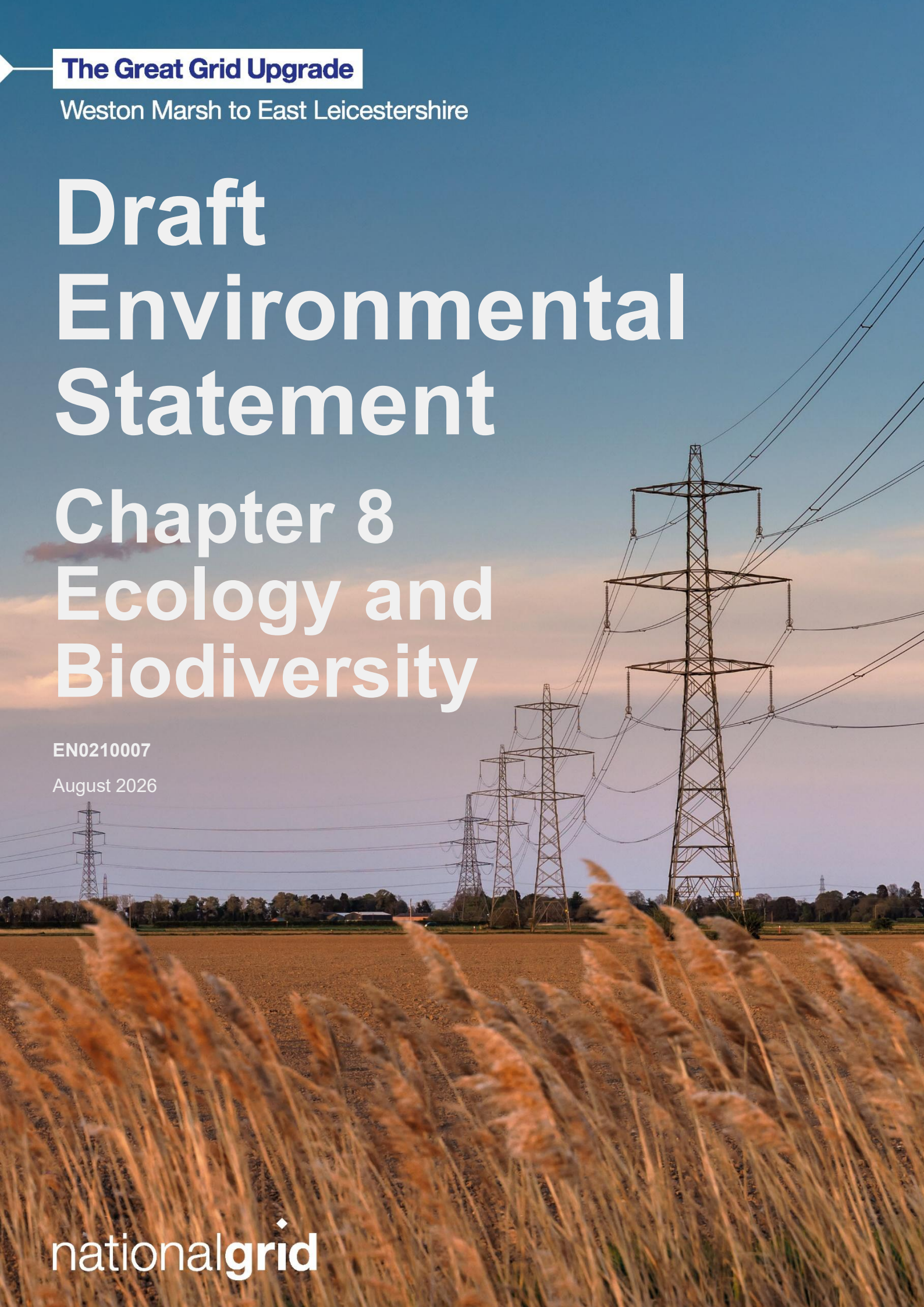




The Great Grid Upgrade

Weston Marsh to East Leicestershire

Draft Environmental Statement

Chapter 8 Ecology and Biodiversity

EN0210007

August 2026

nationalgrid

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8. Ecology and Biodiversity

8.1 Introduction

- 8.1.1 This chapter presents the preliminary assessment of the potential effects of the Weston Marsh to East Leicestershire Project (the Project) on ecology and biodiversity. This chapter includes consideration of the following matters during construction, and operation and maintenance:
- statutory designated sites for nature conservation;
 - non-statutory designated sites for nature conservation;
 - protected and notable habitats (including ancient woodland and Habitats of Principal Importance¹ (HPI)); and
 - terrestrial and aquatic biodiversity (including, notable, non-native and invasive flora and fauna).
- 8.1.2 This chapter should be read in conjunction with the following chapters which provide the Project context and approach to Environmental Impact Assessment (EIA):
- **Chapter 2 Regulatory and Planning Policy Context;**
 - **Chapter 3 Main Alternatives Considered;**
 - **Chapter 4 Description of the Project;** and
 - **Chapter 5 EIA Approach and Methodology.**
- 8.1.3 There are interrelationships with other disciplines. Therefore, this chapter should also be read in conjunction with the following chapters:
- **Chapter 6 Landscape** particularly in relation to post-construction reinstatement and habitat creation;
 - **Chapter 9 Cultural Heritage** particularly in relation to the historic status of ancient woodland and hedgerows;
 - **Chapter 10 Water Environment** and **Chapter 11 Geology and Hydrogeology** provide details of the location of sensitive surface water features, including Water Framework Directive (WFD) (Ref 8.91) water bodies, and the associated mitigation that will also be required to address potential impacts upon important ecological features, such as wetland HPI and aquatic fauna and local hydrology;
 - **Chapter 12 Agriculture and Soils** provides information on soil, land use and ecosystem factors;
 - **Chapter 13 Traffic and Transport** provides information on potential changes in traffic movement which may result in changes to air quality;

¹ Those habitats identified under section 41 of the Natural Environment and Rural Communities Act 2006 (Ref 8.65).

- **Chapter 14 Air Quality** provides detail of the changes to air quality which would inform the assessment of impacts on sensitive ecological features presented in this chapter, such as designated sites and ancient woodland;
- **Chapter 15 Noise and Vibration** provides detail of the potential impacts of noise on sensitive ecological features; and
- **Chapter 19 Cumulative Effects** includes consideration of the potential for in-combination and cumulative effects on ecology and biodiversity.

8.1.4 This chapter is supported by the following figures and appendices:

- **Figure 8.1 Statutory Designated Sites of International Nature Conservation Importance;**
- **Figure 8.2 Statutory Designated Sites of National Nature Conservation Importance;**
- **Figure 8.3 Non-Statutory Designated Sites for Nature Conservation;**
- **Figure 8.4 Ancient Woodland and Habitats of Principal Importance;** and
- **Appendix 8A Habitats Regulations Assessment Stage 1: Screening Report.**

8.2 Legislation, Policy Framework, and Guidance

Legislation

8.2.1 Legislation and national policy relevant to the Project and this chapter are described in **Chapter 2 Regulatory and Planning Policy Context**, and supporting appendices **Appendix 2A Key Legislation**, **Appendix 2B National and Regional Policy**, and **Appendix 2C Local Policy**.

Regional and Local Policy

8.2.2 **Chapter 2 Regulatory and Planning Policy Context** sets out relevant regional and local policy.

8.2.3 Relevant regional and local policies are as follows:

- Central Lincolnshire Local Plan 2023 - 2040, Adopted 2023 (Ref 8.1): Policy S53: Design and Amenity, Policy S60: Protecting Biodiversity and Geodiversity, Policy S61: Biodiversity Opportunity and Delivering Measurable Net Gains, Policy S66: Trees, Woodland and Hedgerows;
- South Kesteven Local Plan 2011 – 2036, Adopted 2020 (Ref 8.2): EN2: Protecting Biodiversity and Geodiversity, DE1: Promoting Good Quality Design;
- South East Lincolnshire Local Plan 2011-2036, Adopted 2019 (Ref 8.3): Policy 3: Design of New Development, Policy 28: The Natural Environment, Policy 31: Climate Change and Renewable and Low Carbon Energy;
- Melton Local Plan 2011 – 2036, Adopted 2018 (Ref 8.4): Policy EN2: Biodiversity and Geodiversity, Policy EN3: The Melton Green Infrastructure Network;
- Harborough Local Plan 2011 to 2031, Adopted 2019 (Ref 8.5): Policy GI5: Biodiversity and Geodiversity;

- North Northamptonshire Joint Core Strategy 2011 – 2031, Adopted 2016 (Ref 8.6): Policy 4: Biodiversity and Geodiversity, Policy 8 – North Northamptonshire Place Shaping Principles; and
- Charnwood Local Plan 2021-2037, adopted 2026 (Ref 8.7): Policy EV6 Conserving and Enhancing Biodiversity and Geodiversity, Policy EV7 Tree planting and retention.

Guidance Specific to the Ecology Assessment

8.2.4 Relevant guidance, specific to ecology and biodiversity, that has informed this non-statutory Draft Environmental Statement (DES) (referred to throughout this document as “DES” or “non-statutory DES”) and will inform the assessment within the Environmental Statement (ES) comprises:

- Guidelines for Ecological Impact Assessment (EclA) in the UK and Ireland: terrestrial, freshwater, coastal and marine (Chartered Institute of Ecology and Environmental Management (CIEEM) (Ref 8.8);
- Biodiversity Net Gain: Good Practice Principles for Development (Ref 8.9);
- Biodiversity Gain Statement for Energy (Ref 8.10);
- Leicester Green Infrastructure Strategy (Ref 8.11)
- Action for Nature (A Strategic Approach to Biodiversity, Habitats and the Local Environment for Leicestershire) (Ref 8.12);
- Biodiversity Duty Plan, Leicestershire County Council (Ref 8.13);
- Biodiversity Supplementary Planning Document for Northamptonshire (Ref 8.14);
- British Standard (BS) 42020:2013 Biodiversity: Code of Practice for Planning and Development (Ref 8.15);
- Natural England and Department for Environment, Food and Rural Affairs (Defra) Standing Advice (protected species) (Ref 8.16);
- Birds of Conservation Concern (BoCC), 2021 (Ref 8.17);
- UK Habitat (UKHab) Classification System (Ref 8.18);
- Hedgerow Survey Handbook: A standard procedure for local surveys in the UK (Ref 8.19);
- Great Crested Newt Mitigation Guidelines (Ref 8.20);
- Bird Survey and Assessment Steering Group, 2022, Bird Survey Guidelines for assessing ecological impacts (Ref 8.21);
- Royal Society for the Protection of Birds (RSPB) Bird Monitoring Methods (Ref 8.22);
- British Trust for Ornithology (BTO) Common Birds Census Instructions (Ref 8.23);
- BTO Wetland Bird Survey methods (Ref 8.24);
- Species-specific methods for raptors (Ref 8.25) and barn owl (Ref 8.26);
- Joint Nature Conservation Committee (JNCC) National Vegetation Classification (NVC) Users' Handbook (Ref 8.27);

- White-clawed crayfish Standing Advice (Ref 8.28);
- Beavers, Advice for making planning decisions (Ref 8.29);
- NatureScot Guidance – Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds² (Ref 8.30);
- NatureScot Recommended bird survey methods to inform impact assessment of onshore windfarms. Version 2³ (Ref 8.31);
- Terrestrial Invertebrates – Surveying terrestrial and freshwater invertebrates for conservation evaluation (Ref 8.32);
- Bibby *et al.* (2000) Bird Census Techniques. 2nd Edition. Academic Press: London (Ref 8.33);
- BS 5837:2012 Trees in relation to design, demolition, and construction – Recommendations (Ref 8.34);
- The International Union for Conservation of Nature Red List Threatened Species, 2024 (Ref 8.35);
- Bat Surveys for Professional Ecologists: Good Practice Guidelines, 2023 (Ref 8.36);
- Evaluating the suitability of habitat for the great crested newt (*Triturus cristatus*) 2000 (Ref 8.37);
- Froglife Advice Sheet Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation, 1999 (Ref 8.38);
- The Mammal Society Surveying Badgers, 1989 (Ref 8.39);
- The Water Vole Mitigation Handbook, 2016 (Ref 8.40);
- The Water Vole Conservation Handbook, 2011 (Ref 8.41);
- Ecology of the European Otter, 2003 (Ref 8.42);
- Analytical and methodological development for improved surveillance of the Great Crested Newt. Defra Project WC1067 (Ref 8.43);
- Amphibian and Reptile Groups of the United Kingdom ARG UK Advice Note 5; Great Crested Newt Habitat Suitability Index (Ref 8.44);
- Hazel Dormouse Mitigation Handbook (Ref 8.45);
- Hazel Dormouse Conservation Handbook (Ref 8.46);
- Greater Lincolnshire Local Nature Recovery Strategy (Draft) (Ref 8.47);
- Leicestershire, Leicester and Rutland Local Nature Recovery Strategy (Ref 8.48);
- North Northamptonshire Local Nature Recovery Strategy (Ref 8.49);
- West Northamptonshire Local Nature Recovery Strategy (Ref 8.50);

² There is no standard equivalent Natural England guidance.

