# Springwell Solar Farm

## Outline Landscape and Ecology Management Plan (oLEMP)

EN010149/APP/7.9.5
Revision 5
Deadline 5
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Springwell Energyfarm Ltd

APFP Regulation 5(2)(q)
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Infrastructure Planning
(Applications: Prescribed Forms
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# 1. Introduction

## 1.1. Purpose

1.1.1. This outline Landscape and Ecology Management Plan (oLEMP) has been prepared on behalf of Springwell Energyfarm Limited ('The Applicant') to accompany the application for a Development Consent Order (DCO) for the construction, operation and decommissioning of the proposed Springwell Solar Farm (hereinafter referred to as the 'Proposed Development').

1.1.2. The oLEMP provides a framework for delivering the Green Infrastructure elements of the Proposed Development for the construction and operational phases of the development including the successful establishment and future management of the proposed landscape and ecological works for the duration of its operation. It sets out the short and long-term measures and practices that will be implemented by the Applicant to establish, monitor and manage landscape and ecology mitigation and enhancement (including Biodiversity Net Gain (BNG) and proposed permissive paths) measures embedded into the design.

1.1.3. The oLEMP has been produced with reference to the Biodiversity – Code of Practice for Planning and Development British Standard: BS42020:2013 **[Ref.1.1]** and in particular, Section 11.1 which provides details on the content of management plans.

1.1.4. The oLEMP has been informed by consultation and engagement with relevant consultees as part of the DCO application process including Lincolnshire County Council, Lincolnshire Wildlife Trust and North Kesteven District Council. Full details of the consultation undertaken are outlined in **Environmental Statement (ES) Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]** and **ES Volume 1, Chapter 7: Biodiversity [EN010149/APP/6.1]**.

1.1.5. This document has been updated at Deadline 5 in response to Deadline 4 submissions. The document references have not been updated from the original submission. Please refer to the **Guide to the Application [EN010149/APP/1.2]** for the list of current versions of documents.

## 1.2. oLEMP Management Area

1.2.1. This oLEMP relates to all land included within the Order Limits as shown on the **Works Plans [EN010149/APP/2.3]**, principally Work No. 9 Green Infrastructure but also other Works numbers where management of the soft landscaping within or underneath development is required (e.g. underneath Solar PV modules in Works No. 1).

## 1.3. Relationship with other Documents and Future LEMPs

1.3.1. This oLEMP is set out in the context of the other environmental documentation plans submitted with the DCO Application including:

- **Design Approach Document [EN010149/APP/7.3].**
- **Design Commitments [EN010149/APP/7.4].**
- **Outline Construction Environmental Management Plan (oCEMP) [EN010149/APP/7.7].**
- **Outline Construction Traffic Management Plan (oCTMP) [EN010149/APP/7.8].**
- **Outline Operational Environmental Management Plan (oOEMP) [En010149/APP/7.10].**
- **Outline Soil Management Plan [EN010149/APP/7.11]**
- **Outline Public Rights of Way and Permissive Path Management Plan [EN010149/APP/7.12].**
- **Outline Decommissioning Environmental Management Plan (oDEMP) [EN010149/APP/7.9].**

1.3.2. The oLEMP has also been informed by other documents including:

- Lincolnshire Biodiversity Action Plan (2011) **[Ref.1.2]**.
- Central Lincolnshire Green Infrastructure Strategy (2011) **[Ref. 1.3]**.

1.3.3. Should the DCO be granted consent, detailed LEMP(s) will be produced for the Proposed Development in accordance with the DCO Requirement in Schedule 2 of the **Draft DCO [EN010149/APP/3.1]**. The LEMP(s) would require approval prior to commencement of construction and would be required to be substantially in accordance with the framework set out in this oLEMP, including the Green Infrastructure Parameters presented in **Appendix 1** and Vegetation Removal Parameters presented in **Appendix 2**.

1.3.4. The Proposed Development is likely to be constructed in phases or parts, and it is envisaged that the detailed LEMP(s) may be prepared, approved, and implemented for individual parts or phases of the Proposed Development. As a result, there could be multiple LEMP(s) prepared in accordance with this oLEMP. Each LEMP will be produced in line with this oLEMP following grant of the DCO and approved by the local planning authority in consultation with relevant parties in advance of the date of commencement of the relevant phase or part of the Proposed Development.

1.3.5. Each LEMP would include details of the location, number, species, size and planting density of any proposed planting including the details of any proposed tree, hedgerow and shrub planting and the proposed times of such planting.

1.3.6. Each LEMP would also include an update to the Biodiversity Net Gain (BNG) Assessment and calculator to ensure that BNG above the mandatory 10% is delivered as identified by Project Principle 3.6 of the **Design Approach Document [EN010149/APP/7.3]**.

## 1.4. The Proposed Development

1.4.1. A summary of the description of the Proposed Development can be found in Section 3.1 of **ES Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1].** The terminology used in this document is defined in the **Glossary [EN010149/APP/6.1]**.

1.4.2. Green Infrastructure has been an integral part of the design process and permeates the Proposed Development as illustrated in **ES Volume 2, Figure 3.3: Green Infrastructure Parameters [EN010149/APP/6.2]** and secured through the oLEMP in **Appendix 1.** Further details of the design evolution of the Green Infrastructure are provided within the **Design Approach Document [EN010149/APP/7.3].**

## 1.5. Legislation and Policy

1.5.1. This oLEMP, future LEMP(s) and all maintenance works must comply with relevant legislation and policy where applicable. Full details are provided in **ES Volume 1, Chapter 7: Biodiversity** and **Chapter 10: Landscape and Visual [EN010149/APP/6.1]**. A non-exhaustive list of relevant legislation, policy and guidance is provided below:

- Directive 2009/147/EC on the conservation of wild birds (the codified version of Council Directive 79/409/EEC as amended) (Birds Directive) **[Ref.1.4]**.
- Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) **[Ref. 1.5].**
- The Conservation of Habitats and Species Regulations 2017 (as amended) **[Ref. 1.6]**.
- Wildlife and Countryside Act (WCA) 1981 (as amended) **[Ref. 1.7]**.
- Countryside & Rights of Way Act 2000 (as amended) **[Ref. 1.8]**.
- Natural Environment and Rural Communities (NERC) Act 2006 (as amended) **[Ref. 1.9]**.
- The Environment Act 2021 **[Ref. 1.10]**.

- Protection of Badgers Act 1992 (as amended) **[Ref. 1.11]**.
- Hedgerow Regulations 1997 (as amended) **[Ref.1.12]**.
- Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 **[Ref. 1.13]**.
- Animal Welfare Act 2006 **[Ref. 1.14]**.

## 1.6. Policy and Guidance

- Overarching National Policy Statement (NPS) for Energy (EN1) (2023) **[Ref.1.15]**.
- NPS for Renewable Energy Infrastructure (EN-3), (2023) **[Ref. 1.16]**.
- NPS for Electricity Networks Infrastructure (EN-5) (2023) **[Ref. 1.17]**.
- National Planning Policy Framework (NPPF) (2023) **[Ref. 1.18]**.
- Planning Practice Guidance (PPG) (2024) Biodiversity Net Gain/Natural Environment/ Renewable and Low Carbon Energy (2024) **[Ref. 1.19]**.
- Central Lincolnshire Local Plan (2023) **[Ref. 1.20]**.
- Lincolnshire Biodiversity Action Plan (2011) **[Ref. 1.2]**.
- Greater Lincolnshire Nature Partnership: Habitat Guidance **[Ref. 1.21]**.
- Greater Lincolnshire Nature Partnership (2024) Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants. [**Ref. 1.22]**.

# 2. Summary of Baseline Environment

## 2.1. Site Description and Evaluation

### Site Description

2.1.1. The Order Limits comprise an agricultural landscape with arable and pasture fields dissected by a network of hedgerows, ditches, and field margins in places. Compartments of broadleaved woodland lie within and adjacent to the Order Limits boundary and farmland ponds are scattered through the area. Local Wildlife Sites (LWS) supporting calcareous grassland verges line the road network in the west of the Site. **ES Volume 1, Chapter 7: Biodiversity [EN010149/APP/6.1]** provides further description of the Site and baseline.

2.1.2. Baseline surveys, detailed in **ES Volume 3, Appendices 7.2 - 7.13 [EN010149/APP/6.3]**, recorded a variety of species within the Order Limits. The following section presents a summary of the baseline conditions for the ecological receptors scoped into further assessment. These are:

- LWS;
- Hedgerows and trees affected by works;
- Notable arable (non-crop) plants;
- Ground nesting birds;
- Barn owl;
- Wintering birds; and
- Bats.

### Local Wildlife Sites

2.1.3. Four LWSs within or adjacent to the Order Limits will be directly affected by the Proposed Development as sections of these grassland road verges will need to be removed for highways access as indicated by the **Vegetation Removal Parameters [Appendix 2]**. These are:

- Green Man Road to Cuckoo Lane LWS;
- A15, Slate House Farm to Dunsby Pit Plantation LWS;
- Temple Road Verges, Welbourn to Brauncewell; and
- Navenby Heath Road Verges LWS.

2.1.4. All of the above LWSs are grassland verges on the side of roads or farm tracks. Their indicative location is presented in **ES Volume 2, Figure 7.1:**

**Local Wildlife Sites and Areas Indicated for Vegetation Removal [EN010149/APP/6.2]**.

2.1.5. All citations for the four LWSs state that they are designated for and qualify as calcareous grassland (with the required number of qualifying species present). The citations of these LWSs are provided in **ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal [EN010149/APP/6.3].**

2.1.6. LWSs are of County importance. The sections of LWS, which were surveyed as they are proposed to be affected by works, met the qualifying LWS criteria as calcareous grassland except for the eastern section of Temple Road Verges, which had less calcareous indicator species. This was considered likely due to lack of management as grassland was becoming rank and dominated by coarse grasses. However, the full extent of the Temple Road Verges LWS was not surveyed, as only the affected length was surveyed, and is assumed to be of County importance. Further details on the surveys are provided in **ES Volume 3, Appendix 7.9: Local Wildlife Site Verges Survey [EN010149/APP/6.3].**

## Hedgerows and trees

2.1.7. Sections of hedgerows will need to be removed for highways access, internal roads and cable installation as indicated by the Vegetation Removal Parameters in **Appendix 2**. Surveys of hedgerows that will be affected by the Proposed Development were carried out in 2023 and 2024. The majority of hedgerows surveyed were not species-rich (i.e. had less than five woody species per 30m).

2.1.8. A total of 17 hedgerows[1] (out of over 100 hedgerows surveyed) within the Order Limits were deemed likely to be important under the wildlife and landscape criteria of the Hedgerows Regulations 1997 **[Ref. 1.12]**. These all had six or more species within the 30m length assessed together with other features indicative of ecological importance such as hedgerow trees, or associated bank or ditch. Twelve of these important hedgerows will require sections to be removed for highways access works. Most hedgerows were predominantly composed of hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*). Also present were field maple (*Acer campestre*), wych elm (*Ulmus glabra*), elder (*Sambucus nigra*), dogrose (*Rosa canina*) and ash (*Fraxinus excelsior*). Occasional species included dogwood (*Cornus sanguinea*), wild cherry (*Prunus avium*), wild privet (*Ligustrum vulgare*) and hazel (*Corylus avellana*).

[1] Note that only a single 30m section per hedge focused on the likely area to be removed were subject to assessment using the Hedgerow Regulations criteria. This information has been used to provide additional context and information as all the hedgerows had already been subject to a UK habitat survey.

Spindle (*Euonymus europaeus*) and wayfaring tree (*Viburnum lantana*) were also found but rarely.

2.1.9. Hedgerow trees were mostly ash and common oak (*Quercus robur*). Beech (*Fagus sylvaticus*), sycamore (*Acer psueudoplatanus*) and poplar sp. (*Populus* sp.) were occasional. Other hedgerow trees less often found included sweet chestnut (*Castanea sativa*) and lime spp. (*Tilia* spp.).

2.1.10. Further details regarding hedgerows and tree surveys are provided in **ES Volume 3, Appendix 7.11: Important Hedgerow Survey** and **Appendix 7.12: Arboricultural Impact Assessment [EN010149/APP/6.3]**.

### Rare or notable arable (non-crop) plants

2.1.11. Several of the fields sampled within the Springwell Central area are of at least County importance for arable flora.

2.1.12. Of the species recorded, four are listed as Near Threatened or Vulnerable on the Botanical Society of Britan and Ireland's Vascular Plant Red List for England of Threatened Species **[Ref. 2.1]**:

- Stinking Chamomile (*Anthemis cotula*) – Vulnerable;
- Hound's-tongue (*Cynoglossum officinale*) – Near Threatened;
- Night-flowering Catchfly (*Silene noctiflora*) – Vulnerable; and
- Wild Pansy (*Viola tricolor*) – Near Threatened (although widespread in Lincolnshire).

2.1.13. Details of the rare or notable arable flora survey and methods are shown in **ES Volume 3, Appendix 7.8: Arable Flora Survey [EN010149/APP/6.3].**

### *Breeding birds*

2.1.14. From the breeding bird surveys, undertaken between March and July 2023, the area within the Order Limits is considered of at least County importance for the farmland bird assemblage present as it supports a range of ground nesting species including skylark (*Alauda arvensis*), corn bunting (*Emberiza calandra*), quail (*Coturnix coturnix*) and grey partridge (*Perdix perdix*); all of which have undergone significant declines in recent decades.

2.1.15. A single curlew (*Numenius arquata*) was seen on three occasions flying over the Order Limits to and from a likely nesting location within RAF Digby. Curlew were not found to be breeding within the Order Limits although they may occasionally use grassland or stubble within the area for foraging.

2.1.16. Further details of the breeding bird surveys and results are detailed in **ES Volume 3, Appendix 7.2: Breeding Bird Survey [EN010149/APP/6.3].**

## Schedule 1 bird species - Barn owl

2.1.17. Barn owl (*Tyto alba*) and marsh harrier (*Circus aeruginosus*) were observed during the breeding bird surveys.

2.1.18. Marsh harrier was not identified to be breeding within the Order Limits but a single female was observed to be using the area occasionally for foraging. During the breeding bird surveys in 2023 one pair of barn owl were confirmed to be using a nest box in a barn immediately adjacent to the Order Limits (northeast edge of Springwell East).

2.1.19. A barn owl survey was subsequently carried out in June 2024. No breeding barn owl were identified within 200m of the Proposed Development, although barn owl pellets were found in most barns indicating that they are using much of the area across the Order Limits for roosting and foraging. Full results are detailed in **ES Volume 3, Appendix 7.4: Barn Owl Survey [EN010149/APP/6.3].**

## Wintering birds

2.1.20. Wintering bird surveys were undertaken in November 2023, December 2023 and February 2024.

2.1.21. A total of 67 bird species were identified to be wintering on the site, of which 40 species are specially protected or notable. Populations of individual species, grey partridge and stock dove (*Columba oenas*) were considered of County importance, with corn bunting considered of District importance. The remaining species were assessed as having been present in numbers of no more than Local importance. Based on the diversity of species recorded, the wintering birds found within the Order Limits are considered of District importance.

2.1.22. No qualifying species of the Wash 'Special Protected Area' (SPA) were recorded using the site during the survey, with a single flyover Pink-footed goose (*Anser brachyrhynchus*) flock being the only qualifying species observed. As a result, in conjunction with the large distance between the site and the SPA (*c.* 35km), it was not considered likely that the area within the Order Limits (and surrounding area) is functionally linked to the Wash SPA. Further details are provided in the **Habitats Regulation Assessment No Significant Effects Screening Report [EN010149/APP/7.17]** which is submitted as part of the DCO Application.

2.1.23. Further details regarding the wintering bird survey are provided in **ES Volume 3, Appendix 7.3: Wintering Bird Survey [EN010149/APP/6.3].**

### Bats

2.1.24. Bat activity surveys recorded a high diversity of species across the Proposed Development; with at least 10 of the 12 species considered to be present within Lincolnshire having been positively identified. The majority of activity was from common pipistrelle *(Pipistrellus pipistrellus)* and soprano pipistrelle *(Pipistrellus pygmaeus).* Barbastelle (*Barbastella barbastellus*) was the third most frequently recorded species. Other species included *Myotis* spp, Leisler's (*Nyctalus leisleri*), noctule (*Nyctalus noctule*), brown-long-eared (*Plecotus auritus*) and Nathusius' pipistrelle (*Pipistrellus nathusii*).

2.1.25. The *Myotis* genus were not counted separately during data analysis due to the similarity and overlapping parameters of their calls. However, the data analysis software is designed to work at a species level, and the following species were assumed to be present; Daubenton's (*Myotis daubentoniid)*, Natterer's (*M. nattereri)* and whiskered / Brandt's (*M. mystacinus / m. brandtii)*.

2.1.26. In line with the Bat Mitigation Guidelines **[Ref. 2.2]** the assemblage of species within this geographic region of the UK could be considered of National importance. The Proposed Development area could be of Regional importance for Barbastelle and of Local importance for the remaining species identified.

2.1.27. Significantly more calls were recorded in August 2022 (during the bat breeding season) therefore bats could be using mature trees or buildings within the Order Limits for breeding or at least breeding nearby and using the area within the Order Limits during the breeding season for foraging and commuting.

2.1.28. Several hedgerow trees across the Order Limits had features suitable for roosting bats. Barns within or adjacent to the Order Limits could also be used for roosting. Trees and barns with bat roosting potential are shown in **ES Volume 3, Appendix 7.1: Preliminary Ecological Appraisal [EN010149/APP/6.3].**

2.1.29. Detailed results of the bat surveys are provided in **ES Volume 3, Appendix 7.5: Bat Activity Survey; Appendix 7.6: Bat Activity Survey Addendum and Appendix 7.13: Further Targeted Bat Surveys [EN010149/APP/6.3].**

## 2.2. Landscape Character

### National Character Area

2.2.1. At a national level, the Order Limits fall within National Character Area 47 (NCA 47) – Southern Lincolnshire Edge **[Ref. 2.3]**.

2.2.2. The key characteristics of NCA 47 are recorded as follows:

- *"Elevated arable escarpment with a distinct cliff running north–south along the western boundary, providing far-reaching views over the Trent and Belvoir Vales NCA.*
- *Productive loamy soils on the limestone plateau, giving rise to a large-scale open landscape of arable cultivation with large, regular fields and few boundaries of tightly cut hedgerows or rubble limestone walls.*
- *Heavy clay soils in the east and south-west of the area, which support more grazing land in smaller, less regular fields, along with small areas of woodland and parkland.*
- *Semi-natural habitats in small, isolated fragments, with pockets of woodland on clay soils, fen at the foot of the dip slope and flower rich limestone grassland, particularly along road verges.*
- *Sparse settlement on higher land, with spring line villages along the foot of the cliff, parklands and country estates such as Rauceby and Belton on lower ground, and larger settlements – including Sleaford, Ruskington and Metheringham – to the east of the dip slope.*
- *Active and re-used airfields prominent on the ridgetop.*
- *Long, straight roads and tracks, often with wide verges, including Ermine Street, which follows the route of a key Roman north–south route.*
- *Vernacular architecture and walling, especially in villages, of local warm-coloured limestone with dark brown pantiles."*

2.2.3. The summary description for NCA 47 notes that:

*"The primary ecosystem services provided by this area include food provision, biomass provision, water availability, sense of place and sense of history. Enhancements in management of soil, water, habitats and landscape features on agricultural land could help to strengthen the provision of many of these services."*

2.2.4. Several headline Statements of Environmental Opportunity (SEOs) are provided by Natural England for NCA 47. These include the following:

2.2.5. **SEO 1:** Enhance the agricultural landscape and soils to increase efficiency of food production, conserve and connect fragmented patches of limestone grassland and woodland and maintain the traditional fabric of the rural landscape, to preserve sense of place and sense of history, protect water quality, enhance biodiversity and improve resilience to climate change.

2.2.6. **SEO 2:** Protect and sympathetically manage geological features and historic features such as Ermine Street Roman road, medieval earthworks, industrial buildings, historic drystone wall networks and traditional villages, to sustain a sense of history and sense of place, providing interpretation to aid understanding of the landscape.

