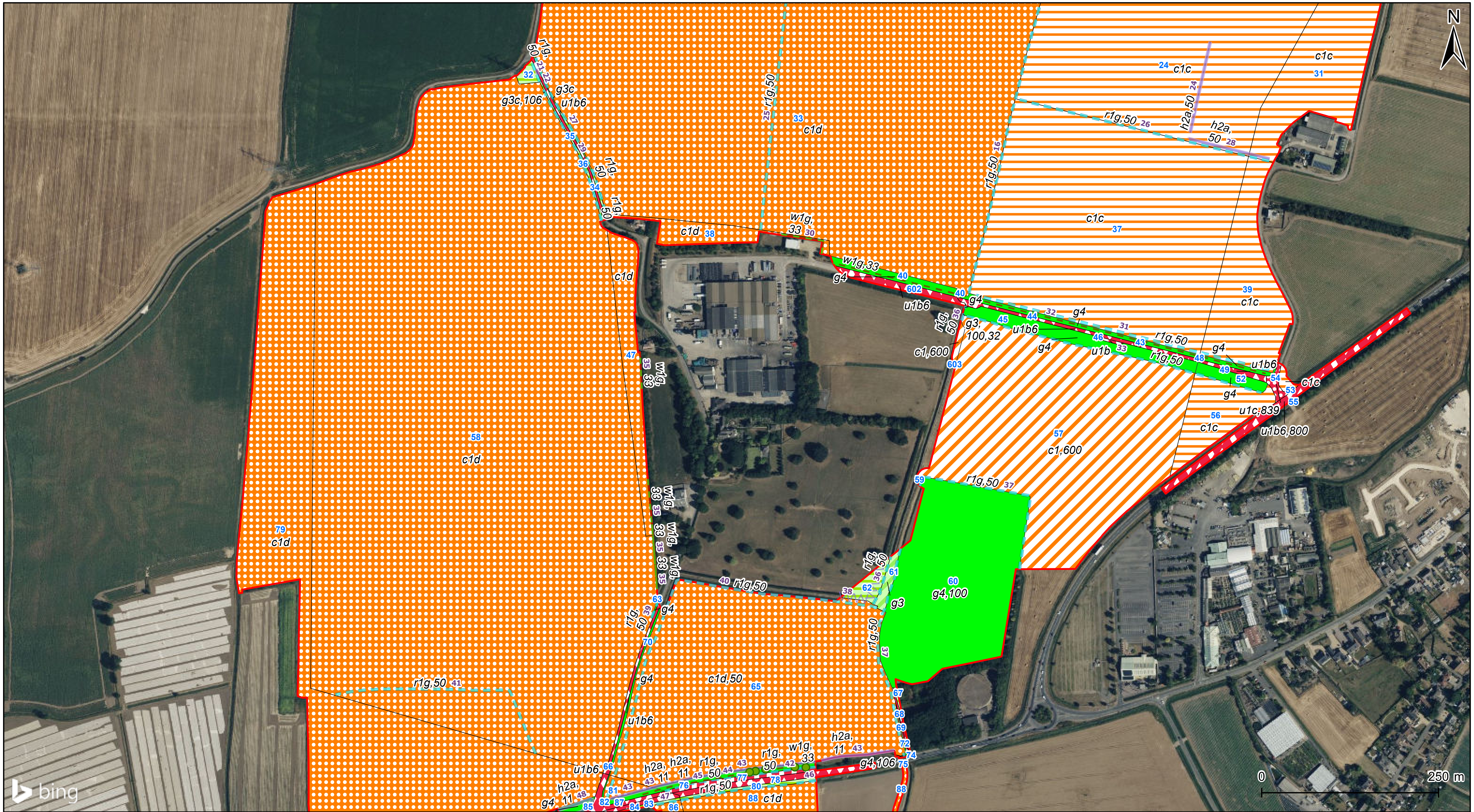

Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 4

Scale @ A3	Version	Drawn	Reviewed
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Legend

- Order Limits

Primary habitat

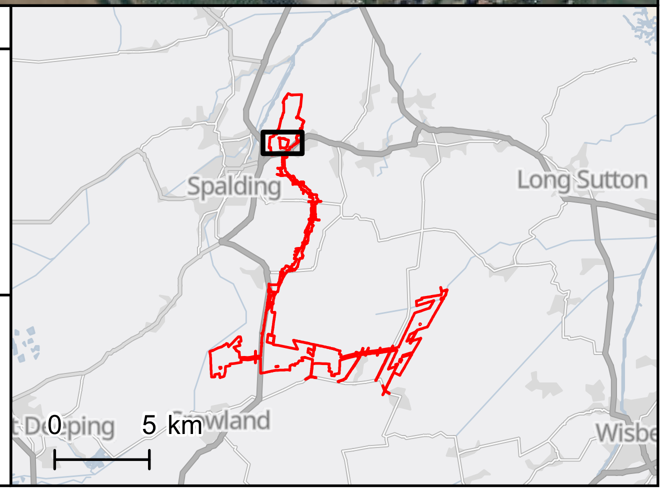
- c1 - Arable and horticulture
- c1c - Cereal crops
- c1d - Non-cereal crops
- g3 - Neutral grassland
- g3c - Other neutral grassland
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- h2a - Native hedgerow
- h2a6 - Other native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

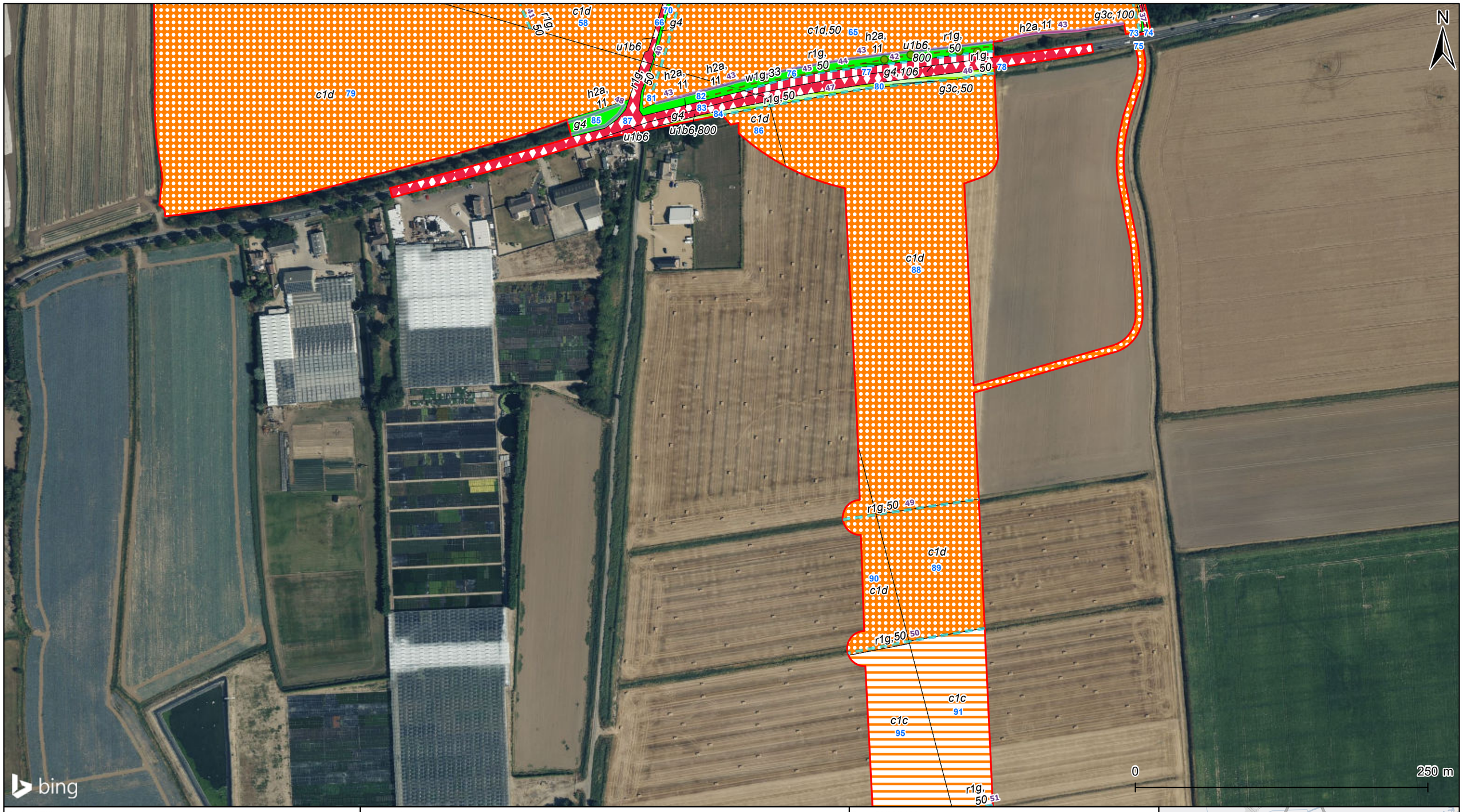
Secondary code

- 50 - Ditch
- 100 - Grazed
- 106 - Mown
- 600 - Ploughed
- 800 - Road
- 839 - Track
- 32 - Scattered trees
- 11 - Hedgerow with trees
- 33 - Line of trees
- 50 - Ditch

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC -
Page 5

Scale @ A3	Version	Drawn	Reviewed
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Legend

- Order Limits

Primary habitat

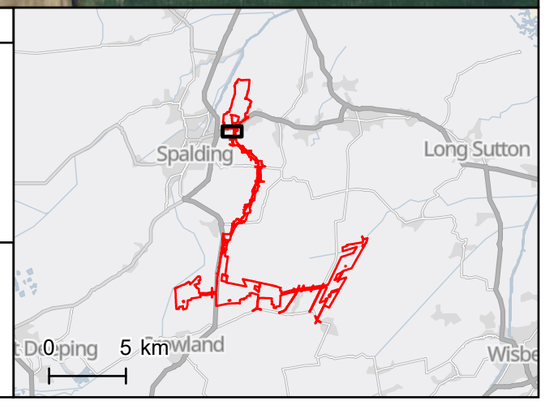
- c1c - Cereal crops
- c1d - Non-cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- h2a - Native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

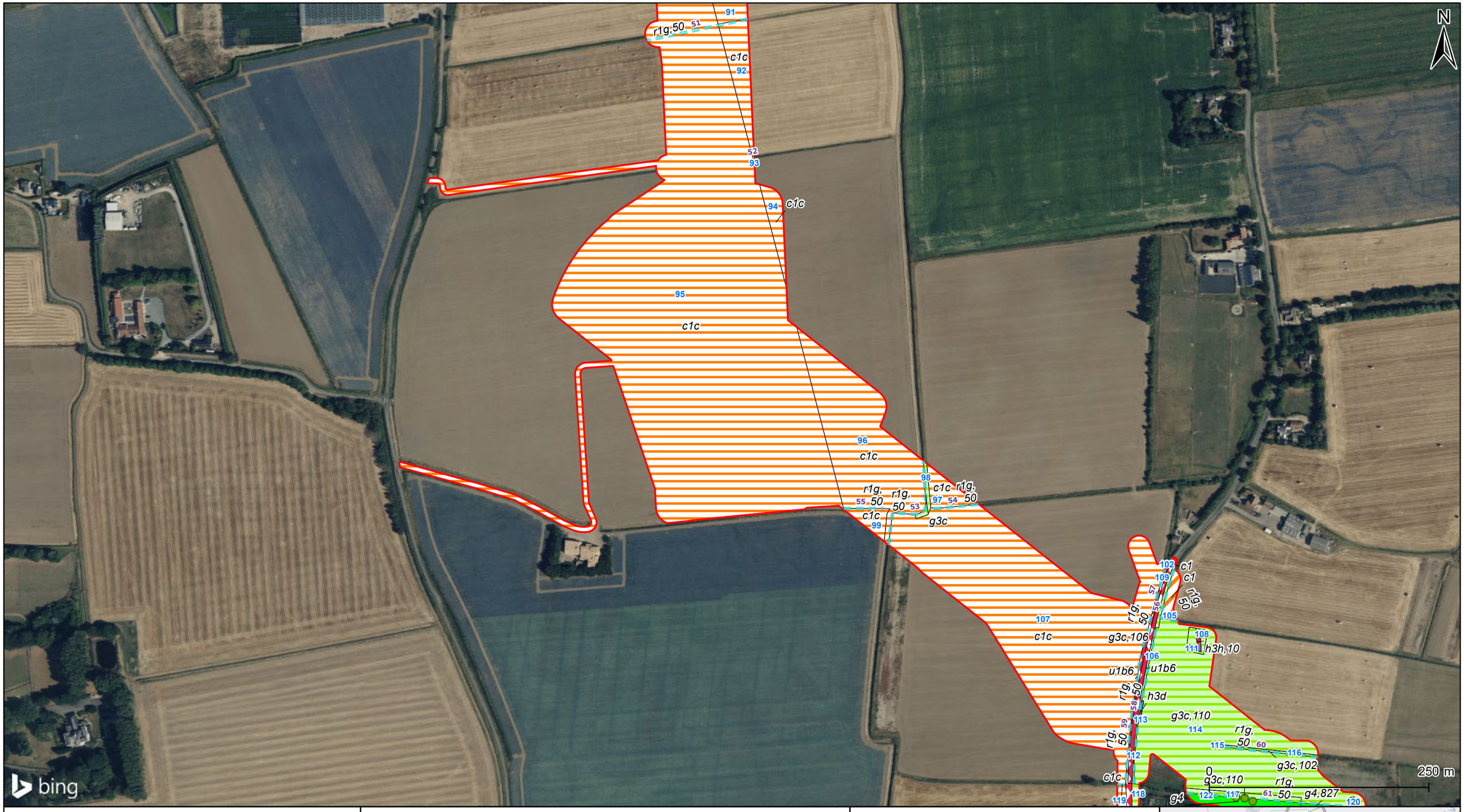
Secondary code

- 50 - Ditch
- 100 - Grazed
- 106 - Mown
- 800 - Road
- 11 - Hedgerow with trees
- 33 - Line of trees
- 50 - Ditch

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 6

Scale @ A3	Version	Drawn	Reviewed
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Legend

- Order Limits

Primary habitat

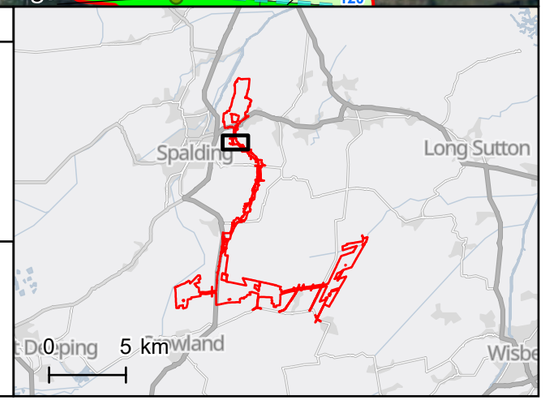
- c1 - Arable and horticulture
- c1c - Cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3d - Bramble scrub
- h3h - Mixed scrub
- h3j - Willow scrub
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- r1g - Other standing water
- Scattered tree

Secondary code

- 10 - Scattered scrub
- 16 - Tall forbs
- 102 - Sheep grazed
- 106 - Mown
- 110 - Silage and haylage
- 827 - Garden
- 50 - Ditch