³ There is no standard equivalent Natural England guidance

- Upper Nene Valley Gravel Pits Special Protection Area – Supplementary Planning Document (Ref 8.51);
- Upper Nene Valley Gravel Pits Special Protection Area – Supplementary Planning Document Mitigation Strategy (Ref 8.52); and
- Draft Upper Nene Valley Gravel Pits Special Protection Area Guidance and Mitigation Strategy (Consultation Version) (Ref 8.53).

8.3 Scope of Assessment

- 8.3.1
- The scope of the assessment has been informed by the Scoping Opinion (**Appendix 5B Scoping Opinion** adopted by the Planning Inspectorate on behalf of the Secretary of State on 17 December 2025) and ongoing engagement with relevant technical consultees.
- 8.3.2
- A full summary of all issues raised relevant to ecology and biodiversity in the Scoping Opinion and National Grid’s response is provided in **Appendix 5C Preliminary Scoping Opinion Response**. Further details of engagement undertaken to date is provided in Section 8.4.

8.4 Stakeholder Engagement

- 8.4.1
- National Grid has held meetings with relevant consultees including local planning authorities, Natural England, the Environment Agency, and the Forestry Commission. A summary of discussions and how these have influenced the Project, scope and/or the approach to the assessment is provided in **Table 8.1**.

Table 8.1 Key stakeholder engagement and National Grid’s response

Organisation and Date	Summary of Issue Discussed	Project Response
Environment Agency, (26/03/2026)	Within Technical Working Group (TWG) meeting on 24/03/26 the Environment Agency stated that their preference was for the installation of overbridges rather than use of pipe culverts.	The installation of overbridges rather than use of pipe culverts will be incorporated wherever practicable in the final design.
	The Environment Agency clarified their Stage 1 Consultation comments on electric and magnetic fields (EMFs) and queries regarding potential heating of watercourses.	National Grid confirmed that there will be no undergrounding of cables for the new 400 kV overhead line and therefore no risk of impacts on fish utilising watercourses through EMFs. Agreed that issues around heating of groundwater would be dealt with outside the ecological assessment if they should prove to be relevant for other scheme elements (e.g. diversion of existing overhead line routes).

Organisation and Date	Summary of Issue Discussed	Project Response
Environment Agency (30/06/26)	Within TWG meeting on 30/06/26 the Environment Agency stated that National Grid should review their programme for fish surveys with surveys in October potentially unacceptable dependent on the context.	National Grid to review programme for fish surveys and liaise with Environment Agency.
Greater Lincolnshire Nature Partnership (30/06/26)	Within TWG meeting on 30/06/26 request made for sharing of species records obtained from surveys undertaken by National Grid.	National Grid can confirm that we will seek to share data records with local records centres following submission of the DCO application.

8.5 Assessment Methodology

- 8.5.1 This section describes the method used to establish the existing and future baseline together with the method and approach used to undertake the preliminary assessment on ecology and biodiversity. The overarching approach is also described in **Chapter 5 EIA Approach and Methodology**. This section also identifies further assessment needed to be undertaken as part of the ES.
- 8.5.2 The assessment is based on the guidance identified above.

Study Area

- 8.5.3 The CIEEM EcIA guidelines (Ref 8.8) require assessments to be focused on Zones of Influence (Zoi) – defined as being the area over which changes arising from construction and operation (including maintenance) could lead to ecologically significant effects.
- 8.5.4 As defined in the EIA Scoping Report (**Appendix 5A EIA Scoping Report**), the Study Areas used to inform the assessment are presented in **Table 8.2**. These were defined through professional judgement of perceived impact pathways, good practice guidelines and engagement with stakeholders and are used as a starting point for baseline data collection.
- 8.5.5 The Study Areas may be refined as more information becomes available regarding the potential ecological effects of the Project and through consideration of presence, distribution and abundance and will form the Zoi (which will vary between different biodiversity features) which will be defined within the ES.

Table 8.2 Study Areas for important ecological features

Study Area (distance from draft Order Limits)	Feature	Associated Figure
30 km	Special Areas of Conservation (SACs), Ramsar sites and Special Protection Areas	Figure 8.1 Statutory Designated Sites of

Study Area (distance from draft Order Limits)	Feature	Associated Figure
	(SPAs) where (respectively) bat or bird species with large foraging ranges are noted as, or one of, the qualifying features ⁴ . Proposed and potential SACs, SPAs and Ramsar sites are also considered.	International Nature Conservation Importance
10 km	Statutory designated sites of international nature conservation importance, e.g. SACs, SPAs and Ramsar sites (as well as proposed or potential sites).	Figure 8.1 Statutory Designated Sites of International Nature Conservation Importance
2 km (extended to 5 km for Sites of Special Scientific Interest (SSSIs) with ornithological qualifying features ⁵ and aquatic receptors)	Statutory designated sites of nature conservation importance, e.g. SSSIs (also referencing Natural England Impact Risk Zones for SSSIs on the Multi-Agency Geographic Information for the Countryside (MAGIC) website (Ref 8.54), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs)).	Figure 8.2 Statutory Designated Sites of National Nature Conservation Importance
2 km	Non-statutory designated sites of nature conservation importance, e.g. Local Wildlife Sites (LWSs), Sites of Nature Conservation Importance, Potential Wildlife Sites, Wildlife Trust Reserves and ancient woodlands. Records of protected and notable species received from Local Environmental Records Centres (LERCs) ⁶ .	Figure 8.3 Non-Statutory Designated Sites for Nature Conservation Figure 8.4 Ancient Woodland and Habitats of Principal Importance

⁴ i.e. a habitat or species population for which the site has been designated.

⁵ There is often spatial overlap between SSSIs/SPAs, Ramsar sites and qualifying ornithological features of SSSIs; in some cases birds might forage over relatively large distances outside the designated site. Therefore, the Study Area for SSSIs with qualifying ornithological features is extended to 5 km.

⁶ Figures presenting relevant protected and notable species where permitted will be provided within individual appendix reports for each species within the ES chapter.

Data Collection

Desk study

- 8.5.6 The baseline assessment has been informed by a desk study which has drawn from the following key information sources:
- MAGIC (Ref 8.54) – to identify the location (and details) of statutorily designated sites, ancient woodland⁷, HPI (including Priority River Habitat) and for any granted European Protected Species Mitigation Licence (EPSML) applications, habitats and locations for designated habitats and protected species;
 - the Natural England website (Ref 8.55) for information on statutory designated sites of nature conservation importance;
 - the JNCC website (Ref 8.56) for site information and designation details of SACs, SPAs and Ramsar sites;
 - the Data.gov.uk (Ref 8.57) website for datasets such as location of priority habitats and land cover data;
 - aerial imagery of habitats and ecological features of interest (Ref 8.58); and
 - data requests made to the following environmental record centres to obtain data in support of baseline assessments (including location of designated sites, species, habitats and ancient woodland):
 - Lincolnshire Environmental Records Centre (Ref 8.59);
 - Leicestershire and Rutland Environmental Records Centre (Ref 8.60);
 - Northamptonshire Biodiversity Records Centre (Ref 8.61); and
 - UK Centre for Ecology and Hydrology Land Cover Maps (Ref 8.62).

Site visit and surveys

- 8.5.7 Field survey data collection commenced in late 2025, continued in 2026 and will continue into 2027 where required. Once a robust combination of desk study and field survey data to support the application for development consent has been obtained, results will be collated for inclusion within the ES to be submitted with the application for development consent.
- 8.5.8 Non-breeding bird surveys from Public Rights of Way (PRoWs) commenced from November 2025 and a high-level summary of preliminary results has been included within this chapter; the remaining ecology surveys for the Project commenced in 2026. Full details of these ecology field surveys will be included within the ES.
- 8.5.9 An initial habitat mapping exercise was undertaken in November 2025, utilising UK Centre for Ecology and Hydrology Land Cover Maps (Ref 8.62) and aerial photography (Ref 8.58) to allocate habitat types to land within the draft Order Limits plus a 50 m surrounding buffer. This interim dataset is being ground-truthed and updated during extended UKHab Classification surveys which commenced in June 2026 and are ongoing. The final habitat mapping data will be included within the ES.

⁷ This includes consideration of the revised completed counties updates to the Ancient Woodland Inventory.

- 8.5.10 The UKHab surveys will confirm the location of protected and/or notable habitats and identify areas with the potential to support protected and/or notable species, where further surveys may be required to confirm their presence/absence.
- 8.5.11 Great crested newt Habitat Suitability Index (HSI) and environmental DNA (eDNA) surveys commenced in June 2026 and will be completed in spring 2027. These surveys will confirm the suitability of water bodies within the Study Area for great crested newt, and for those deemed suitable confirm presence/absence through eDNA surveys. The results of these surveys will be included within the ES.
- 8.5.12 The ecology survey programme is outlined within **Table 8.3**; this is based on surveys completed to date and those programmed for the remainder of 2026 and for 2027, in addition to the results of the ecological desk study, good practice guidance and previous consultation and engagement. The survey status is based on the surveys carried out up to and including June 2026. Further engagement and consultation with relevant consultees regarding the survey programme is ongoing and may influence the information provided within **Table 8.3** which will be reported in the ES.

Table 8.3 Ecological survey programme for the Project

Survey Type	Overview and Survey Area	Survey Status
Extended UKHab and Habitat Condition Assessments	Habitats will be assigned a UKHab Classification habitat type in accordance with UK Habitat Classification (Ref 8.18) and their condition will be assessed in accordance with the condition assessment criteria outlined in the Statutory Biodiversity Net Gain (BNG) guidance documents (Ref 8.63). An assessment of the suitability of habitat to support protected and notable species and incidental records of these species or their field signs will be recorded. Invasive non-native plant species (INNPS) will be recorded where visible. The survey will include a 50 m buffer around the draft Order Limits.	Ongoing (planned to be completed by September 2026)
Detailed Habitat/Vegetation Surveys (NVC)	NVC surveys (Ref 8.27) may be required to inform a detailed botanical assessment of habitats of high ecological value, including priority habitats if they cannot be avoided. Areas of further survey are to be identified following receipt of local records and UKHab survey results. Results of the NVC survey will inform detailed strategies to mitigate for the loss or degradation of such habitats.	July to September 2026 inclusive (exact timing dependent on habitat type)
Detailed Habitat/Vegetation Surveys (Hedgerows)	Where hedgerows within the draft Order Limits are likely to be lost or fragmented, specific hedgerow surveys will be undertaken to identify hedgerows that are either important under The	July to September 2026

Survey Type	Overview and Survey Area	Survey Status
	Hedgerows Regulations 1997 (Ref 8.64); species rich hedgerows; and/or HPI under section 41 of the Natural Environment and Rural Communities Act 2006 (Ref 8.65). Surveys will be undertaken in accordance with the Defra Hedgerow Survey Handbook (Ref 8.19) which defines a hedgerow as <i>‘any boundary line of trees or shrubs over 20m long and less than 5m wide at the base, provided that at one time the trees or shrubs were more or less continuous’</i>. It includes an earth bank or wall only where such a feature occurs in association with a line of trees or shrubs. This includes ‘classic’ shrubby hedgerows, lines of trees, shrubby hedgerows with trees and very gappy hedgerows (where each shrubby section may be less than 20 m long, but the gaps are less than 20 m).	
Trees including ancient, veteran and notable trees	An arboricultural survey will be undertaken in areas to be impacted by the Project (i.e. within the draft Order Limits or works likely within the relevant root protection zone) including the new overhead line, and associated infrastructure such as substations, haul roads and compounds and vegetation removal or management associated with the reconductoring sections. The survey will help to categorise trees, identify any veteran or ancient trees and flag areas of potential ancient woodland (especially that which may be too small to be registered on the Ancient Woodland Inventory (Ref 8.66). The survey will inform tree protection requirements for retained trees in close proximity to the Project in line with BS 5837:2012 (Ref 8.34). Results of the survey will inform the layout and design of the works in terms of irreplaceable or high-quality habitat to avoid, or if this is unavoidable, to inform the mitigation and compensatory planting required.	July to September 2026
Amphibians	The desk study has identified the presence of potential suitable water bodies within the draft Order Limits and up to 250 m from it. The presence of ponds has been confirmed during the Extended UKHab surveys and includes HSI assessments and eDNA surveys of all water bodies within and up to 250 m from the draft Order Limits except where no significant barriers to great crested newt movement exist (including absence of suitable connective habitat).	June 2026/ (continuing into spring 2027 as required)