2.2.7. **SEO 3:** Ensure that new development is planned and executed to preserve a sense of place, sense of history, tranquillity and biodiversity, while minimising water use and avoiding exacerbation of flooding and habitat fragmentation.

2.2.8. **SEO 4:** Enhance the provision for access and recreation while maintaining the tranquillity of undisturbed areas and providing educational opportunities and interpretation.

## Local Landscape Character

2.2.9. At a district level, the North Kesteven Landscape Character Assessment **[Ref. 2.4]** identifies four regional Landscape Character Types (LCTs). The Order Limits fall within the Central Plateau LCT.

2.2.10. The LCTs are further subdivided into Landscape Character Sub-Areas (LCAs). Springwell West and Central fall within LCA 7: The Limestone Heath LCA whilst Springwell East falls within LCA 11: The Central Clays and Gravels LCA. The boundaries of the North Kesteven LCAs are illustrated on **ES Volume 2, Figure 10.2: Landscape Character Areas [EN010149/APP/6.2]**.

2.2.11. LCA 7 is a large landscape character sub-area situated in the centre of the North Kesteven District between the ridge of the Lincoln Cliff and the Central Clays and Gravels to the east. Its position on the upper reaches of the cliff's dip slope gives it a feeling of relative elevation and exposure.

2.2.12. It is predominantly an empty, open landscape with wide views to the skyline in all directions. The landform is a gently undulating plateau which dips gently towards the east.

2.2.13. Generally, the whole area is dry, with no obvious surface drainage as a consequence of the underlying limestone geology.

2.2.14. Scattered woodland copses punctuate the whole of the sub-area, which although relatively small are prominent features because of the openness of the landscape.

2.2.15. Roadside hedgerows are often found with mature trees within. Limestone dry stone walls are apparent along roadsides and some field boundaries but are generally in poor condition. Fields are very large and rectilinear.

Field boundaries are often absent, broken or delineated by a strip of rough grass or remnant hedgerow or wall.

2.2.16. Intensive arable agriculture dominates land use with wheat and root crop common. The central plateau area is generally unsettled except for isolated farmsteads and occasional ribbon development along the A15. Larger settlements are situated on the edge of the sub-area characterised by having historic cores with limestone buildings but often surrounded by significant levels of 20th century development. Utility infrastructure, which although sparse, makes an impact on the landscape including prominent pylons and the main A15 running north to south. RAF installations have made a significant impact on the landscape sub-area with several large bases and training centres. Mineral working is also a feature of the sub-area with several large limestone quarries.

2.2.17. The following 'Opportunities for Enhancement' are identified in the character assessment in relation to LCA 7:

- *"Replacement hedgerow planting where these have been lost or degraded.*
- *Reinstatement and repair of the dry stone walls.*
- *There are steps that could be taken to improve the dominant appearance of the RAF establishments, such as additional tree and hedge planting around some buildings and around and away from the perimeter fences.*
- *Habitat friendly limestone grass management regimes should be investigated."*

2.2.18. LCA 11: Central Clay and Gravels LCA runs the entire length of the District. The western edge is defined by the Limestone Heath, whilst the Fens lie to the east along its full extent.

2.2.19. It is a gently undulating lowland, edged by areas of woodland in the north. Fields are generally smaller and more varied in shape than on the adjacent limestone plateau with some grazing land as well as arable.

2.2.20. Surface water drains into small streams running from west to east and drainage ditches run by the sides of the fields.

2.2.21. There are well kept hedgerows along roadsides and sometimes between fields, small copses of broadleaved woodland throughout the sub-area and larger areas of woodland on the eastern edge.

2.2.22. Although generally flat and of low relief, this sub-area differs from its immediate neighbours, it does not have the same emptiness and exposure of the limestone heath nor the uniform flatness of the Fens. The general

impression of this sub-area is of a gentle, agricultural landscape which is well managed and settled.

2.2.23. There are a few scattered agricultural buildings mostly associated with farmsteads and occasional poultry units. The only industrial and commercial uses are located on the edges of the larger settlements such as Metheringham and Ruskington. The main infrastructure feature in the sub-area is the main line Lincoln-Sleaford railway line. High voltage power lines and pylons cross the area but whilst tall in stature, are generally less prominent in the landscape than in the more open landscapes of the Fens or the Limestone Heath.

2.2.24. The following 'Opportunities for Enhancement' are identified in the character assessment in relation to LCA 11:

- *"Replacement hedgerow planting where these have been lost or degraded.*
- *An increase in grassland and pasture would help to restore a more mixed pattern of land use, returning to a more visually varied and traditional landscape.*
- *Maintaining the distinctive character of the villages in this unit is very important."*

2.2.25. Further details of the landscape and visual baseline are provided in **ES Volume 1, Chapter 10: Landscape and Visual [EN010149/APP/6.1]**.

## Amenity & Recreation

2.2.26. There is an extensive network of statutory Public Rights of Way (PRoW) within the Site which link with the surrounding settlements as shown on **ES Volume 2, Figure 2.2: Existing Public Rights of Way [EN010149/APP/6.2].** A total of 38 PRoW and 2 permissive paths are within the Order Limits although the distribution of PRoW varies across the land parcels. There is a notably higher concentration of PRoW in Springwell East compared to Springwell West and Springwell Central.

2.2.27. The Spires and Steeples Trail (a regionally promoted recreation walk) runs north to south through Springwell East connecting Blankney and Scopwick. In addition, a series of locally promoted 'Stepping Out' **[Ref. 2.5]** walks pass through Springwell East including: the Spires and Steeples Trail; 'Scopwick Loop'; 'Around Kirkby Green'; and 'Blankney Circuit'. A number of permissive routes are also present, often utilising exiting farm tracks.

2.2.28. Other walking routes in the 'Stepping Out' series near to the western edge of the Site include the 'Navenby and the Viking Way', and the 'Temple Bruer and the Knights Templar' routes.

2.2.29. Further details of the access and recreation baseline are provided in **ES Volume 1, Chapter 10: Landscape and Visual, Chapter 13: Population** and **Chapter 14: Traffic and Transport [EN010149/APP/6.1]**.

# 3. Green Infrastructure Strategy

3.1.1. This management plan seeks to contribute positively to Green Infrastructure priorities both within the Order Limits and by creating connections beyond including the local character, biodiversity, recreation and amenity, as well as unlocking wider benefits.

3.1.2. By creating larger areas of semi-natural habitat, it is hoped that this will facilitate flora and fauna movement within the landscape. By taking land out of intensive agricultural production, the mitigation and enhancement measures outlined in this document will help improve water quality whilst also giving soils a rest and improving soil heath over the operational life of the Proposed Development thereby not compromising food production in the future.

3.1.3. Green Infrastructure corridors will form habitat networks, comprising a mosaic of retained and enhanced neutral grassland meadows, arable margins, hedgerows and woodlands. Priority habitat in LWS will be extended through creation of calcareous grassland on adjacent land whilst the grassland under and around the panels would support a variety of wildflowers and greater diversity of grass sward.

3.1.4. This landscape will support a wide range of species including ground nesting birds, bats, pollinating insects and rare plants. New hedgerow and tree planting will soften the appearance of the Proposed Development and where appropriate provide screening whilst at the same time strengthening biodiversity.

3.1.5. Whilst some temporary closures may be required during construction, all existing PRoW and permissive paths will be retained and new statutory PRoW and temporary permissive paths are proposed, linking to existing routes and contributing positively to the wider network.

3.1.6. Within the green infrastructure strategy, there is a clear distinction between measures that are required to mitigate the likely effects to receptors of the Proposed Development, and measures that provide enhancement above and beyond that mitigation.

3.1.7. The design of the Proposed Development will take into account the aerodrome safeguarding of nearby airfields to ensure it does not increase the risk of aviation bird strike. This will include the design of any ponds, swales, surface water drainage systems, storm water attenuation systems including storage basins and channels or other wetland features that may be included in the development, and the design of planting proposals within 5km of RAF Cranwell to ensure they do not increase the likelihood of aviation bird strike.

## Farmland bird strategy

3.1.8. A key part of the Green Infrastructure Strategy has been ensuring the requirements for farmland birds are met and this has been articulated and reflected within the Management Objectives outlined in Section 4. Requirements for farmland birds including ground nesting species are threefold:

- Continued availability of open ground for nesting for species such as skylark, as well as hedgerows and margin habitat for species such as grey partridge and corn bunting;
- Adequate foraging during the breeding season in the form of insects;
- A source of winter bird food in the form of seeds from granivorous species or insects.

3.1.9. The approach to ground nesting birds has been to use skylark as a proxy; these being the most abundant species identified. If the Proposed Development establishes sufficient habitat for skylark it should also have adequate capacity for other species also. The methodology applied to quantify the extent of mitigation is outlined below.

3.1.10. As presented in **ES Volume 3, Appendix 7.2: Breeding Bird Survey [EN010149/APP/6.3],** skylark were the most abundant species recorded with an average of 185 singing males recorded across five survey visits in 2023. The numbers on the first visit (early March 2023) are likely inflated due to wintering birds from the continent still being present, whilst the last visit (July 2023) included a number of family parties including newly fledged birds. Therefore, an average value of 185 singing male birds has been applied. The area of habitat surveyed for skylarks and other nesting birds was approximately 1,681 hectares (considerably larger than the area allocated to solar PV modules within the Order Limits), equating to an average estimated density of territories or breeding pairs of 0.11/ha. Density of nesting birds varied considerably from field to field (depending on the cropping regime) which is why an estimated average density has been used.

3.1.11. It is considered that only areas underneath solar panels are considered to require mitigation, as the placement of panels is likely to displace ground nesting species such as skylark. This average density of breeding skylark was applied to the area allocated to solar panels to estimate the number of skylark territories that would require compensation, 0.11 territories per hectare x 712.69ha = 78 territories.

3.1.12. Available literature suggested that typical skylark territory densities range from 0.02 per ha in intensive grazed pasture through to 0.56 in organic set aside or 0.76 in coastal marshes. It is considered that grassland creation could, with careful management achieve a density similar to coastal

marshes 78/0.76 = 102 ha of mitigation required, just short of 1ha of grassland per pair. Mitigation has been allocated in blocks larger than 3ha recognising that skylark like large open fields. The upper limit of skylark density is believed to be achievable given the additional measures proposed to boost foraging habitat as outlined below in the Management Objectives ensuring the three broad requirements for survival are met.

# 4. Management Objectives

4.1.1. To set a framework for the operational management of Green Infrastructure of the Proposed Development, 12 Management Objectives have been identified within this oLEMP. The Management Objectives are aligned to the Project Principles set out within the **Design Approach Document [EN010149/APP/7.3]** as follows:

**Management Objective 1** – Retain existing vegetation wherever reasonably possible to retain the fabric of the site and aid assimilation of development into its context

4.1.2. A strong network of vegetation is present across the Order Limits and will be retained wherever reasonably possible by the Proposed Development in accordance with Project Principle 2.1. The Vegetation Removal Parameters presented in **Appendix 2** identifies likely vegetation for removal for construction purposes which would be reinstated where practicable and retained during the operational phase of the Proposed Development.

4.1.3. Existing vegetation not only provides important visual softening and screening functions but also biodiversity habitats and connectivity. Retention of existing vegetation will include:

- Retention of the existing field pattern and wildlife corridors both during the construction and operational of the Proposed Development;
- Retention of the majority of LWS verges;
- Protection of existing habitat for nesting birds and foraging and roosting bats;
- Protection of existing habitat corridors along these features;
- Protection of the functionality and ecosystem services of the landscape and its watercourses; and
- Providing and maintain suitable growth levels/heights of visual screening.

**Management Objective 2** - Manage the Proposed Development to respond to the distinctive and unique local character of the site, informed by relevant local studies such as the North Kesteven landscape character assessment.

4.1.4. New structural planting, in the form of tree belts and hedgerows, would help to soften and screen built development and integrate it to the existing landscape, whilst also providing habitat for biodiversity. Planting would be designed and managed to complement the existing vegetation mix, structure and pattern of the landscape. It would be informed by an understanding of the environmental context and aspirations of the Lincolnshire BAP and landscape character studies which encourage

planting of native species, creation of calcareous grassland, and planting of tree belts and individual trees. This will ensure:

- An enhanced landscape structure with greatly improved green infrastructure corridors and connectivity around and within the Order Limits such as along existing field boundaries and PRoWs.
- Screening and filtering of close views to the Solar PV development and associated built elements from PRoWs, local roads (such as the A15, B1191 and B1188) and other publicly accessible areas within and immediate adjacent to the Order Limits.
- A 700m section of the A15 at the south of Springwell West requires mitigation to reduce glint and glare impacts upon roads users. This includes hedgerows to be infilled and maintained to a height of at least 3m. Until the advance planting (to be planted in Winter 2024/25) in this area has grown to sufficient density and height of 3m to mitigate impacts of glint and glare, temporary mitigation will be implemented to mitigate impacts. This temporary mitigation may include temporary screening or suitable alternative mitigation to be confirmed in the detailed LEMP. This would be removed once the hedgerows are of sufficient height. It is anticipated that a temporary barrier or suitable alternative would be required for approximately 3 years following the construction phase. The colour and materials of temporary barriers would be designed to be sensitive to their context in accordance with the **Design Commitments [EN010149/APP/7.4]**. The landscape planting proposals are secured within the Green Infrastructure Parameters in **Appendix 1** and further detail on the glint and glare assessment is detailed in **ES Volume 3, Appendix 5.4 [EN010149/APP/6.3]**.

**Management Objective 3** – Extend and enhance existing local wildlife sites and priority habitats, including the creation of calcareous grassland adjacent to the A15.

4.1.5. Creation of calcareous grassland will be sited in Springwell West and Springwell Central, where landscape is underlain by chalk geology, adjacent to existing LWS along road verges in the Order Limits.

4.1.6. Calcareous grassland creation in these locations will extend and enhance these priority habitats designated as LWS in accordance with Project Principle 3.1.

**Management Objective 4** – Create a mosaic of habitats, such as new grassland and arable margins, to support farmland birds such as skylark and grey partridge and species such as brown hare.

4.1.7. A mosaic of new habitats will be created to support key species across the Order Limits in accordance with Project Principle 3.2. These habitats will complement retained vegetation and create a network of valuable habitats

through the Proposed Development as shown in the Green Infrastructure Parameters in **Appendix 1**. This network would maximise foraging, sheltering and breeding possibilities for a wide range of species, including farmland birds and brown hare. New habitats would include:

- Calcareous grassland;
- Neutral grassland meadow;
- Arable field margins (wild bird cover/seeding);
- Tussocky grass field margins;
- Grassland open fields and margins with wildflowers;
- Legume-rich modified grassland (underneath Solar PV modules); and
- Tree belt, tree and hedgerow planting.

**Management Objective 5** – Use locally native species wherever possible to create new habitats, increase the number of pollinator species and create food sources for birds such as skylark and yellow hammer and other animals during winter months.

4.1.8. New planting will comprise locally native species designed to increase the number of pollinator species and create food sources for birds such as skylark and yellow hammer during winter months in accordance with Project Principle 3.3.

4.1.9. Locally sourced green hay or brush harvested seed will be used for grassland creation where practical, and there will be emphasis on using seed mixes of local provenance should the first two options be unavailable.

4.1.10. The green infrastructure proposed would provide a large floristic resource across the Order Limits. This will comprise a mix of locally native species which will flower at different times of the year and provide a long summer foraging window for pollinators and other insects. It will also provide a summer food source for birds, such as skylark and yellow hammer, which will also benefit in the winter with the creation of the wild bird cover/seeded arable margins.

4.1.11. Fruiting, berry and nut bearing species will be used to provide food and foraging sources for a variety of wildlife including birds, foxes, badgers, rodents and insects.

**Management Objective 6** – Use land under and between solar panels to deliver biodiversity benefit for pollinators and farmland birds.

4.1.12. Land under and between solar panels will be used to deliver biodiversity benefits and improve soil health in accordance with Project Principle 3.4.

This will comprise creation of legume rich (clovers, vetches etc) neutral grassland meadow.

**Management Objective 7** – Establish new planting and landforms at the earliest practicable opportunity.

4.1.13. The Proposed Development includes c. 15,563m of new tree and hedgerow planting. New planting and landforms will be established at the earliest practicable opportunity within the construction programme in accordance with Project Principle 3.5. This includes the Earth Bund in Field Tb2 providing mitigation for the proposed Springwell Substation and BESS compound.

4.1.14. A phasing strategy for new planting would be developed at the detailed design stage of the project within the detailed LEMP(s). This would identify priority areas for new planting to be implemented. The Applicant is open to suggestions of early planting from the Community Liaison Group (CLG) at the appropriately timed LEMP.

**Management Objective 8** – Deliver a biodiversity net gain beyond the minimum of 10%

4.1.15. The Proposed Development will deliver a BNG gain of at least 10% in accordance with Project Principle 3.6.

4.1.16. For this current stage of the DCO process, Defra's Statutory Biodiversity Metric 2024 **[Ref.4.1]** was used to assess the value of the baseline and proposed habitats and understand the net change in value of the Site based on the Green Infrastructure Parameters presented in **Appendix 1**. The metric provides a separate assessment for habitat areas (referred to as habitat units), linear vegetated habitats (referred to as hedgerow units), and linear aquatic habitats (referred to as watercourse units). The results of this assessment are detailed in full in **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3]** and are summarised in **Table 1** below.

*Table 1 DCO Submission Stage Summary of BNG Calculations.*

| Unit type | No. baseline units | No. units delivered by the Proposed Development | Net change in units | Unit % change |
|---|---|---|---|---|
| **Habitat Units** | 3,035.67 | 3860.19 | 824.52 | 27.16 |

| | | | | |
|---|---|---|---|---|
| **Hedgerow Units** | 544.44 | 648.19 | 103.75 | 19.06 |
| **Watercourse Units** | 18.7 | 21.24 | 2.54 | 13.59 |

4.1.17. The detailed LEMP(s) will include an update to the BNG calculations undertaken at detailed design using the Defra Statutory Biodiversity Metric. Any updates to habitat surveys required as part of this update will also be undertaken as required.

**Management Objective 9** – Retain all existing PRoW and protect their amenity.

4.1.18. Whilst there may be some temporary closures during construction, all existing PRoW will be retained for the operational phase in accordance with Project Principle 5.1, and steps have been taken to protect their amenity in accordance with Project Principle 5.2 and 5.3. In addition, newly created statutory PRoW will be retained post decommissioning of the Proposed Development as a permanent positive legacy.

4.1.19. A total of 38 PRoWs and 2 Permissive Paths run through the Order Limits and several more run adjacent to the Order Limits boundary at various points along it. An important objective is to minimise where possible the perceived detrimental impacts of the Proposed Development on the recreational amenity. This has been addressed by:

- Omitting Solar PV development from areas of land to break up the amount of development along footpaths and to create green infrastructure corridors aligned to them.
- Provision of minimum 15m offsets to perimeter fencing surrounding Solar PV development from all PRoW and a minimum 50m offset to Independent Outdoor Equipment (transformer, switchgear and central inverters) and ITS.
- Creation of a wide walking corridor (at least 15m wide) in areas where Solar PV development is located adjacent to both sides of a footpath, bounded on either side by existing or proposed hedgerows to minimise any perceived channelling / funnelling of the visual experience from PRoW.
- Creation of new native planting along existing routes to screen and filter close views to the Proposed Development, comprising a combination of tree belt, hedgerow and grassland with wildflower planting.
- Siting of security fencing behind new planting to reduce visual impact.
- Implementation of interpretation boards at appropriate junctions of PRoWs within the Order Limits, which will allow for opportunities to

better understand the positive contribution the Proposed Development will make in adapting to climate change.

**Management Objective 10** – Enhance the footpath and cycle network by providing new and improved routes to increase connectivity and link local settlements such as RAF Digby, Scopwick and Blankney.

4.1.20. New PRoW and permissive paths will be created as part of the Proposed Development in accordance with Project Principle 5.4.