Date: 20/03/2026

Meridian Solar



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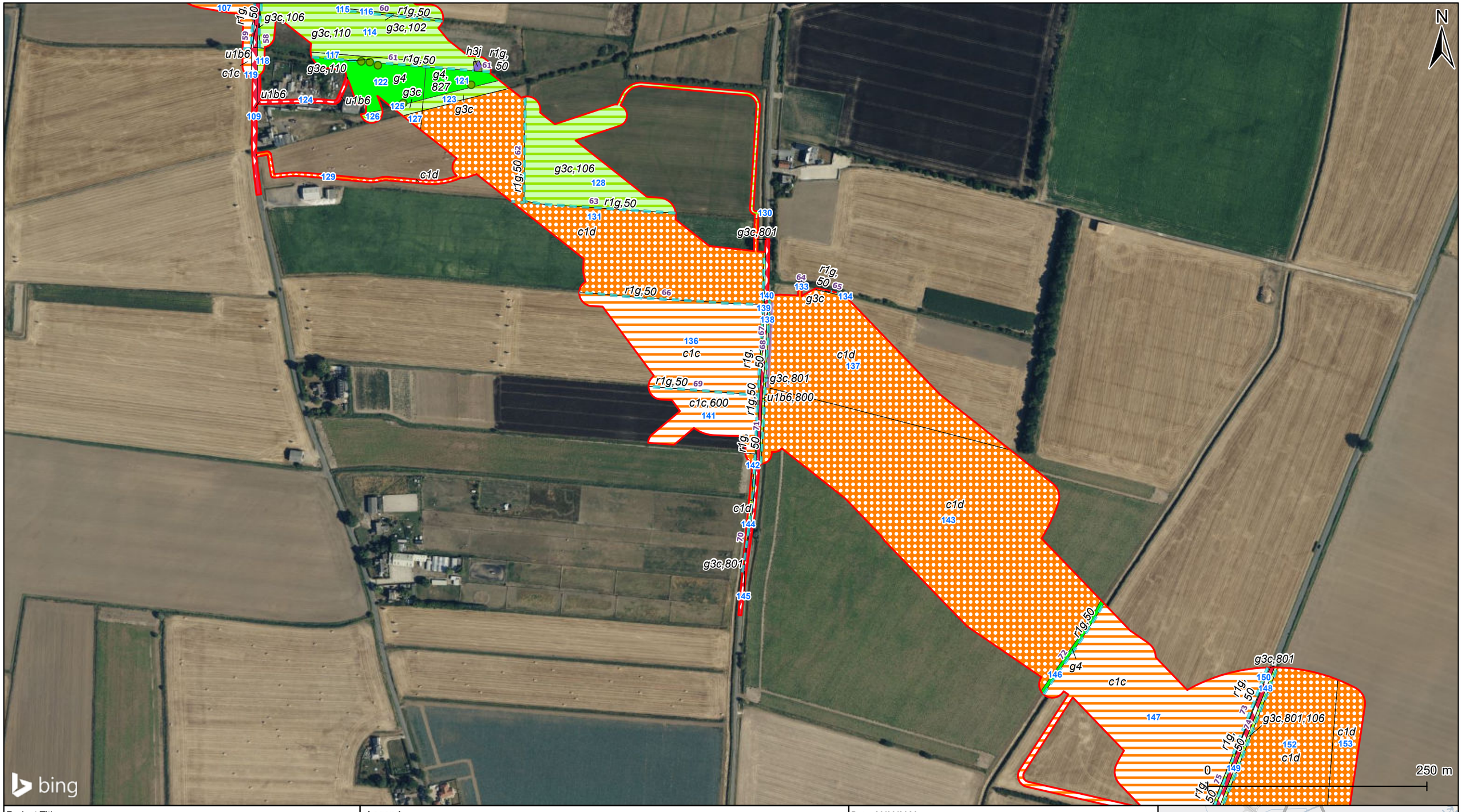

Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 7

Scale @ A3	Version	Drawn	Reviewed
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Legend

- Order Limits

Primary habitat

- c1c - Cereal crops
- c1d - Non-cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3h - Mixed scrub
- h3j - Willow scrub
- u1b6 - Other developed land
- h2a - Native hedgerow
- h2a6 - Other native hedgerow
- r1g - Other standing water
- Scattered tree

Secondary code

- 102 - Sheep grazed
- 106 - Mown
- 110 - Silage and haylage
- 600 - Ploughed
- 800 - Road
- 801 - Road verge or island
- 827 - Garden
- 106 - Mown
- 50 - Ditch

Date: 20/03/2026

Meridian Solar

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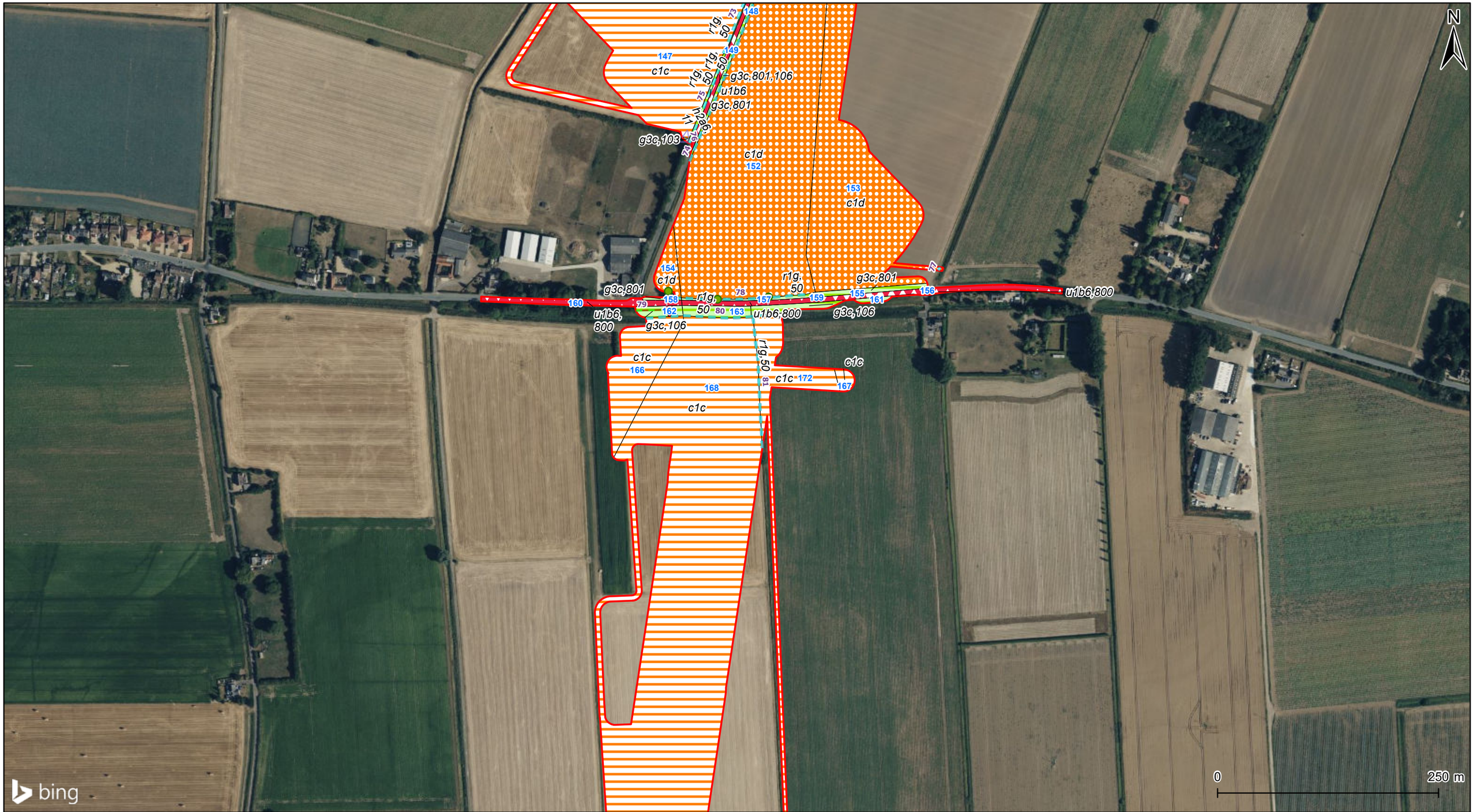

Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 8

Scale @ A3	Version	Drawn	Reviewed
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Legend

- Order Limits

Primary habitat

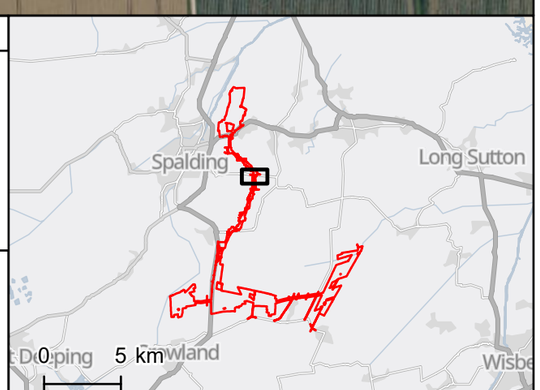
- c1c - Cereal crops
- c1d - Non-cereal crops
- g3c - Other neutral grassland
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- h2a6 - Other native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

Secondary code

- 103 - Horse grazed
- 106 - Mown
- 800 - Road
- 801 - Road verge or island
- 839 - Track
- 106 - Mown
- 11 - Hedgerow with trees
- 33 - Line of trees
- 50 - Ditch

Date: 20/03/2026

Meridian Solar



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Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 9

Scale @ A3	Version	Drawn	Reviewed
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Legend

Order Limits

Primary habitat

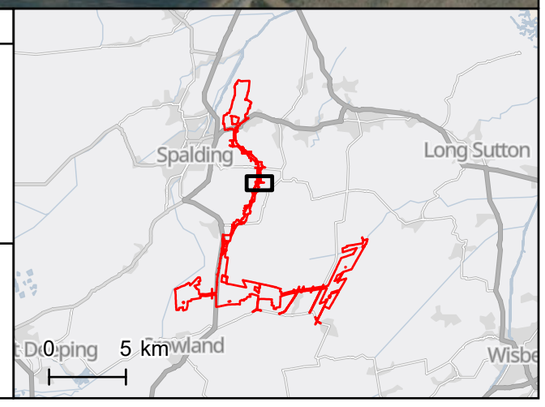
- c1c - Cereal crops
- g4 - Modified grassland
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- r1g - Other standing water

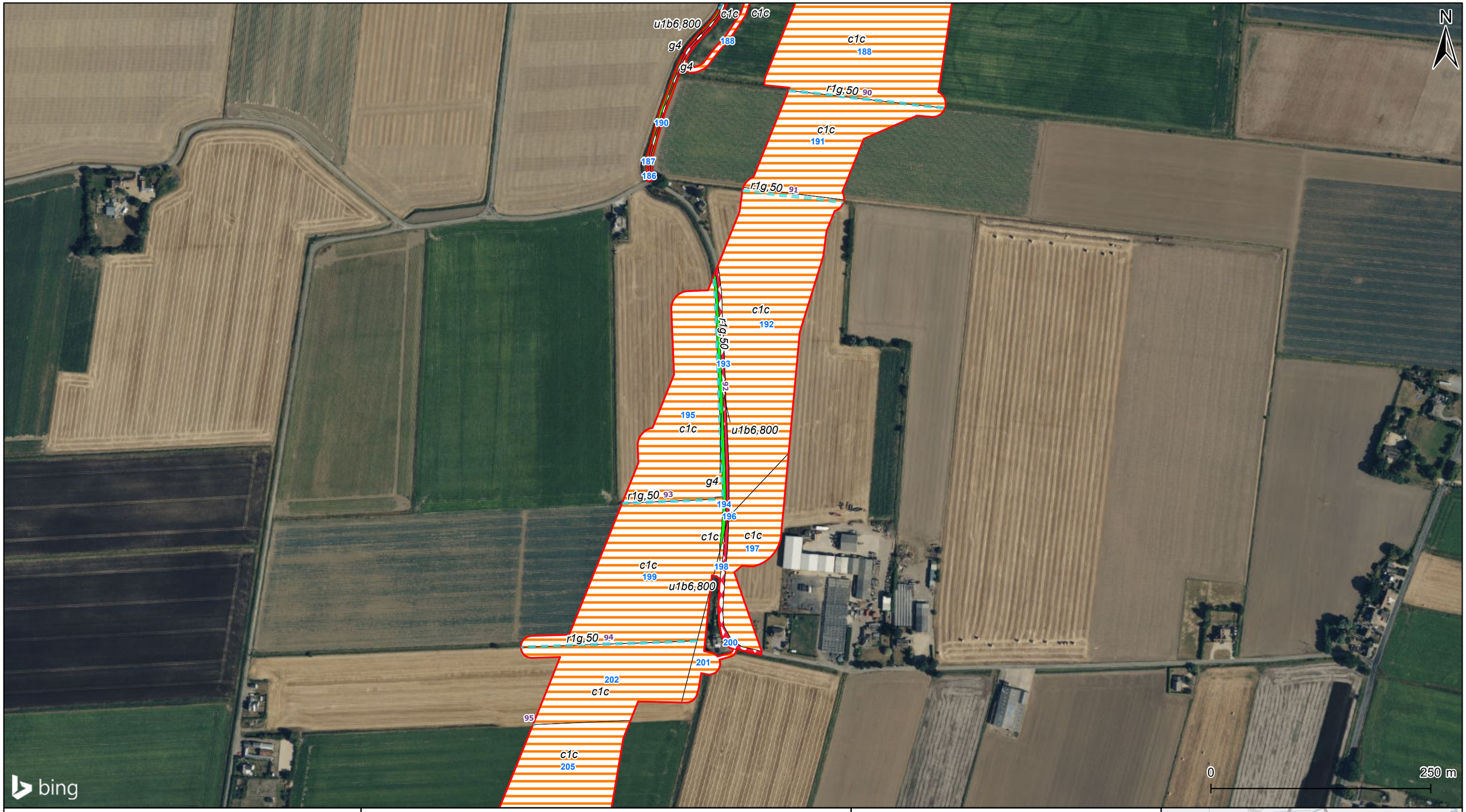
Secondary code

- 800 - Road
- 839 - Track
- 50 - Ditch

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 10

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

c1c - Cereal crops

g4 - Modified grassland

u1b6 - Other developed land

r1g - Other standing water

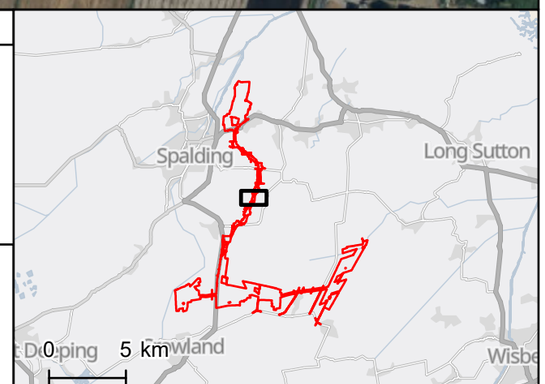
Secondary code

800 - Road

50 - Ditch

Date: 20/03/2026

Meridian Solar



Project Title	
	Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 11

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

- Order Limits

Primary habitat

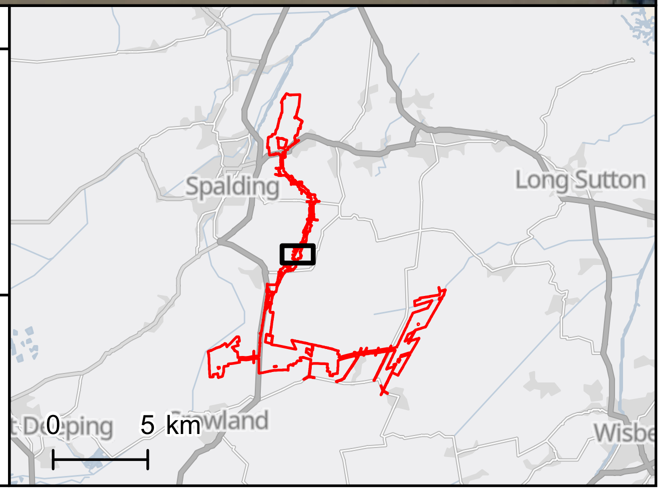
- c1c - Cereal crops
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- u1b6 - Other developed land
- r1g - Other standing water