Survey Type	Overview and Survey Area	Survey Status
	The HSI assessment has been undertaken in accordance with the approach in Amphibian and Reptile Group UK Advice Note 5 (Ref 8.44). The eDNA surveys were carried out in accordance with Biggs <i>et al.</i> (Ref 8.43) to assess the presence or likely absence of great crested newts in water bodies. It is not anticipated that full population surveys will be required due to likely implementation of a District Level Licence (DLL). For those water bodies more than 250 m from the draft Order Limits, field surveys were only undertaken in exceptional circumstances where there is considered to be the potential for amphibians using the water body to utilise terrestrial habitats within the draft Order Limits (e.g. where there is no other suitable terrestrial habitat closer to the pond).	
Beaver (<i>Castor fiber</i>)	Beaver have been reintroduced into Lincolnshire within 5 km of the draft Order Limits to the north of Section 4 and at the Nene Washes within 25 km of the draft Order Limits to the south. These populations are likely to be within enclosures but there are also reports of wild beaver or those that may have escaped enclosures within Northamptonshire. Surveys of watercourses to be impacted or hydrologically connected to the Project will be undertaken where scoping deems this to be required in accordance with Natural England Guidance (Ref 8.67) on reaches of 500 m to identify: • burrows, lodges or dams on or adjacent to the Study Area, taking into account that burrows will be hard to find as often under water; and • map any evidence of territorial boundaries, access to foraging and dispersal routes.	Scoping: July to September 2026 with follow up surveys October 2026 to March 2027 (as required)
Birds	Scope and rationale Baseline surveys have been designed to cover a much wider range of potential impacts on designated sites over a wider area, plus more general ornithological constraints and potential impacts across the Study Area. These include: • direct impacts on the Upper Nene Valley Gravel Pits SPA, Ramsar site and SSSI, due	

Survey Type	Overview and Survey Area	Survey Status
	to habitat clearance needed to enable reconductoring of existing overhead lines; - indirect impacts on The Wash SPA, Ramsar site and SSSI and Rutland Water SPA, Ramsar site and SSSI, through potential effects on habitat that is outside the designated sites but that nevertheless provides a supporting function to the designations (termed 'Functionally Linked Land'), by providing habitat that is regularly used in some capacity; - potential impacts on key sites or habitats that are notable for their capacity to support notable bird populations regardless of any designation (for instance as a significant habitat resource for breeding birds; or as a significant feeding and roosting area regularly used by non-breeding birds); - potential impacts on key flyways or migration routes for any species of bird which may lead to mortality or population decline during construction and operation of the Project; and - potential impacts of collision with transmission overhead lines by bird species that are known to be vulnerable. To characterise the ornithological baseline a series of surveys to determine the breeding and non-breeding populations and assemblages of birds will be undertaken. These surveys will consider species that may be associated with designated sites such as SPAs, species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) (Ref 8.68) and those species that are of conservation concern, i.e. Species of Principal Importance (SPI) and BoCC Red and Amber list species (Ref 8.17). The surveys to be undertaken will consider the potential impacts of the Project on the aforementioned species and be designed to allow a robust, but proportionate, assessment of potential impacts.	
	Flight activity surveys To understand the potential risks of new overhead line to birds a programme of flight activity surveys will be undertaken. These surveys will provide data on flight activity and movements and inform an assessment of the potential risk of collision and barriers to movement. This method is recommended in the	Commenced November 2025 and ongoing to September 2026. The requirement for further vantage point (VP) surveys beyond

Survey Type	Overview and Survey Area	Survey Status
	NatureScot guidance on the assessment of the impacts of powerlines on birds (Ref 8.30), adapted from the recommended bird survey methods to inform impact assessment of onshore windfarms (Ref 8.31). Each viewing point location viewshed will be observed for a minimum of six hours per month over a minimum of a single year survey period using a team of two surveyors (to ensure no lone working and to optimise recording efficiency), ensuring minimum survey effort of 72 hours for a full year at all VPs. These surveys commenced in November 2025 and will continue until September 2026 inclusive. The requirement for further survey beyond this period will be determined following review of the data collected in this period and consultation with stakeholders. VP locations will be continuously reviewed to ensure that adequate, but proportionate coverage is being provided. Where levels of flight activity by potentially sensitive species is either low or completely absent, then the continuing of further surveys will be reviewed. It is not considered necessary to collect flight activity data along the route of the Project where only reconductoring is proposed, as the existing overhead line will already influence bird activity, i.e. there is no new risk of collision or displacement from overhead line presence.	this period will be determined following review of data collected in this period and consultation with stakeholders.
	Non-breeding bird walkovers To complement the VP surveys, monthly walkovers (a combination of walked and driven transects) were undertaken at the eastern end of the Project where there is the potential for birds associated with the Wash designated sites complex to occur. These surveys commenced in November 2025 and were completed in March 2026 (inclusive) and recorded the spatial and temporal distribution of target bird species. It is anticipated that surveys will also be required at substation locations, i.e. areas where permanent habitat loss may occur. These will be undertaken in winter 2026/27, once further Project refinement has occurred. The reconductoring elements of the Project include works over and in the vicinity of, the Upper Nene Valley Gravel Pits SPA/Ramsar site. To understand current usage of the designated site by species, as well as the potential	Commenced November 2025 and completed in March 2026. The requirement for further non-breeding bird walkover surveys and flight activity surveys beyond this period will be determined following review of data collected in this period, consultation with stakeholders and refinement of the Project design.

Survey Type	Overview and Survey Area	Survey Status
	occurrence of qualifying bird species in areas away from the designated sites, which could be subject to disturbance from works associated with the reconductoring, monthly visits to record the distribution of birds have been completed between November 2025 and March 2026.	
	Breeding bird territory mapping survey In accordance with the breeding bird survey method (Ref 8.69) surveys comprise six survey visits during the breeding season (broadly mid-March to early July). These surveys have focused on areas where permanent habitat loss is likely to occur, such as locations for substations, or where there are areas of habitat that may support larger assemblages of breeding birds including notable species, such as mature woodland and wetland. For areas comprising a large expanse of open grassland or arable field, the boundaries would be walked and all birds within the field recorded. In other habitat where access and views allow, efforts would be made to record all bird activity within 50 m of the draft Order Limits. Where no access is available, PRowS (where available) and local roads (where it is deemed safe to do so) would be utilised.	March 2026 to July 2026 and March 2027 to July 2027, where access has not been possible in 2026.
	Breeding Schedule 1 species surveys Where there is the potential for breeding Schedule 1 birds, surveys will be carried out during the appropriate nesting period for the species. During each survey visit, surveys will be targeted at areas identified as supporting suitable habitat for Wildlife and Countryside Act 1981 (as amended) (Ref 8.68) Schedule 1 breeding bird species in accordance with the survey methods outlined in Gilbert <i>et al.</i> (Ref 8.70), Hardey <i>et al.</i> (Ref 8.25) and Shawyer (Ref 8.26), which will include habitat searches and possible further VP effort at additional locations. Taking account of the predominant habitat type within the Study Area comprising arable farmland, breeding bird assemblages in such habitat will largely comprise farmland passerines (songbirds) which are not generally at risk of significant impacts from transmission lines and therefore not the focus of VP surveys or transect surveys. Additional breeding season target species that could be present and at risk of significant impacts from the proposed overhead	May 2026 to September 2026 and March 2027 to August 2027, where access has not been possible in 2026.

Survey Type	Overview and Survey Area	Survey Status
	line comprise several species of raptor – marsh harrier (<i>Circus aeruginosus</i>), hobby (<i>Falco subbuteo</i>), peregrine (<i>Falco peregrinus</i>) and red kite (<i>Milvus milvus</i>) – and barn owl (<i>Tyto alba</i>). As such, breeding bird survey transects will be undertaken at locations where proposed infrastructure is likely to require the clearance of habitat suitable for assemblages of breeding passerines (typically woodland, scrub, dense networks of mature hedgerows and reedbeds) and at other locations to sample the breeding bird assemblage within the draft Order Limits. Where high levels of flight activity from target species of raptor are noted on transect surveys outside the viewing arcs of the VP locations, consideration will be given to undertaking habitat searches following as closely as possible to suitable methods set out in Gilbert <i>et al.</i> (Ref 8.70, Hardey <i>et al.</i> (Ref 8.25) and/or further VP effort at additional locations will be considered. Such surveys will not be carried out where third-party data are considered sufficiently detailed and contemporary to inform the assessment of potential impacts of the Project, or where data from VP surveys are sufficient to conclude confirmed or probable breeding.	
Badger (<i>Meles meles</i>) (Data to be provided within a confidential appendix as part of the SCO application)	Surveys for badger setts and activity will focus on areas within the proposed construction footprint of permanent and temporary works where there will be habitat loss such as: • The emerging preferred Substation Siting Zones and compound locations as there will be a permanent and/or temporary loss of habitat – here additional space may be required to achieve a successful design; for example, providing space for replacement main setts or foraging habitat. • Overhead line route and other areas of temporary works such as haul roads and access road. Here the locations where there is greater potential for main setts to occur within the preferred route corridor will be surveyed. This shall include areas within 100 m of known main setts and any areas located within 50 m of optimal habitat (woodland, continuous scrub, hedgerows and permanent grassland, road/rail verges and embankments).	June 2026 onwards. (Badger surveys can be undertaken at any time of year but are most effective over winter before vegetation growth obscures setts and field signs).

Survey Type	Overview and Survey Area	Survey Status
	Method Badger surveys will be undertaken within the defined survey area with reference to standard guidance (Harris, Cresswell, and Jefferies (Ref 8.39)) to include the recording of field signs such as latrines, footprints, paths and hair, setts and classification of sett activity and status, i.e. main, annex, subsidiary or outlier in accordance with Roper (Ref 8.71). In addition, the size of the sett in terms of area coverage will be collected and also the number of, and grid reference for each sett entrance. Any incidental badger field signs within the Study Area undertaken during other ecology surveys will be recorded and all survey results reviewed to determine if further surveys such as badger bait marking to establish territories for each main sett, are required.	
Bats – Roosts	No buildings or structures will be removed as a result of the Project. Trees subject to removal, pruning or otherwise likely to be impacted by construction activities within the Project will be surveyed for roosting bats. Method All bat surveys will be undertaken with reference to the current best practice guidance (Ref 8.36). A daytime ground level tree assessment (GLTA) will be carried out on trees within the Study Area identified as likely to be removed or within a surrounding 20 m buffer. The area of expected impact has been derived from applying a series of buffers to the current design (e.g. haul road alignment and surrounding 10 m buffer, 100 m indicative working area around all angle towers). The GLTA will involve a visual inspection from the ground using binoculars. Features with bat suitability will be recorded such as potential entrance/exit points and crevices. Trees will be classified as having no Potential Roost Features (PRFs) or PRFs present. This assessment will be used to inform further survey work. This will further be defined using an indicative category of provisional PRF-I (only suitable for individual bats or very small numbers of bats) or provisional PRF-M (suitable for multiple bats and may be used by a maternity colony) using professional judgement and from ground level only. The extent of the overall survey will be	Ground level tree assessments – July 2026 onwards Aerial inspection – up to three visits July to September 2026 and May to August 2027 Three dusk emergence surveys – July to September 2026 inclusive (with at least two between May and August 2026).