4.1.21. These are shown on the Green Infrastructure Parameters in **Appendix 1** and **Outline Public Rights of Way and Permissive Path Management Plan [EN010149/APP/7.12]** and include:

- Creation of 3 new PRoW:
  - A new PRoW linking RAF Digby to Scopwick (approx. length 1,670m).
  - A new PRoW connecting the existing PRoW (AshL/4/1) west of the A15 (near Navenby Lane) to New England Lane. (approx. length 990m).
  - A new PRoW from Temple Road (north of Brauncewell) to the Bloxham Woods Car Park to provide a connection across the A15 (approx. length 860m).
- Creation of 4 new permissive paths:
  - A new permissive path along the western edge of the Proposed Development linking New England Lane to Temple Road, north of Brauncewell (approx. length 4,130m).
  - A new permissive path connecting the B1191 (Heath Road) with the existing PRoW between RAF Digby and Rowston (Rows/5/1) (approx. length 1,610m).
  - A new permissive path linking Bloxholm Wood to Brauncewell Village (1,120m).
  - New permissive paths to provide a series of circular walking loops from Bloxholm Woods (approx. length 1,830m).

4.1.22. In addition to the creation of the new routes identified above, the Proposed Development would include a permanent upgrade to the existing PRoW between Scopwick and Blankney to bridleway status (approx. length 2,090m). This would include an upgrade of the existing surface conditions of the trail to better allow user access and enjoyment to ‘all-weather’ standard allowing year-round accessibility for all users. Further details are provided in the **Outline Public Rights of Way and Permissive Path Management Plan [EN010149/APP/7.12]**. Specifications of signage and waymarking would be developed in consultation with the CLG.

**Management Objective 11** – Provide education and interpretation of the solar farm and the site.

4.1.23. The Proposed Development will be designed to provide education and interpretation of the Proposed Development in accordance with Project Principle 6.2.

4.1.24. Opportunities for the local community to engage with and learn about the natural environment will be provided. This will include the provision of informal, low-key interpretation boards at appropriate, strategic points across the Order Limits that would allow the local community to learn about and engage with nature. Information will also be provided on the Proposed Development, climate change, local history and ecology and the benefits of renewable energy. Way-markers and interpretation boards will be provided at appropriate junctions of the existing footpaths or where they enter the Order Limits to aid interpretation and will be installed prior to the first anniversary of the date of final commissioning of the relevant phase of the Proposed Development to which they relate. The detailed LEMP(s) will confirm the proposed content and location of the interpretation boards. These would be agreed with the relevant local planning authority prior to their installation and in consultation with local communities via the CLG formed pursuant to the **oCEMP [EN010149/APP/7.7]** and Requirement 5 of the **Draft Development Consent Order [EN010149/APP/3.1]**.

4.1.25. A new community growing area of up to approximately 2ha is proposed to the north of Scopwick in response to stakeholder feedback. The area is located adjacent to existing community facilities along Vicarage Lane (including the Scopwick cemetery and recreational area) and is adjacent to the Spires and Steeples trail and Stepping Out Scopwick Loop (refer to **Appendix 1**). The detailed design of the space will be developed at the detailed design stage in conjunction with the local community via the CLG.

**Management Objective 12** – Design for resilience and adaptation to future climate change.

4.1.26. The Proposed Development will be designed for resilience and adaptation to future climate change in accordance with Project Principle 9.1.

4.1.27. The enhancement of existing vegetation and the implementation of proposed planting will promote improved interception, evapotranspiration and infiltration rates, whilst also providing water quality treatment for surface water runoff before it enters the watercourses within and surrounding the Order Limits **[Ref 4.2]**. These increased hydrological rates will provide a betterment on existing runoff rates, which is beneficial in any future climate change scenarios.

4.1.28. Species should be resilient to climate change impacts and disease / pests as far as is practicable and foreseeable. Detailed design and accompanying LEMP(s) will provide further details in relation to species selection.

# 5. Pre-Construction and Construction

5.1.1. This section details the required works to help to ensure the objectives set out in Section 4.0 can be achieved. Works will be undertaken in accordance with the **Works Plans [EN010149/APP/2.3]** and substantially in accordance with the following plans and documents:

- **Green Infrastructure Parameters [Appendix 1]**.
- **Vegetation Removal Parameters [Appendix 2]**.
- **Outline Construction Environmental Management Plan (oCEMP) [EN010149/APP/7.7]**.

5.1.2. All soft and hard works will be agreed with the relevant planning authority through the discharge of requirements and will be detailed in specifications included within the LEMP(s).

## 5.2. Community Liaison Group (CLG)

5.2.1. A CLG will be established for the duration of the construction period as set out in the **oCEMP [EN010149/APP/7.7]**. While the CLG would not be in place during operation, updates would be given to the local community and stakeholders at key milestones to maintain an on-going relationship over the entire lifetime of the project. There would also be contact details onsite and online for members of the community and stakeholders to contact the asset operations team.

5.2.2. The Applicant will consult with the CLG on the proposals for the location and content of the interpretation boards and waymarking signage, the options for planting alongside PRoWs and permissive paths including information regarding the specification (minimum height, species, density). Details of the community growing area would also be developed in consultation with the CLG.

5.2.3. Following consultation with the CLG, the detailed LEMP(s) will include the specification of the hedgerow and tree belt planting along permissive paths and PRoW and how it will be managed, including explaining how the feedback from CLG has been considered. The detailed LEMP(s) will be submitted to the relevant planning authority for approval pursuant to Requirement 7 of the **Draft DCO [EN010149/APP/3.1].**

## 5.3. Pre-Construction and Construction

### Principles

5.3.1. The **oCEMP [EN010149/APP/7.7]** sets out the broader framework in relation to construction activities. In relation to green infrastructure, the

following pre-construction and construction principles will be followed and further developed as part of the detailed design and LEMP(s):

- All new planting should be sourced from a reputable UK based provider who is able to demonstrate provenance of planting and adhere to all relevant biohazard controls and biosecurity measures including Landscape Institute Technical Note 1/15 Pests and Disease Threats **[Ref. 5.1]**.
- All new planting must be certified disease and pest free from the chosen supplier(s). Planting to be undertaken in suitable planting conditions. All new tree planting will be undertaken in accordance with the BS8545:2014 “Trees: from Nursery to Independence in the Landscape – Recommendations” **[Ref. 5.2]** document.
- Areas of bare earth and scarification as a result of the construction to be resown with a suitable seed mix of species to encourage sward diversity. Details of proposed planting areas are provided by the Green Infrastructure Parameters in **Appendix 1.**
- Where vegetation removal/pruning is required for access and/or visibility splays, the works should be limited to that amount required to achieve the appropriate access / visibility required and substantially in accordance with the Vegetation Removal Parameters in **Appendix 2.** Pruning of vegetation will be preferred over removal wherever practical.
- Bat boxes will be installed on retained trees across the Order Limits, the details of which will be provided in the detailed LEMP(s). This will consist of general-purpose bat boxes which would be used by a range of species.
- Bird boxes will be installed in mature trees and will include boxes for a range of species of principal importance, such as barn owl (avoiding the A15), starling, house and tree sparrow and spotted flycatcher. Specific details will be provided in the detailed LEMP(s) at the detailed design stage.

### Pest and Disease Control and Biosecurity

5.3.2. All plant material shall be inspected for the presence of any pests or disease occurring on the Order Limits and appropriate action shall be taken to remedy the disease and eradicate pests.

5.3.3. Appropriate biosecurity measures will be implemented and all plant material will be checked for invasive species and biosecurity hazards.

5.3.4. All materials used in connection with these works shall be of an approved type and be applied and used in accordance with the conditions for the

use of herbicides which will be outlined in the specification documents at the construction stage.

## Pre-Planting Preparation

5.3.5. Pre-planting preparation will be undertaken where required to ensure optimum chances of successful establishment and mitigation. Further details, including timings, for each planting typology are set out in **Appendix 3** and the LEMP(s) submitted at the detailed design stage will provide additional details once detailed specifications are confirmed.

5.3.6. The current nitrate and phosphate levels in the soils across the Order Limits are likely to be high due to years of inorganic fertiliser application. High levels of these nutrients favour coarse grasses and leads to a less floristically diverse sward. It is not anticipated that directly sowing species rich grassland mixes into nutrient-rich soils will be effective, as grasses will outcompete wildflowers, and the yield (and therefore extent of nutrient depletion) will be reduced compared to a conventional grass seed mix for silage or hay cropping. This will be a particular constraint for the areas set aside for creation of calcareous and neutral grassland but is not considered a constraint for the legume rich sowing under panels which are better equipped at dealing with higher fertility levels.

5.3.7. Should the nutrient levels be too high to deliver grassland habitat mitigation, measures to reduce soil fertility may need to be implemented. The exact method will be detailed in the LEMP(s).

## Advanced and Early Planting

5.3.8. The Applicant recognises the importance of establishing new planting at the earliest practicable opportunity to mitigate the Proposed Development and is committed to undertaking ‘advanced’ and ‘early’ planting.

5.3.9. Advanced planting refers to new planting which can take place in advance of the DCO consent in agreement with the relevant Landowner under existing land management rights. This includes the planting adjacent to the A15 and the Spires and Steeples Trail which was implemented in Winter 2024-25 to mitigate some adverse significant visual effects of the Proposed Development.

5.3.10. The Applicant has remained open to potential further advanced planting during the examination process in areas identified by the Green Infrastructure Parameters in **Appendix 1** where they:

- provide earlier mitigation of effects stated in the **ES [EN010149/APP/6.1]** through earlier establishment and growth;
- do not hinder existing / future farming operations;

- provide an environmental / biological benefit to the local area regardless of the Proposed Development. Such planting could include tree planting, planting new hedgerows, or infilling gaps in existing hedgerows;

5.3.11. Early planting refers to planting that can take place following DCO consent (if it is granted) and before construction is complete. This is referred to as early planting because it would be implemented earlier than the 'worst case' scenario assessed within the Environmental Statement which assumes new planting would be implemented after construction.

5.3.12. A phasing strategy for new planting would be developed at the detailed design stage of the project within the detailed LEMP(s). This would identify priority areas for early planting identified through engagement with the CLG, Lincolnshire County Council, the Environment Agency and Natural England, to be implemented based on areas that would have most benefit in reducing the short-term impacts of the Proposed Development.

## Planting and Utilities

5.3.13. Offsets to utilities has been factored in as part of the design process and appropriate planting of species (grassland and low shrubs) is proposed in these utility corridors where indicated by the Green Infrastructure Parameters in **Appendix 1**.

5.3.14. In accordance with National Grid Guidance **[Ref. 5.3]**, only slow and low growing species of trees and shrubs will be planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances. Planting specification will be confirmed within the LEMP(s). Planting will be regularly inspected to maintain clearance from overhead utilities.

5.3.15. Planting above underground utilities will accord with relevant utility provider guidance with suitable species selected that do not result in risk to buried utilities as a result of roots or soil shrinkage. This includes the specification of shrubs (not mature trees) for hedgerows that are reinstated over proposed cable routes (refer to Paragraph 6.1.31). Planting specification will be confirmed within the LEMP(s).

## Permitted Preliminary Works – Vegetation Removal

5.3.16. Vegetation removal, including trees and hedgerows, is identified within the list of Permitted Preliminary Works to be undertaken prior to commencement within the **Draft DCO [EN010149/APP/3.1],** within the extents indicated by the Vegetation Removal Parameters in **Appendix 2**.

5.3.17. The **oCEMP [EN010149/APP/7.7]** provides details of pre-construction and construction works. However, in relation to green infrastructure, minor

works to vegetation such as lateral pruning or crown lifting will be undertaken where required as part of the permitted preliminary works to avoid damage to trees by construction activities. Some vegetation and tree clearance/pruning may also be required. These works will be undertaken by a qualified arborist and in accordance with an agreed specification set out within an Arboricultural Method Statement (AMS) that will form part of the detailed CEMP(s).

5.3.18. Tree Fencing Protection (TFP) will be erected before any permitted preliminary works begin on the Site. Location and alignment of tree protection fencing will be provided within the AMS. TFP will be in accordance with the principles set out within 'BS5837: Trees in relation to design, demolition and construction – Recommendations' **[Ref. 5.4]**. Where appropriate, the security fence shall act as an effective protection barrier but in some locations specific, temporary tree protection fencing will be required. Protection fencing may be erected and dismantled in phases as construction progresses across the Order Limits.

5.3.19. The removal of vegetation for the creation of passing bays within road verges would also be required as part of the permitted preliminary works and is indicated by the Vegetation Removal Parameters in **Appendix 2.** Planting is proposed to mitigate for the loss of these grass verges.

5.3.20. Whilst no removals of trees subject to a Tree Preservation Order (TPO) are proposed, where an individual tree subject to a TPO must be removed (e.g. due to its dead or dangerous condition) and the local authority requires replacement, a new tree of equivalent species and ultimate size will be planted in the same place or as near as reasonably practicable, subject to operational requirements. Replacement planting for individual trees will utilise heavy standard tree stock (typically, 12-14cm girth) and will be planted in the next planting season following removal. The final species and planting location will be agreed in advance with the local authority.

5.3.21. The Applicant anticipates that a detailed LEMP will be produced to set out details of vegetation clearance, mitigation and protection measures for the Permitted Preliminary Works. However, as these activities will be undertaken ahead of the detailed landscape design coming forward, an update to the BNG assessment will not be included at this stage.

### Construction Works

5.3.22. The **oCEMP [EN010149/APP/7.7]** provides details of pre-construction and construction works. However, in relation to green infrastructure, minor works to vegetation such as lateral pruning or crown lifting will be undertaken where required as part of the permitted preliminary works to avoid damage to trees by construction activities. Some vegetation and tree clearance/pruning may also be required. These works will be undertaken

by a qualified arborist and in accordance with an agreed specification set out within an Arboricultural Method Statement (AMS) that will form part of the CEMP.

5.3.23. Construction of the Proposed Development will accord with the AMS for where construction activities encroach into root protection areas of trees.

5.3.24. Topsoil stripping would be limited to the construction of the Springwell Substation, BESS, collector compounds, access tracks, Inverter and Transformer Stations (ITS) and cable routes. All soil would be managed in accordance with the Soil Management Plan produced in accordance with the **Outline Soil Management Plan [EN010149/APP/7.11]** secured pursuant to the requirement in Schedule 2 of the **draft DCO [EN010149/APP/3.1]**.

5.3.25. The removal of vegetation for the creation of passing bays within road verges would also be required as part of the permitted preliminary works and is indicated by the Vegetation Removal Parameters in **Appendix 2.** Planting is proposed to mitigate for the loss of these grass verges.

### Construction Reinstatement Planting

5.3.26. New planting serving as reinstatement / mitigation planting for construction activities will be implemented post construction. The detailed LEMP(s) will detail the locations and specification of this planting.

5.3.27. New planting will have appropriate measures to ensure long-term protection from graziers such as deer and grey squirrels.

# 6. Operational Management

## 6.1. General Management

6.1.1. The following general management will be undertaken across the whole of the Order Limits. An indicative works schedule is presented in **Appendix 3** which will be further developed within the LEMP(s) at the detailed design stage.

### Public Rights of Way and Permissive Paths

6.1.2. The management of Public Rights of Way (PRoW) and permissive paths, both existing and proposed, within the Order Limits is set out within the **Outline Public Rights of Way and Permissive Path Management Plan [EN010149/APP/7.12].** Details of any waymarking, signage and interpretation would be developed in consultation with the CLG.

6.1.3. Proposed PRoW will have statutory status and remain beyond the operational phase representing a permanent legacy benefit of the Proposed Development.

6.1.4. The permissive paths will be made available to the public, 364 days a year, by permission of the Landowner. They will be managed by the Applicant and will include signs to make clear that its use is for the public by permission of the landowner. At the end of the Proposed Development's operation, the area will be returned to the Landowner (with further detail to be included in the DEMP) when the land will be in private ownership and the permitted public use will cease.

6.1.5. In relation to Green Infrastructure, all routes will be maintained to allow unhindered passage. Vegetation will be checked periodically and pruned where necessary to maintain an obstruction free route. Stiles and gates will be checked to ensure they are safe and operationally effective.

### Fencing

6.1.6. All perimeter fencing for the Proposed Development will be regularly checked to ensure it is safe and fit for purpose. Repairs and replacement of fencing will be made as soon as practically possible as and when required.

6.1.7. Stock proof fencing may be used where necessary to manage grazing rotation and ensure grazing animals (including deer) do not impinge on other habitat areas.

6.1.8. Details of fencing will be approved under Requirement 9 of the **Draft DCO [EN010149/APP/3.1].**

### Maintenance of Tree Supports

6.1.9. Supporting tree stakes, ties and tree guards used for more mature tree planting where used will be biodegradable and maintained in good condition, replaced as necessary and preferably removed when trees are self-supporting (normally after two years).

6.1.10. Tree ties will be adjusted for tightness as necessary to avoid strangulation of the stem.

### Watering of New Structure Planting

6.1.11. All new tree and hedgerow planting will be monitored regularly and additional watering from a mains water source using bowsers will be provided where required during times of prolonged heat and/or drought/dryness to ensure new planting establishes. Additional watering will be carefully applied on a specific basis to ensure new planting establishes successfully but not to the extent as to create a permanent dependency on additional watering.

6.1.12. Detailed LEMP(s) will include a 5 year defects replacement planting period, which is common practice for landscape maintenance contracts.

### Protection from Damage by Deer and Squirrels

6.1.13. New planting will have appropriate measures to ensure long-term protection from graziers such as deer and grey squirrels.

### Riverbanks and Watercourses

6.1.14. Riverbanks and watercourse, including ditches, will be managed for biodiversity enhancements whilst maintaining flow levels. Currently these are heavily shaded across much of the Order Limits. The watercourses will benefit from limited thinning of vegetation to decrease shading but without causing significant losses in scrub/hedgerow habitats. Small gaps of approximately 5 m will be created to allow marginal vegetation to establish at intervals along the streams and placed every 100m. This will improve the quality of the aquatic and marginal habitat in places while retaining much of the dense scrubby vegetation potentially used by other species such as dormouse, and farmland birds.

### Control of Litter/Vandalism

6.1.15. Grounds maintenance will be delivered throughout the Proposed Development. The Proposed Development will be kept clean and litter removed from planted areas as part of the regular maintenance of the

Order Limits. Response to acts of vandalism or graffiti will be dealt with swiftly and the repair or replacement implemented as soon as practically possible.

6.1.16. Benches, interpretation boards and signages will be regularly checked and maintained to ensure they are in good condition.

### Avoidance of Fertiliser and Herbicides

6.1.17. In order to maximise the biodiversity value of the Proposed Development, and avoid water pollution, fertiliser use will be avoided, including areas used for productive purposes (such as grazing land), unless required for successful establishment of new planting.

6.1.18. It is likely that fertilizers and herbicides will continue to be used for the arable areas retained in agricultural use.

6.1.19. Herbicide use will be limited to areas where it is specifically required under the Solar PV modules and avoided elsewhere within the Order Limits to prevent damage to adjacent habitats, and only then when this is considered absolutely necessary. Any herbicide application will be carried out by suitably licensed persons following appropriate guidance and legislation.

6.1.20. Spot treatment using herbicide may be required in areas managed for rare arable weeds if ongoing monitoring indicates pernicious weeds such as dock and thistle are a problem.

### Vegetation Management and Grazing

6.1.21. Vegetation management will be undertaken at an appropriate time of year so as to avoid nesting bird season and in such a way as to avoid incidental injuring or killing of reptiles and amphibians. Cutting of grassland and similar habitats will be carried out no lower than 150mm to avoid harm to reptiles and amphibians. Wood vegetation will be cut during January or early February to avoid the nesting season and allow berries and other fruit to remain in place into the early part of the winter. Checks would also be carried out for ground nesting birds and brown hare leverets if ground clearance of any suitable habitat is carried out between March and September.