Secondary code

- 103 - Horse grazed
- 800 - Road
- 50 - Ditch

Date: 20/03/2026

Meridian Solar



Project Title	Meridian Solar Farm
Map Title	Preliminary Ecological Appraisal Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 12

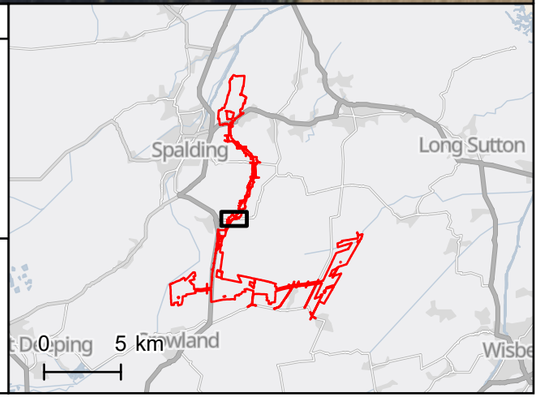
Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

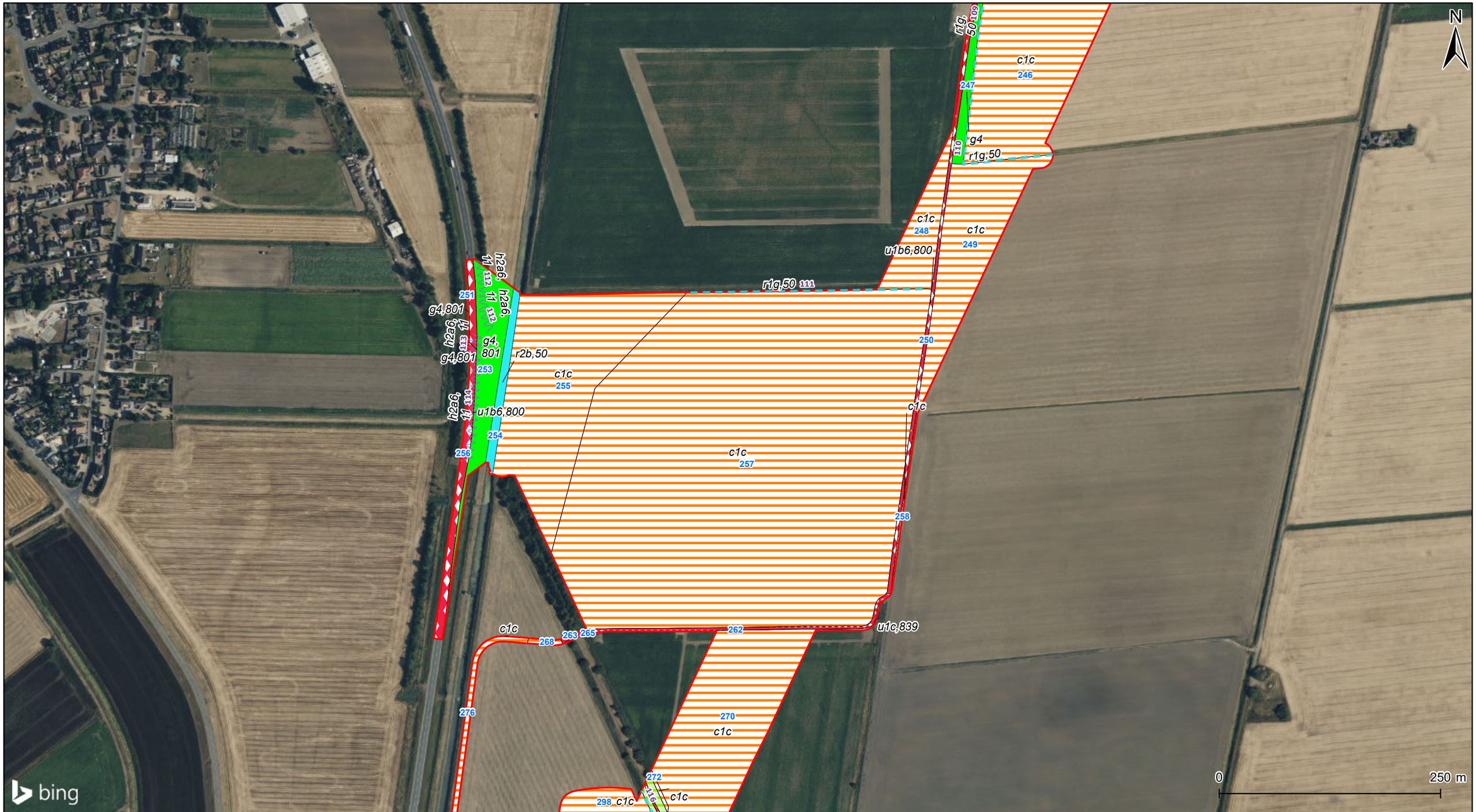
Legend

- Order Limits
- Primary habitat
  - c1c - Cereal crops
  - c1d8 - Other non-cereal crops
  - g4 - Modified grassland
  - u1b - Developed land, sealed surface
  - u1b5 - Buildings
  - u1b6 - Other developed land
- h2a - Native hedgerow
- r1g - Other standing water
- Scattered tree
- Secondary code
  - 800 - Road
  - 11 - Hedgerow with trees
  - 50 - Ditch

Date: 20/03/2026

Meridian Solar





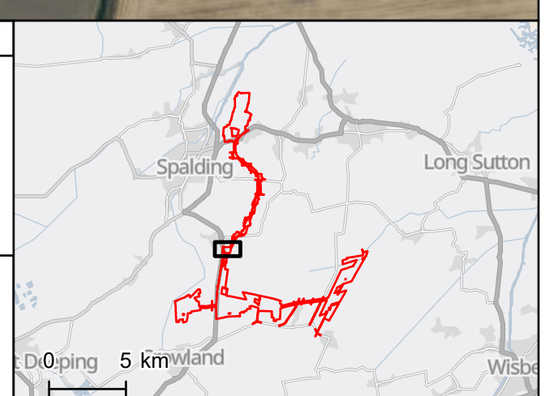
Project Title: Meridian Solar Farm			
Map Title: Preliminary Ecological Appraisal Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 13			
Scale @ A3: 1:4,000	Version: 0	Drawn: JM	Reviewed: JET

Legend

	Secondary code
Order Limits	10 - Scattered scrub
Primary habitat	50 - Ditch
c1c - Cereal crops	800 - Road
g3c - Other neutral grassland	801 - Road verge or island
g4 - Modified grassland	839 - Track
h3h - Mixed scrub	16 - Tall forbs
r2b - Other river/stream	128 - Tall or tussocky sward
u1b6 - Other developed land	11 - Hedgerow with trees
u1c - Artificial unvegetated unsealed surface	50 - Ditch
h2a6 - Other native hedgerow	
r1g - Other standing water	

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 14

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

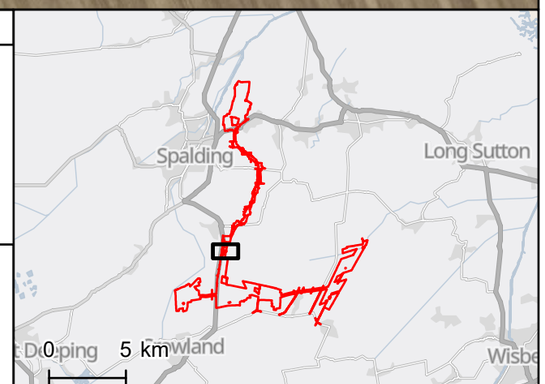
- c1c - Cereal crops
- g3c - Other neutral grassland
- g4 - Modified grassland
- u1c - Artificial unvegetated unsealed surface
- r1g - Other standing water

Secondary code

- 10 - Scattered scrub
- 839 - Track
- 16 - Tall forbs
- 128 - Tall or tussocky sward
- 50 - Ditch

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 15

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

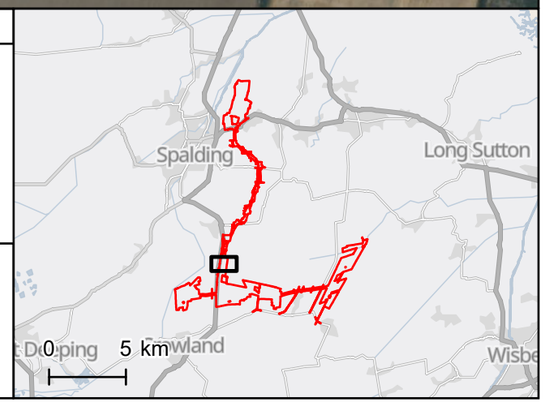
- c1 - Arable and horticulture
- c1c - Cereal crops
- g4 - Modified grassland
- u1c - Artificial unvegetated unsealed surface
- r1g - Other standing water

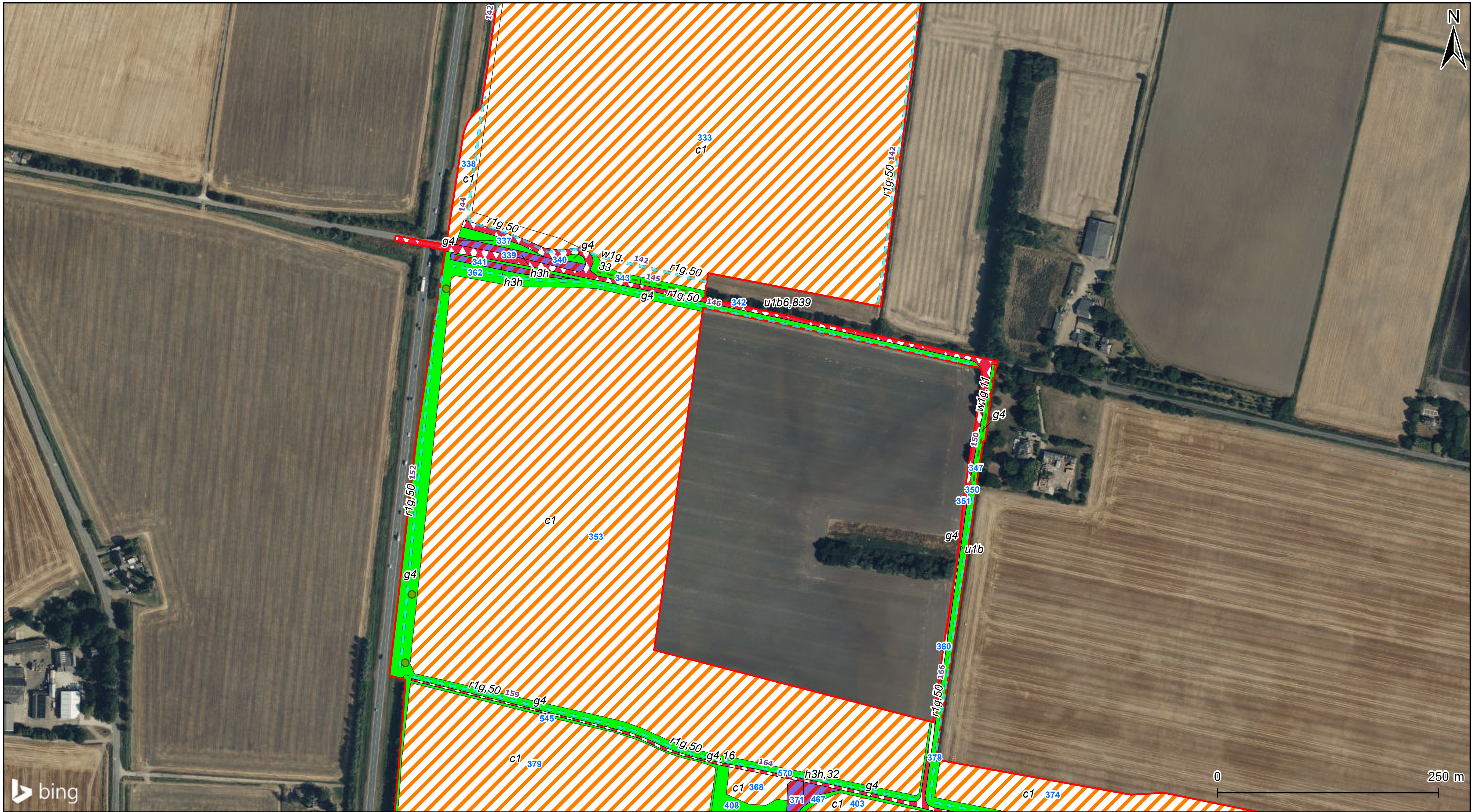
Secondary code

50 - Ditch

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 16

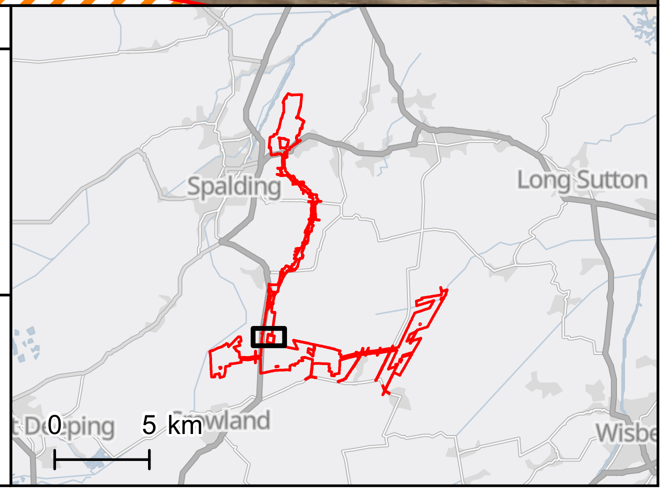
Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

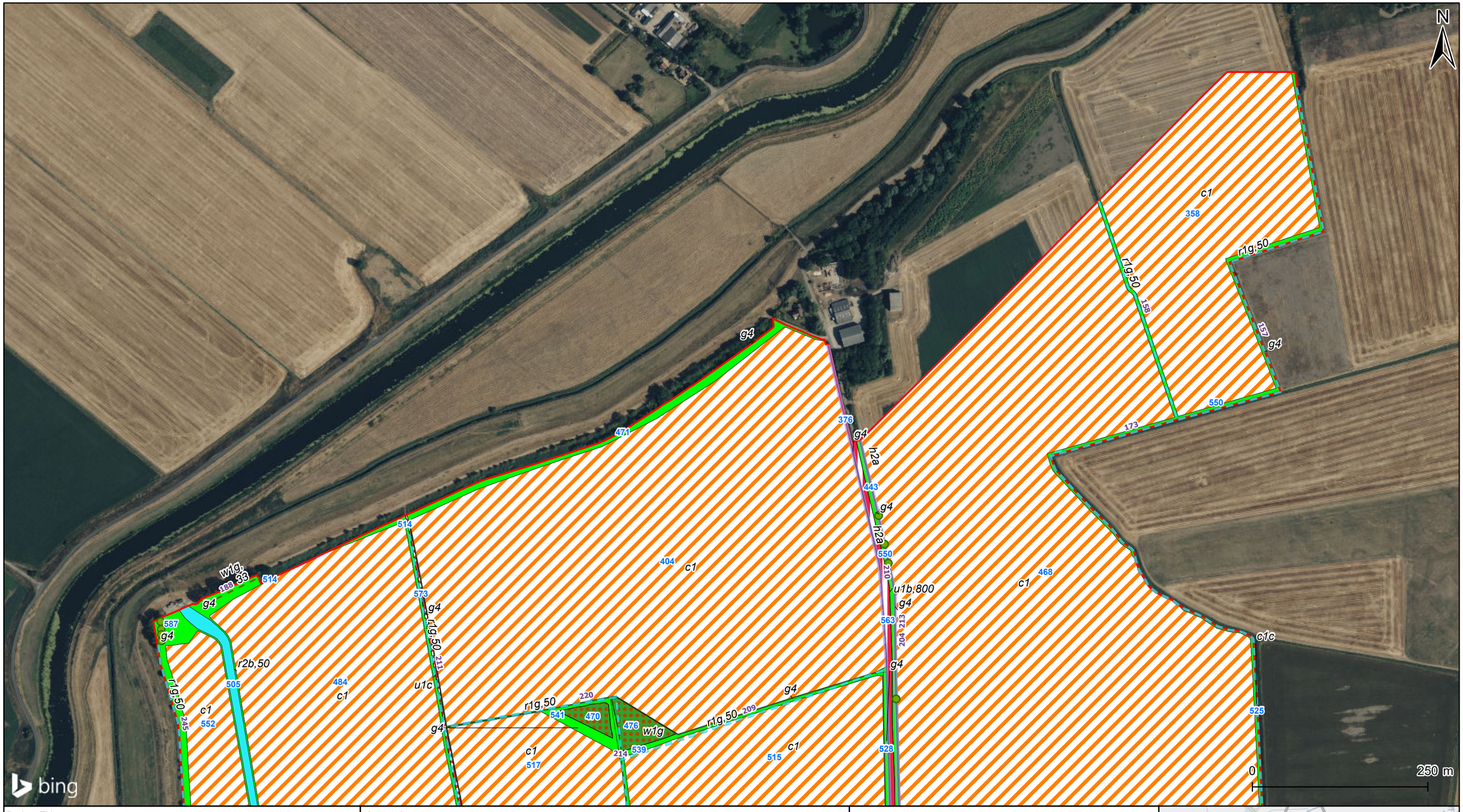
Legend

- Order Limits
- Primary habitat
  - c1 - Arable and horticulture
  - g4 - Modified grassland
  - h3h - Mixed scrub
  - u1b - Developed land, sealed surface
  - u1b6 - Other developed land
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree
- Secondary code
  - 16 - Tall forbs
  - 32 - Scattered trees
  - 839 - Track