Survey Type	Overview and Survey Area	Survey Status
	recorded but individual records will not be made of trees that do not have PRF. All trees assessed as having provisional PRF-M status based on ground level inspection will be climbed and inspected by a licensed bat ecologist to confirm PRF status. Surveyors will assess potential roost features for their suitability to support roosting bats and record signs of bat activity including droppings, staining, odour or live/dead bats and assign an updated category of PRF-I, PRF-M or features not suitable. Should any tree identified as having potential PRF-M features not be safe to climb, three dusk emergence surveys will be carried out. Surveyors will stand below the tree with a bat detector observing the potential roost feature to record any bats leaving or entering the roost at dusk or dawn. All activity will be recorded including bat passes. Night vision aids will be used. The surveys will commence 15 minutes before sunset and continue for up to two hours after sunset. An EPSML will be required if a bat roost will be disturbed or destroyed as a result of the Project.	
Bats – Activity	Night-time bat walkovers (NBWs) and VP surveys will be targeted in areas of habitat loss which is considered to be of value to foraging and commuting bats. Within areas where reconductoring is proposed surveys will only be undertaken at substation sites. Where new overhead lines are proposed as well as directly impacting suitable bat foraging habitat, the clearance of vegetation has the potential to remove or sever (i.e. fragment) features that are used by bats to move between foraging or roosting areas. Where the clearance of suitable habitat is planned, NBWs shall focus on identifying the features that are of importance to the local bat population for commuting and foraging. The requirement for survey will take account of the likely extent of vegetation clearance at each location, including the retention of suitable connecting habitat within the Project and surrounding landscape, such as hedgerows and watercourses. Due to the scale of the Project and to achieve a proportionate approach to survey the location of activity, surveys have been selected using a desk-based assessment of suitability. The desk-based approach has made use of aerial photography and local records for bats.	June to October 2026 inclusive and May 2027.

Survey Type	Overview and Survey Area	Survey Status
	Method All bat surveys will be undertaken with reference to the current best practice guidance (Ref 8.36). Night-time bat walkover (NBW) NBW surveys will be carried out in spring (May), summer (June/July/August) and autumn (September/October). The NBW will be carried out by two surveyors, one of which will be suitably experienced in leading bat activity surveys and hold a Natural England bat survey licence or have a suitable level of experience. The surveyors will walk a pre-determined route using a full spectrum bat detector to record bat species. Following the Bat Conservation Trust good practice guidelines (Ref 8.36), surveyors will commence the survey at sunset and will stand on potential flight lines close to potential roost features where present (i.e. a woodland block or line of trees). Surveyors will remain stationary observing these potential roost features for between 30 minutes to an hour after sunset, observing behaviour and making acoustic recordings of bat activity. Surveyors will then continue walking the pre-determined transect route and complete the survey 2–3 hours after sunset (the transect route would be walked at least once). The surveyors may stop or take a detour to observe bat behaviour; any changes to the pre-determined route must clearly be marked. Data will be recorded on the number of bats, species, location and time of activity, type of activity (foraging/commuting/emerging) and direction of travel, etc. Vantage point surveys A dusk survey will be carried out in spring (May), summer (June/July/August) and autumn (September/October) 2026 at required VP locations. The survey will be carried out by two surveyors, one of which will be suitably experienced in leading bat activity surveys and/or hold a Natural England bat survey licence. Surveys should be 60–90 minutes in duration, commencing at sunset. The aim of the VP survey is to track the route of each bat that crosses the feature of interest, in particular its horizontal and vertical distance from the habitat feature. The information to be recorded is:	

Survey Type	Overview and Survey Area	Survey Status
	• a record number for each observation made; • the precise (ideally to the second) time of the observation; • a call/track identifier to allow the observation to be paired with the relevant sound file; • the approximate height of the bat above the feature of interest to the nearest metre; • the side of the feature that the bat crossed on, using compass bearings; • the direction the bat crossed, using compass bearings; and • weather variables and other comments. Automated bat detector surveys Automatic static bat detectors will be used to record foraging and commuting activity at the NBW and VP locations. The locations of automated bat detector deployment will take into account the habitats likely to be impacted by the Project, and the need to identify important habitat features within the survey area. Each detector will be deployed in accordance with the current survey guidelines which will be determined following initial ecology surveys and desk exercise as the frequency and length of deployment time depends on the value of foraging and commuting habitat and anticipated impacts. Deployment will be between May and October and as a minimum cover spring, summer and autumn (spring visits in 2027). The static bat detector will be set to start recording 30 minutes before sunset and continue for 30 minutes after sunrise and be positioned on hedgerows/trees other suitable location but not placed on the ground.	
Hazel Dormouse (<i>Muscardinus avellanarius</i>)	There are no existing records of hazel dormouse within the Study Area within the last ten years. There are no previous granted Natural England EPSMLs for hazel dormice within the draft Order Limits. Dormice are not abundant within the counties of Lincolnshire, Leicestershire and North Northamptonshire. They were reintroduced in Lincolnshire (one reintroduction site) in 2002 and have been confirmed as being present in 2020. The reintroduction site is located more than 40 km from the draft Order Limits.	Requirement for surveys has been scoped out.

Survey Type	Overview and Survey Area	Survey Status
	Hazel dormice have also been reintroduced in Leicestershire (Bradgate Park Trust), recorded in 2025. This reintroduction site is more than 15 km from the draft Order Limits). There are two known dormice reintroduction sites in North Northamptonshire: Rockingham Forest and Brampton Wood. These reintroduction sites are more than 25 km from the draft Order Limits. Dormice can disperse up to 1 km from reintroduction sites if there is suitable habitat. Given the distances from the above reintroduction sites and the draft Order Limits, hazel dormouse is assumed to be absent within the Study Area and will not be considered further in the assessment.	
Otter (<i>Lutra lutra</i>)	Survey will focus on the identification of otter holt and resting sites within terrestrial habitat areas that are located within or adjacent to the Project. Any watercourses within the Study Area that provide suitable otter habitat and that may be impacted temporarily or permanently by the Project will be surveyed for otter and otter holts. A minimum length of 500 m of any watercourse will be surveyed and at least 200 m from the Study Area as the potential distance for disturbance of otter may also extend up to 200 m from an impact (Ref 8.42). Up to 100 m of suitable terrestrial habitat inland from a watercourse will also be surveyed for the presence of otter holts, though most are located closer to the watercourse (Ref 8.42). Method Field survey will be undertaken in accordance with Chanin (Ref 8.42) and Lenton <i>et al.</i> (Ref 8.72). Surveys will comprise an initial appraisal of habitat suitability, followed by a survey for otter signs and potential holt sites. Where holts are identified then further detailed monitoring may be required to determine the likely presence of otter and mitigation required.	July to September 2026.
Water Vole (<i>Arvicola amphibius</i>)	Surveys to assess presence or absence of water vole would be undertaken on all watercourses or water bodies providing suitable water vole habitat within the Study Area that may be impacted temporarily or permanently by the Project, and where physical works come within 5 m of the top of bank of any watercourse or water	Two surveys between July and September 2026.

Survey Type	Overview and Survey Area	Survey Status
	body. A minimum length of 500 m of any watercourse will be surveyed extending 50 m from the Study Area where applicable. Surveys will inform the mitigation required and whether a displacement licence from Natural England is required for any water vole populations that may be impacted. Two survey visits for assessing water vole habitat suitability and presence or absence would be undertaken on any watercourse to be impacted by the Project. Method All water vole surveys will be undertaken with reference to the current best practice (Ref 8.73).	
Reptiles	Reptile surveys will be undertaken where suitable reptiles habitat has been identified within the proposed construction footprint of permanent and temporary works where large areas of habitat loss is proposed such as substation locations, compounds, haul roads and tower base locations. Suitable habitat to survey will include long/rough grassland for example at field edges or verges and hedgerows. To determine the presence/likely absence of reptiles within a defined habitat patch, a minimum of seven visits will be conducted during the optimal survey period within optimal survey conditions. Where presence of reptiles is established and habitat is to be permanently lost with no scope for local displacement, a further 13 visits (totalling 20) will be conducted in order to inform the population size assessment in order to inform a translocation strategy. Visits should be a minimum of 48 hours apart. Method Reptile surveys will be undertaken with reference to the current best practice guidance: • Froglife Advice Sheet 10: Reptile Survey (Ref 8.38); • Froglife Reptile survey booklet (Ref 8.74); and • Herpetofauna Workers Manual (Ref 8.75). Details including refugia number, life stages, and sex (if possible) of reptiles to be recorded. Locations of potential reptile hibernation sites, or refugia such as log or rubble piles should also be noted.	Refugia deployment – August 2026. Surveys in September/October 2026 (where required).

Survey Type	Overview and Survey Area	Survey Status
Invertebrates – Terrestrial	Biodiversity hotspots identified through the desk study and the location of notable invertebrate records will be used to identify areas of potential high quality invertebrate habitat within the draft Order Limits for Stage 2 Consultation. The requirement for further surveys will be planned based upon the extent and quality of habitat present and then confirmed through field survey. The level of survey effort will be proportionate to the anticipated extent of potential impacts, and opportunities to minimise habitat losses will be taken into account when determining any need for follow on surveys. Habitats to be surveyed may include flower-rich grassland, mature and veteran trees and early successional habitats. Method An initial appraisal of invertebrate habitat will be made in accordance with Natural England Guidance (Ref 8.76) and Kirby (Ref 8.77) and where necessary sampling of invertebrate fauna will be undertaken where there is permanent loss of high-quality invertebrate habitat. Survey methods will be determined based on habitat to be surveyed and likely target species as determined by a specialist and in accordance with Natural England Guidance (Ref 8.76).	Autumn 2026 and spring 2027 – exact timing dependent on the target species.
Invertebrates – Aquatic	If any watercourses are to be permanently impacted, for example by culverting or diverting, aquatic invertebrate surveys will be undertaken to identify the presence of SPI. This includes surveys for white-clawed crayfish (<i>Austropotamobius pallipes</i>) if habitat is suitable or there is hydrological connection to known sites indicated on the National Biodiversity Network Atlas (Ref 8.78), Habitat appraisal as above for terrestrial invertebrates will also be used to determine the requirement for aquatic invertebrate surveys. Method All surveys for aquatic invertebrates should be carried out in accordance with the guidance outlined below: • BS EN ISO 10870:2012 (Ref 8.79); • Environment Agency’s standard macroinvertebrate sampling and analysis manual – BT001 (Ref 8.80); and	July to October 2026 (with optimum time for white-clawed crayfish being July to September). (Full survey period is May to October).

Survey Type	Overview and Survey Area	Survey Status
	white-clawed crayfish surveys must be undertaken by licensed surveyors in accordance with the following guidance: Peay (Ref 8.81). Survey sample areas will cover 100 m within a 500 m stretch of watercourse.	
Fish Surveys	Affected and unavoidable watercourses or ditches within the draft Order Limits. Targeted field surveys, in conjunction with a desk study and consultation with the Environment Agency will be undertaken on watercourses and/or ditches of value to fish.	Surveys will be completed in 2026/2027.
Aquatic Habitat Surveys	Affected and unavoidable watercourses or ditches within the draft Order Limits. Targeted Modular River Surveys will be undertaken to inform the BNG assessment where required.	Surveys will be completed in 2026/2027.

Further data to be collected to inform the ES

8.5.13 In addition to the data collected for this non-statutory DES, the ES will also be informed by the following additional third-party data and data obtained through surveys:

- Environment Agency – results of Environment Agency freshwater river macroinvertebrate, white-clawed crayfish, aquatic macrophyte⁸ and fish survey data and information relating to monitoring locations within or close to the Study Area;
- further ecological baseline survey data – as outlined in **Table 8.3**, ecological surveys will continue in 2026 and in the 2027 survey season and will inform the environmental baseline within the ES; and
- updated LERC data searches (as required) to capture relevant records since the original data searches.

Impact Assessment Methodology

8.5.14 The following section summarises the methods used for the ecology assessment in this chapter and the assessment method that will be followed in the ES. This builds on the general assessment method presented in **Chapter 5 EIA Approach and Methodology**.

8.5.15 The impact assessment will be undertaken with best practice guidance for EclA, issued by CIEEM, Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Freshwater, Coastal and Marine (Ref 8.8). The principal steps involved in the approach are summarised below:

⁸ Aquatic plants that are large enough to be seen with the naked eye.

- Ecological features that are both present and might be affected by the Project are identified through a combination of targeted desk-based study and field survey work to determine the relevant baseline conditions.
- The importance of the identified ecological features is evaluated, placing their relative biodiversity and nature conservation value into geographic context, which is then used to define the relevant ecological features that need to be considered further.
- The changes or perturbations predicted to result as a consequence of the Project (i.e. the potential impacts) and which could potentially affect relevant ecological features are identified and their nature described. Established best-practice, legislative requirements, or other incorporated design measures to minimise or avoid impacts, are also described and are taken into account.
- The likely significant effects (beneficial or adverse) on relevant ecological features are then assessed and, where possible, quantified.
- Measures to avoid or reduce any likely significant effects, if possible, are then developed in conjunction with other elements of the design (including mitigation for other environmental disciplines) and, if necessary, measures to compensate for likely significant effects on features of nature conservation importance are also included.
- The residual effects of the Project are reported.
- The potential for delivering ecological enhancements is considered.