6.1.22. Habitat management is undertaken often through mechanical means (i.e. grass cutting). However, grazing is a fundamental process that can be effectively utilised in the management of natural and semi-natural habitats. Conservation grazing uses herbivores to maintain habitats in a specific desired state in line with a habitat management plan. This may be to keep coarse grasses in check and allow herbs to flourish, to prevent scrub succession, and/or stocking to create open spaces and a varied grassland

structure. The density of animals is typically far lower than conventional grazing. If grazing is not possible light scarifying every three years after the hay cut would help mimic light poaching creating gaps for new species to colonise. Grazing is a common technique used for vegetation management on solar farm developments. Opportunities for grazing will be considered where practicable and is viable with details such as timings and stocking densities to be provided in the LEMP(s) at the detailed design stage.

6.1.23. For the Proposed Development the habitats that will benefit from conservation grazing are the calcareous grassland, neutral grassland meadow and the legume-rich modified grassland beneath and around the panels created for biodiversity enhancement. Grazing in and around panels will commonly be carried out using sheep, as they are less likely to damage infrastructure than larger herbivores.

6.1.24. If any invasive species are recorded within the Order Limits then specific control measures, depending on species, would be implemented. Monitoring will ensure that the attributes required to achieve the desired BNG condition are achieved, for example the proportion of long to short grass and proportion of bare ground. If the grazing or cutting regime does not appear to be delivering the required condition, then remedial management will be implemented.

6.1.25. A detailed vegetation management programme for habitats is set out in **Appendix 3**. This details the steps to managing each proposed habitat and the month and year (from year 6 to year 30) each step should be undertaken. Where possible, grazing or cutting (depending on the final management regime) will be over a three year rotation to ensure there are always some areas of longer grassland to benefit invertebrate species.

### Screening / Structure Planting – Tree Belts

6.1.26. Substantial new tree belt planting throughout the Order Limits is proposed, principally along existing field boundaries, to bolster existing vegetation but also to create new tree belts providing screening and biodiversity benefits.

6.1.27. Tree belts will be a combination of native broadleaf and coniferous species and include bushier smaller species such as hazel, hawthorn, blackthorn and holly to provide structure and screening at lower levels.

6.1.28. The planting specification for trees will be confirmed within the LEMP(s) and would typically be planted as young transplants or ‘whips’ with the use of extra heavy standards where more mature specimens are required.

### Screening / Structure Planting – Hedgerows

6.1.29. Substantial new hedgerow planting throughout the Order Limits is proposed, both to bolster existing hedgerows but also to create new hedgerows to provide screening and biodiversity benefits.

6.1.30. A native mix of scrubby species such as hawthorn, blackthorn, holly and hazel will be used, interspersed with taller tree species such as field maple and oak which will mature to become large hedgerow trees. Alder buckthorn and disease resistant elm will also be included within the planting mix to benefit brimstone white letter hairstreak butterflies.

6.1.31. Sections of hedgerows will be reinstated where they have been removed to accommodate cabling routes. At these locations small shrubs (reaching less than 5m tall on maturity) will be planted to avoid damage to underground cables. This will exclude trees species such as oak or ash but would include shrubs such as hawthorn, hazel and dog wood.

6.1.32. The specification of new hedgerow planting located within 5km of RAF Cranwell (the southern half of Springwell West) will be designed so as not to increase the risk of bird strike hazard to aircraft.

6.1.33. Existing field hedgerows would be gapped up / filled in with new plating and would be allowed to grow out more fully and managed for visual screening and biodiversity benefits for the duration of the Proposed Development.

6.1.34. Prior to submission of the detailed LEMP(s), a landscape architect will undertake a detailed survey of all hedgerows within the Order Limits and identify lengths of hedgerow which require infilling of gaps or increasing in density to provide a reasonable degree of screening to mitigate the visual effects of the Proposed Development. Linear gaps of more than 1m and lengths of hedgerow where in the opinion of the landscape architect the hedgerow is sparse or thin will be geo-referenced and recorded. Gaps identified will be infilled with new hedgerow plants and where hedgerows are considered to be insufficiently dense by the landscape architect, a supplementary row of hedgerow planting will be implemented as part of the detailed planting proposals submitted with the LEMP(s).

6.1.35. The planting specification for screening / structure planting will be confirmed within the LEMP(s) and will typically be planted as young transplants or ‘whips’ with the use of extra heavy standards where more mature specimens are required.

6.1.36. The Applicant is open to discussion where early planting might be appropriate via the CLG.

6.1.37. In order to ensure the Biodiversity Net Gain trading rules are met the new hedgerow planting will incorporate the following as a minimum:

- Create 0.03km (30m) of native hedgerow with trees - associated with a bank or ditch
- Enhance 0.02km (20m) of existing native hedgerows with trees - associated with a bank or ditch.

6.1.38. Once established (likely to be 10 years), new hedgerow planting will be managed by light trimming every 3-5 years as required with only one side being trimmed in any one year. Existing and gapped up hedgerows will have a relaxation in management so that they become tall and bushy with long term management by light trimming every 3-5 years.

### Calcareous Grassland

6.1.39. Calcareous grassland creation is proposed in Springwell West and Springwell Central where the underlying geology is limestone. This includes areas adjacent to existing roadside verge LWS designated for the calcareous flora they support. The calcareous grassland would provide suitable insect food for birds as well as habitat for use by ground nesting birds such as skylark and with appropriate management a higher density of nesting pairs could be achieved than is typical with close grown arable crops. The grassland would be cut or grazed late in the summer after ground nesting birds have fledged.

6.1.40. A potentially suitable mix of flower and grass species for calcareous grassland is available from the Local Wildlife Site Guidelines for Lincolnshire (refer to **Appendix 4**). Note it is not expected that all the grass and wildflower species will be sown but this is an indicative list of appropriate species. As an example, Emorsgate mix EM6 for calcareous grassland is similar, but other suppliers are available.

### Neutral Grassland Meadow

6.1.41. Neutral meadow is proposed in Springwell East where the geology is more clay based and the soils heavier and wetter. Management would be similar for the calcareous grassland above with either grazing or a hay cut late in the summer after ground nesting birds have fledged. Again, a suitable indicative list of grass and flower species can be found within Local Wildlife Site Guidelines for Lincolnshire (refer to **Appendix 4**). Note it is not expected that all the grass and wildflower species will be sown but this is an indicative list of appropriate species. As an example, Emorsgate mix EM3 or EM4 for neutral grassland is similar, but other suppliers are available.

### Arable Field Margins (Wild Bird Cover/Seeding)

6.1.42. A proportion of arable margins on Springwell West will be sown with a bird cover crop to provide seed for ground nesting and other bird species

during the winter months, this being an important aspect of maintaining farmland bird populations. Seed mixes as specified by farmland agricultural environmental schemes would be suitable. Suggestions are outlined in **Appendix 4**. This cultivation and sowing is also likely to benefit the continued establishment of rare arable weeds.

6.1.43. Additionally, within fields Bcd105 and Bcd115 some of the margins will be cultivated and left unsown in both the spring and autumn each year to benefit the notable arable (non-crop) flora that was identified during survey work. This will occur within the minimum 10 metre margin between the security fence and the field boundary as shown in **Appendix 5**. The margin would be separated from the rest of the field by the security fence. Monitoring would be required and if pernicious weeds such as docks or thistle become a problem then spot treatment with herbicide will be considered. As the margins are located outside of the security fence, management of the remainder of the field will not affect the margins as the security fence will contain stock if used.

### Grassland Open Fields and Margins with Wildflowers

6.1.44. A proportion of the margins would be sown with a flower-rich neutral grassland seed mix and managed in a similar way by a late summer hay cut as identified for neutral meadow above. These will provide a valuable foraging resource for invertebrates and birds whilst forming a wide buffer, safeguarding non-ground-nesting birds that may be nesting in adjacent hedgerows from operational activities.

### Legume-Rich Modified Grassland

6.1.45. Grassland under the Solar PV modules will be managed as legume-rich modified grassland, to increase the diversity of grassland sward and improve soil health, whilst still being grass dominated and suitable of grazing commercially. The herbal ley would be either grazed or cut in late summer or autumn or grazed all year at very low densities moving the stock frequently so that plants can flower and set seed. Monitoring will ensure that the attributes required to achieve the desired BNG condition are achieved, for example the proportion of long to tall grass and proportion of bare ground. If the grazing or cutting regime does not appear to be delivering the required condition, then remedial management will be implemented. Suggested suitable seed mix is outlined in **Appendix 4**.

6.1.46. The specification of grassland under the Solar PV modules located within 5km of RAF Cranwell will be designed so as not to increase the risk of bird strike hazard to aircraft.

### Community Growing Area

6.1.47. An area of up to 2ha adjacent to the north of Scopwick will be provided for community growing. The exact nature of this would be shaped in consultation with the CLG and details set out in the LEMP(s) but could include growing areas for growing of fruit, vegetables and wild foraging.

6.1.48. The community growing area will be made available to the public, 364 days a year, by permission of the landowner. It will be managed by the Applicant and will include signs to make clear that its use is for the public by permission of the landowner. At the end of the Proposed Development's operation, the area will be returned to the landowner (with further detail to be included in the DEMP) in private ownership and the permitted public use will cease.

### Earth Bund

6.1.49. Within Field Tb2, the Springwell Substation and BESS compound would be offset by 250m from the A15 and an Earth Bund would partially screen the lower lying elements of the compound from the road. The proposed crest height of the bund would be between 3-5m above existing ground levels. The eastward facing slope of the bund would have a typical gradient of 1:20 to blend with the existing character of the landform when viewed from the road. It would have a natural vegetated appearance in keeping with the existing agrarian landscape.

6.1.50. The vegetation on the Earth Bund would be managed to provide screening and biodiversity enhancements. Details of the planting would be provided at the detailed design stage and management set out within the detailed LEMP(s).

### Biodiversity Net Gain Plan and Habitat Management and Monitoring Plan

6.1.51. A Biodiversity Net Gain Plan will establish the framework for how the Proposed Development will achieve BNG. The purpose of the plan is to:

- Clearly and consistently demonstrate how the Proposed Development meet the statutory requirements;
- Provide evidence for BNG decisions; and
- Help authorities to determine whether the Proposed Development meets the BNG requirements.

6.1.52. The plan will include:

- A completed metric tool calculation, and
- Pre-development and post-development plans (showing the location of on-site habitat, the direction of north and drawn to an identified scale).

6.1.53. **ES Volume 3, Appendix 7.14: Biodiversity Net Gain Assessment [EN010149/APP/6.3]** presents the net gain from habitats proposed in the oLEMP, summarised in Management Objective 8. The updated BNG calculations undertaken at detailed design and LEMP(s) will be used to deliver the Biodiversity Gain Plan as part of those LEMP(s) following the granting of the DCO.

6.1.54. A description of how significant on-site gains will be managed and monitored will also be required as part of the biodiversity gain plan. GOV.UK provide a Habitat Management and Monitoring Plan (HMMP) template **[Ref. 5.5]** for this purpose, which details how land will be managed over at least 30 years to:

- Create and enhance habitats for BNG, and
- Manage and monitor the BNG.

6.1.55. The detailed LEMP(s) will contain the information that the HMMP is designed to provide therefore an additional document is not required. This will include the following content:

- Project background: including project information, funding, legal agreements, high level summary of proposals, site boundary, phasing strategy, roles and responsibilities, and baseline information.
- Planned management activities: including aims and objectives, design principles informed by baseline information, habitats and condition targets, details of retained habitats, habitat creation, enhancement and management targets and prescriptions, and a risk register with remedial measures.
- Monitoring schedule: including a monitoring strategy, monitoring methods and intervals, reporting information, and an adaptive management summary.

## Species Mitigation and Enhancement

6.1.56. A brief summary of the mitigation and enhancement measures for flora and fauna relevant to the operational phase is given below but as indicated above this should be read in conjunction with the **ES Volume 1, Chapter 7: Biodiversity [EN010149/APP/6.1].** Those measures that will be implemented during the Construction and Decommissioning phases will be detailed in the **oCEMP [EN010149/APP/7.7]** and **oDEMP [EN010149/APP/7.9]** respectively.

6.1.57. Grassland creation and management outlined above would mitigate for the impacts on ground nesting and wintering birds, whilst new hedgerow and woodland planting would benefit other nesting bird species. Provision of winter bird seed along a small proportion of the margins would ensure nesting birds have a source of food during the winter months. The

management of field margins to provide a winter seed source would also ensure suitable habitat is maintained for a number of scarce arable (non-crop) plant species.

6.1.58. New grassland creation and landscape planting would deliver insect-rich habitat to mitigate for the effects on foraging bat species and to avoid potential noise impacts, 4m high acoustic fending would be erected around the BESS. In addition, any security lighting during the operational phase would be infra-red so outside of the visual spectrum for bats.

6.1.59. New grassland creation and improvement of field margins will benefit reptiles. Additional calcareous grassland adjacent to the existing LWS verges will be created to mitigate for loss of verge habitat due to construction works and managed as outlined above.

6.1.60. The security fence will not be buried, and it is considered that mammals such as badgers and brown hare will be able to push under the fence to access and forage under panels. Notwithstanding this the security fence will be checked regularly to ensure no large mammals such as deer become trapped by the fence. Mammal gates will also be installed to allow small mammals to pass through fencing.

6.1.61. The creation and management of grassland and wide grass margins will benefit small mammals which in turn will enhance these habitats for barn owl and marsh harrier, which predate them.

# 7. Roles, Responsibilities and Monitoring

## 7.1. Roles and Responsibilities

7.1.1. Protected species surveys and checks by a suitably qualified Ecological Clerk of Works (ECoW) would also be required prior to any works which may disturb or cause harm. These would include bird nest checks, badger surveys, barn owl, quail and other bird surveys and bat 'roost' surveys (if any trees/structures with bat roost potential are to be affected by works) as appropriate - depending on nature and timings of works. Note that surveys prior to construction works starting would be secured via the CEMP.

7.1.2. There will be a full review and update of the detailed LEMP(s) every 5 years by a suitably qualified ecologist and landscape architect.

7.1.3. Where the delivery of the detailed LEMP(s) is not being met for whatever reason(s) appropriate action will be identified and taken to rectify failings. This may entail making changes to specification of planting species if these are failing to establish successfully, including additional planting and/or replacement planting for planting that has failed to establish. Equally, where successes are identified, these should be promoted further and lessons learned from both success and failure fed into the next iteration of the detailed LEMP(s).

7.1.4. Any works to trees identified as a result of monitoring will be undertaken by a suitably qualified arborist. A list of approved contractors is available from the Arboricultural Association.

## 7.2. Ecological Steering Group (ESG)

7.2.1. This section sets out the draft Terms of Reference (TOR) for the Ecological Steering Group. The remit of the ESG is as follows:

- to monitor the progress and implementation of the detailed LEMP(s), the aim of which is to achieve the biodiversity mitigation and enhancement as laid out in the oLEMP;
- to provide oversight and scrutiny of the BNG monitoring undertaken by the Applicant;
- to provide communication on landscape and biodiversity matters between the Proposed Development and relevant stakeholders;
- to consider and suggest remedial habitat management measures to be implemented when habitat creation and enhancement are not meeting the required condition as outlined in the LEMP(s), based on a review of monitoring reports;

- to undertake a compliance audit of the LEMP(s) against key performance indicators (to be agreed with the ESG following approval of the LEMP(s) every five years;
- to work with the Applicant in meeting its commitments in the DEMP with regards to dealing with ecological habitats post the carrying out of the decommissioning works; and
- in conjunction with the Applicant, the co-ordination of any research projects planned around the Proposed Development and dissemination of the outcomes of any research both within the Proposed Development and externally.

7.2.2. The Applicant shall have regard to any reviews, recommendations or updates received from the Group in accordance with its terms of reference and thereafter employ reasonable endeavours to implement any competent recommendations including, where necessary, through proposing to the Group such alterations to ecological management measures as the Applicant considers appropriate, having regard what is reasonable, practicable and achievable.

7.2.3. The formation of the ESG may provide opportunities for strategic collaboration with other solar projects within the region.

7.2.4. The Applicant will establish the ESG at least 6 months prior to the submission of the first detailed LEMP(s) to help inform the development of the LEMP(s). The ESG would convene in advance of the commencement of such works, and shall continue to exist until completion of decommissioning works, unless a shorter period is agreed between the members of the ESG.

7.2.5. The ESG shall comprise up to but not limited to:

- two representatives nominated by the Applicant, at least one of which being a suitably qualified and experienced ecologist.
- one representative from Lincolnshire County Council; and
- one representative from North Kesteven District Council.

7.2.6. The ESG will encourage representation at its meetings by representatives from relevant nature conservation organisations as and when required.

7.2.7. The Applicant will be responsible for the administration of convening annual meetings of the ESG. Meetings will be chaired by an appropriately qualified member of the ESG and be quorate if at least 3 members are present.

7.2.8. Once established, the ESG shall meet at least twice annually for the 10 years and then move to a single annual meeting thereafter, , either virtually or in a convenient location to be agreed by the ESG. Decisions and recommendations made by the ESG would normally be on the basis of consensus. In the unusual case of needing to put a decision to the vote, this would be by a majority vote from those attending that meeting. The remit of the ESG cannot be extended beyond the scope of measures in this oLEMP.

7.2.9. The Applicant will meet all reasonable costs of attendees of the ESG related to the attendance at meetings and reviewing supplied material. Additional costs will be met where deemed necessary and agreed in advance between the ESG members. The mechanism to securing funding for the costs will be via the S106 agreement.

## 7.3. Monitoring

7.3.1. The detailed LEMP(s) would continue to be monitored for the entirety of the operational phase of the Proposed Development.

7.3.2. Note that the timeline for the operation of each phase of the Proposed Development is 40 years, which exceeds the 30-year timeline for mandatory biodiversity net gain. After 30 years, the management of habitats will fall under the general management prescriptions set out within the detailed LEMP(s).

7.3.3. Once the 30-year commitment for habitats created to deliver BNG has ceased the management plan and monitoring requirements will be reviewed for the remaining 10 years of the operational life of the Proposed Development.

7.3.4. Following completion of construction, monitoring of all habitats being created and enhanced for the delivery of biodiversity net gain will be undertaken in years 1, 2, 3 and 5, 10, 15, 20, 25 and 30 against the BNG Metric target habitat types and condition.

7.3.5. Monitoring of new tree and hedgerow heights and densities will be undertaken in years 1, 2, 3, 5 and 10 to help ensure they reach the target heights set out in the Environmental Statement. For hedgerows, the target height is at least 3.5m with a width of at least 1.5m at 1.5m above ground level by Year 10. For woodland and scrub, the target height is at least 4m by Year 10.

7.3.6. Monitoring of calcareous grassland creation areas, which are mitigation for loss of LWS verges, would be monitored in years 1, 3 and 5. After this the need for any further monitoring would be reviewed.

7.3.7. Notable arable weeds would also be monitored in years 1, 3 and 5, and then every 5 years up to year 30 in fields Bcd105 and Bcd 115 to ensure management of the margins are continuing to maintain the arable flora recorded. Annual spot checks would also be undertaken to ensure pernicious weeds (such as dock and thistle) to not become a problem.

7.3.8. Results of each monitoring visit will be compiled into a short monitoring report for the Site. These should follow BNG monitoring guidance **[Ref 7.1]** and present survey details, summary of progress, an overview of site wide successes and challenges, detailed review of the progress of each ecological feature and a list of actions or adaptive management practices required for the next monitoring period.

7.3.9. Protected species monitoring will be undertaken to understand the effectiveness of the mitigation. This will involve surveys for ground nesting birds and bats:

- For bats, the baseline activity surveys (carried out in spring, summer and autumn) would be repeated in years 1, 3, 5 and 10. The need for any further monitoring would then be reviewed
- For ground nesting birds, the baseline surveys would be repeated in years 1, 3 and 10. With specific assessment of skylarks, within areas set aside for mitigation, monitored in years 1, 3 and 5 then reviewed.