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 17

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

- Order Limits

Primary habitat

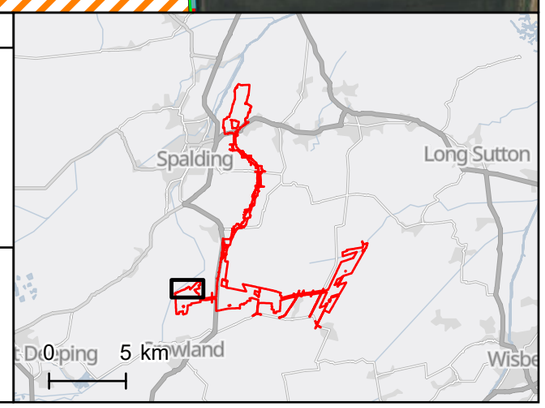
- c1 - Arable and horticulture
- c1c - Cereal crops
- g4 - Modified grassland
- r2b - Other river/stream
- u1b - Developed land, sealed surface
- u1c - Artificial unvegetated unsealed surface
- w1g - Other broadleaved woodland
- h2a - Native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

Secondary code

- 50 - Ditch
- 800 - Road

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 18

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

Order Limits

Primary habitat

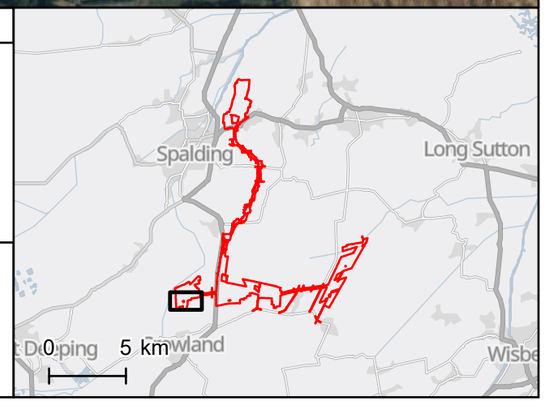
- c1 - Arable and horticulture
- c1c - Cereal crops
- g4 - Modified grassland
- h3h - Mixed scrub
- r1g - Other standing water
- r2b - Other river/stream
- u1b - Developed land, sealed surface
- u1c - Artificial unvegetated unsealed surface
- w1g - Other broadleaved woodland
- h2a - Native hedgerow
- r1g - Other standing water

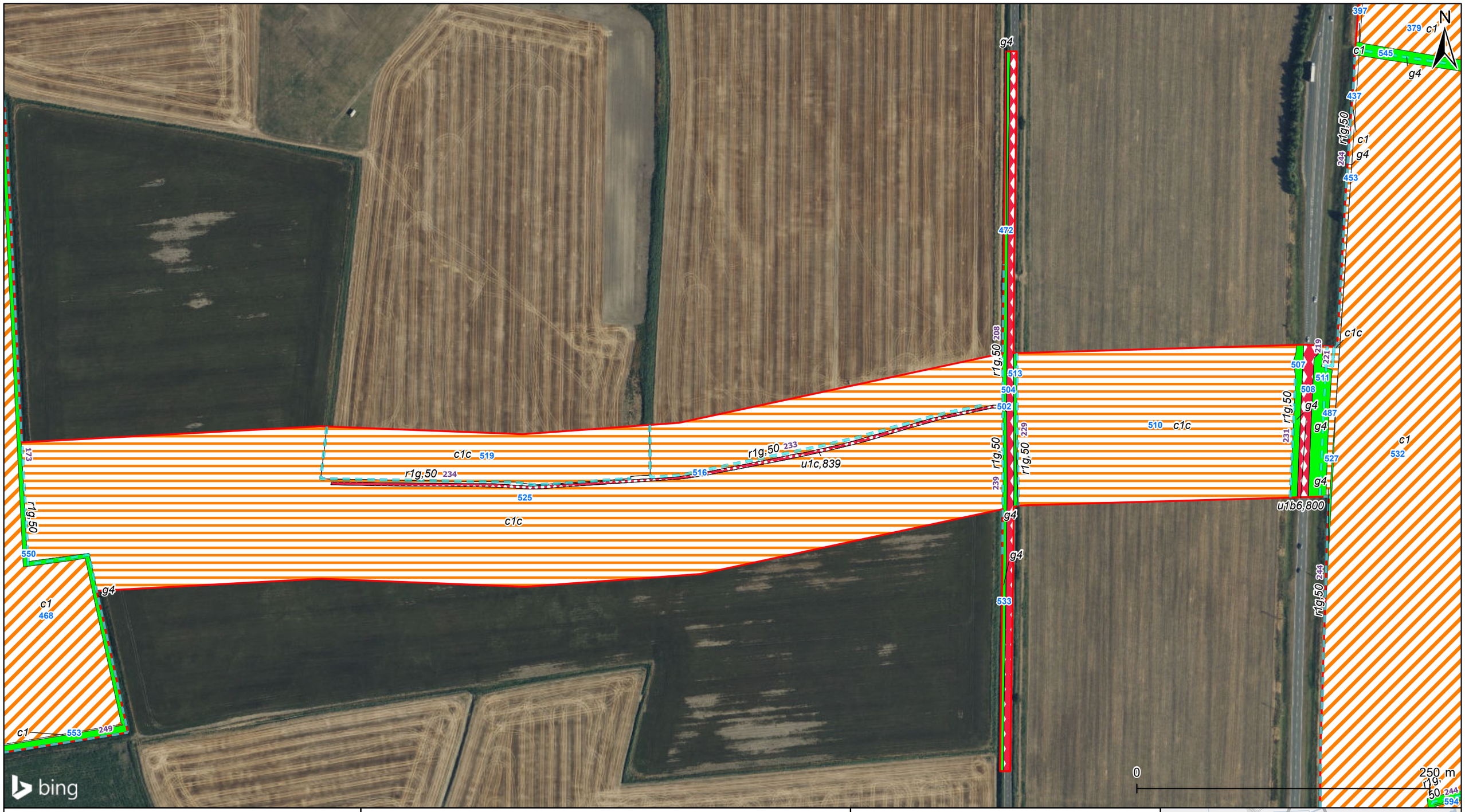
Secondary code

- 50 - Ditch
- 800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 19

Scale @ A3	Version	Drawn	Reviewed
1:3,000	0	JM	JET

Legend

- Order Limits

Primary habitat

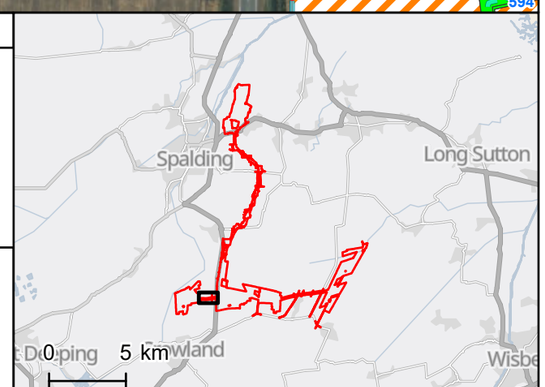
- c1 - Arable and horticulture
- c1c - Cereal crops
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- r1g - Other standing water

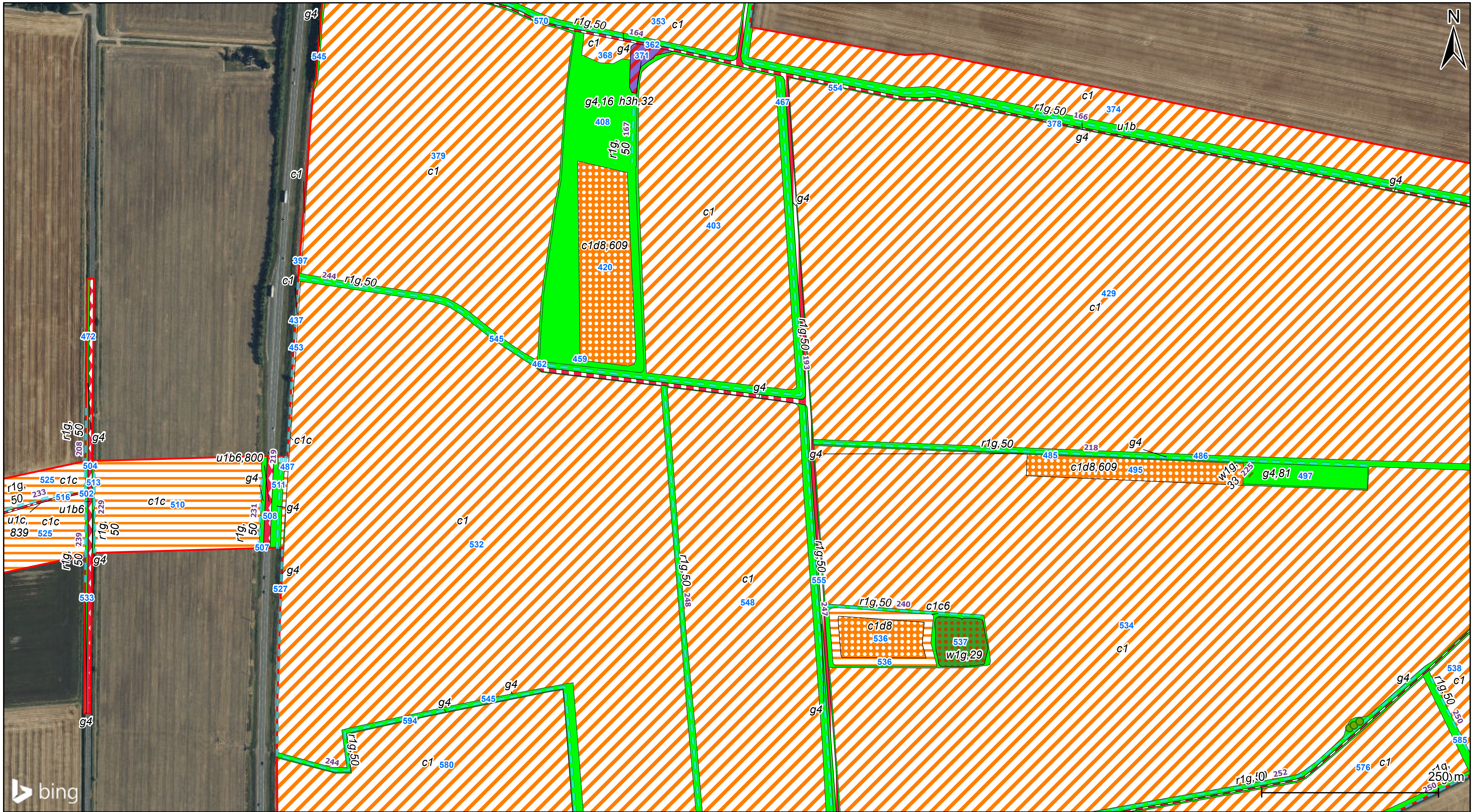
Secondary code

- 800 - Road
- 839 - Track

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 20

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

- Order Limits

Primary habitat

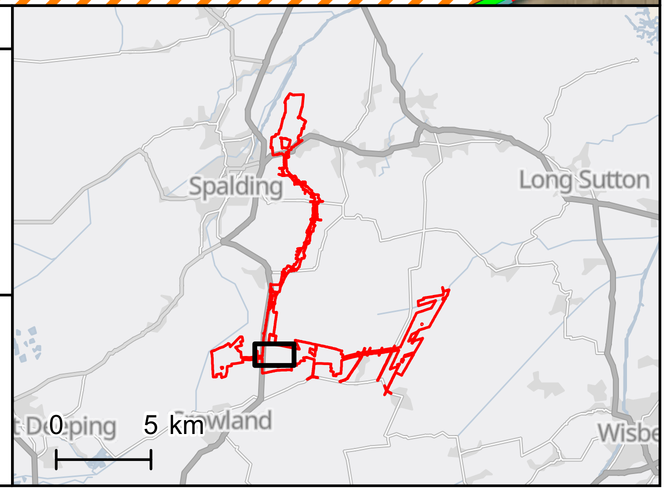
- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c6 - Arable fields - wild bird mix
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- w1g - Other broadleaved woodland
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

Secondary code

- 16 - Tall forbs
- 29 - Plantation
- 32 - Scattered trees
- 81 - Ruderal or ephemeral
- 609 - Cover crops
- 800 - Road
- 839 - Track

Date: 20/03/2026

Meridian Solar



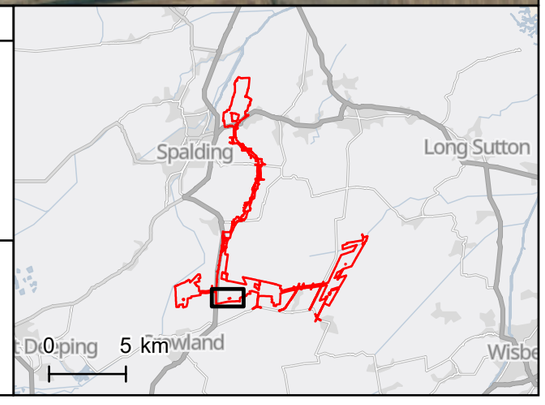
Project Title: Meridian Solar Farm			
Map Title: Preliminary Ecological Appraisal Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 21			
Scale @ A3 1:5,000	Version 0	Drawn JM	Reviewed JET

Legend

- Order Limits
- Primary habitat
  - c1 - Arable and horticulture
  - c1c - Cereal crops
  - c1c6 - Arable fields - wild bird mix
  - c1d8 - Other non-cereal crops
  - g4 - Modified grassland
  - u1b - Developed land, sealed surface
  - u1b5 - Buildings
  - u1b6 - Other developed land
  - w1g - Other broadleaved woodland
  - h2a - Native hedgerow
  - r1g - Other standing water
  - w1g - Other broadleaved woodland
  - Scattered tree
- Secondary code
  - 29 - Plantation
  - 81 - Ruderal or ephemeral
  - 609 - Cover crops
  - 800 - Road