Sensitivity/importance of ecological features

- 8.5.16 The CIEEM guidelines (Ref 8.8) make it clear that there is no need to:
- ‘...carry out detailed assessment of ecological features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable.’*
- 8.5.17 Therefore, it is not necessary for the assessment to address all habitats and species with potential to occur in the relevant Study Area and instead the focus is on those that are relevant, i.e. ecological features that are considered to be important and potentially affected by the Project. This does not mean that efforts will not be made to safeguard wider biodiversity.
- 8.5.18 To support a focused assessment, there is a need to determine the scale at which the relevant ecological features identified through the desk study and field surveys undertaken for the Project are of value. The value of each relevant ecological feature has been defined with reference to the geographical level at which it matters.
- 8.5.19 The frames of reference that will be used for the assessment, based on Section 4.7 of the CIEEM guidelines (Ref 8.8) are:
- International (i.e. Ramsar sites, SACs, SPAs), normally within the geographic area of Europe;
 - UK or national (Great Britain, but considering the potential for certain ecological features to be more notable (of higher value) in England, with context relative to Great Britain as a whole);
 - Regional (East Midlands and East Anglia);

- County (Lincolnshire, Leicestershire and Northamptonshire);
- District (Town and parish areas, e.g. South Holland, South Kesteven, Melton, Harborough);
- Local (ecological features that do not meet criteria for valuation at a District or higher level, but that have sufficient value to merit retention or mitigation); and
- Site (common and widespread ecological features, the priority of which is low enough that they do not require retention or mitigation at the relevant location to otherwise maintain a favourable nature conservation status).

- 8.5.20 The importance of species populations is determined on the basis of their size, recognised status such as published lists of species of conservation concern, inclusion within Local Nature Recovery Strategies and legal protection. For example, bird populations exceeding 1% of published information on biogeographic populations are considered to be of international importance; those exceeding 1% of published data for national populations are considered to be of national importance.
- 8.5.21 In assigning importance to species populations, it is important to consider the status of the species in terms of any legal protection. However, it is also important to consider other factors such as its distribution, rarity, population trends, and the size of the population that would be affected. For example, whilst great crested newt is afforded European Protected Species (EPS) status under the relevant legislation and therefore conservation of the species is of significance at an international level, this does not mean that every population of great crested newt is internationally important. It is important to consider each population in its context. Therefore, in assigning values to species, the geographic scale at which they are important has been considered. The assessments of value rely on the professional opinion and judgment of suitably experienced ecologists.
- 8.5.22 Plant communities will be assessed in terms of their intrinsic importance and for their importance as a resource for protected species whose habitat is also specifically protected. Also species of conservation concern which may be associated with a particular habitat will be considered, for example white-clawed crayfish in river corridors.
- 8.5.23 Due regard will be paid to the legal protection afforded to species during the development of mitigation and compensation measures should they be required to be implemented for the Project. For EPS there is a requirement that the Project should not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 8.5.24 Assessing the value of features requires consideration of both existing and future predicted baseline conditions. Therefore, the description and valuation of ecological features takes account of any likely changes, such as trends in the population size or distribution of species, likely changes to the extent of habitats, and the effects of other proposed developments or land use changes.
- 8.5.25 Within the non-statutory DES where there are uncertainties due to the ongoing nature of survey works a precautionary approach to the valuation of ecological features has been adopted and a reasonable worst-case 'up to' importance category has been utilised. This precautionary approach will allow the likely significant ecological effects of the Project to be identified, with importance valuations updated in the ES when further information is available to demonstrate a lower importance category should be utilised.

- 8.5.26 All ecological features of local value, and above, where there is potential for the Project to impact them directly or indirectly, will be taken forward to the impact assessment and will be the important ecological features for the purposes of the EclA.

Significance methodology

- 8.5.27 In line with Paragraph 1.21 of the CIEEM guidelines (Ref 8.8), the terminology used within the EclA draws a clear distinction between the term's impact and effect. For the purposes of this chapter these terms are defined as follows:

'Impact – Actions resulting in changes to an ecological feature. For example, the construction activities of a development removing a hedgerow.'

'Effect – Outcome to an ecological feature from an impact. For example, the effects on a dormouse population from loss of a hedgerow.'

- 8.5.28 When describing potential impacts (and where relevant the resultant effects) consideration is given to the following characteristics likely to influence this:

- Positive or negative (beneficial or adverse), i.e. the change is likely to be in accordance with nature conservation objectives and policy and is that change:
 - positive (beneficial) – a change that improves the quality of the environment, or halts and slows an existing decline in quality, e.g. increasing the extent of habitat of conservation value; or
 - negative (adverse) – a change that reduces the quality of the environment, e.g. destruction of habitat.
- Spatial extent – the spatial or geographical area or distance over which the impact or effect may occur under a suitably representative range of conditions.
- Magnitude – the size, amount or intensity and volume of an impact. This is described on a quantitative basis where possible.
- Duration – the time over which an impact is expected to last prior to recovery or replacement of the resource or feature. Consideration has been given to how this duration relates to relevant ecological characteristics such as species' lifecycle. However, it is not always appropriate to report the duration of impacts in these terms. The duration of an effect may be longer than the duration of an activity or impact.
- Timing and frequency – i.e. consideration of the point at which the impact occurs in relation to critical life-stages or seasons.
- Reversibility – is the impact temporary or permanent? A temporary impact is one from which recovery is possible or for which effective mitigation is both possible and enforceable. A permanent effect is one from which recovery is not possible or cannot be achieved within a reasonable timescale (in the context of the feature being assessed).

- 8.5.29 Inter-project cumulative effects result from the combined impacts of multiple developments on a feature and are considered as described in **Chapter 19 Cumulative Effects**, of this non-statutory DES. For relevant ecological features, intra-project effects (which occur when multiple in-scheme impacts, for example, combined noise, air quality and lighting impacts, affect the same sensitive feature) are considered within this chapter.

Significance of effects

- 8.5.30 For each ecological feature only those characteristics relevant to understanding the ecological effect of the Project and determining the significance are described. The determination of the significance of effects is made based on the predicted effect on the structure and function, or conservation status, of relevant ecological features, as follows:
- not significant – no effect on structure and function or conservation status; or
 - significant – structure and function, or conservation status is affected.
- 8.5.31 Paragraph 5.24 of the CIEEM guidelines (Ref 8.8) states that:
- ‘...For the purpose of EclA, ‘significant effect’ is an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ (explained in Chapter 4) or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local.’*
- 8.5.32 Paragraphs 5.25 and 5.26 of the CIEEM guidelines (Ref 8.8) state that:
- ‘A significant effect is simply an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project. A significant effect is a positive or negative ecological effect that should be given weight in judging whether to authorise a project: it can influence whether permission is given or refused and, if given, whether the effect is important enough to warrant conditions, restrictions or further requirements such as monitoring. A significant effect does not necessarily equate to an effect so severe that consent for the project should be refused planning permission. For example, many projects with significant negative ecological effects have been lawfully permitted following EIA procedures.*
- In broad terms, significant effects encompass impacts on the structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).’*
- 8.5.33 Using this information and judgment, it is determined whether the effects will be significant or not on the structure and function (of site or ecosystems) or conservation status (of habitats and/or species) of each ecological feature and the effect significance is determined at the appropriate geographical scale.
- 8.5.34 There are a range of approaches for determining the significance of effects on ecological features. The CIEEM guidelines (Ref 8.8) recommend the avoidance of the use of the matrix approach for categorisation of effect (i.e. major, moderate and minor significant effects), therefore the assessment has been undertaken in accordance with the CIEEM approach. The CIEEM assessment conclusions (e.g. significant adverse effect at the County level) are then translated into the corresponding effect outcome categories presented in **Chapter 5 EIA Approach and Methodology**, utilising the translation set out in **Table 8.4**. This approach remains consistent with the CIEEM guidelines (Ref 8.8). As a rule, major and moderate effects (effects at District level and above in the CIEEM method) are considered to be significant, whilst minor and negligible effects (effects at Local level or below in the CIEEM method) are considered to be not significant. However, professional judgement can also be applied when concluding whether an effect is significant or

not, including taking account of whether the effect is permanent or temporary, its duration and frequency, whether it is reversible, and/or its likelihood of occurrence.

Table 8.4 Relating CIEEM assessment terms to those used in Chapter 5 EIA Approach and Methodology

Effect Classification Terminology Used in Chapter 5	Equivalent CIEEM assessment
Major beneficial	Beneficial effect on structure/function or conservation status at a regional, national or international level
Moderate beneficial	Beneficial effect on structure/function or conservation status at a county and district level
Minor beneficial	Beneficial effect on structure/function or conservation status at local level
Negligible	No effect on structure/function or conservation status
Minor adverse	Adverse effect on structure/function or conservation status at local level
Moderate adverse	Adverse effect on structure/function or conservation status at county or district level
Major adverse	Adverse effect on structure/function or conservation status at regional, national or international level

Assessment Assumptions and Limitations

- 8.5.35 This assessment has been undertaken based on preliminary design information for the Project as described within **Chapter 4 Description of the Project**. This information is likely to develop further in response to ongoing design, assessment and stakeholder feedback, and will be updated for the ES as the design evolves.
- 8.5.36 Ecology surveys are ongoing and will continue during 2026/2027, therefore the importance categories assigned are preliminary and may be updated in the ES once the surveys are completed and full data are available.
- 8.5.37 As set out in **Chapter 4 Description of the Project**, the following assumptions are taken into consideration for the ecology assessment:
- At each proposed substation location, it assumed that all vegetation would be cleared from the proposed permanent site area and any associated working areas.
 - Within areas where reconductoring only is proposed the works would comprise replacement of existing conductors and associated fittings. Tower replacement is considered unlikely but where required any replacement towers would be provided in similar locations to existing towers and of similar height and appearance.

- All works are to be undertaken in accordance with the measures included in **Appendix 4A Draft Outline Code of Construction Practice** of this non-statutory DES.
- Construction of the Project would commence in 2030 and it is expected main construction works would continue through to 2035 (five years) including any reinstatement required.
- Works at substations would occur for much of the four-year period but works in any given area along the overhead route would be transient and of much shorter duration.
- Existing watercourse crossing points will be utilised as far as practicable.
- Large or sensitive watercourses, for example those designated as Main Rivers, and those with WFD status, would be crossed by the temporary haul road using temporary clear span bridges to reduce the effect on watercourses, their banks, and water quality.
- Wherever practicable appropriate stand-off distances will be applied to sensitive receptors including designated sites and areas of higher importance for habitats and/or species. For ancient woodland and watercourses, the Project will aim to maintain a minimum 15 m buffer, to avoid impacts wherever practicable.

- 8.5.38 The assessment of impacts (and resultant effects upon) ecological features is based upon the expected extents of vegetation clearance set out in Section 4.7 of **Chapter 4 Description of the Project**, and the current design. As there is still some potential for further minor amendments to the scheme design prior to development consent order (DCO) submission, and survey work is ongoing, the assessments made at this stage are indicative and precautionary. Once the surveys are complete and the design finalised it will be possible in some cases to refine the assessment and commit to not removing vegetation in certain areas, where this would avoid a potentially significant effect.
- 8.5.39 Suitably sized stand-off distances have been applied to the design of the Project to protect important habitat features during construction, including woodland (minimum 15 m), watercourses (minimum 15 m from top of the bank), and hedgerows (minimum 5 m), wherever practicable.
- 8.5.40 As detailed in **Chapter 14 Air Quality**, the preliminary air quality assessment focuses on the local air quality impacts associated with the construction phase. No significant effects on air quality are likely to occur during operation or maintenance. Potential air quality effects on ecological features arising from the operation and maintenance of the Project have therefore been scoped out and no significant effects are anticipated.
- 8.5.41 **Chapter 14 Air Quality** presents a preliminary assessment of construction dust on relevant ecological sites, located within the draft Order Limits and up to 50 m from them, and up to 50 m from the route(s) used by construction vehicles on the public highway, up to 500 m from a construction site entrance. This has been used to inform the preliminary assessment of potential ecological effects presented in this chapter (i.e. **Chapter 8 Ecology and Biodiversity**).
- 8.5.42 **Chapter 14 Air Quality** presents a preliminary assessment of construction traffic emissions on relevant ecological sites. Available construction traffic data have been reviewed as part of the preliminary assessment but detailed construction traffic modelling and baseline surveys have not been undertaken at the time of writing.

Initial Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK) Development Control screening thresholds are set out and considered in **Chapter 14 Air Quality**. Potential air quality impacts from construction vehicle emissions will be quantitatively assessed and reported in the ES once further details are available, where the IAQM and EPUK screening thresholds have been exceeded.