# 8. LEMP/HMMP Indicative Structure

8.1.1. The information to be set out in the detailed LEMP(s) for the purposes of general landscape and ecology management should follow the structure of the oLEMP and should include:

- Detailed mitigation and enhancement measures for each phase.
- Detailed specification of new planting including the location, number, species, mixes, size and planting density of any proposed planting.
- An implementation timetable for new planting
- Programme for management and maintenance of proposed hard landscape areas.
- Monitoring of artificial ecological installations.
- Timings of maintenance and management of aquatic/marginal planting.
- Management of waterbodies.
- Management and monitoring of grassland, for habitat establishment, including in regularly trafficked areas.
- Programmes for the management of trees, woodland, wetland, hedgerow and any further edge of woodland/scrub planting.
- Programme for the management of existing vegetation/habitats.
- Details of Invasive Non-Native Strategies, if required.
- Results of habitat maintenance monitoring.
- Habitat condition monitoring.
- Habitat condition assessments and species monitoring and whether this results in any additional or revised management recommendations.
- Detailed species strategies.

# 9. References

Ref. 1.1 British Standard Institute (2013) BS42020:2013 Code of Practice for Planning and Development.

Ref. 1.2 Lincolnshire Biodiversity Partnership (2011) Lincolnshire Biodiversity Action Plan (3rd Ed).

Ref 1.3 Chris Blandford Associates (2011) Central Lincolnshire Green Infrastructure Strategy.

Ref. 1.4 Directive 2009/147/EC on the conservation of wild birds (the codified version of Council Directive 79/409/EEC as amended) (Birds Directive).

Ref. 1.5 Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive).

Ref. 1.6 The Conservation of Habitats and Species Regulations 2017 (as amended).

Ref. 1.7 Countryside and Wildlife Act (1981) (as amended).

Ref. 1.8 Countryside & Rights of Way Act 2000 (as amended).

Ref. 1.9 Natural Environment and Rural Communities (NERC) Act 2006 (as amended).

Ref. 1.10 The Environment Act 2021.

Ref. 1.11 Protection of Badgers Act 1992 (as amended).

Ref. 1.12 Hedgerow Regulations 1997 (as amended).

Ref. 1.13 The Water Environment (Water Framework Directive) Regulation (2017).

Ref. 1.14 Animal Welfare Act 2006.

Ref. 1.15 Overarching National Policy Statement (NPS) for Energy (EN1) (2023)

Ref. 1.16 NPS for Renewable Energy Infrastructure (EN-3) (2023).

Ref. 1.17 NPS for Electricity Networks Infrastructure (EN5) (2023).

Ref. 1.18 National Planning Policy Framework (NPPF) (2023) [online].

Ref. 1.19 Planning Practice Guidance (PPG) [online].

Ref. 1.20 Central Lincolnshire Local Plan (2023).

Ref. 1.21 Greater Lincolnshire Nature Partnership: Habitat Guidance (online) [https://glnp.org.uk/knowledge-hub/category/habitat-guidance].

Ref. 1.22 Greater Lincolnshire Nature Partnership (2024) Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants. [online] https://www.nkesteven.gov.uk/sites/default/files/202405/Central%20Lincolnshire%20BNG%20Guidance.pdf

Ref. 2.1 Botanical Society of Britain and Ireland: Vascular Plant Red List (2014).

Ref. 2.2 CIEEM (2023) Bat Mitigation Guidelines.

Ref. 2.3 Natural England National Character Area Profiles [online] https://www.gov.uk/government/publications/national-character-area-profiles-data-forlocal-decision-making/national-character-area-profiles.

Ref. 2.4 David Tyldesley and Associates (2007) North Kesteven Landscape Character Assessment.

Ref. 2.5 Hill Holt Wood [online] Stepping Out Walks [https://www.hillholtwood.co.uk/stepping-out-walks]

Ref. 4.1 Natural England (2023) Statutory Biodiversity Metric 3.1

Ref. 4.2 Cook and McCuen (2013) Hydrologic Response of Solar Farms, Journal of Hydrologic Engineering.

Ref. 5.1 Landscape Institute (2015) Technical Information Note: Pest and Disease Threats.

Ref 5.2 British Standards Institute (2012) BS: 8545:2012 Trees from Nursey to Independence in the Landscape.

Ref 5.3 National Grid (2008) Development Near Overhead Lines [https://www.nationalgrid.com/sites/default/files/documents/Development%20near%20overhead%20lines_0.pdf]

Ref. 5.4 British Standard Institute (2012) Trees in Relation to Design, Demolition and Construction.

Ref. 5.5 Gov.uk [online Habitat Management and Monitoring Template [https://publications.naturalengland.org.uk/publication/5813530037846016]

Ref. 7.1 Natural England (2024) Biodiversity Net Gain [online] https://publications.naturalengland.org.uk/category/5098178404417536.

**Other non-referenced sources:**

Emorsgate Seeds [https://wildseed.co.uk/]

Cotswolds Seeds Company [https://www.cotswoldseeds.com/]

Natural England Green Infrastructure Mapping Tool [online] [https://designatedsites.naturalengland.org.uk/GreenInfrastructure/map.aspx]

The Local Wildlife Site Guidelines for Greater Lincolnshire (2013 Greater Lincolnshire Partnership) chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://glnp.org.uk/images/uploads/services/5e84eae57f8a5_LWS%20guidelines%203rd%20ed.pdf (accessed 09/10/2024)

# Appendix 1
# Green Infrastructure Parameters

Application Document Ref: EN010149/APP/7.9.5
Planning Inspectorate Scheme Ref: EN010149


KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Areas of farmland bird mitigation
- Grassland under Solar PV modules
- Community growing area
- Strategic planting (Hedgerow)
- Strategic planting (Tree belt)
- Siting zone for Earth Bund

Existing routes

- Existing Public Right of Way
- Existing permissive footpath

Indicative proposed routes

- Proposed Public Right of Way
- Proposed enhancement to Public Right of Way
- Proposed permissive footpath

NOTES:

1. Ordnance Survey (OS) MasterMap data adopted as the drawing base map.
2. The location of features shown are indicative only. Exact locations to be confirmed on site.
3. Additional features may be present on site that have not been identified on the OS data.
4. The parameter plans are drawn to OS MasterMap data.
6. The following components are not shown on the parameter plans: cable route corridors, utility connections, boundary fencing and CCTV, inverter and transformers and switchgear compounds, internal access tracks, drainage, construction access and compounds, and offsets to underground utilities.

| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 04 | SEP 2025 | DEADLINE 4 | LDA | LDA | EDF |
| 03 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a)

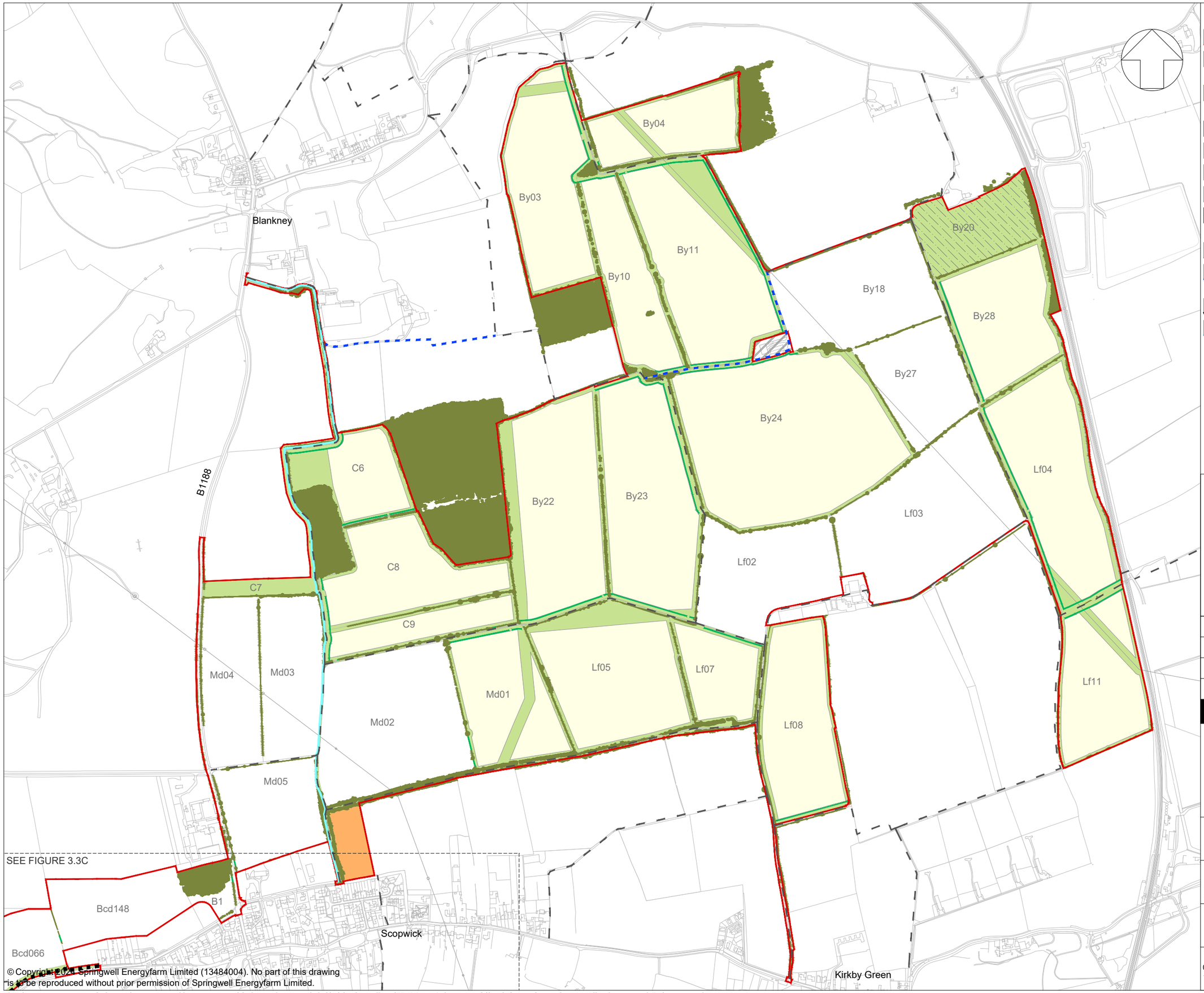
TITLE:
FIGURE 3.3A
GREEN INFRASTRUCTURE PARAMETERS
KEY PLAN

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3

0 2.5km

REV: 04






KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Areas of farmland bird mitigation
- Grassland under Solar PV modules
- Community growing area
- Strategic planting (Hedgerow)

Existing routes

- Existing Public Right of Way
- Existing permissive footpath

Indicative proposed routes

- Proposed Public Right of Way
- Proposed enhancement to Public Right of Way

NOTES:

1. Refer to Figure 3.3A for drawing notes.

KEY PLAN:

| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 03 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a)

TITLE:
FIGURE 3.3B
GREEN INFRASTRUCTURE PARAMETERS
SPRINGWELL EAST

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:10,000 @ A3

0 500m

REV: 03

Bcd148
B1
Scopwick
Bcd066
Bcd065
SEE FIGURE 3.3B
Bcd068
Bcd067
Bk03
Bk15
Bk06
Bk07
Bk08
Bk09
Bk11
Heath Road (B1191)
Bk10
Bk05
Bk04
BK02
Rw02
Rw01
RAF Digby
SEE FIGURE 3.3D
Rw12
Bcd079
Bcd086
SEE FIGURE 3.3C (INSET)
Bcd088
Navenby Lane
Ashby de la Launde
Heath Road (B1191)
SEE FIGURE 3.3D
INSET

KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Areas of farmland bird mitigation
- Grassland under Solar PV modules
- Community growing area
- Strategic planting (Hedgerow)
- Strategic planting (Tree belt)

Existing routes

- Existing Public Right of Way

Indicative proposed routes

- Proposed Public Right of Way
- Proposed enhancement to Public Right of Way
- Proposed permissive footpath

NOTES:

1. Refer to Figure 3.3A for drawing notes.

KEY PLAN:

| | | | | | |
|---|---|---|---|---|---|
| 03 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |
| App | Date | Description | Drn | Chk | App |

**Springwell Solar Farm**

Springwell Solar Farm

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a)

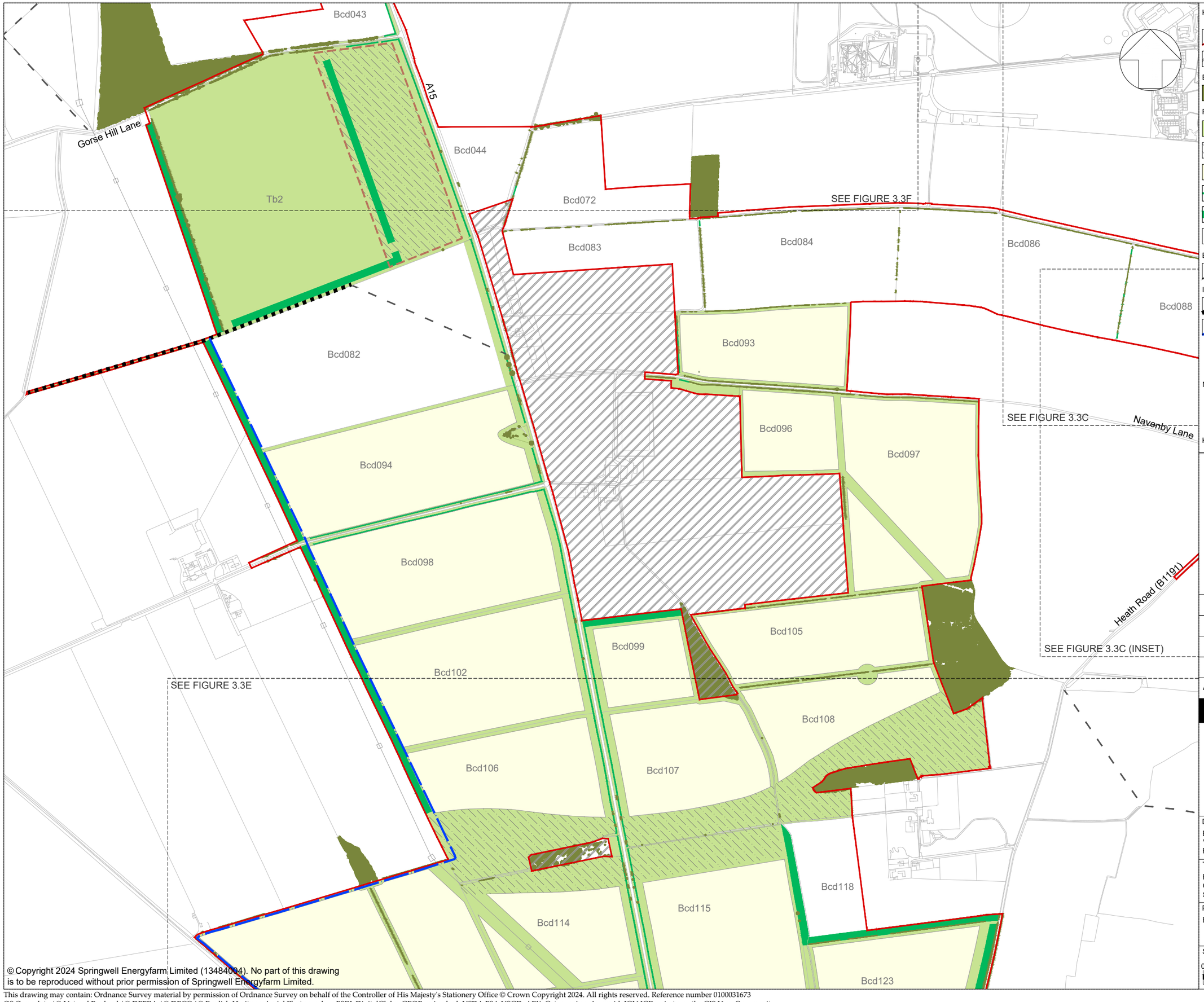
TITLE:
FIGURE 3.3C
GREEN INFRASTRUCTURE PARAMETERS
SRPINGWELL CENTRAL

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:10,000 @ A3

0 500m

REV: 03




KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Areas of farmland bird mitigation
- Grassland under Solar PV modules
- Strategic planting (Hedgerow)
- Strategic planting (Tree belt)
- Siting zone for Earth Bund

Existing routes

- Existing Public Right of Way

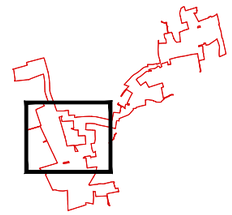
Indicative proposed routes

- Proposed Public Right of Way
- Proposed permissive footpath

NOTES:

1. Refer to Figure 3.3A for drawing notes.

KEY PLAN:



| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
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| 03 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |

**Springwell Solar Farm**

Springwell Solar Farm

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a)

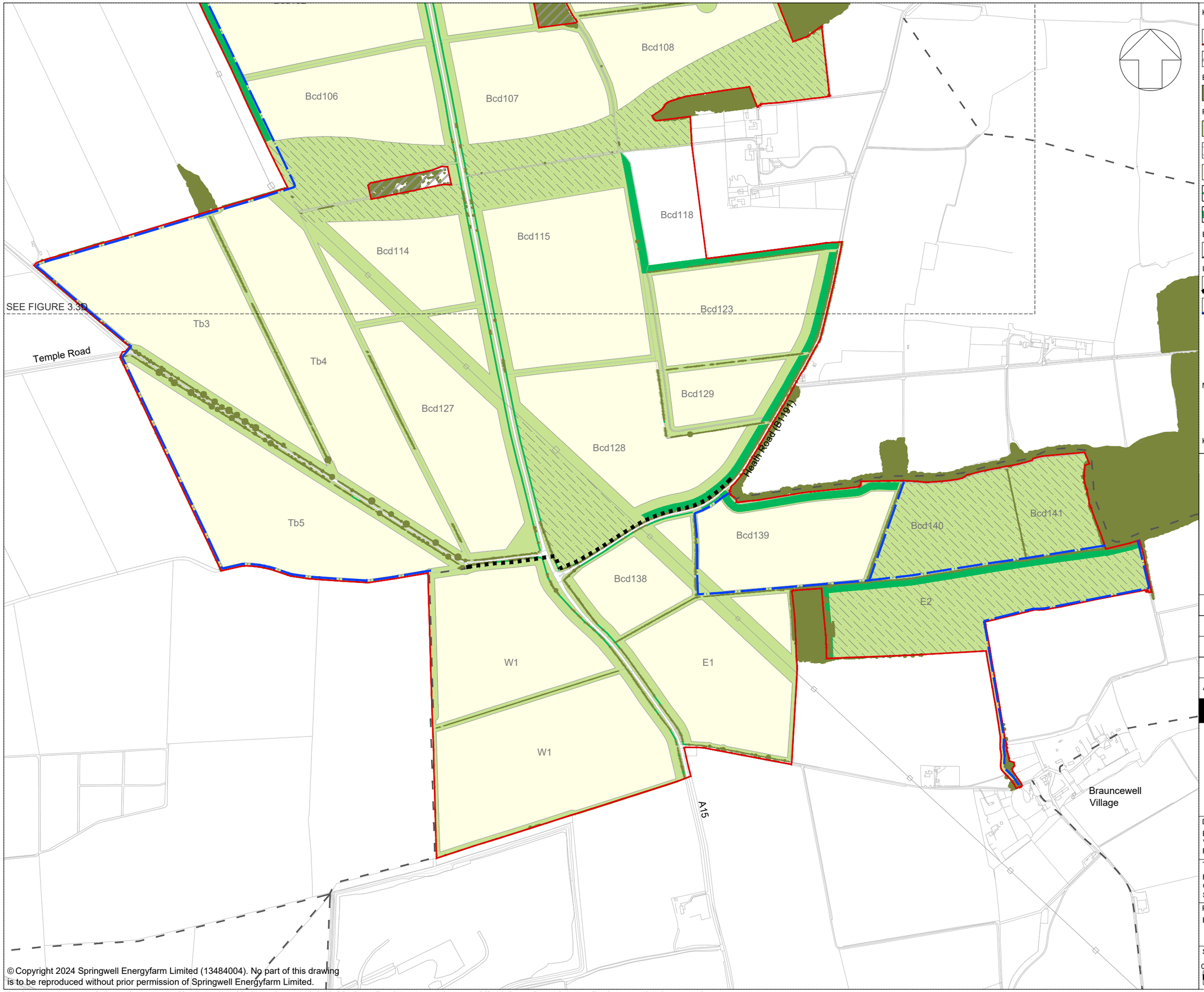
TITLE:
FIGURE 3.3D
GREEN INFRASTRUCTURE PARAMETERS
SPRINGWELL WEST A

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:10,000 @ A3

0 500m

REV: 04




KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Areas of farmland bird mitigation
- Grassland under Solar PV modules
- Strategic planting (Hedgerow)
- Strategic planting (Tree belt)