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 22

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

- Order Limits

Primary habitat

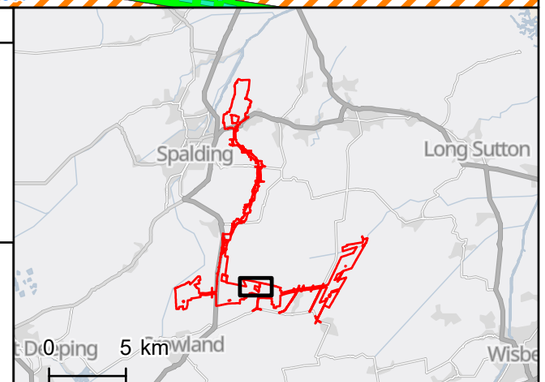
- c1 - Arable and horticulture
- c1c6 - Arable fields - wild bird mix
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b - Developed land, sealed surface
- w1g - Other broadleaved woodland
- h2a - Native hedgerow
- r1g - Other standing water

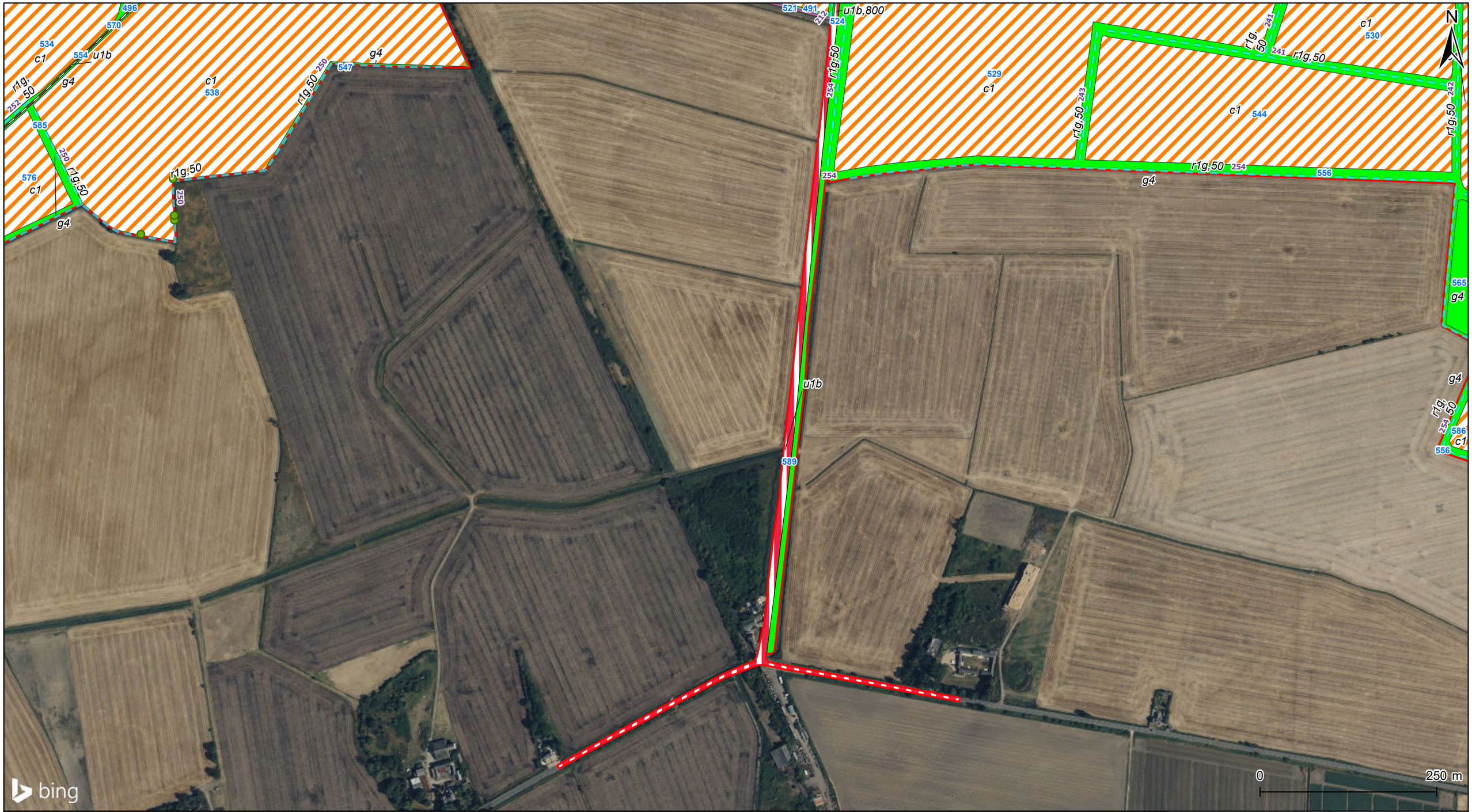
Secondary code

- 10 - Scattered scrub
- 11 - Hedgerow with trees
- 29 - Plantation
- 800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 23

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

Order Limits

Primary habitat

c1 - Arable and horticulture

g4 - Modified grassland

u1b - Developed land, sealed surface

h2a - Native hedgerow

r1g - Other standing water

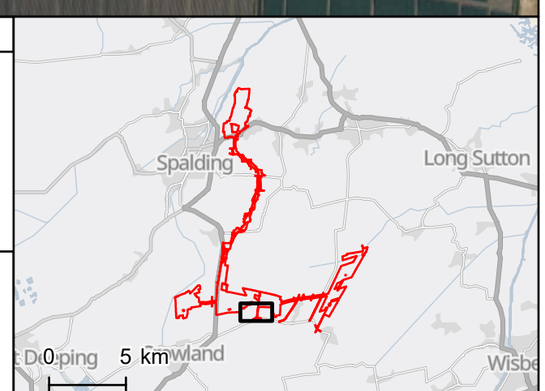
Scattered tree

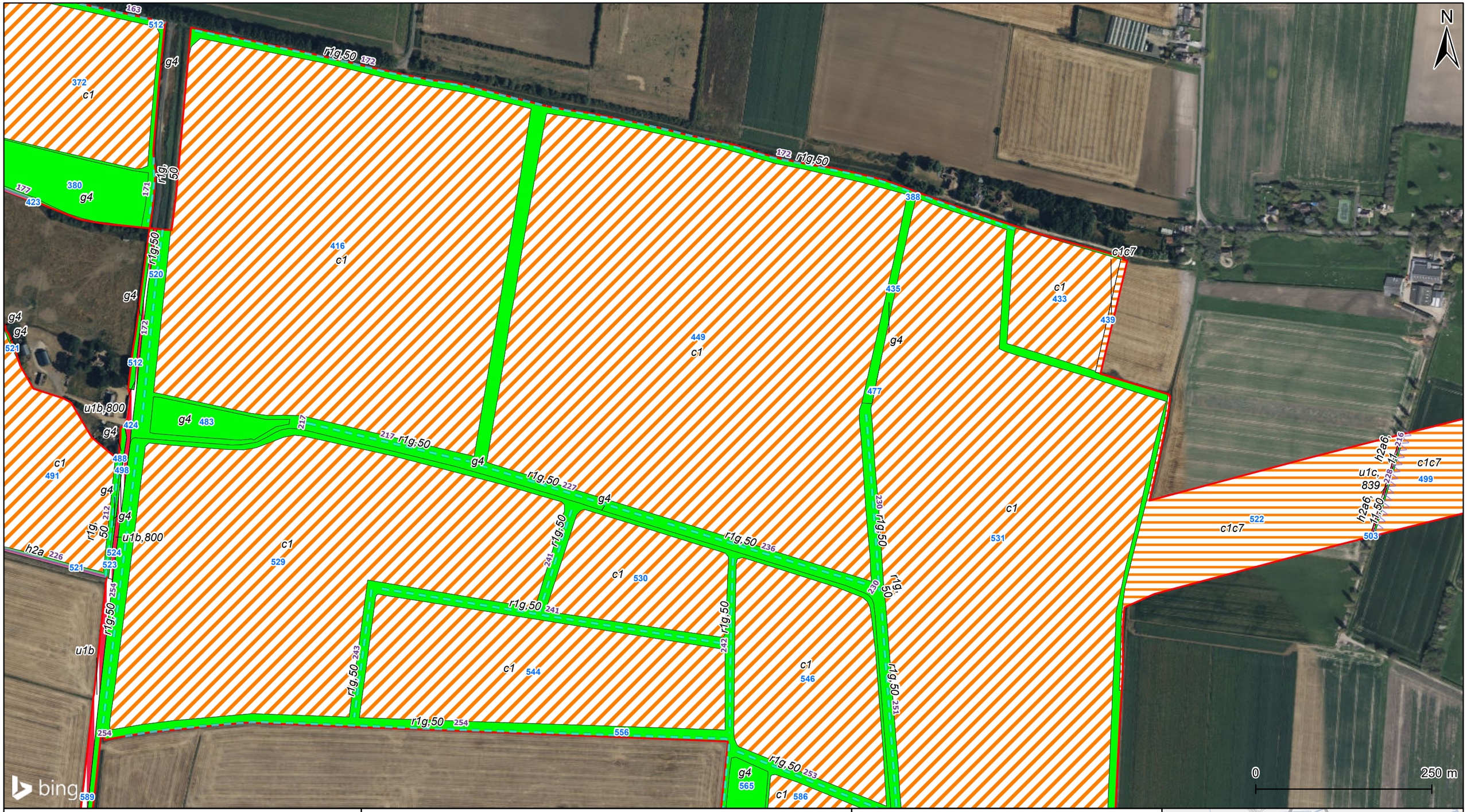
Secondary code

800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 24

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

- Order Limits

Primary habitat

- c1 - Arable and horticulture
- c1c7 - Other cereal crops
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1c - Artificial unvegetated unsealed surface
- h2a - Native hedgerow
- h2a6 - Other native hedgerow
- r1g - Other standing water

Secondary code

- 800 - Road
- 839 - Track
- 11 - Hedgerow with trees

Date: 20/03/2026

Meridian Solar

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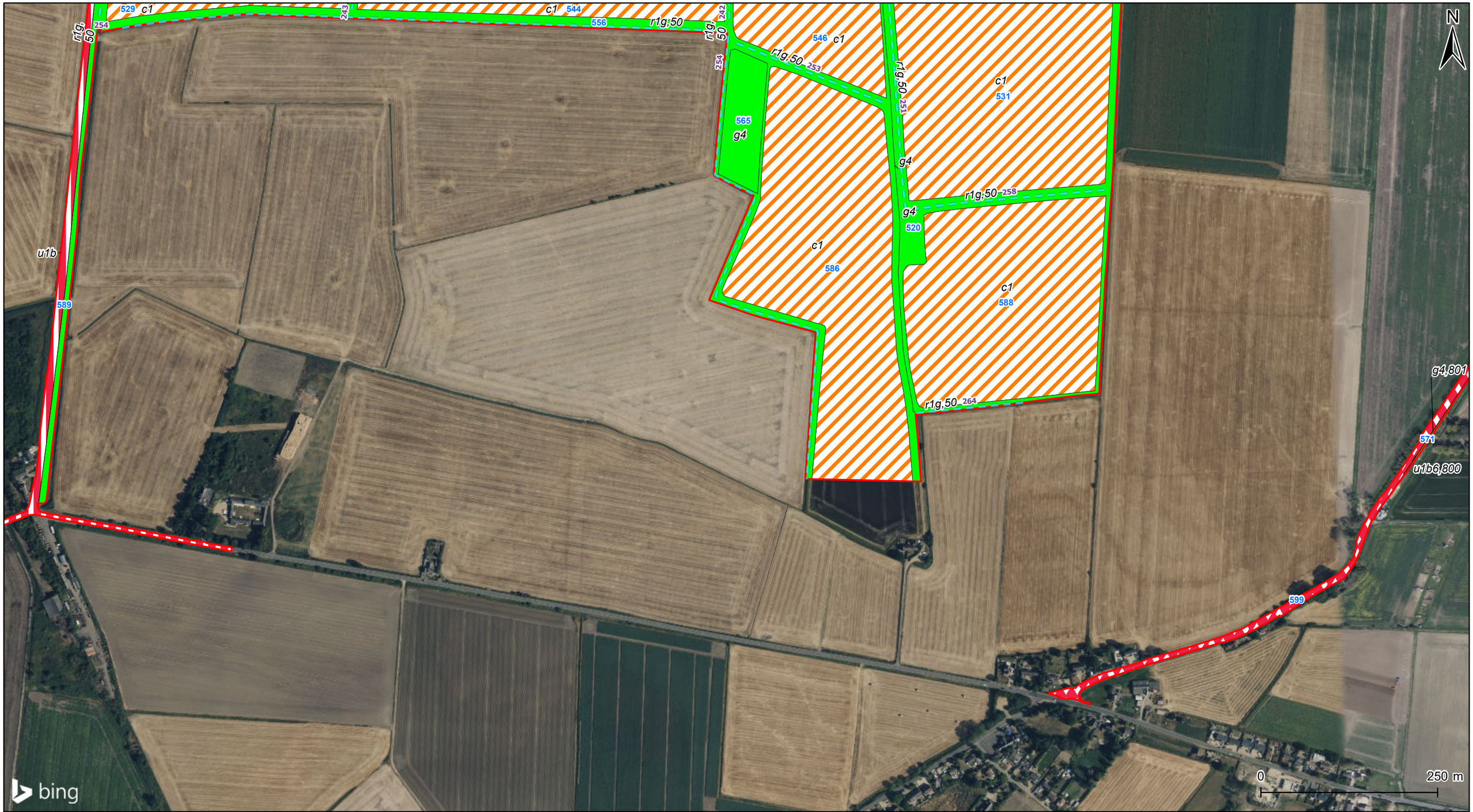


Project Title: Meridian Solar Farm			
Map Title: Preliminary Ecological Appraisal Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 25			
Scale @ A3 1:5,000	Version 0	Drawn JM	Reviewed JET

Legend

- Order Limits

Primary habitat

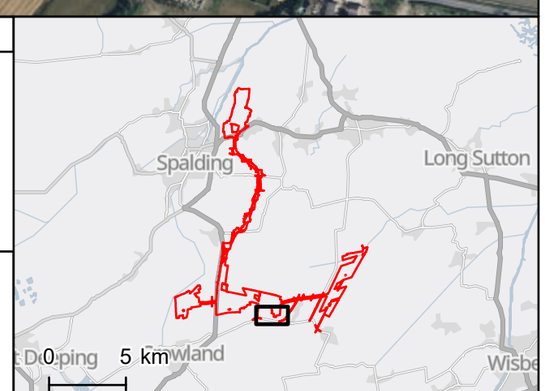
- c1 - Arable and horticulture
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- r1g - Other standing water