- 8.5.43 The key parameters and assumptions will be reviewed based on the design presented in the application for development consent and, where required, updated, or refined. The ES will present the final key parameters and assumptions used within that assessment, particularly drawing attention to any areas that may have changed from what is presented in this preliminary assessment.

Biodiversity Net Gain

- 8.5.44 BNG is an approach to development that makes sure that habitats for wildlife are left in a measurably better state than they were before the development by increasing the overall biodiversity value of a site.
- 8.5.45 Following the government's consultation on BNG for Nationally Significant Infrastructure Projects (NSIPs) held in 2025 (Ref 8.82) it has been confirmed that mandatory BNG will come into effect on 2 November 2026. The Project will therefore be required to deliver at least 10% BNG and will comply with Defra guidance on BNG for NSIPs (Ref 8.95).
- 8.5.46 National Grid already has already committed to achieving 10% Net Gain in Environmental value including, as a minimum, 10% BNG across all its construction projects, including this Project.
- 8.5.47 A BNG assessment will be undertaken and submitted with the application for development consent, and will follow industry good practice methods comprising:
- Nationally Significant Infrastructure Projects: Biodiversity Net Gain Statement for Energy (Ref 8.10);
 - Biodiversity Net Gain: Good Practice Principles for Development (Ref 8.9);
 - Statutory Biodiversity Metric Tools and Guides, 2024 (Ref 8.63) (this being the most recent version at the time of undertaking the preliminary assessment); and
 - Defra guidance on biodiversity net gain for nationally significant infrastructure projects (Ref 8.95).

Habitats Regulations Assessment

- 8.5.48 The Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations') (Ref 8.83), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Ref 8.84) provide for the designation of sites in England that are important for protecting certain species and habitats of European (i.e. International) importance. These sites are in Habitats Regulations Assessment (HRA) terminology known as 'European sites' or 'Habitats sites' and form part of a network of protected sites across the UK known as the 'National Site Network'. These sites include: SACs, candidate SACs (cSACs) and SPAs.
- 8.5.49 Government policy set out within the Overarching National Policy Statement for Energy (EN-1) (Ref 8.85) also requires the following to be protected as if they are designated European sites:

- potential SPAs and possible SACs;
- listed or proposed Ramsar sites; and
- sites identified, or required, as compensatory measures for adverse effects on SPAs, SACs, and any of the other sites covered by this paragraph.

- 8.5.50 Within the EIA this collection of sites are referred to as ‘statutory designated sites of international nature conservation importance’.
- 8.5.51 The Habitats Regulations establish several stages of assessment to determine if a plan or project may affect the protected features of a European site before a competent authority decides whether to undertake, permit or authorise it.
- 8.5.52 Under Regulation 63 of the Habitats Regulations, before a competent authority decides to undertake, or give any consent, permission or other authorisation for, a plan or project which is likely to have a significant effect on a Habitats site (either alone or in combination with other plans or projects), and which is not directly connected with or necessary to the management of the site, it must make an appropriate assessment of the implications of the plan or project for the site in view of that site’s conservation objectives. For the Project, which is a nationally significant infrastructure project (NSIP) requiring a Development Consent Order (DCO) under the Planning Act 2008, the relevant Secretary of State is the competent authority for the purposes of the Habitats Regulations. The findings and conclusions on nature conservation issues reported by the appointed Examining Authority will assist the Secretary of State in performing their duties under the Habitats Regulations.
- 8.5.53 Although the emerging preferred corridor for the new overhead line has avoided direct impacts on European sites, there is the potential for impacts on birds associated with European sites that are located in the region. The Project includes existing towers within the Upper Nene Valley Gravel Pits SPA and Ramsar site and is located adjacent to Grendon Substation, which includes the tie in point of the reconductoring works proposed to the existing overhead line.
- 8.5.54 A preliminary HRA has been undertaken and is included as **Appendix 8A Habitats Regulations Assessment Stage 1: Screening Report**. An updated HRA Stage 1: Screening for Likely Significant Effects and, if required, information to inform Stage 2: Appropriate Assessment will be produced in line with the Habitats Regulations Ref 8.83 (and the Planning Inspectorate’s advice note on HRA Ref 8.86) and submitted with the application for development consent.
- 8.5.55 The ES and HRA assessments will be appropriately co-ordinated.

District Level Licence (DLL)

- 8.5.56 The DLL is an alternative approach to mitigation licensing for development that could affect great crested newt. The approach aims to increase the number of great crested newt by providing new/better habitats in targeted areas to benefit their wider population, rather than mitigation being located where the potential impacts occur.
- 8.5.57 The DLL approach includes strategic area assessment, the identification of risk zones, and the use of strategic opportunity area maps. The DLL approach is not available in all locations in the UK. There are currently DLL schemes in place for Northamptonshire (via NatureSpace Partnership) and Leicestershire (via Natural England). Where a DLL scheme is in place, developers can make a financial contribution to strategic habitat compensation (documented within an Impact

Assessment and Conservation Payment Certificate) instead of applying for a separate licence. This avoids the need to conduct detailed great crested newt surveys (i.e. population size estimates) and means that great crested newt compensatory provision does not need to be considered in an ES.

- 8.5.58 There are three risk categories under the DLL schemes (red, amber, and green) and DLL is only available for development within amber and green zones. The sections of the draft Order Limits covered by the DLL fall within green and amber zones therefore use of the DLL will likely be available as an option for the Project.
- 8.5.59 Discussions with stakeholders are ongoing regarding use of the DLL in sections of the draft Order Limits where it is available. In parallel National Grid is discussing with Natural England the potential to obtain a licence covering the Project as a whole, based on a proportionate level of baseline survey. The ecology assessment has been, and will continue to be, informed by consultation and engagement with relevant stakeholders. Further details of these discussions will be provided in the ES.

8.6 Baseline Conditions

Existing Baseline

- 8.6.1 The Project has been divided into five Sections as described within **Chapter 4 Description of the Project** and shown on **Figure 1.2 Draft Order Limits**. The Sections are defined by the geographical alignment of the draft Order Limits and the administrative boundaries of the local authorities. The following section outlines the ecology baseline in each Section.

Statutory designated sites of international nature conservation importance

- 8.6.2 There are no SACs with bats as the qualifying feature within 30 km of the draft Order Limits.
- 8.6.3 There are eight statutory designated sites of international nature conservation importance within the 30 km Study Area with birds that are listed as qualifying features: Upper Nene Valley Gravel Pits SPA and Ramsar site; Rutland Water SPA and Ramsar site; Nene Washes SPA and Ramsar site; the Wash SPA and Ramsar site.
- 8.6.4 A total of seven statutory designated sites of international nature conservation importance are located within the 10 km Study Area, of which two (Upper Nene Valley Gravel Pits SPA and Ramsar site) are located within the draft Order Limits.
- 8.6.5 All identified statutory designated sites of international nature conservation importance within the Study Area are shown on **Figure 8.1 Statutory Designated Sites of International Nature Conservation Importance** and are listed in **Table 8.5**. Each site is listed once in **Table 8.5** based on the route Section it is nearest to. These sites are each of international importance.
- 8.6.6 An HRA screening exercise (**Appendix 8A Habitats Regulations Assessment Stage 1: Screening Report**) undertaken in parallel to this non-statutory DES has identified that the potential for likely significant effects on statutory designated sites of international nature conservation importance (i.e. European sites) is limited to seven sites, namely The Wash SPA/Ramsar site; the Wash and North Norfolk Coast SAC;

the Upper Nene Valley Gravel Pits SPA/Ramsar site and Rutland Water SPA/Ramsar site. Therefore, the remaining sites are not considered further within this chapter.

Table 8.5 Statutory designated sites of international nature conservation importance relevant to the assessment

Site	Designation	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point
Section 1 - South Holland District			
The Wash	SPA	Annex I and/or migratory species: • Bewick's swan (<i>Cygnus columbianus bewickii</i>) (non-breeding); • pink-footed goose (<i>Anser brachyrhynchus</i>) (non-breeding); • dark-bellied brent goose (<i>Branta bernicla</i>) (non-breeding); • common shelduck (<i>Tadorna tadorna</i>) (non-breeding); • Eurasian wigeon (<i>Mareca penelope</i>) (non-breeding); • gadwall (<i>Anas strepera</i>) (non-breeding); • northern pintail (<i>Anas acuta</i>) (non-breeding); • black (common) scoter (<i>Melanitta nigra</i>) (non-breeding); • common goldeneye (<i>Bucephala clangula</i>) (non-breeding); • Eurasian oystercatcher (<i>Haematopus ostralegus</i>) (non-breeding); • grey plover (<i>Pluvialis squatarola</i>) (non-breeding); • red knot (<i>Calidris canutus</i>) (non-breeding); • sanderling (<i>Calidris alba</i>) (non-breeding); • dunlin (<i>Calidris alpina</i>) (non-breeding); • black-tailed godwit (<i>Limosa islandica</i>) (non-breeding); • Eurasian curlew (<i>Numenius arquata</i>) (non-breeding);	8.7

Site	Designation	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point
		• common redshank (<i>Tringa tetanus</i>) (non-breeding); • ruddy turnstone (<i>Arenaria interpres</i>) (non-breeding); • common tern (<i>Sterna hirundo</i>) (breeding); and • little tern (<i>Sterna albifrons</i>) (breeding). Waterbird assemblage	
The Wash	Ramsar site	• Criterion 1 – Extensive saltmarshes, major intertidal banks of sand and mud, shallow water and deep channels; • Criterion 3 – Interrelationship of component habitats; • Criterion 5 – Waterfowl assemblage; and • Criterion 6 – Internationally important population of: — pink-footed goose; — dark-bellied brent goose; — common shelduck; — northern pintail; — Eurasian oystercatcher; — grey plover; — red knot; — sanderling; — dunlin; — bar-tailed godwit; — Eurasian curlew; — common redshank; and — ruddy turnstone.	8.7
The Wash and North Norfolk Coast SAC	SAC	Annex I habitat: • sandbanks which are slightly covered by sea water all the time; • mudflats and sandflats not covered by seawater at low tide;	8.7

Site	Designation	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point
		- large shallow inlets and bays; - reefs; - Salicornia and other annuals colonising mud and sand; - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>); and - Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>). Annex II species: - harbour seal (<i>Phoca vitulina</i>).	
Nene Washes	SPA	Annex II/wintering species: - northern pintail; - northern shoveler (<i>Anas clypeata</i>); - common teal (<i>Anas crecca</i>); - wigeon; - garganey (<i>Anas querquedula</i>); - gadwall; - Bewick's swan; and - black-tailed godwit.	26.5
Nene Washes	Ramsar site	Criterion 6: International important population of: Bewick's swan.	26.5
Section 2 - South Kesteven District			
Grimsthorpe	SAC	Annex I habitat: - semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>). Annex II species: - early gentian (<i>Gentianella anglica</i>).	2.6
Baston Fen	SAC	Annex II species: spined loach (<i>Cobitis taenia</i>).	8.2
Section 3 - Melton Borough			
Rutland Water	SPA	Annex II and/or wintering species: - northern shoveler; - common teal; - wigeon;	10.9

Site	Designation	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point
		• gadwall; • tufted duck (<i>Aythya fuligula</i>); • goldeneye; • mute swan (<i>Cygnus olor</i>); • Eurasian coot (<i>Fulica atra</i>); • goosander (<i>Mergus merganser</i>); and • great crested grebe (<i>Podiceps cristatus</i>). Internationally important assemblage of wintering birds	
Rutland Water	Ramsar site	Criterion 5: International assemblage of wintering waterfowl Criterion 6: International important population of: • gadwall; and • northern shoveler.	10.9
Section 4 - Harborough District – none within Study Area			
Section 5 - Northamptonshire			
Upper Nene Valley Gravel Pits	SPA	Annex I/II and/or wintering species: • northern shoveler; • wigeon; • mallard (<i>Anas platyrhynchos</i>); • gadwall; • common pochard (<i>Aythya ferina</i>); • tufted duck; • Eurasian bittern (<i>Botaurus stellaris</i>); • Eurasian coot; • cormorant (<i>Phalacrocorax carbo</i>); • golden plover (<i>Pluvialis apricaria</i>); • great crested grebe; and • northern lapwing (<i>Vanellus vanellus</i>).	Within draft Order Limits
Upper Nene Valley Gravel Pits	Ramsar site	• Criterion 5: Regularly supports 20,000 or more waterbirds.	Within draft Order Limits

Site	Designation	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point
		• Criterion 6: Regularly supports 1% of individuals in populations of following species in any season: – mute swan; and – gadwall. • Annex I and/or wintering species: – Eurasian bittern; – golden plover; – wigeon; – northern shoveler; – pochard; – tufted duck; – great crested grebe; – cormorant; and – Eurasian coot.	