Existing routes

- Existing Public Right of Way

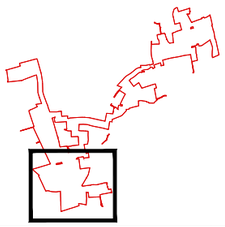
Indicative proposed routes

- Proposed Public Right of Way
- Proposed permissive footpath

NOTES:

1. Refer to Figure 3.3A for drawing notes.

KEY PLAN:



| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 04 | SEP 2025 | DEADLINE 4 | LDA | LDA | EDF |
| 03 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a)

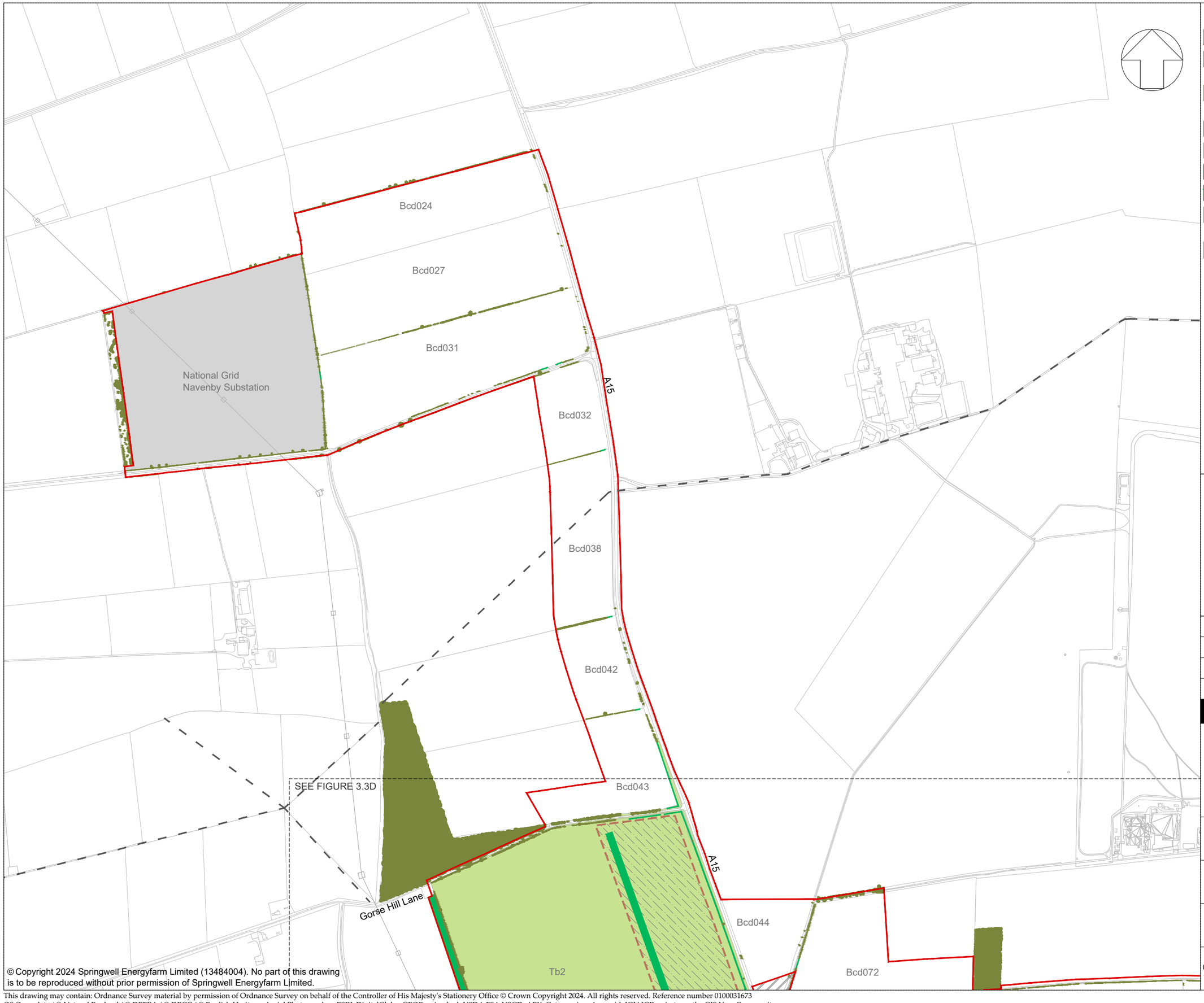
TITLE:
FIGURE 3.3E
GREEN INFRASTRUCTURE PARAMETERS
SPRINGWELL WEST B

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:10,000 @ A3

0 500m

REV: 04




KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Areas of farmland bird mitigation
- Strategic planting (Hedgerow)
- Strategic planting (Tree belt)
- Siting zone for Earth Bund

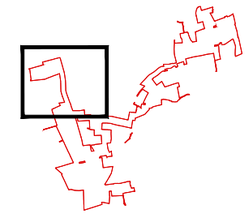
Existing routes

- Existing Public Right of Way

NOTES:

1. Refer to Figure 3.3A for drawing notes.

KEY PLAN:



| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 03 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a)

TITLE:
FIGURE 3.3F
GREEN INFRASTRUCTURE PARAMETERS
SPRINGWELL WEST C

PINS REFERENCE NUMBER:
EN010149/APP/6.2

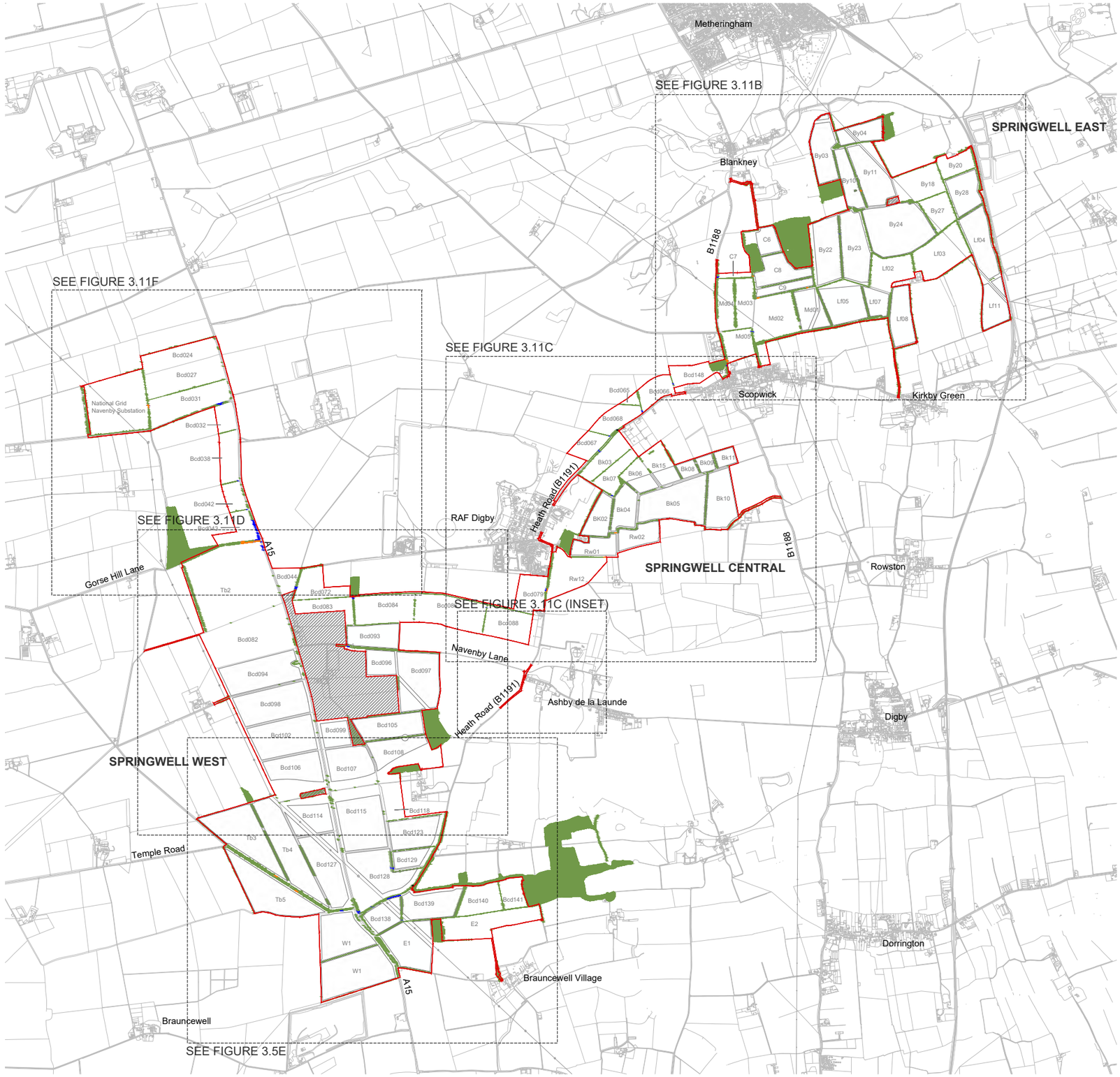
SCALE : 1:10,000 @ A3

0 500m

REV: 03

# Appendix 2 Vegetation Removal Parameters

Application Document Ref: EN010149/APP/7.9.5
Planning Inspectorate Scheme Ref: EN010149




KEY:

- Order Limits
- Areas outside the Order Limits
- Existing vegetation (Trees and hedgerows)
- Trees and hedgerows to be removed
- Important hedgerows to be removed

NOTES:

1. Ordnance Survey (OS) MasterMap data adopted as the drawing base map.
2. The location of features shown are indicative only. Exact locations to be confirmed on site.
3. Additional features may be present on site that have not been identified on the OS data.
4. The location of existing vegetation is based on topographical survey data. The accuracy of the topographical survey differs from the OS data which results in the existing vegetation not aligning with the line work shown on the base map.
5. The location of vegetation to be removed assumes the maximum extent that may be required for the construction of highway works, internal access tracks and cable routes. Wherever practicable, these works are aligned to existing tracks, crossing and / or gaps in hedgerows to reduce the extent of vegetation removal.
6. Vegetation Removal Parameters is prepared for the purposes of schedule 12 to the DCO and provisions within the oLEMP.
7. The Vegetation Removal Parameters should be read in conjunction with Schedule 12 (Hedgerows to be removed) of the draft Development Consent Order.

| | | | | | |
|---|---|---|---|---|---|
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |
| App | Date | Description | Drn | Chk | App |

**Springwell Solar Farm**

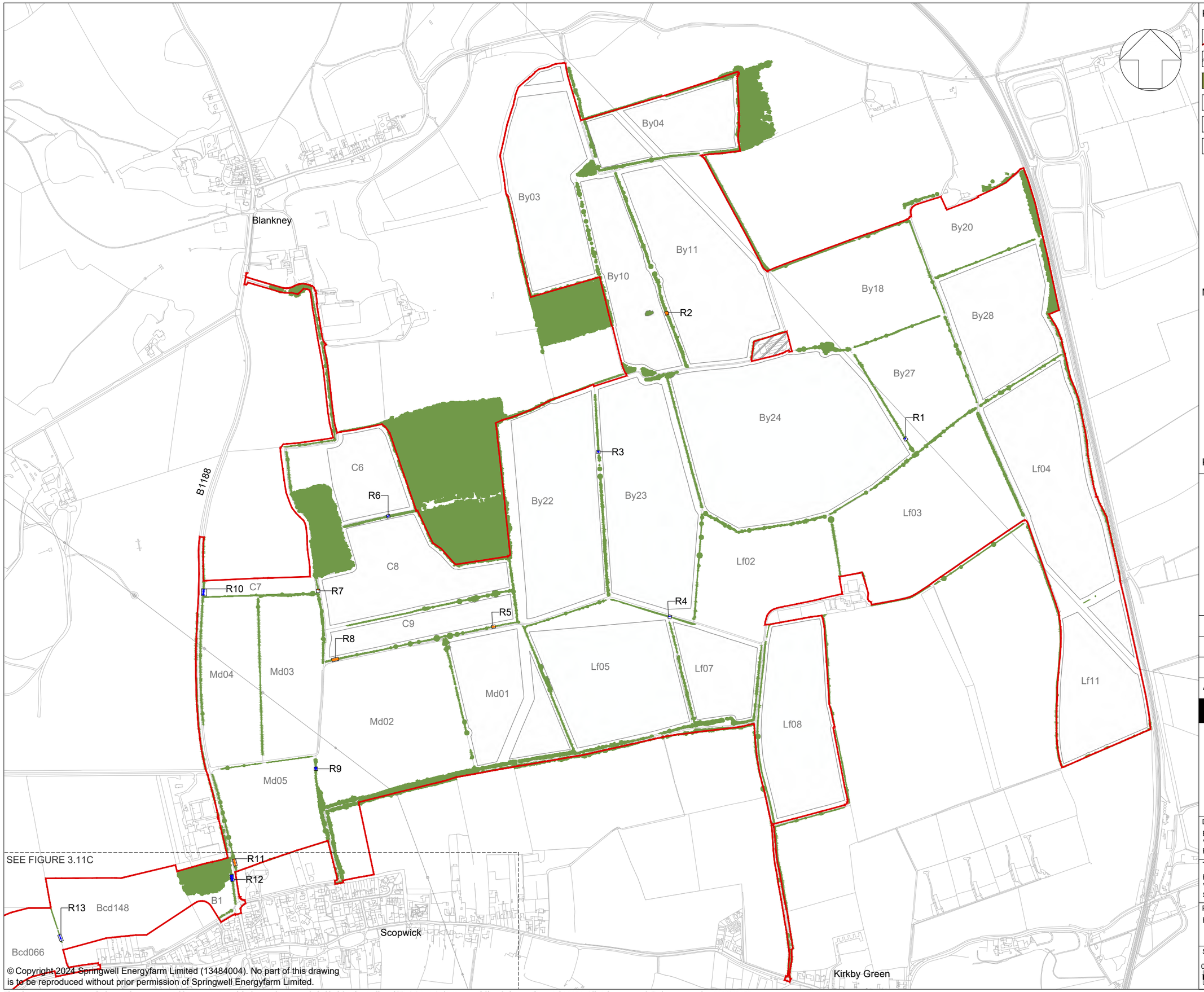
DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a) & 5(2)(I)(ii)

TITLE:
FIGURE 3.11A
VEGETATION REMOVAL PARAMETERS
KEY PLAN

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3
0 2.5km

REV: 02





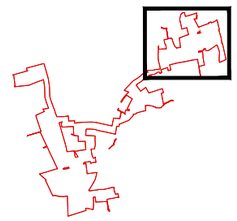

KEY:

- Order Limits
- Areas outside the Order Limits
- Existing vegetation (Trees and hedgerows)
- RXX — Area of vegetation to be removed
- Trees and hedgerows to be removed
- Important hedgerows to be removed

NOTES:

1. Refer to Figure 3.11A for drawing notes.

KEY PLAN:



| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |
| App | Date | Description | Drn | Chk | App |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a) & 5(2)(l)(ii)

TITLE:
FIGURE 3.11B
VEGETATION REMOVAL PARAMETERS
SPRINGWELL EAST

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3
0 500m

REV: 01

R11
R12
R13
Bcd148
B1
Scopwick
Bcd066
SEE FIGURE 3.11B
Bcd065
R14
Bcd068
R49
R15
R16
Bcd067
R17
Bk03
Bk07
Bk06
Bk15
Bk08
Bk09
Bk11
Heath Road (B1191)
R18
Bk04
Bk05
Bk10
BK02
RAF Digby
SEE FIGURE 3.11D
R19
Rw02
Rw01
R20
Rw12
R22
R21
Bcd079
Bcd086
R24
R23
SEE FIGURE 3.11C (INSET)
Bcd088
Navenby Lane
Ashby de la Launde
Heath Road (B1191)
SEE FIGURE 3.11D
INSET

KEY:

- Order Limits
- Areas outside the Order Limits
- Existing vegetation (Trees and hedgerows)
- Area of vegetation to be removed (RXX)
- Trees and hedgerows to be removed
- Important hedgerows to be removed

NOTES:

1. Refer to Figure 3.11A for drawing notes.

KEY PLAN:

| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a) & 5(2)(l)(ii)

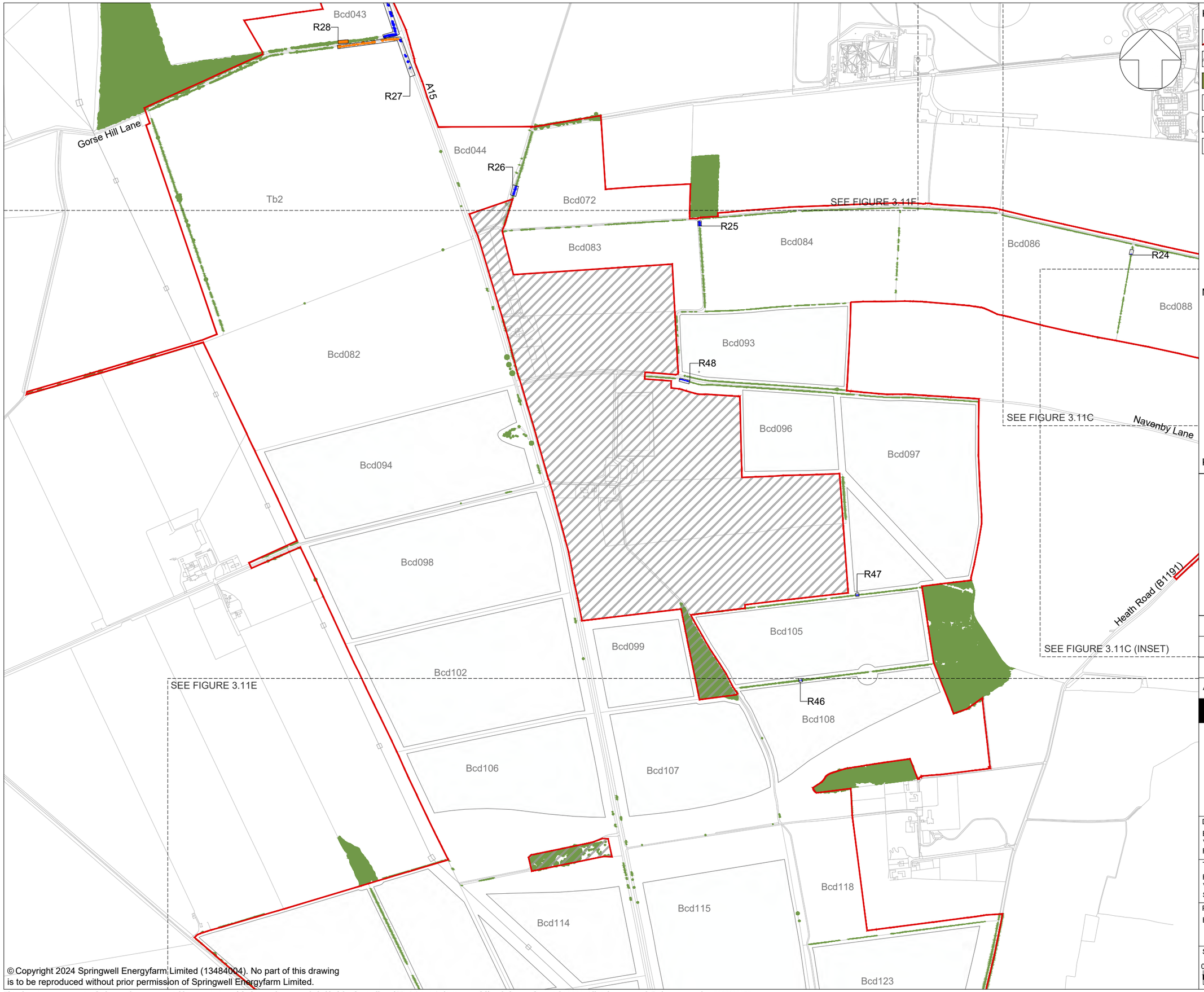
TITLE:
FIGURE 3.11C
VEGETATION REMOVAL PARAMETERS
SRPINGWELL CENTRAL

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3

0 500m

REV: 02



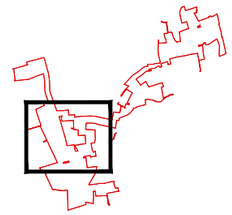

KEY:

- Order Limits
- Areas outside the Order Limits
- Existing vegetation (Trees and hedgerows)
- RXX — Area of vegetation to be removed
- Trees and hedgerows to be removed
- Important hedgerows to be removed

NOTES:

1. Refer to Figure 3.11A for drawing notes.

KEY PLAN:



| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |
| App | Date | Description | Drn | Chk | App |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a) & 5(2)(l)(ii)

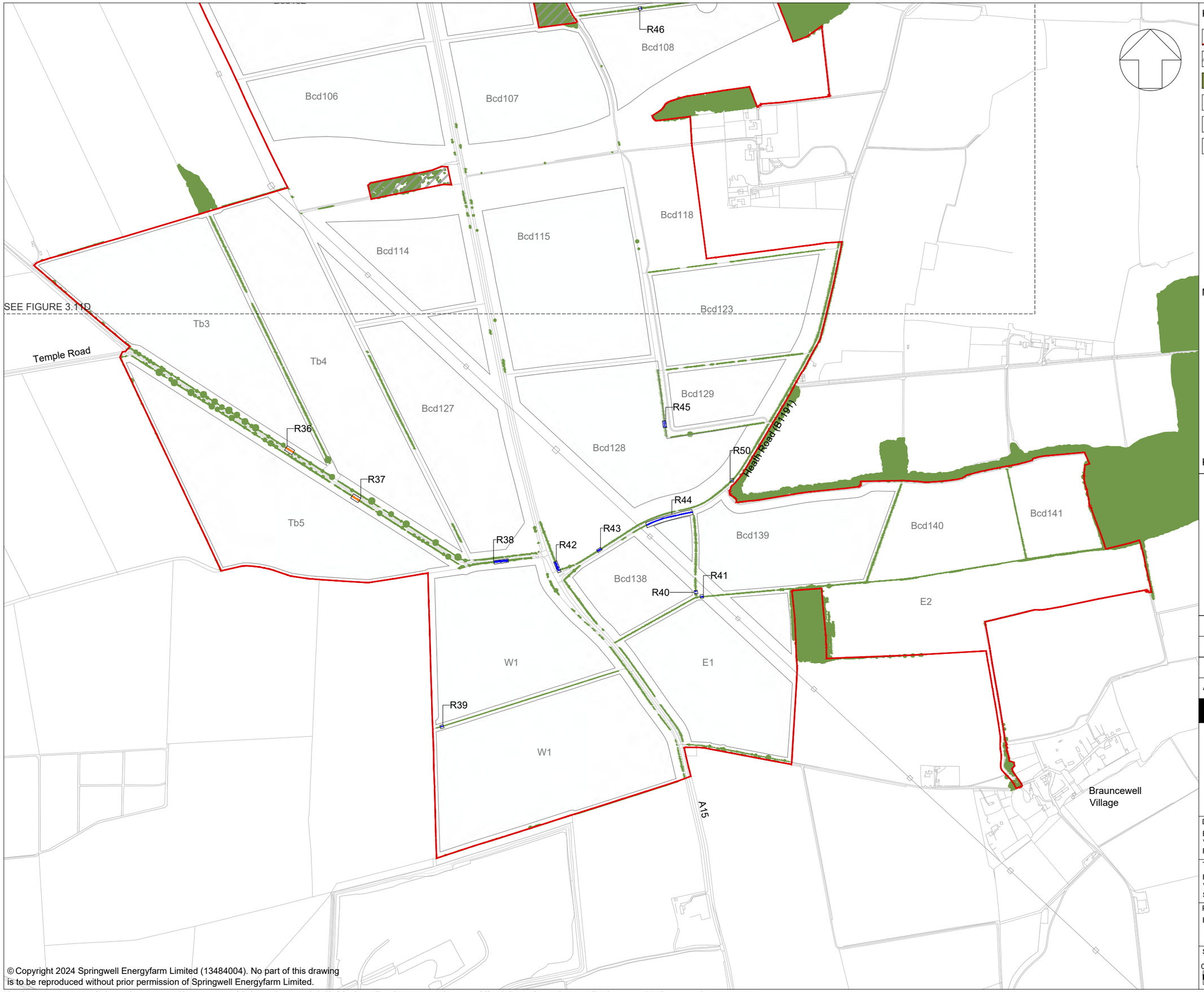
TITLE:
FIGURE 3.11D
VEGETATION REMOVAL PARAMETERS
SPRINGWELL WEST A

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3

0 500m

REV: 01



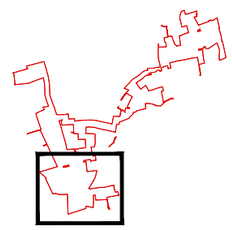

KEY:

- Order Limits
- Areas outside the Order Limits
- Existing vegetation (Trees and hedgerows)
- RXX — Area of vegetation to be removed
- Trees and hedgerows to be removed
- Important hedgerows to be removed

NOTES:

1. Refer to Figure 3.11A for drawing notes.

KEY PLAN:



| | | | | | |
|---|---|---|---|---|---|
| 02 | JUN 2025 | DEADLINE 1 | LDA | LDA | EDF |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |
| App | Date | Description | Drn | Chk | App |

**Springwell Solar Farm**

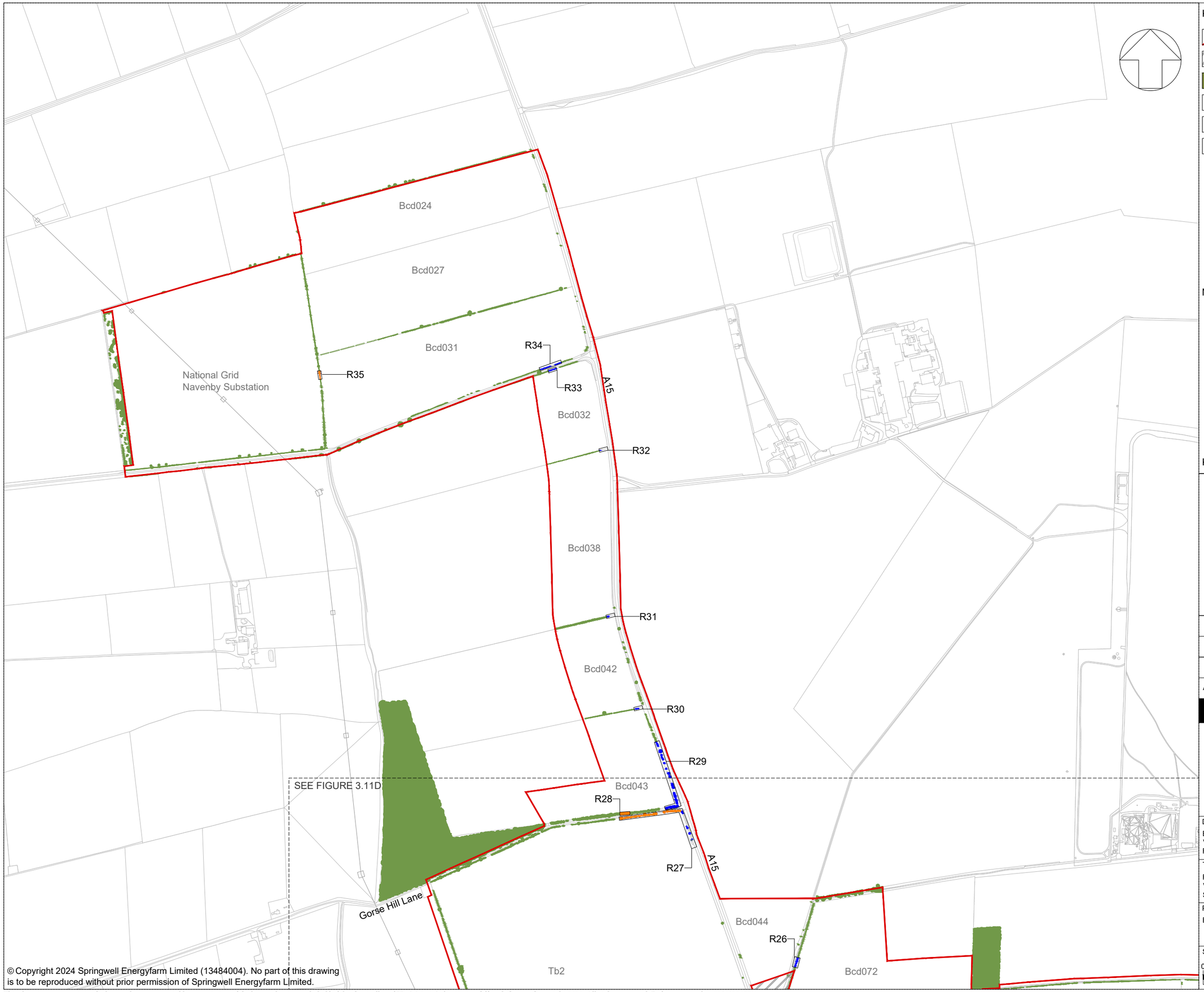
DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a) & 5(2)(l)(ii)

TITLE:
FIGURE 3.11E
VEGETATION REMOVAL PARAMETERS
SPRINGWELL WEST B

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3
0 500m

REV:
02



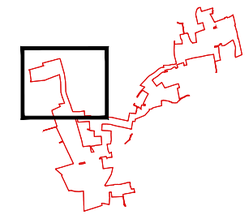

KEY:

- Order Limits
- Areas outside the Order Limits
- Existing vegetation (Trees and hedgerows)
- RXX — Area of vegetation to be removed
- Trees and hedgerows to be removed
- Important hedgerows to be removed

NOTES:

1. Refer to Figure 3.11A for drawing notes.

KEY PLAN:



| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 01 | NOV 2024 | DCO SUBMISSION | LDA | LDA | EDF |
| App | Date | Description | Drn | Chk | App |

**Springwell Solar Farm**

DOCUMENT:
ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES
REGULATION 5(2)(a) & 5(2)(l)(ii)

TITLE:
FIGURE 3.11F
VEGETATION REMOVAL Parameters
SPRINGWELL WEST C

PINS REFERENCE NUMBER:
EN010149/APP/6.2

SCALE : 1:40,000 @ A3
0 500m

REV: 01

# Appendix 3 Management Programme Schedule

Application Document Ref: EN010149/APP/7.9.5
Planning Inspectorate Scheme Ref: EN010149

## Table A3.1: General Enabling and General Management

| Management Prescription | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 5 onwards (annually) | Every 5 Years |
|---|---|---|---|---|---|---|---|---|
| **Enabling / Pre Commencement** | | | | | | | | |
| **Trees / Vegetation** | | | | | | | | |
| Removal / pruning of vegetation substantially in accordance with Vegetation Removal Parameters and AIA / AMS as part of CEMP | ✓ | | | | | | | |
| Erection of tree protection fencing in accordance with Tree Protection Plan as part of CEMP | ✓ | | | | | | | |
| Construction of development within root protection areas in accordance with AMS as part of CEMP | ✓ | | | | | | | |
| **Operational Maintenance** | | | | | | | | |
| **Trees** | | | | | | | | |
| Annual visual inspection of trees to ensure duty of care to users of PRoW and permissive paths and operational performance of the Development. | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Pruning if required by qualified arborist to be undertaken in late winter (February), inspections to monitor health of trees and to remove dead, dying or diseased wood where necessary in accordance with BS3998:2010. Safe stacking of logs in small piles in situ. | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Ensure appropriate measures in place to protect young planting from deer and squirrel damage | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| **Hedgerows** | | | | | | | | |

| Management Prescription | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 5 onwards (annually) | Every 5 Years |
|---|---|---|---|---|---|---|---|---|
| New hedgerow planting will be monitored and managed to ensure successful establishment. This will include control of weed and grass growth, replacement planting, and firming tree stakes and guards where required. | | ✓ | ✓ | ✓ | | ✓ | | |
| Relaxation of management to allow hedgerows to mature and grow out maintaining at least a *c.* 3.5m around the Solar PV, Springwell substation, collector compound and BESS areas. Pruning if required to maintain operational performance and integrity of calcareous grassland verges and undertaken in later winter (February) in accordance with BS3998:2010, inspections to monitor health of trees and to remove dead, dying or diseased wood where necessary. Chippings to be removed. | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| **Control of litter and vandalism** | | | | | | | | |
| Grounds maintenance of the Order Limits will ensure it is kept clean and tidy. Response to acts of vandalism or graffiti will be dealt swiftly with the repair or replacement. | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| **Existing and Proposed PRoW and permissive Paths** | | | | | | | | |
| Pruning of vegetation (September to February) as appropriate to maintain unobstructed passage | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| **Monitoring and Review** | | | | | | | | |
| General monitoring and surveys as required | | | | | | | ✓ | |
| Full LEMP(s) review and amendment of management regime if required. | | | | | | | | ✓ |

## Table A3.2 Mitigation Habitat Implementation and Management Programme

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| **Calcareous Grassland** | | | | |
| Soil nutrient sampling | Soil should not be tested within three months of the last application of lime, slurry or chemical fertiliser in order to achieve accurate results | X X X X X | 1-2 | N/A |
| **Where baseline habitat is grassland**<br>Cease addition of fertilizer to the soil.<br>Cut existing grassland sward and remove arisings | Undertake multiple times over the summer to reduce nutrient levels in the soil<br>Remove arisings from the grassland.<br>Keep vegetation short prior to scarification | X X X X X X X X | 1-2 | N/A |
| **Where baseline habitat is arable**<br>Form the landscape and create a sterile seed bed | Consider the need for nutrient reduction.<br>Remove any vegetation and cultivate to a fine tilth.<br>Consider sculpting the ground to provide variations in topography.<br>Apply Glyphosate if only necessary | X X X X X X X X | 1-2 | N/A |
| Source seed | Seed mix to ideally be of local provenance.<br>Consider green hay or brush harvested seed from local site before using seed mix. | X X X X X X X X | 1-2 | N/A |
| Lightly scarify any existing grassland areas to prepare for seeding | Using chain harrow or similar, ensure at least 50% of bare ground is present prior to seed application.<br>Take care around hedgerows and individual trees, leaving a buffer if appropriate. | X X X X X X | 1-2 | N/A |
| Seed primary mitigation calcareous grassland areas | Surface sow with the aim to get an even distribution across the entire area. | X X X X | 1-2 | N/A |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| (brush harvested seed or seed mix option) | Firm seed with a roll or tread into soil to give good contact | | | |
| Seed primary mitigation calcareous grassland areas (green hay option) | Apply directly after harvesting from donor site in the summer.<br>After spreading the hay, roll in seeds to encourage germination | X X | 1-2 | N/A |
| Cut to 5cm height and remove flush of annual weed | There may be a flush of annual weeds from the soil as the wildflower seeds germinate.<br>Cut before they seed and remove arisings from site | X X X | 2-3 | N/A |
| Restrict vegetation growth in autumn and winter – if required undertake on a 3 year rotation so that at least 1/3 of grassland does not get a winter or spring cut in any one year | This should reduce dominance of vigorous grasses and could be achieved through a late autumn cut.<br>Cut again, in early spring if winter growth is still high before ground nesting bird season. | X X X X X | 2-5 | 6-30 |
| Cut calcareous grassland once a year, but ensure 1/4 of grassland uncut each year on rotation to leave a foraging resource for invertebrates. | Undertake a cut in late summer (August onwards) when conditions are suitable.<br>Consider rotational cutting of the ¾ quarters to be cut over the summer into autumn i.e., cut 25% then cut the next 25% a month later to leave a floral resource for invertebrates for as long as possible. Allow arisings to dry where possible before removing them from the area.<br>Cut from the centre towards the hedgerow, leaving a buffer uncut. | X X X X | 3-5 | 6-30 |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| **Grazing Option**<br>Graze calcareous grassland instead of, or in conjunction with, cutting.<br><br>Monitor grazing and move stock regularly to ensure a mixture of long and shorter sward heights all year so that no more than 75% of sward is short. | Use sheep or smaller cattle at a low stocking density to avoid overgrazing and poaching. Exclude grazing in summer to allow plants to flower and set seed. Move stock regularly so that there is a mosaic of sward heights. | X X X X X X X X X | 3-5 | 6-30 |
| Control of problem perennial species i.e., Bracken, docks and scrub. | As and when needed<br>Control before seeding<br>Mechanical removal or electro control would be preferable. Spot spray as a last resort. | X X | 4-5 | 6-30 |
| **Neutral Grassland Meadow** | | | | |
| Soil nutrient sampling | Soil should not be tested within three months of the last application of lime, slurry or chemical fertiliser in order to achieve accurate results | X X X X X | 1-2 | N/A |
| Cut existing modified grassland sward and remove arisings | Undertake multiple times over the summer to reduce nutrient levels in the soil.<br>Remove arisings from the grassland.<br>Keep vegetation short prior to scarification | X X X X X X X X | 1-2 | N/A |
| Source seed | Seed mix to ideally be of local provenance.<br>Consider green hay or brush harvested seed from local site. | X X X X X X X X | 1-2 | N/A |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| Lightly scarify area to prepare for seeding | Using chain harrow or similar, ensure at least 50% of bare ground is present. Take care around hedgerows, leaving a buffer if appropriate. | X X X X X X | 1-2 | N/A |
| Seed primary mitigation neutral grassland areas (brush harvested seed or seed mix option) | Surface sow with the aim to get an even distribution across the entire area. Firm seed with a roll or tread into soil to give good contact | X X X X | 1-2 | N/A |
| Seed primary mitigation neutral grassland areas (green hay option) | Apply directly after harvesting from donor site in the summer. After spreading the hay, roll or tread in seeds with livestock to encourage germination | X X | 1-2 | N/A |
| Cut to 5cm height and remove flush of annual weed | There may be a flush of annual weeds from the soil as the wildflower seeds germinate. Cut and remove arisings from site | X X X X X X | 2-3 | N/A |
| Restrict vegetation growth in autumn and winter – if required. Undertake on a 3 year rotation so that at least 1/3 of grassland does not get a winter or spring cut in any one year | This should reduce dominance of vigorous grasses and could be achieved through a late autumn cut. Cut again, in early spring if winter growth is high before ground nesting bird season. | X X X X X | 2-5 | 6-30 |
| Cut grassland once a year but ensure 1/3 of grassland uncut each year on rotation to leave a foraging resource for invertebrates | Undertake a cut in late summer (August) when conditions are suitable. Consider rotational cutting of the 2/3rds to be cut over the summer and into autumn i.e., cut 25% then cut the next 25% a month later to leave a floral resource for invertebrates for | X X X X | 3-5 | 6-30 |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| | as long as possible. Allow arisings to dry where possible before removing them from the area.<br>Cut from the centre towards the hedgerow, leaving a buffer uncut. | | | |
| **Grazing Option**<br>Aftermath grazing following summer cut. Monitor grazing and move stock regularly to ensure a mixture of long and shorter sward heights all year so that no more than 75% of sward is short. | Use cattle or sheep at a low stocking density to avoid overgrazing and poaching. Remove when conditions become too wet. Move stock regularly to maintain a mosaic of sward heights. | X X X X | 3-5 | 6-30 |
| Control of problem perennial species i.e., Bracken, docks and scrub. | As and when needed<br>Control before seeding<br>Mechanical removal or electro control would be preferable. Spot spray as a last resort. | X X | 4-5 | 6-30 |
| **Arable Field Margins – Wild Bird Cover/Seed** | | | | |
| Create a fine and firm seedbed | Remove existing vegetation and cultivate to a fine tilth. | X X X X X | 1-5 | 6-30 |
| Sow wild bird seed mix | Seed mixes could be varied and include a variety across the available margin areas, including 1-year mixes and 2-year mixes. | X X X X X | 1-5 | 6-30 |
| Retain vegetation throughout winter | | X X X X X X X X | 1-5 | 6-30 |
| re-establish margins to maintain seed production | Repeat sow 1-year mixes annually and 2-year mixes every other year | X X X X X | 1-5 | 6-30 |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| | Re-sow winter bird plots that fail to establish | | | |
| **Tussocky Grass Margins** | | | | |
| Cut grassland on rotation every 2-3 years | Leave selected margins to grow out and become tussocky<br>Cut on a rotational basis, leaving parts as an undisturbed winter refuge each winter. | X X X X | 1-5 | 6-30 |
| **Grassland Open Fields and Margins with Wildflowers** | | | | |
| Cut neutral grassland sward and remove arisings | Keep vegetation short prior to scarification | X X X X X X | 1 | N/A |
| Source seed | Seed mix to ideally be of local provenance. | X X X X X X | 1 | N/A |
| Lightly scarify area to prepare for seeding | Using chain harrow or similar, ensure at least 50% of bare ground is present.<br>Take care around retained mature trees and hedgerows, leaving a buffer if appropriate.<br>Hedgerow management may expose areas of bare ground. | X X X X | 1 | N/A |
| Seed green infrastructure neutral grassland areas | Surface sow with the aim to get an even distribution across the entire area.<br>Firm with a roll or tread into soil to give good contact | X X X X | 1 | N/A |
| Cut to 5cm height and remove flush of annual weed | There will be a flush of annual weeds from the soil bank as the wildflower seeds germinate. Cut and remove arisings from site | X X X X X X | 1 | N/A |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| Restrict vegetation growth in autumn and winter – if required but ensure that at least 1/3 are left uncut in any year on a three year rotation. | This should reduce dominance of vigorous grasses and could be achieved through a late autumn cut.<br>Cut again, in early spring if winter growth is high before ground nesting bird season. | X X X X X | 2-5 | 6-30 |
| Cut grassland margins once a year but ensure that at least ¼ are left uncut in any one year on a three year rotation. | Undertake a cut in summer when conditions are suitable.<br>Consider rotational cutting over the summer i.e., cut 25% then cut the next 25% a month later to leave a floral resource.<br>Cut from the PV fence towards the hedgerow, leaving a buffer uncut.<br>Allow arisings to dry where possible before removing them from the area. | X X X X | 4-5 | 6-30 |
| Control of problem perennial species i.e., Bracken and scrub. | As and when needed, before seeding. Mechanical removal or electro control would be preferable. Spot spray as a last resort. | X X | 4-5 | 6-30 |
| **Legume-rich Modified Grassland – Solar PV Area** | | | | |
| **Where baseline habitat is grassland**<br>Cut existing grassland sward and remove arisings | Remove arisings from the grassland.<br>Keep vegetation short prior to scarification | X X X X | 1 | N/A |
| **Where baseline habitat is arable**<br>Form the landscape and create a sterile seed bed | Remove any vegetation and cultivate to a fine tilth.<br>Apply Glyphosate if only necessary | X X X X | 1 | N/A |
| Source seed | Choose suitable legume-rich seed mix. | X X X X X X | 1 | N/A |