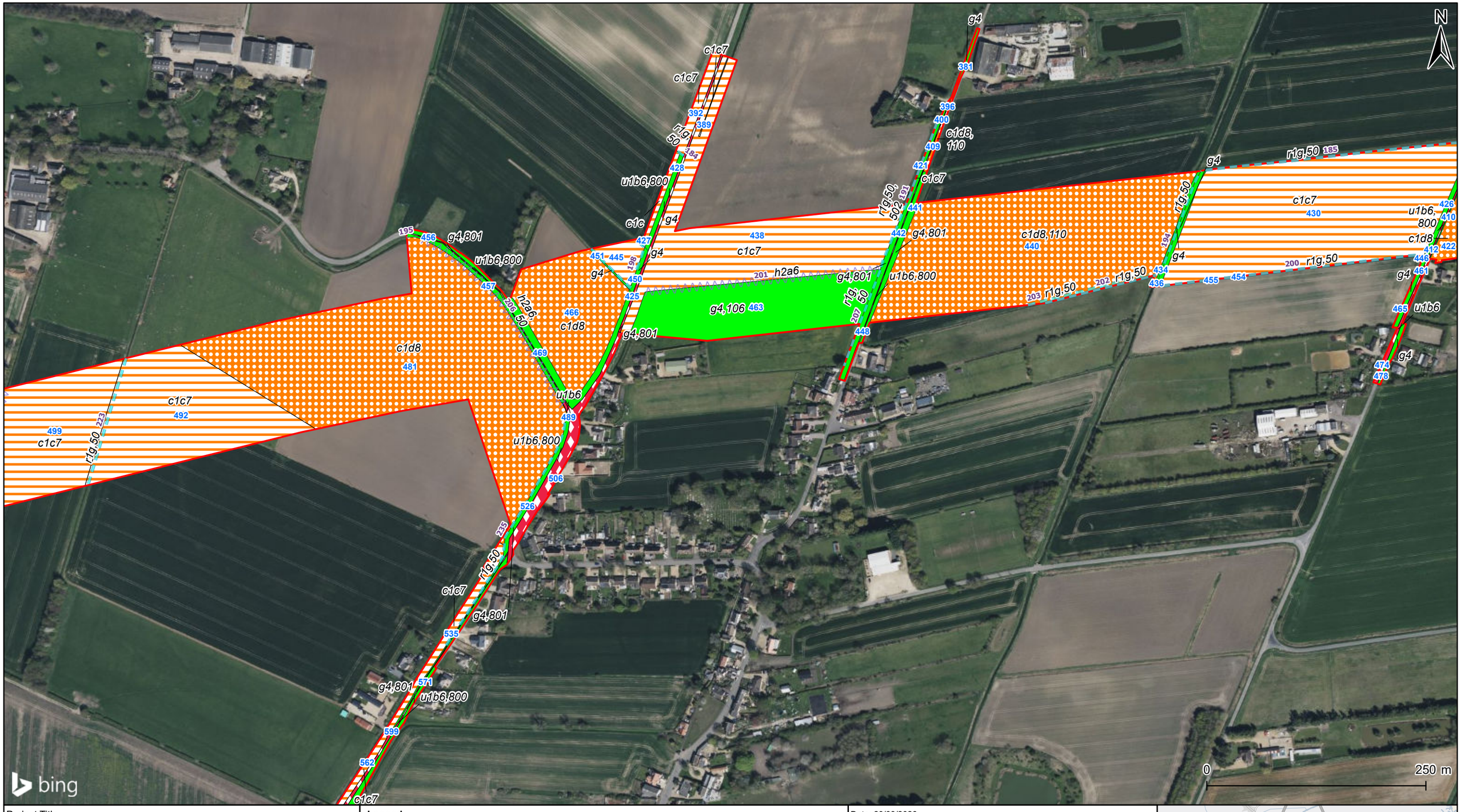
Secondary code

- 800 - Road
- 801 - Road verge or island

Date: 20/03/2026

Meridian Solar





Project Title	Meridian Solar Farm
Map Title	Preliminary Ecological Appraisal Figure 3: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 26

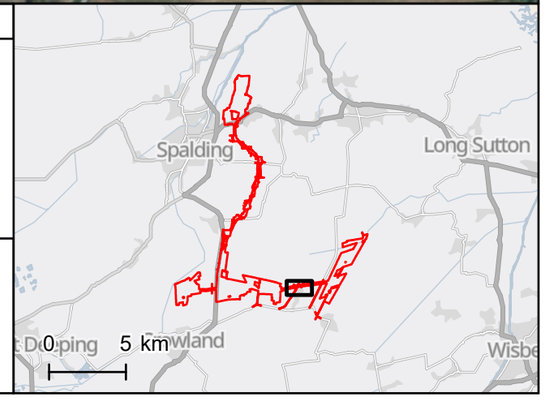
Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits	r1g - Other standing water
Primary habitat	**Secondary code**
c1c - Cereal crops	106 - Mown
c1c7 - Other cereal crops	110 - Silage and haylage
c1d8 - Other non-cereal crops	800 - Road
g4 - Modified grassland	801 - Road verge or island
u1b6 - Other developed land	50 - Ditch
h2a6 - Other native hedgerow	

Date: 20/03/2026

Meridian Solar



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Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 27

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

Order Limits

Primary habitat

- c1 - Arable and horticulture
- c1c7 - Other cereal crops
- g4 - Modified grassland
- u1b6 - Other developed land
- r1g - Other standing water

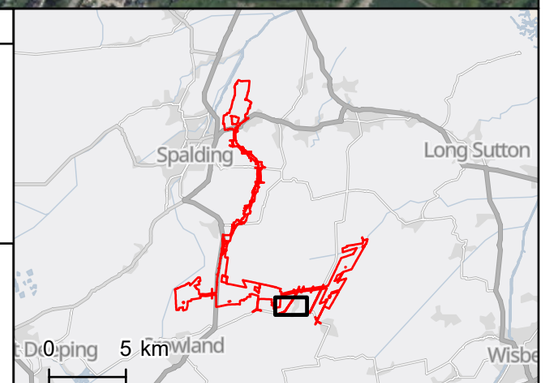
Secondary code

800 - Road

801 - Road verge or island

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 28

Scale @ A3	Version	Drawn	Reviewed
1:6,000	0	JM	JET

Legend

Order Limits

Primary habitat

c1 - Arable and horticulture

g4 - Modified grassland

u1b - Developed land, sealed surface

u1b6 - Other developed land

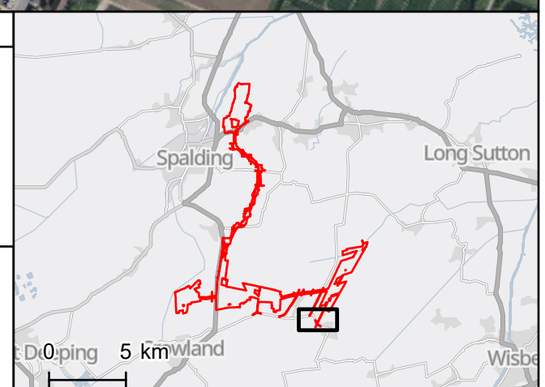
r1g - Other standing water

Secondary code

800 - Road

Date: 20/03/2026

Meridian Solar



Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 29

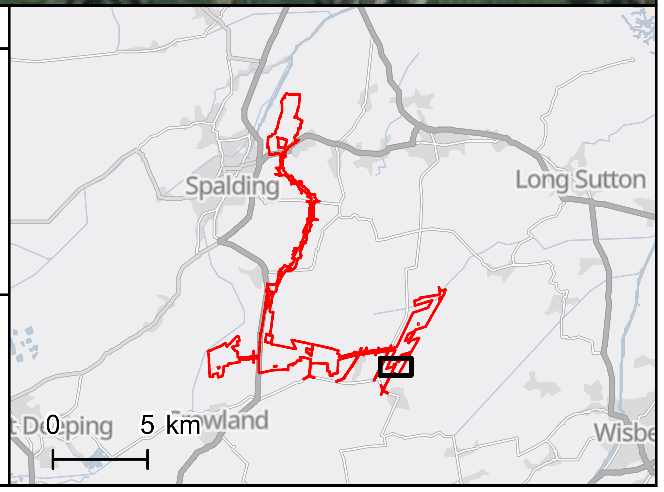
Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

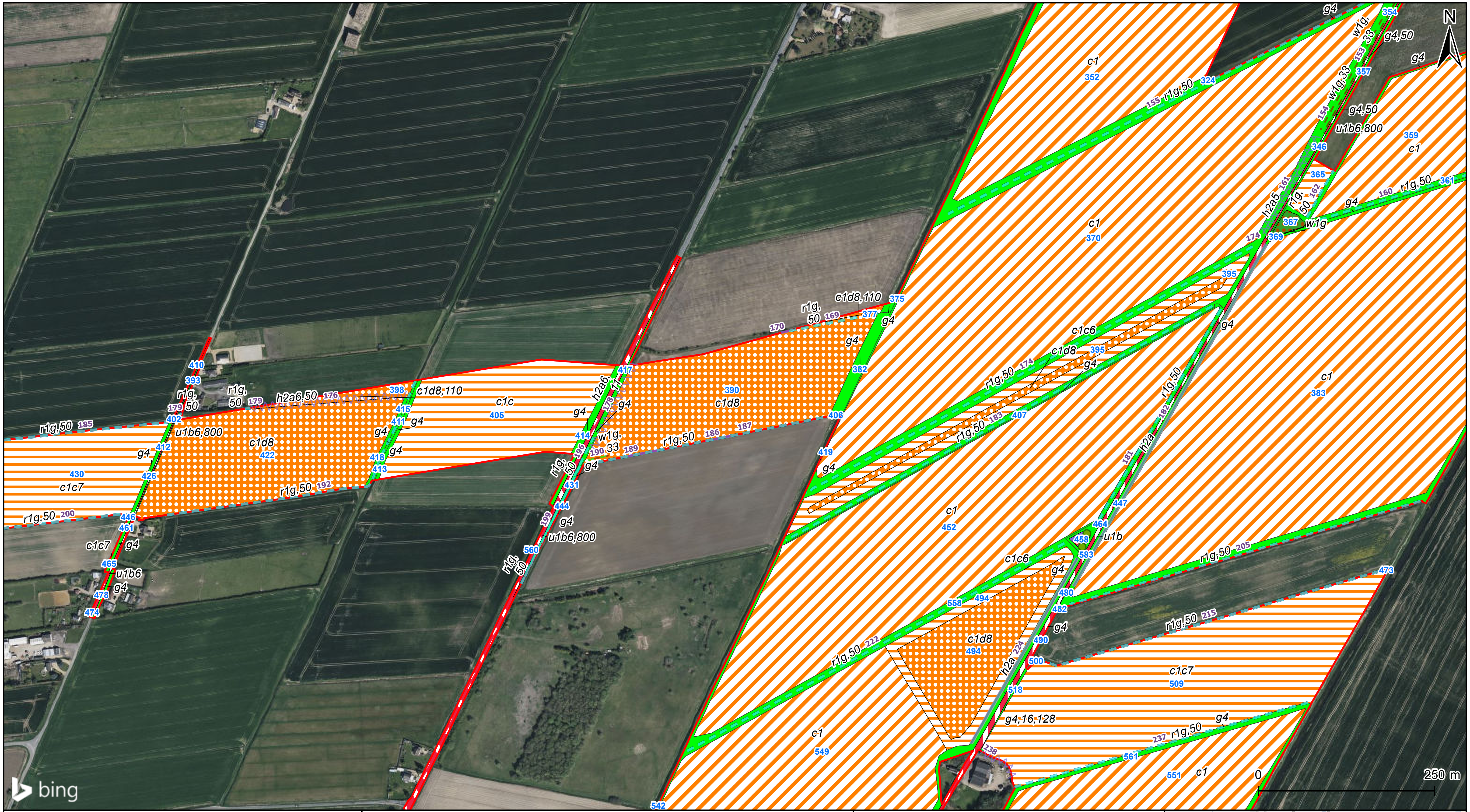
Legend

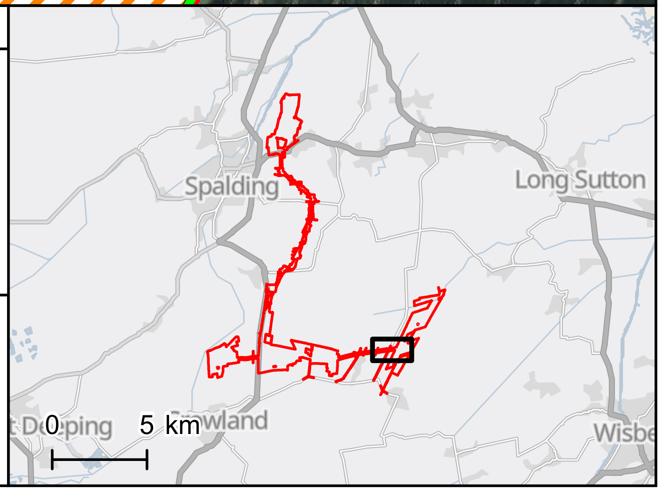
- Order Limits
- Primary habitat
- c1 - Arable and horticulture
- c1c6 - Arable fields - wild bird mix
- c1c7 - Other cereal crops
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- h2a - Native hedgerow
- h2a6 - Other native hedgerow
- r1g - Other standing water
- Secondary code
- 16 - Tall forbs
- 800 - Road

Date: 20/03/2026

Meridian Solar







Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 30

Scale @ A3	Version	Drawn	Reviewed
1:5,000	0	JM	JET

Legend

- Order Limits

Primary habitat

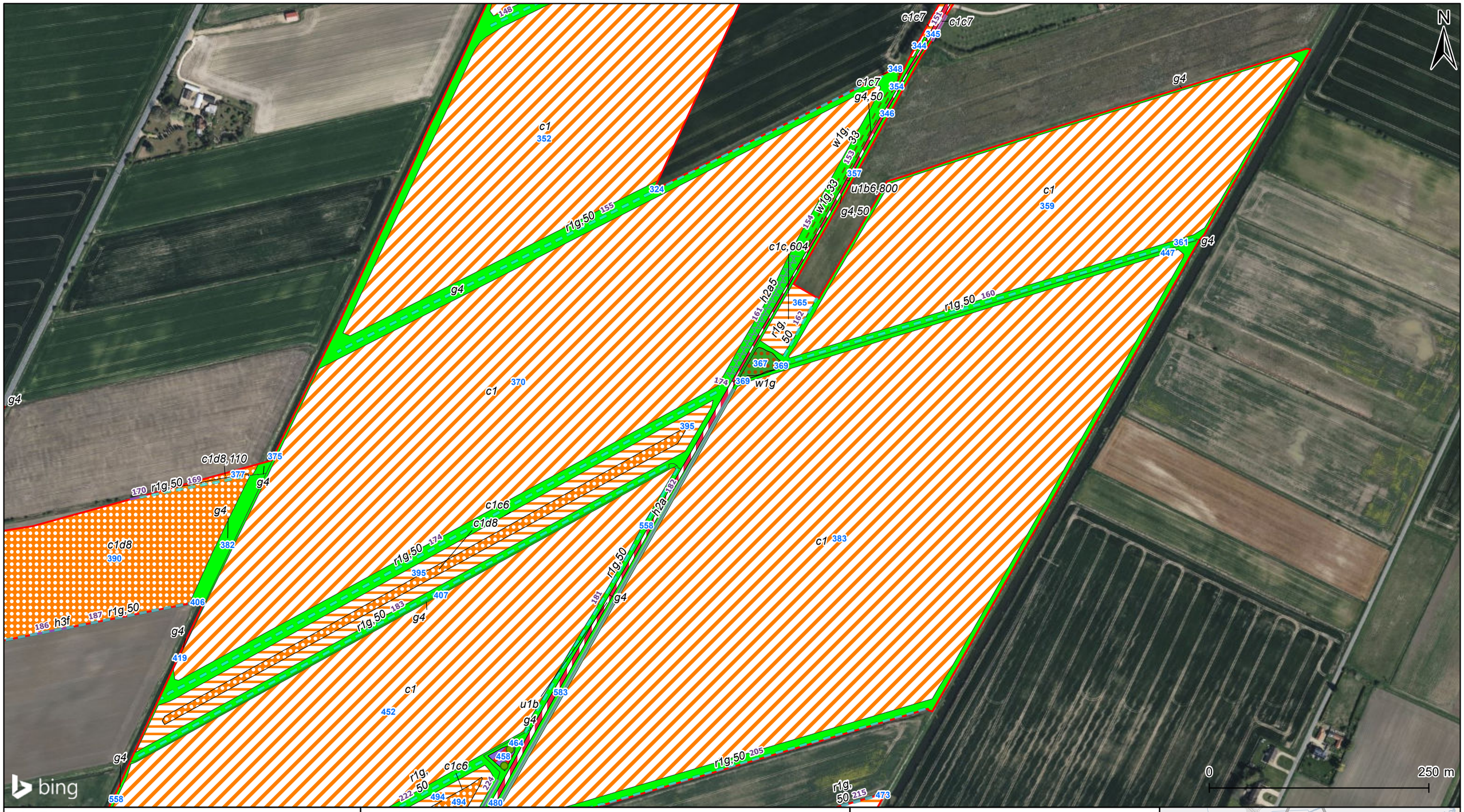
- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c6 - Arable fields - wild bird mix
- c1c7 - Other cereal crops
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- w1g - Other broadleaved woodland
- h2a - Native hedgerow
- h2a5 - Species-rich native hedgerow
- h2a6 - Other native hedgerow
- h3f - Hawthorn scrub
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