Statutory designated sites of national nature conservation importance

- 8.6.7 Thirteen SSSIs designated for biological features, each of which is of national importance, are located within the 2 km Study Area. In addition, there are an additional two SSSIs (River Eye SSSI and Swinstead Valley SSSI), each of national importance, located within the extended 5 km Study Area for hydrological links and/or aquatic receptors. Of these sites, two (Upper Nene Valley Gravel Pits SSSI and Birch Spinney and Mawsley Marsh SSSI) are located within the draft Order Limits.
- 8.6.8 Seven SSSIs have been identified with potential impact pathways to the Project (i.e. a pathway between the source of the impact and the SSSI by which the implementation of the Project could lead to an effect on the SSSI) and are listed in **Table 8.6**.

Table 8.6 Statutory designated sites of national nature conservation importance relevant to the assessment

Site	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point	Potential Impact Pathway
Section 1 - South Holland District			
Surfleet Lows SSSI	One of few remaining wet alluvial meadows in	0.6	No direct impacts.

Site	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point	Potential Impact Pathway
	Lincolnshire supporting over 50 species of birds.		Indirect impacts: construction pollution (e.g. air quality/dust) – scoped out due to distance. Supports diverse non-breeding birds – draft Order Limits may be functionally linked.

Section 2 - South Kesteven District

Dunsby Wood SSSI	One of a group of ancient semi-natural woodland lying on Kesteven Plateau. An example of wet ash–maple (<i>Fraxinus/Acer</i>) (woodland with over 120 species of fungi recorded.	Directly adjoins the draft Order Limits	Potential for direct impacts: construction pollution (e.g. noise/vibration/air quality/dust/light/visual), habitat loss, habitat degradation, fragmentation. Indirect: construction pollution (e.g. air quality/dust, noise, vibration, light). Potential for hydrological connectivity to draft Order Limits.
Swinstead Valley SSSI	A fine example of calcareous grassland developed on soils derived from Eastern Jurassic Limestone.	1.1	No direct impacts. Potential for indirect impacts: hydrological connectivity to draft Order Limits.

Section 3 - Melton Borough

River Eye SSSI	An exceptional example of a semi-natural lowland river and is representative of clay streams in central and southern England.	3.0	No direct impacts. Potential for indirect impacts: hydrological connectivity to draft Order Limits.
Twenty Acre Piece SSSI	Includes some of the best examples of neutral marsh in Leicestershire. The mix of habitats present provides	Directly adjoins the draft Order Limits	Potential for direct impacts: construction pollution (e.g. noise/vibration/air

Site	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point	Potential Impact Pathway
	suitable feeding and breeding conditions for a range of birds and insects	(adjoining A46 slip road at Six Hills)	quality/dust/light/visual), habitat loss, habitat degradation, fragmentation. Indirect: construction pollution (e.g. air quality/dust, noise, vibration, light). Potential for hydrological connectivity to draft Order Limits.

Section 4 - Harborough District – none within Study Area

Section 5 - Northamptonshire

Upper Nene Valley Gravel Pits SSSI	Nationally important site for breeding bird assemblage of lowland open waters and their margins, wintering waterbird species and an assemblage of over 2,000 waterbirds in the non-breeding season. SSSI includes a rare example wet floodplain woodland.	Partially within draft Order Limits	Direct: habitat loss/fragmentation as a result of cable reconductoring. Underpins Upper Nene Valley Gravel Pits SPA and Ramsar – draft Order Limits may be functionally linked. Construction pollution (e.g. air quality/dust, noise, vibration, light). Hydrological connectivity to draft Order Limits.
Birch Spinney and Mawsley Marsh SSSI	Unusual woodland type partly developed on peat with unimproved and botanically rich grasslands adjoined to one of the finest remaining Northamptonshire marshes. Mixed habitat types support invertebrates and birds, with the SSSI supporting one of the few farmland localities of breeding snipe (<i>Gallinago gallinago</i>) in Northamptonshire.	Partially within draft Order Limits	Direct: habitat loss/fragmentation as a result of cable reconductoring. Construction pollution (e.g. air quality/dust, noise, vibration, light). Hydrological connectivity to draft Order Limits.

8.6.9 Seven sites have been identified with no potential impact pathways to the Project as detailed in **Table 8.7**.

Table 8.7 SSSIs designated for biological features with no potential impact pathways

Site	Designated Features	Approximate Distance from Draft Order Limits (km) at Closest Point
Section 1 - South Holland District – none within Study Area		
Section 2 - South Kesteven District		
Tortoiseshell Wood SSSI	A good representation example of oak–ash–maple (<i>Quercus/Fraxinus/Acer</i>) woodland developed on a plateau of poorly drained boulder clay overlying Eastern Jurassic limestone. The SSSI is also important for a number of breeding bird species.	1.7
Porter’s Lodge Meadows SSSI	A fine example of a traditionally managed grassland, supporting plant communities typical of calcareous clay and loam soils.	1.9
Section 3 - Melton Borough		
Frisby Marsh SSSI	Some of the best remaining areas of marsh in Leicestershire. Contains a complex of wetland habitats, grassland and woodland.	1.1
Cribb’s Lodge Meadows SSSI	The SSSI includes some of the best examples of species-rich neutral grassland in Leicestershire and is representative of grassland on clay soils in the English Midlands.	1.3
Section 4 - Harborough District		
Leighfield Forest SSSI	Some of the best remaining examples of ash–maple woodland in Leicestershire and is representative of	0.6

Site	Designated Features	Approximate Distance from Draft Order Limits (km) at Closest Point
	ancient semi-natural woodland developed on heavy clays in eastern central England. Supports diverse breeding bird and moth/beetle communities.	
Great Bowden Borrowpit SSSI	An unusual Leicestershire example of a tall fen plant community characteristic of base-poor soils. SSSI is a regular feeding ground for snipe.	1.3

Section 5 - Northamptonshire

Badsaddle, Withmale Park and Bush Walk Woods SSSI	An important example of wet ash/maple type woodland with indications of ancient woodland ground flora. Woodland/rides support good numbers of typical birds and invertebrates.	1.0
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- 8.6.10 Four of the sites (Tortoiseshell Wood SSSI, Leighfield Forest SSSI, Great Bowden Borrowpit SSSI and Badsaddle, Withmale Park and Bush Walk Woods SSSI) are designated for breeding birds, but the species for which they are designated do not include any species that are qualifying features of those SPA/Ramsar sites within the Study Area.
- 8.6.11 The remaining three SSSI sites are designated for woodland or grassland habitats and the following potential impact pathways have been considered:
- hydrological connectivity to the draft Order Limits (not present for any of the SSSI sites);
 - construction dust (all sites are more than 200 m from the draft Order Limits and therefore not affected by construction dust); and
 - air quality (all sites are more than 200 m from the draft Order Limits and therefore not affected by reduced air quality).
- 8.6.12 Given the absence of potential impact pathways with the Project, the SSSIs identified in **Table 8.7** are scoped out and are not considered further in this report or the ES.
- 8.6.13 All statutory designated sites of national nature conservation importance within the Study Area are shown on **Figure 8.2 Statutory Designated Sites of National Nature Conservation Importance**.

- 8.6.14 It is noted there are several SSSIs which fall within the 2 km to 5 km Study Area radius which have been omitted from **Figure 8.2 Statutory Designated Sites of National Nature Conservation Importance** as they do not have ornithological qualifying features⁹ and/or aquatic receptors.

Other statutory designated sites of nature conservation importance

- 8.6.15 One NNR and one LNR are located within the Study Area. While these sites are statutorily designated the habitats and species populations that they support are not of national importance, and are considered more comparable to those for which non-statutory designated sites are designated. In accordance with the methodology and geographical frames of reference set out in Paragraphs 8.5.18 to 8.5.26 each of these sites is of up to County importance.
- 8.6.16 One of these sites (Summer Leys LNR) has been identified to have potential impact pathways to the Project.
- 8.6.17 These sites are shown on **Figure 8.2 Statutory Designated Sites of National Nature Conservation Importance** and are listed in **Table 8.8**.

Table 8.8 LNRs and NNRs designated on the basis of features of biodiversity interest

Site	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point	Potential Impact Pathway
Section 1 - South Holland District – none within Study Area			
Section 2 - South Kesteven District – none within Study Area			
Section 3 - Melton Borough			
Cribb's Meadow NNR	Cribb's Meadow NNR is a 4 ha site located near Edmondthorpe, Leicestershire. Designated for its species-rich lowland grassland, it is a significant site for biodiversity, featuring ridge-and-furrow patterns and diverse flora, including green-winged orchids (<i>Anacamptis morio</i>).	1.3	No direct or indirect impacts. No hydrological links.

⁹ There is often spatial overlap between SSSIs/SPAs, Ramsar sites and qualifying ornithological features of SSSIs; in some cases birds might forage over relatively large distances outside the designated site. Therefore, the Study Area for SSSIs with qualifying ornithological features is extended to 5 km.

Site	Designation Features	Approximate Distance from Draft Order Limits (km) at Closest Point	Potential Impact Pathway
Section 4 - Harborough District – none within Study Area			
Section 5 - Northamptonshire			
Summer Leys LNR	Important wetland within the Upper Nene Valley is made up of flooded gravel pits, flood meadows, species-rich neutral grassland and mature hedges. Largest breeding colony of tree sparrows (<i>Passer montanus</i>) in Northamptonshire. A wide variety of wading birds and duck and large numbers of golden plover depending on season. One of the best places in Northamptonshire to see the uncommon hairy dragonfly (<i>Brachytron pratense</i>).	1.3	No direct impacts. Indirect: hydrological connectivity to draft Order Limits. Underpins Upper Nene Valley Gravel Pits SPA and Ramsar site – draft Order Limits may be functionally linked.

Non-statutory designated sites

- 8.6.18 There are 447 non-statutory sites designated on the basis of features of biodiversity interest (LWSs) within the Study Area. There is one Wildlife Trust Reserve within the Study Area: Howell Nature Reserve is located 1.1 km north of Section 3.
- 8.6.19 Thirty-six of these sites have been identified with potential impact pathways to the Project. Sixteen of these sites are located within the draft Order Limits. Each of these sites is of up to County importance.
- 8.6.20 Any LWSs which are more than 200 m from the draft Order Limits with no hydrological links have been scoped out on the basis of no potential impact pathways. All non-statutory sites designated on the basis of features of biodiversity interest are shown in **Figure 8.3 Non-Statutory Designated Sites Nature Conservation** and those with potential impact pathways are listed in **Table 8.9**.
- 8.6.21 Additionally, there are 284 potential LWS sites located within the Study Area with 35 potential LWS sites located within the draft Order Limits. Full details will be provided in the ES.

Table 8.9 Non-statutory designated sites for nature conservation with potential impact pathway(s) to the Project

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
Section 1 - South Holland District				
A16 East Verge South of the River Glen LWS	Main habitat: • semi-improved neutral grassland; and • drain. Additional habitat: • scattered scrub; and • coarse or rank grassland.	Partially within draft Order Limits.	Habitat loss/fragmentation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Vernatt's Drain LWS	Main habitat: • drain; • calcareous grassland; • neutral grassland; • reedbed; and • coarse grassland.	Partially within draft Order Limits.	Habitat loss/fragmentation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
River Glen Corridor LWS	Main habitat: • river; • coarse or rank grassland; and • semi-improved neutral grassland. Additional habitat: • scrub; and • linear reedbed.	Partially within draft Order Limits	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
Pinchbeck Marsh LWS	Main habitat: • calcareous grassland. Additional habitat: • river; and • reedbed.	0.05	Habitat loss/fragmentation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); hydrological connectivity to the draft Order Limits.
Surfleet Seas End Saltmarsh LWS	Main habitat: • river; • marsh; and • calcareous grassland. Additional habitat: • saltmarsh; and • mudflat.	0.11	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.