| Management Prescription | Additional Details | Timing (months) J | F | M | A | M | J | J | A | S | O | N | D | Delivery (years) | Management (years) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lightly scarify any existing grassland areas to prepare for seeding | Using chain harrow or similar, ensure at least 50% of bare ground is present prior to seed application. | | | X | X | | | | | X | X | | | 1 | N/A |
| Seed Solar PV modified grassland areas | Surface sow with the aim to get an even distribution across the entire area.<br>Firm with a roll or tread into soil to give good contact | | | X | X | | | | | X | X | | | 1 | N/A |
| Cut to 5cm height and remove flush of annual weed | There will be a flush of annual weeds from the soil bank as the wildflower seeds germinate. Cut and remove arisings from site | | | | X | X | X | X | X | X | | | | 1 | N/A |
| Restrict vegetation growth in autumn and winter – if required. | Cut again, in early spring if winter growth is high before ground nesting bird season.<br>Remove arisings from the area | | X | X | | | | | | X | X | X | | 1-5 | 6-30 |
| Cut Solar PV grassland once a year | Undertake a cut in summer when conditions are suitable.<br>Consider rotational cutting over the summer into the autumn i.e., cut 25% then cut the next 25% a month later to leave a floral resource for invertebrates for as long as possible.<br>Remove arisings from the area. | | | | | | X | X | X | X | | | | 2-5 | 6-30 |
| **Grazing Option**<br>Graze solar PV area over Autumn and Winter but ensure that no more than 75% of area is a short sward. | If sheep used for grazing.<br>Stocking density to be low (max 7sheep per ha) to avoid overgrazing and poaching.<br>Remove livestock if ground conditions are too wet and move sheep regularly to ensure some longer areas of grass and a floral resource for as long as possible during | X | X | | | | | | | | X | X | X | 2-5 | 6-30 |

| Management Prescription | Additional Details | Timing (months) J F M A M J J A S O N D | Delivery (years) | Management (years) |
|---|---|---|---|---|
| | autumn and leaving some longer aeas of grass for invertebrates over the winter. | | | |
| Control of problem perennial species i.e., Bracken and scrub. | As and when needed, before seeding. Mechanical removal or electro control would be preferable. Spot spray as a last resort. | X X | 2-5 | 6-30 |

# Appendix 4
# Indicative Seed Mixes

Application Document Ref: EN010149/APP/7.9.5
Planning Inspectorate Scheme Ref: EN010149

# Local Wildlife Site Guidelines for Lincolnshire: Calcareous grassland species

| | |
|---|---|
| *Anacamptis pyramidalis* | Pyramidal orchid |
| *Anthyllis vulneraria* | Kidney vetch |
| *Astragalus danicus* | Purple milk-vetch |
| *Avenula pratensis* | Meadow oat-grass |
| *Avenula pubescens* | Downy oat-grass |
| *Blackstonia perfoliata* | Yellow-wort |
| *Brachypodium pinnatum* | Heath false-brome |
| *Briza media* | Quaking-grass |
| *Bromopsis erecta* | Upright brome |
| *Campanula glomerata* | Clustered bellflower |
| *Campanula rotundifolia* | Harebell |
| *Carex caryophyllea* | Spring-sedge |
| *Carex flacca* | Glaucous sedge |
| *Carlina vulgaris* | Carline thistle |
| *Centaurea nigra* | Common knapweed |
| *Centaurea scabiosa* | Greater knapweed |
| *Centaurium erythraea* | Common centaury |
| *Cirsium acaule* | Dwarf thistle |
| *Cirsium eriophiorum* | Woolly thistle |
| *Clinopodium acinos* | Basil thyme |
| *Clinopodium vulgare* | Wild basil |
| *Cruciata laevipes* | Crosswort |
| *Dactylorhiza fuchsii* | Common spotted-orchid |
| *Daucus carota* | Wild carrot |
| *Euphrasia* spp. | Eyebrights (one point maximum) |
| *Festuca ovina* | Sheep's-fescue |
| *Filipendula vulgaris* | Dropwort |
| *Fragaria vesca* | Wild strawberry |
| *Galium verum* | Lady's bedstraw |
| *Genista tinctoria* | Dyer's greenweed |
| *Gentianella amarella* | Autumn gentian |
| *Gymnadenia conopsea* | Chalk fragant-orchid |
| *Helianthemum nummularium* | Common rock-rose |
| *Hippocrepis comosa* | Horseshoe vetch |
| *Hypericum perforatum* | Perforate St John's-wort |
| *Inula conyzae* | Ploughman's-spikenard |
| *Knautia arvensis* | Field scabious |
| *Koeleria macrantha* | Crested hair-grass |
| *Leontodon hispidus* | Rough hawkbit |
| *Linum catharticum* | Fairy flax |
| *Lotus corniculatus* | Common bird's-foot-trefoil |
| *Myosotis ramosissima* | Early forget-me-not |
| *Neottia ovata* | Common twayblade |
| *Odontites vernus* | Red bartsia |
| *Ononis* spp. | Restharrows (one point maximum) |
| *Ophrys apifera* | Bee orchid |
| *Origanum vulgare* | Wild marjoram |

| | |
|---|---|
| *Pimpinella saxifraga* | Burnet-saxifrage |
| *Plantago media* | Hoary plantain |
| *Polygala vulgaris* | Common milkwort |
| *Poterium sanguisorba ssp. sanguisorba* | Salad burnet |
| *Primula veris* | Cowslip |
| *Reseda lutea* | Wild mignonette |
| *Ranunculus bulbosus* | Bulbous buttercup |
| *Rhinanthus minor* | Yellow-rattle |
| *Saxifraga granulata* | Meadow saxifrage |
| *Scabiosa columbaria* | Small scabious |
| *Serratula tinctoria* | Saw-wort |
| *Silene vulgaris* | Bladder campion |
| *Succisa pratensis* | Devil's-bit scabious |
| *Thymus polytrichus* | Wild thyme |
| *Trisetum flavescens* | Yellow oat-grass |
| *Viola hirta* | Hairy violet |

# Local Wildlife Site Guidelines for Lincolnshire: Neutral grassland species

| | |
|---|---|
| *Achillea ptarmica* | Sneezewort |
| *Ajuga reptans* | Bugle |
| *Alopecurus geniculatus* | Marsh foxtail |
| *Alopecurus pratensis* | Meadow foxtail |
| *Anacamptis morio* | Green-winged orchid |
| *Angelica sylvestris* | Wild angelica |
| *Anthoxanthum odoratum* | Sweet vernal-grass |
| *Betonica officinalis* | Betony |
| *Briza media* | Quaking-grass |
| *Cardamine pratensis* | Cuckooflower |
| *Carex caryophyllea* | Spring-sedge |
| *Carex disticha* | Brown sedge |
| *Carex flacca* | Glaucous sedge |
| *Carex leporina* | Oval sedge |
| *Carex nigra* | Common sedge |
| *Carex panicea* | Carnation sedge |
| *Centaurea nigra* | Common knapweed |
| *Conopodium majus* | Pignut |
| *Cynosurus cristatus* | Crested dog's-tail |
| *Dactylorhiza fuchsii* | Common spotted-orchid |
| *Dactylorhiza praetermissa* | Southern marsh-orchid |
| *Equisetum palustre* | Marsh horsetail |
| *Filipendula ulmaria* | Meadowsweet |
| *Galium verum* | Lady's bedstraw |
| *Genista tinctoria* | Dyer's greenweed |
| *Geum rivale* | Water avens |
| *Gnaphalium uliginosum* | Marsh cudweed |
| *Hordeum secalinum* | Meadow barley |
| *Hypochaeris radicata* | Cat's-ear |
| *Juncus acutiflorus* | Sharp-flowered rush |
| *Juncus articulatus* | Jointed rush |
| *Lathyrus pratensis* | Meadow vetchling |
| *Leontodon hispidus* | Rough hawkbit |
| *Leontodon saxatilis* | Lesser hawkbit |
| *Leucanthemum vulgare* | Oxeye daisy |
| *Lotus corniculatus* | Common bird's-foot-trefoil |
| *Lotus pedunculatus* | Greater bird's-foot-trefoil |
| *Luzula campestris* | Field wood-rush |
| *Neottia ovata* | Common twayblade |
| *Ononis spp.* | Restharrows (one point maximum) |
| *Ophioglossum vulgatum* | Adder's-tongue |
| *Pimpinella saxifraga* | Burnet-saxifrage |
| *Poa pratensis* | Smooth meadow-grass |
| *Potentilla erecta* | Tormentil |
| *Primula veris* | Cowslip |
| *Ranunculus bulbosus* | Bulbous buttercup |

| | |
|---|---|
| *Ranunculus hederaceus* | Ivy-leaved water-crowfoot |
| *Ranunculus sardous* | Hairy buttercup |
| *Rhinanthus minor* | Yellow-rattle |
| *Sanguisorba officinalis* | Great burnet |
| *Saxifraga granulata* | Meadow saxifrage |
| *Schedonorus pratensis* | Meadow fescue |
| *Serratula tinctoria* | Saw-wort |
| *Silaum silaus* | Pepper-saxifrage |
| *Silene flos-cuculi* | Ragged-Robin |
| *Succisa pratensis* | Devil's-bit scabious |
| *Trifolium fragiferum* | Strawberry clover |
| *Trisetum flavescens* | Yellow oat-grass |

## Arable Field Margins (Wild Bird Cover/Seeding)

Any mix specified for agricultural environmental schemes would be suitable, for example, Cotswolds seeds suggests a two year mix based on the following:

| Species | % |
|---|---|
| Spring barley | 70 |
| **Kale** | 12 |
| **White millet** | 8 |
| **Linseed** | 2.5 |
| **Hybrid rape** | 2 |
| **Mustard** | 2 |
| **Fodder radish** | 2 |
| **Fennel** | 1.5 |

Cotswolds seeds suggest a number of suitable mixes, for example their simple cutting and grazing four-year ley, the % of grass to forbs is approximate:

| Species | % |
|---|---|
| Perennial ryegrass | 40 |
| Festulolium | 22 |
| Cocksfoot | 12.5 |
| Timothy | 8 |
| Meadow fescue | 5 |
| White clover | 5 |
| Red clover | 3 |
| Alsike clover | 2 |
| Chickory | 2 |

## Legume-Rich Modified Grassland

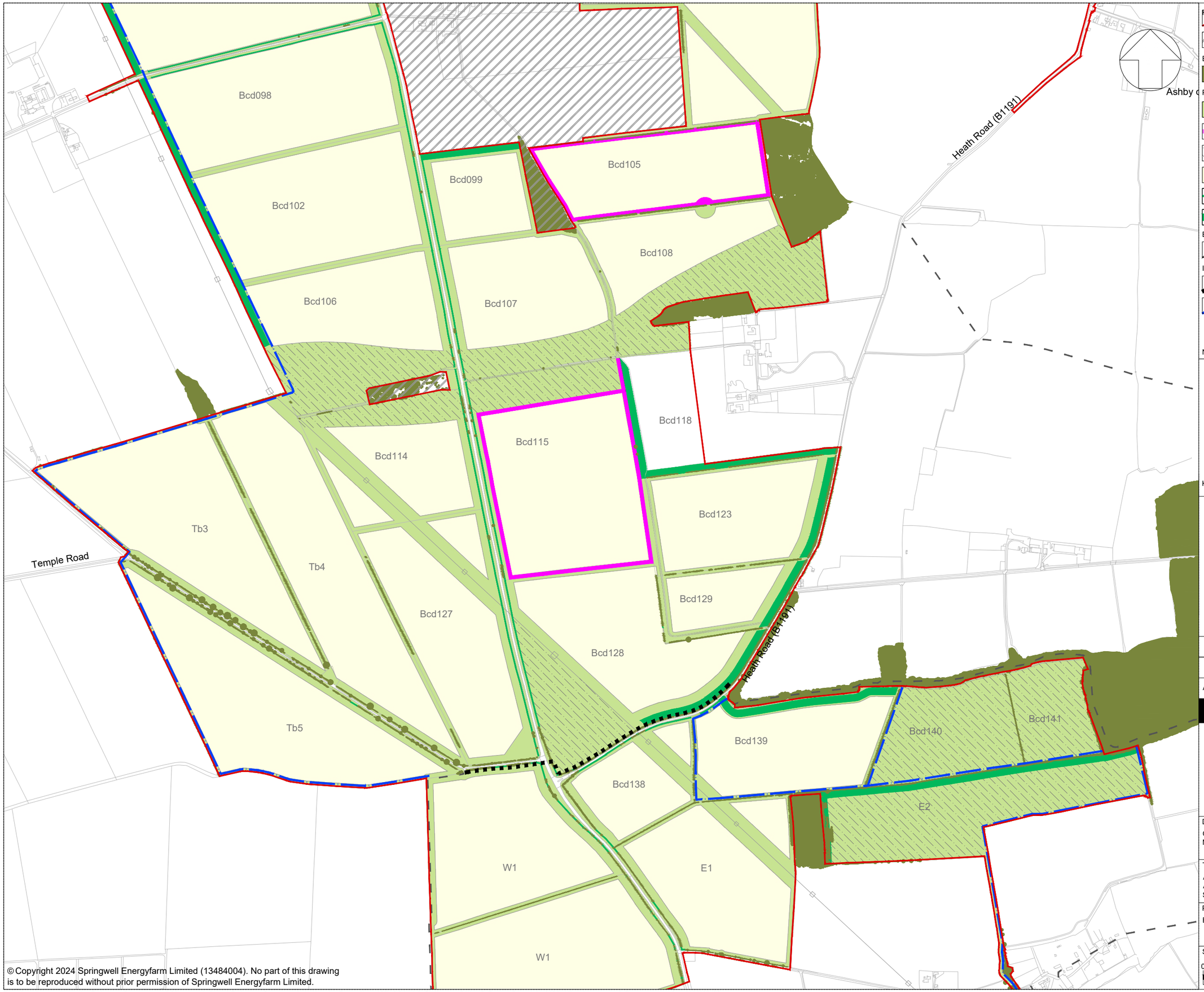
A suggested legume and flower mix used by the Blankney Estate in Springwell west is as follows:

*Alsike clover, Birds foot trefoil, Common vetch, Fenugreek, Lucerne, Phacelia,Red Campion, Red Clover, Sainfoin, Sweet Clover, yellow trefoil.*

A suitable standard meadow grass mix would need to be added, or the above species over sown into existing grassland. Overall, for maximum biodiversity benefit forb (legume) diversity should be high.

# Appendix 5
# Arable Weed Management Plan

Application Document Ref: EN010149/APP/7.9.5
Planning Inspectorate Scheme Ref: EN010149




KEY:

- Order Limits
- Areas outside the Order Limits

Existing landscape features

- Existing vegetation (Trees and hedgerows)

Proposed green infrastructure

- Grassland open fields and margins with wildflower
- Grassland managed for arable weeds
- Areas of farmland bird mitigation
- Grassland under Solar PV modules
- Strategic planting (Hedgerow)
- Strategic planting (Tree belt)

Existing routes

- Existing Public Right of Way

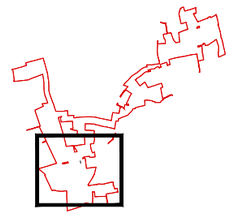
Indicative proposed routes

- Proposed Public Right of Way
- Proposed permissive footpath

NOTES:

1. Ordnance Survey (OS) MasterMap data adopted as the drawing base map.
2. The location of features shown are indicative only. Exact locations to be confirmed on site.
3. Additional features may be present on site that have not been identified on the OS data.
4. The parameter plans are drawn to OS MasterMap data.
6. The following components are not shown on the parameter plans: cable route corridors, utility connections, boundary fencing and CCTV, inverter and transformers and switchgear compounds, internal access tracks, drainage, construction access and compounds, and offsets to underground utilities.

KEY PLAN:



| App | Date | Description | Drn | Chk | App |
|---|---|---|---|---|---|
| 02 | SEP 2025 | DEADLINE 4 | LDA | LDA | EDF |
| 01 | AUG 2025 | DEADLINE 3 | LDA | LDA | EDF |

**Springwell Solar Farm**

DOCUMENT:
OUTLINE LANDSCAPE AND ECOLOGY MANAGEMENT PLAN

TITLE:
APPENDIX 5
AREAS OF ARABLE WEED MANAGEMENT
SPRINGWELL WEST

PINS REFERENCE NUMBER:
EN010149/APP/7.9

SCALE : 1:10,000 @ A3

0 500m

REV: 02

Springwell
Solar Farm

springwellsolarfarm.co.uk

Application Document Ref: EN010149/APP/7.9.5
Planning Inspectorate Scheme Ref: EN010149