Secondary code

- 16 - Tall forbs
- 29 - Plantation
- 50 - Ditch
- 110 - Silage and haylage
- 604 - Whole-field fallow
- 800 - Road

Date: 20/03/2026

Meridian Solar



Project Title	Meridian Solar Farm
Map Title	Environmental Statement Figure 9-3.1: UKHab Baseline (Habitat Map) across SDA, GCR and IAC - Page 31

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c6 - Arable fields - wild bird mix
- c1c7 - Other cereal crops
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- w1g - Other broadleaved woodland

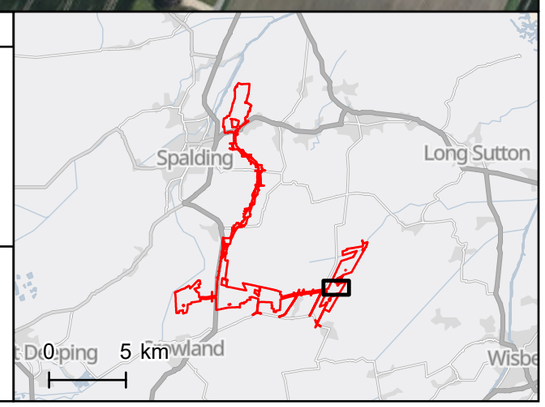
- h2a - Native hedgerow
- h2a5 - Species-rich native hedgerow
- h3f - Hawthorn scrub
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

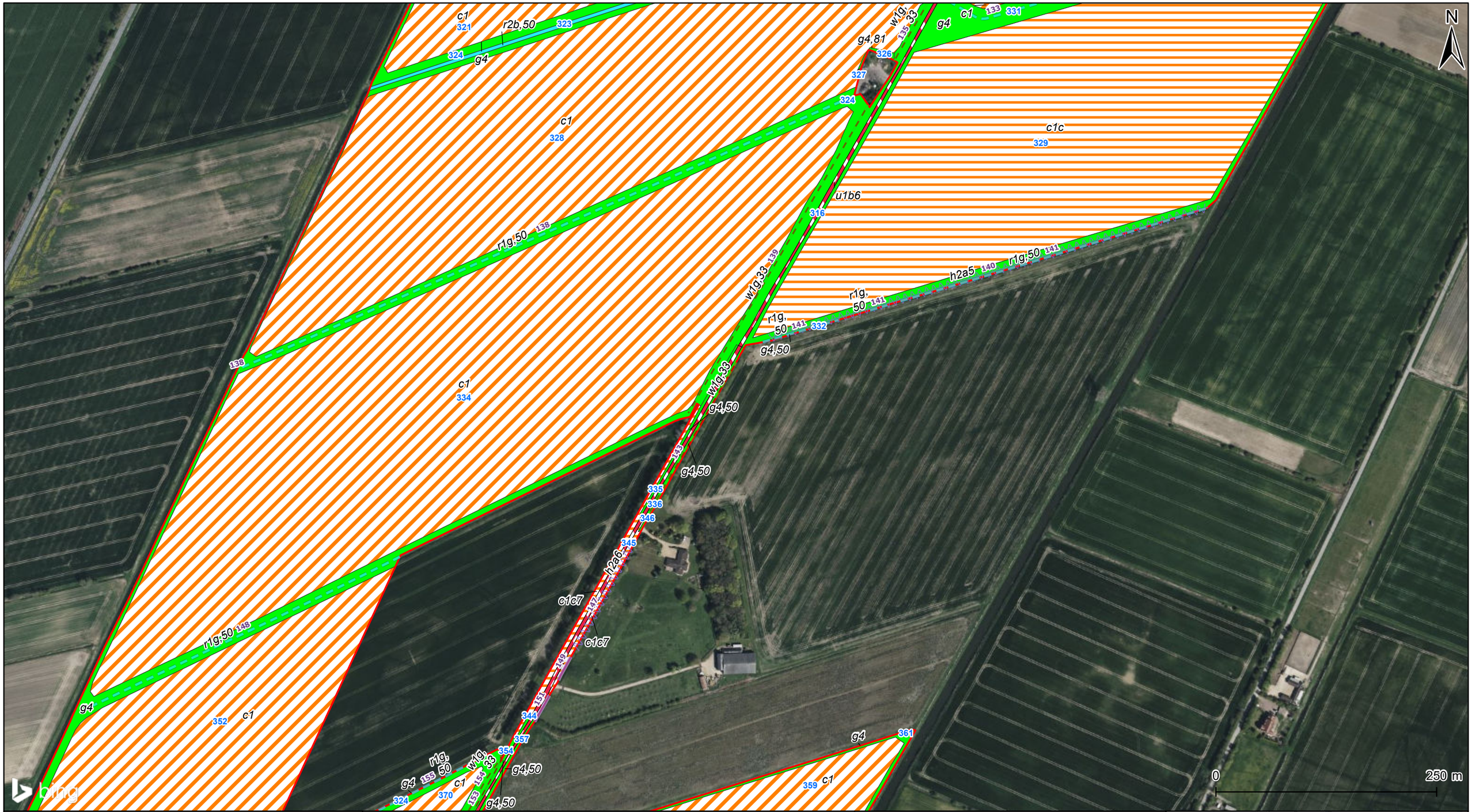
Secondary code

- 29 - Plantation
- 50 - Ditch
- 110 - Silage and haylage
- 604 - Whole-field fallow
- 800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 32

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

- Order Limits

Primary habitat

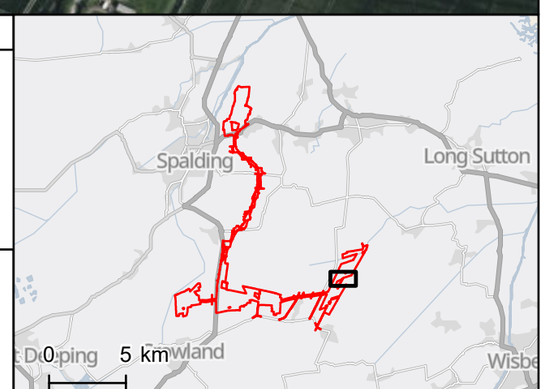
- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c7 - Other cereal crops
- g4 - Modified grassland
- r2b - Other river/stream
- u1b6 - Other developed land
- u1c - Artificial unvegetated unsealed surface
- h2a - Native hedgerow
- h2a5 - Species-rich native hedgerow
- h2a6 - Other native hedgerow
- r1g - Other standing water
- w1g - Other broadleaved woodland

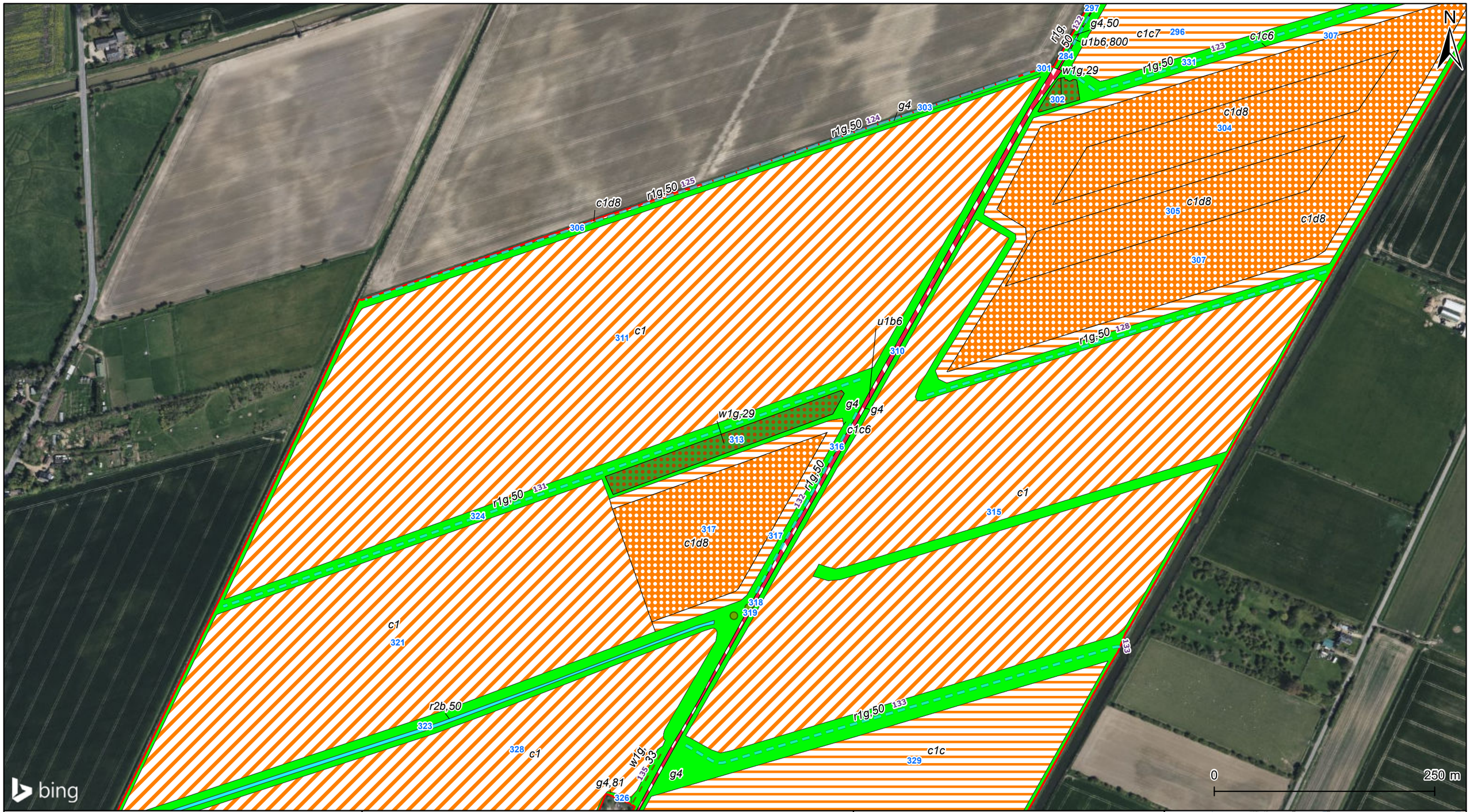
Secondary code

- 50 - Ditch
- 81 - Ruderal or ephemeral
- 800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 33

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

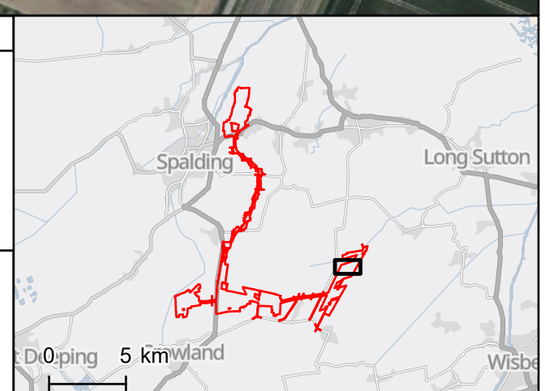
- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c6 - Arable fields - wild bird mix
- c1c7 - Other cereal crops
- c1d8 - Other non-cereal crops
- g4 - Modified grassland
- r2b - Other river/stream
- u1b6 - Other developed land
- w1g - Other broadleaved woodland
- r1g - Other standing water
- w1g - Other broadleaved woodland
- Scattered tree

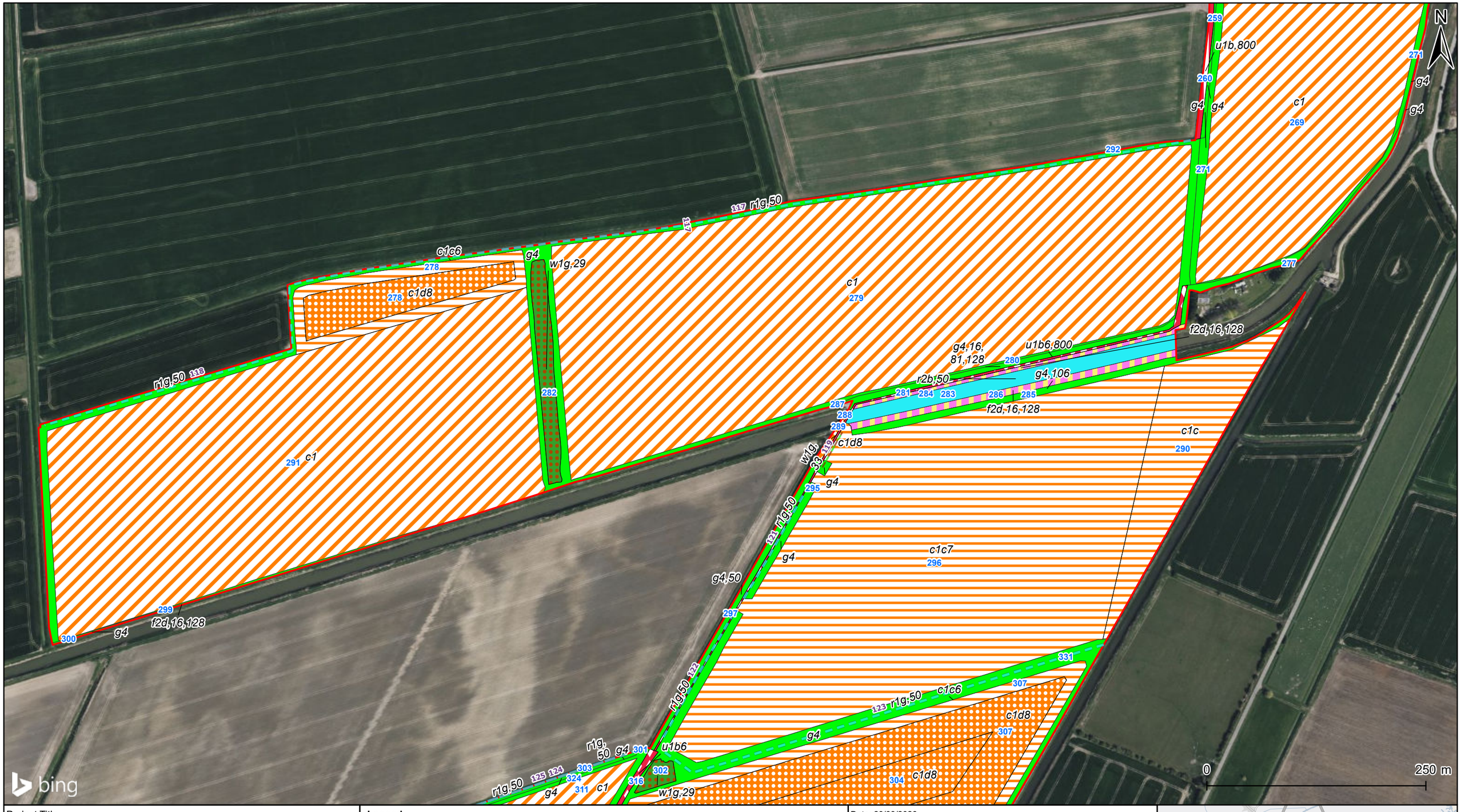
Secondary code

- 10 - Scattered scrub
- 29 - Plantation
- 50 - Ditch
- 81 - Ruderal or ephemeral
- 800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 34

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

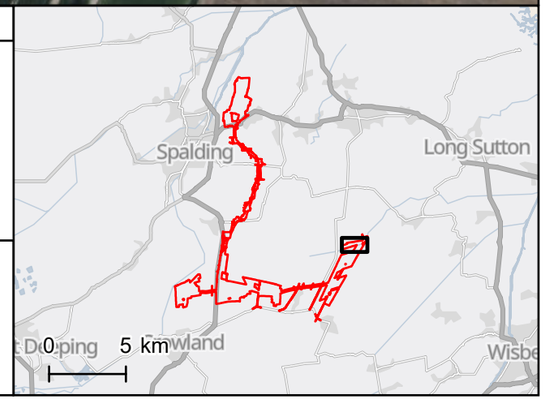
- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c6 - Arable fields - wild bird mix
- c1c7 - Other cereal crops
- c1d8 - Other non-cereal crops
- f2d - Aquatic marginal vegetation
- g4 - Modified grassland
- r2b - Other river/stream
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- w1g - Other broadleaved woodland
- r1g - Other standing water
- w1g - Other broadleaved woodland

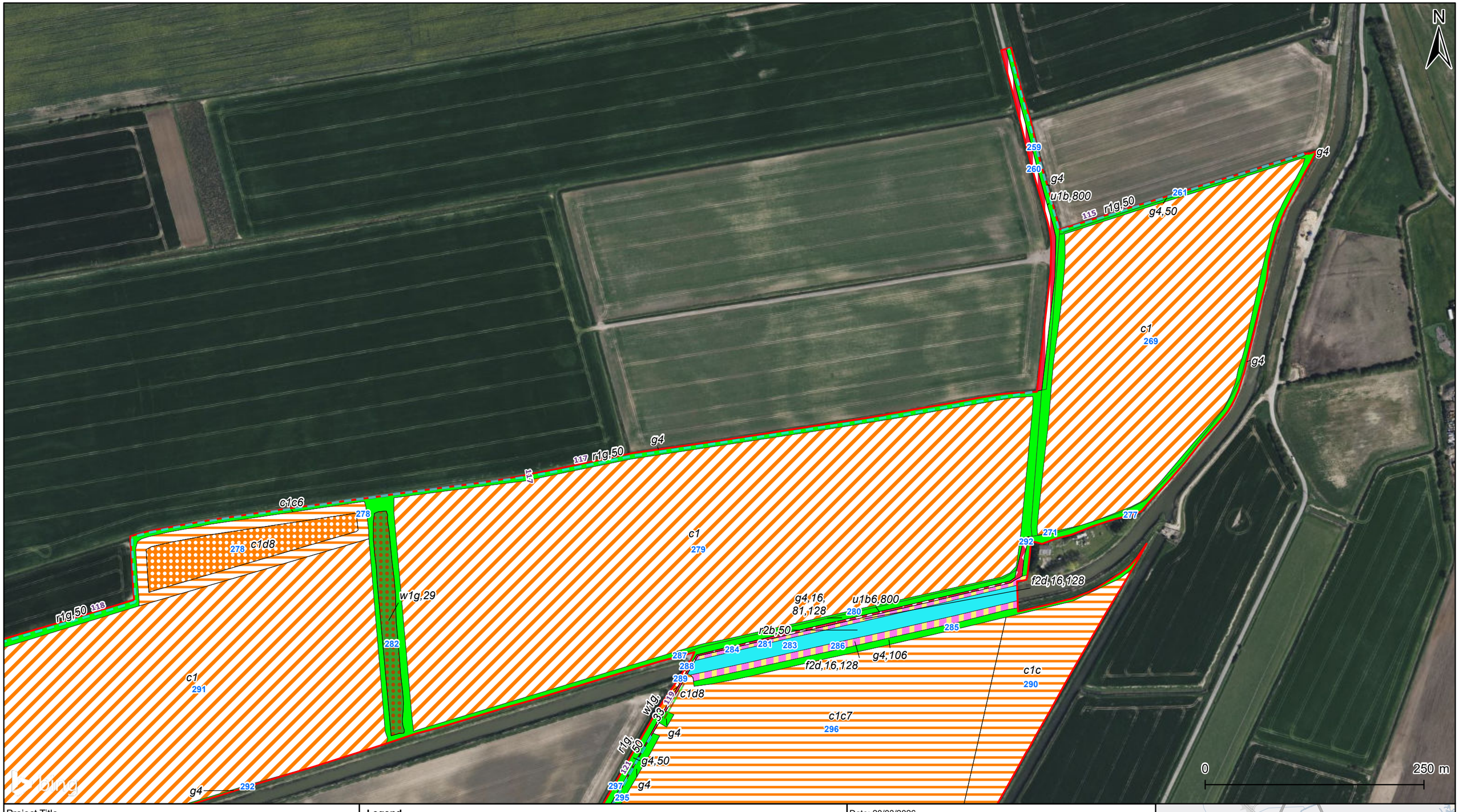
Secondary code

- 16 - Tall forbs
- 29 - Plantation
- 50 - Ditch
- 106 - Mown
- 800 - Road

Date: 20/03/2026

Meridian Solar





Project Title

Meridian Solar Farm

Map Title

Preliminary Ecological Appraisal
Figure 3: UKHab Baseline (Habitat Map)
across SDA, GCR and IAC -
Page 35

Scale @ A3	Version	Drawn	Reviewed
1:4,000	0	JM	JET

Legend

Order Limits

Primary habitat

- c1 - Arable and horticulture
- c1c - Cereal crops
- c1c6 - Arable fields - wild bird mix
- c1c7 - Other cereal crops
- c1d8 - Other non-cereal crops
- f2d - Aquatic marginal vegetation
- g4 - Modified grassland
- r2b - Other river/stream
- u1b - Developed land, sealed surface
- u1b6 - Other developed land
- w1g - Other broadleaved woodland
- r1g - Other standing water
- w1g - Other broadleaved woodland

Secondary code

- 16 - Tall forbs
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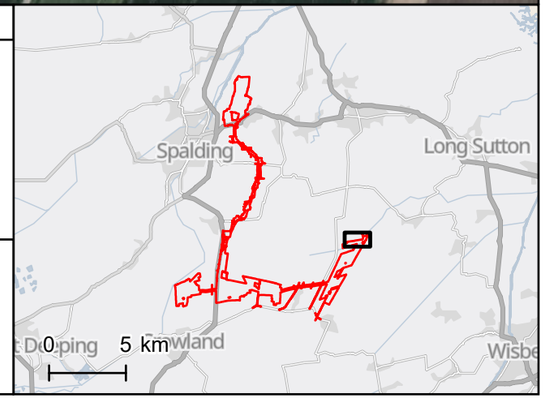
- 800 - Road

Date: 20/03/2026

Meridian Solar



Appendix 2: Species List

Botanical Species List for the Meridian Grid Connection Route and Inter-array connections compiled from the Habitat Surveys carried out between 15th May and 19th July 2025.

Scientific nomenclature and common names for vascular plants follow Stace (2019) and Blockeel and Long (1998) for bryophyte species. Please note that this plant species list was generated as part of a habitat survey, does not constitute a full botanical survey and should be read in conjunction with the associated results section of this PEA.

Abundance was estimated using the DAFOR scale and additional notes taken as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally

c=clumped, e=edge only, g=garden origin, p=planted, y = young, s=seedling or sucker, t=tree, h=hedgerow, w=water

Table 8: Botanical Species List for the Meridian Grid Connection Route and Inter-array connections compiled from the Habitat Surveys carried out between 15th May and 19th July 2025.

Scientific Name	Common Name	Abundance
Acer campestre	Field maple	O
Acer plantanoides	Norway maple	R
Acer pseudoplatanus	Sycamore	O
Achillea millefolium	Yarrow	O
Aesculus hippocastanum	Horse chestnut	R
Alnus glutinosa	Alder	O
Alopecurus myosuroides	Black grass	F
Anisantha sterilis	Barren brome	F
Anthriscus sylvestris	Cow parsley	O
Arrhenatherum elatius	False oat-grass	F

Scientific Name	Common Name	Abundance
Artemisia vulgaris	Mugwort	R
Bellis perennis	Daisy	R
Berberis vulgaris	Barberry	R
Betula pendula	Silver birch	R
Brassica napus ssp. oleifera	Oil-seed rape	A
Bromus hordaeceus	Soft-brome	O
Buddleja davidii	Buddleia/Butterfly bush	R
Carex riparia	Greater pond-sedge	R
Centaurea nigra	Common centaury	R
Cirsium arvense	Creeping thistle	F
Cirsium vulgare	Spear thistle	O
Convolvulus arvensis	Field bindweed	O
Cornus sanguinea	Dogwood	R
Corylus avellana	Hazel	R
Crataegus monogyna	Hawthorn	F
Dactylis glomerata	Cocksfoot	F
Epilobium hirsutum	Great willowherb	F
Fagus sylvatica	Beech	R
Fagus sylvatica f. purpurea	Copper beech	F
Filago germanica	Common cudweed	F
Fraxinus excelsior	Ash	O
Galium aparine	Cleavers	F
Geranium dissectum	Cut-leaved crane's-bill	R
Helminthotheca echioides	Bristly oxtongue	F
Holcus lanatus	Yorkshire fog	O

Scientific Name	Common Name	Abundance
Jacobaea vulgaris	Common ragwort	O
Leucanthemum vulgare	Oxeye daisy	R
Lolium perenne	Perennial rye grass	A
Ligustrum vulgare	Wild privet	R
Malus sylvestris	Crab apple	R
Matricaria discoidea	Pineappleweed	F
Persicaria maculosa	Redshank	O
Phragmites australis	Common reed	A
Plantago lanceolata	Ribwort plantain	O
Plantago major	Greater plantain	F
Poa pratensis	Smooth meadow-grass	O
Poa trivialis	Rough meadow-grass	O
Populus alba	White poplar	R
Populus nigra 'Italica'	Lombardy poplar	O
Populus x canadensis	Hybrid black-poplar	R
Prunus avium	Wild cherry	R
Prunus domestica	Wild plum	O
Prunus laurocerasus	Cherry laurel	R
Prunus spinosa	Blackthorn	R
Quercus robur	Pedunculate oak	R
Ranunculus repens	Creeping buttercup	F
Rosa canina	Dog rose	O
Rubus fruticosus agg	Bramble	O
Rumex crispus	Curled dock	O
Rumex obtusifolius	Broad-leaved dock	F
Salix alba	White willow	R
Salix caprea	Goat willow	R

Scientific Name	Common Name	Abundance
Salix cinerea	Grey willow	R
Salix fragilis	Crack-willow	R
Sambucus nigra	Elder	R
Schedonorus arundinaceus	Tall fescue	O
Sisymbrium officinale	Hedge mustard	O
Sorbus aucuparia	Rowan	R
Stellaria media	Chickweed	F
Taraxacum agg	Dandelion	F
Tilia cordata	Small-leaved lime	O
Trifolium pratense	Red clover	F
Tripleurospermum inodurum	Scentless mayweed	F
Urtica dioica	Common nettle	A
Veronica persica	Common field-speedwell	O
Viburnum opulus	Guelder rose	R
Vicia sp.	Vetch sp.	O

Appendix 3: Target notes

Table 9: Target Notes List for Meridian Inter-array connections zones from the Habitat Survey and protected and notable species assessment carried out between 15/05 and 19/07/2025.

Target note (TN)	Description
1 (Inter-array connections)	Mature trees in front garden of private dwelling, bat roost and bird nesting potential
2 (Inter-array connections)	Farm buildings with multiple access/egress points. Bat roost and nesting birds (including raptors) potential
3 (Inter-array connections)	Large sycamore tree containing owl box. Bat roost and nesting bird potential
4 (Inter-array connections)	Area of farm buildings of an open nature with bat roost and nesting bird potential. Swallows noted flying around buildings
5 (Inter-array connections)	Line of predominantly ash trees with hedgerow. Bat roost and nesting bird potential
6 (Inter-array connections)	Ash tree in line of trees on field boundary, bat roost and nesting bird potential
7 (Inter-array connections)	Farm buildings and outhouses with sufficient gaps to have bat roost and nesting bird (including raptors) potential
8 (Inter-array connections)	Anecdotal report of badger activity within horse paddock
9 (Inter-array connections)	Farm buildings of part chrysolite construction, adjacent to red line boundary, with bat roost and nesting bird potential
10 (Inter-array connections)	Small broadleaf woodland adjacent to red line boundary with bat roost and nesting bird potential
11 (Inter-array connections)	Farm buildings adjacent to red line boundary with bat roost and nesting bird potential
12 (Inter-array connections)	Line of ash trees on field boundary close to South Holland main Drain, with features suitable for roosting bats and/or nesting birds

Target note (TN)	Description
13 (Grid Connection Route)	Dead tree with flaking bark potential roost feature (PRF).
14 (Grid Connection Route)	Mature ash tree with multiple PRFs on Delgate Bank
15 (Grid Connection Route)	Mature crack willow with PRF (cavity in trunk).
16 (Grid Connection Route)	Mature willow with PRF (crack in the trunk)
17 (Grid Connection Route)	Mature/veteran crack willow with multiple PRFs
18 (Grid Connection Route)	Owl box and bat box
1 (Solar Development Area)	Spoil and waste piles (Photograph 37).

Appendix 4: Photographs

Photograph 1: within zone B1, illustrating open nature of the landscape. Facing south.

Photograph 2: Non-cereal bean crop within zone B1, facing north.

Photograph 3: Wheat crop with agro-forestry within the field, zone C2, facing east.

Photograph 4: Former arable field that had been left to become overrun with creeping thistle, possibly after treatment to kill black grass infestation. Zone C2, facing south.

Photograph 5: Example of an unsealed surface farm track within zone B1, native hedgerow with trees beyond the track. Facing northeast

Photograph 6: Example of hawthorn scrub, which is a defunct hedgerow, with a silage/herbage crop in the foreground. Zone B2, facing southeast

Photograph 7: Example of a field of modified grassland, at least annually cut. Zone B1, facing northeast

Photograph 8: Other broadleaf woodland, zone B1, facing west, with sheep-grazed modified grassland in the foreground

Photograph 9: Example of native hedgerow, with adjacent farm track, zone B1, facing west

Photograph 10: Example of a dry ditch between field boundaries, with common reed, false oat-grass and umbellifers. Zone B2, facing west

Photograph 11: Example of one of the larger IDB drains, typically running north to south. Zone B2, facing north

Photograph 12: South Holland Main Drain, zone C3, facing east, common reed aquatic marginal vegetation

Photograph 13: Rare example of a double line of trees along a stretch of Langary gate Road, zone C2, facing south

Photograph 14: One of three sycamores recorded as single trees within zone B1. Note owl box within tree. Facing northwest. See Target Note 3, Appendix 3

Photograph 15: Example of size and condition of arable fields. Sub-parcel C-2 facing west

Photograph 16: Bird seed mixes at Sub-parcel B-2. Phacelia and sunflower to the left of picture and millet to the right. Facing north

Photograph 17: Artificial unsealed surface as storage on Sub-parcel D-3. Facing south adjacent to Langary Gate Road

Photograph 18: Derelict barn in Sub-parcel B-2. Facing west.

Photograph 19: Part of built surface at Sub-parcel B-2. Facing east.

Photograph 20: Line of trees along Langary Gate Road at Sub-parcel D-3. Facing south

Photograph 21: Plantation woodland at Sub-parcel D-3. Facing south-west

Photograph 22: Mixed scrub to the west of Sub-parcel B-2. Facing south

Photograph 23: Grassland margin displaying typical composition including false oat-grass with dead stands of hogweed. Sub-parcel B-2 facing west

Photograph 24: Example of wide margin in Sub-parcel C-2. Facing west

Photograph 25: Hedgerow around a paddock at Sub-parcel C-2

Photograph 26: Defunct hedgerow along Cloot Grove at Parcel A. Facing north

Photograph 27: Species rich hedgerow along Langary Gate Road at Sub-parcel D-4. Facing south

Photograph 28: Example of scattered tree in Sub-parcel B-2. Poplar species. Facing north

Photograph 29: Example of watercourse in Sub-parcel B-2. A dry ditch. Dimensions and composition in this picture are typical for the majority of watercourses on site. Facing north

Photograph 30: One of the few watercourses on the Site that held water. A main drain connection called Sly's Connection LWS in Sub-parcel D-2 and Sub-parcel D-3. This section is Sub-parcel D-2. Facing east

Photograph 31: Spoil and waste piles in Sub-parcel B-2. Solar development area, Target Note 1