Section 2 - South Kesteven District

Norwood LWS	Main habitat: • native plantation – on ancient woodland. Additional habitat: • non-native plantation – on ancient woodland.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Twyford Wood LWS	Main habitat: • native plantation (on ancient and new woodland. Additional habitat: • semi-natural woodland;	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
	- wet woodland/Carr; - non-native plantation (on ancient and new woodland); - scrub (scattered and dense); - neutral grassland (semi-improved); - drain/ditch/stream; - pond; - coarse grassland; and - brownfield Mosaic.			
South Forty Foot Drain LWS	Main habitat: - drain; - neutral grassland (semi-improved); and - coarse or rank grassland. Additional habitat: - calcareous grassland (semi-improved); - scattered scrub; - reedbed; and - improved grassland.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Corby Glen Road Verge LWS	Main habitat: calcareous grassland.	Partially within draft Order Limits	Habitat loss/fragmentation/degradation as a	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
			result of overhead line installation and maintenance activities.	
Hacconby Drove Drain LWS	Main habitat: - coarse or rank grassland; - drain; and - linear reedbed.	Partially within draft Order Limits	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Potential for hydrological connectivity to the draft Order Limits.
Swinstead Road Verges North LWS	Main habitat: calcareous grassland.	0.01	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Herricho Wood LWS	Main habitat: - ancient woodland (mature). Additional habitat: - species-rich hedgerows (ancient); and - ditch.	Directly adjacent	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Breache's Wood LWS	Main habitat: - native plantation – on ancient woodland. Additional habitat: - drain.	Directly adjacent	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Spring Wood, Edenham LWS	Main habitat: native plantation – on ancient/new woodland. Additional habitat:	Directly adjacent	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
	- ancient woodland – regrowth; - bracken; - ditch; - drain; - flush; - neutral grassland – semi-improved; - non-native plantation – new - pond; - scrub – scattered; and - wet woodland/Carr.			
Burton Coggles Road Verge, East LWS	Main habitat: calcareous grassland.	0.08	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual)
Mickley Wood LWS	Main habitat: - ancient woodland (mature). Additional habitat: - ditch.	0.13	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual)
New Wood LWS	Main habitat: native plantation – new woodland.	1.2	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual)

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
Grimsthorpe Park LWS	Main habitat: • semi-natural woodland; • parkland; and • pond/lake. Additional habitat: • native plantation; • non-native plantation; • species-rich hedgerows; • neutral grassland (semi-improved); • wet woodland; • scrub; • ruderal; and • stream.	0.15	None.	Potential for hydrological connectivity to the draft Order Limits.
Thorny Wood LWS	Main habitat: • Native plantation – new. Additional habitat: • bracken; • ditch; • drain; • flush; • non-native plantation – new woodland; • scrub – scattered/dense; and • stream.	0.31	None.	Potential for hydrological connectivity to the draft Order Limits.

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
Gunboro' Wood LWS	Main habitat: • native plantation (on ancient and new). Additional habitat: • non-native plantation (on ancient woodland); and • ditch.	0.82	None.	Potential for hydrological connectivity to the draft Order Limits.
Section 3 - Melton Borough				
Oak Plantation Hedgerow LWS	Main habitat: • species rich-native hedgerow.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual)
Gipsy Nook Verge LWS	Main habitat: • mesotrophic grassland.	Partially within draft Order Limits.	Habitat loss/fragmentation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Hedgerow S of High View, off Nott'm Rd LWS	Main habitat: • species-rich hedgerow.	0.04	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Elm Hedgerow LWS	Main habitat: • species-rich hedgerow.	0.04	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Freeby Wood LWS	Main habitat: • ancient semi-natural woodland.	0.08	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
Waltham Mature Ash LWS	Main habitat: ash tree.	0.11	None.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Nottingham Road Hedgerow LWS	Main habitat: species-rich hedgerow.	0.12	None	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
Scaford Brook LWS	Main habitat: brook.	1.34.	Habitat loss/fragmentation/degradation as a result of overhead line installation and maintenance activities.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.

Section 4 - Harborough District

Hammer's Lodge Farm Field LWS	Main habitat: mesotrophic grassland.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of site access tracks.	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).
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Section 5 - Northamptonshire

Earls Barton Lock Lake LWS	Main habitat: - eutrophic standing waters; - grassland; and - wetland.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line reconductoring (construction activities only)	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Vivians Covert LWS	Main habitat: lowland mixed deciduous woodland.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual).

Site	Designation Features	Approximate Distance from the Draft Order Limits (km)	Potential Impact Pathway	
			Direct	Indirect
			reconductoring (construction activities only).	
Grendon Lakes North LWS	Main habitat: • eutrophic standing waters; • floodplain grazing marsh; • lowland fen; and • woodland.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line reconductoring (construction activities only).	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Grendon Lakes LWS	Main habitat: • grassland; • eutrophic standing waters; and • reedbed.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line reconductoring (construction activities only).	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); potential for hydrological connectivity to the draft Order Limits.
Wilby Meadows Stream LWS	Main habitat: • wetland; and • river.	Partially within draft Order Limits.	Habitat loss/fragmentation/degradation as a result of overhead line reconductoring (construction activities only).	Construction pollution (e.g. noise/vibration/air quality/dust/light/visual); hydrological connectivity to the draft Order Limits.
Earls Barton Carr LWS	Main habitat: • wet woodland.	0.02	None.	Potential for hydrological connectivity to the draft Order Limits.
Park Farm Industrial Estate LWS	Main habitat: • grassland; and • woodland.	0.30	None.	Potential for hydrological connectivity to the draft Order Limits.

- 8.6.22 Based on the following criteria, 178 non-statutory sites have been identified with no potential impact pathway:
- hydrological connectivity to the draft Order Limits (not present for any of the SSSI sites);
 - construction dust (all sites are more than 200 m from the draft Order Limits and therefore not affected by construction dust); and
 - air quality (all sites are more than 200 m from the draft Order Limits and therefore not affected by reduced air quality).
- 8.6.23 Given the absence of potential impact pathways with the Project, these sites are scoped out and not considered further in this report or the ES.

Habitats

Ancient woodland and veteran trees

- 8.6.24 Ancient woodland includes all woodland that has existed continuously since 1600. However, any woodlands less than 2 ha were not included on the inventory originally developed by the Nature Conservancy Council (now Natural England), and so small woodlands and linear features may not appear on the inventory. Ancient woodland within the Study Area is shown on **Figure 8.4 Ancient Woodland and Habitats of Principal Importance**. Targeted surveys and review of historic mapping will continue to determine if smaller wooded areas affected by the Project support ancient woodland and to identify veteran and/or ancient trees. This information will be included within the ES.
- 8.6.25 Based on the ancient woodland inventory information currently available, 97 blocks of ancient woodland fall within the Study Area. Of these, four blocks are partially located within the draft Order Limits:
- Breache's Wood Plantations on Ancient Woodland (PAWS) (Section 2);
 - Norwood/West Woods Ancient Semi-Natural Woodland (ASNW) (Section 2);
 - Little Osgrove ASNW (Section 2); and
 - Herricho Wood ASNW (Section 2).
- 8.6.26 A further four blocks of ancient woodland are located directly adjacent to the draft Order Limits:
- Dunsby Wood ASNW (Section 2);
 - Norwood/West Wood PAWS (Section 2);
 - Great Osgrove Wood ASNW (Section 2); and
 - Cransley Wood PAWS (Section 5).
- 8.6.27 An additional two blocks are located within 50 m of the draft Order Limits: Freeby Wood ASNW (Section 3) and Stonton Wood ASNW (Section 4).
- 8.6.28 Ancient woodland is an irreplaceable resource and each area of ancient woodland is considered to be of up to National importance.

- 8.6.29 The Woodland Trust's Ancient Tree Inventory has been reviewed and there are no known ancient trees within the draft Order Limits.
- 8.6.30 The desk study identified the presence of several HPI as listed under section 41 of the Natural Environment and Rural Communities Act (Ref 8.65) within the draft Order Limits. These are detailed in **Table 8.10**.

Table 8.10 HPI within the draft Order Limits

HPI Type	Area (ha)	% of Total Draft Order Limits Area
Reedbeds	1.8	<0.1
Deciduous woodland*	161.2	0.6
Lowland fens	2.7	<0.1
Coastal and floodplain grazing marsh	0.3	<0.1
Mudflats	3.2	<0.1
Ponds	<0.1	<0.1
Good quality semi-improved grassland*	8.4	<0.1
No main habitat but additional habitats present*	28.3	0.1

*Not considered HPI but have potential ecological value

- 8.6.31 The following HPI were identified through the desk study within the Study Area but not within the draft Order Limits:
- lowland calcareous grassland;
 - lowland meadows;
 - traditional orchards;
 - lowland heathland; and
 - purple moor grass and rush pasture.
- 8.6.32 The location of HPI, including ancient woodland within the Study Area is presented on **Figure 8.4 Ancient Woodland and Habitats of Principal Importance**.
- 8.6.33 Further surveys to be undertaken prior to submission of the ES will determine whether HPI are present within the draft Order Limits.
- 8.6.34 An initial review of habitats across the draft Order Limits using aerial photography revealed that most of the land comprises arable and pastoral farmland; however, there are multiple parcels of grassland, pockets of woodland and scrub, watercourses and ditches, along with boundary features (such as hedgerows and tree lines) present.

- 8.6.35 An initial assessment of the habitats present and their potential importance is provided below. This is a preliminary assessment and full results of the habitat surveys and the importance of the habitats present will be provided within the ES.

Overview of habitats present by route section

Section 1: South Holland District

- 8.6.36 This area is characterised by low lying ground that is managed intensively as arable agriculture, with straight hedgerows and largely man-made ditches forming field boundaries.
- 8.6.37 There is very little woodland within this section. One access track passes through an area of lowland deciduous woodland (a HPI) north of proposed tower WMEL22 (see **Figure 4.1 Proposed Project Design**). Two smaller areas of HPI woodland are located within the draft Order Limits south of tower WMEL01. A small number of other isolated woodland parcels adjoin the draft Order Limits.
- 8.6.38 There are four other parcels listed as coastal floodplain grazing marsh, adjacent to the draft Order Limits east of Surfleet.
- 8.6.39 In addition to the many ditches providing aquatic habitat, there are two statutory Main Rivers, the River Glen and the River Welland.
- 8.6.40 Pending habitat survey results the woodland and watercourse habitats are considered to be of up to County value. Remaining habitats are considered likely to be of no more than Local importance.

Section 2: South Kesteven District

- 8.6.41 East of Haconby, Section 2 comprises predominately flat agricultural land with field drains and hedgerows, with only small areas of deciduous woodland. West of Haconby, the habitats and topography become more varied. It is still largely arable agriculture but with fewer field drains and the fields and boundary hedgerows with standard trees are more irregular in shape and therefore likely to be older. There are multiple large areas of ancient woodland within this section and many other woodland areas that whilst not ancient, are deciduous woodland. A single area of lowland meadow (a HPI) is located south east of Corby Glen.
- 8.6.42 There are six Main Rivers within this section, namely the South Forty Foot Drain, the Rippingdale Running Dike, the Car Dyke, the East Glen River, West Glen River and the River Witham.
- 8.6.43 Pending habitat survey results, the areas of ancient woodland are considered to be of National importance due to the irreplaceable nature of ancient woodland. Remaining areas of woodland and watercourses are considered to be of up to County importance. Remaining habitats are considered likely to be of no more than Local importance.

Section 3: Melton Borough

- 8.6.44 Section 3 is located in Leicestershire and is largely arable farmland or pastures with hedgerows and standard trees. There are only two small parcels of ancient semi-natural woodland in this section, but many smaller areas of HPI deciduous woodland.

- 8.6.45 There are several areas of 'good quality semi-improved grassland' that could support HPI grassland within the draft Order Limits. There are areas of lowland meadow, coastal floodplain grazing marsh, purple moor grass and rush pasture with lowland fen in the wider Study Area but these are not located within the draft Order Limits.
- 8.6.46 There are two Main Rivers within Section 3, the River Wreake and the Gaddesby Brook.
- 8.6.47 Pending habitat survey results, the areas of ancient woodland are considered to be of National importance due to the irreplaceable nature of ancient woodland. Remaining areas of woodland, good quality semi-improved grassland, coastal floodplain grazing marsh, purple moor grass and rush pasture and watercourses are considered to be of up to County importance. Remaining habitats are considered likely to be of no more than Local importance.

Section 4: Harborough District

- 8.6.48 Section 4 comprises arable farmland and pasture with hedgerows and standard trees throughout. There are no areas of areas of ancient woodland within or directly adjacent to the draft Order Limits in Section 4. However, there are a range of ancient woodland parcels within the surrounding Study Area.
- 8.6.49 There are several HPI deciduous woodland parcels that are located within or adjoining the draft Order Limits and small woodland parcels are frequent across the wider Study Area.
- 8.6.50 There are a small number of fragmented areas of HPI: lowland heathland, and lowland fen. However, they are all more than 1.5 km away from the draft Order Limits with no functional linkage and therefore are not considered further.
- 8.6.51 An unnamed Main River flows north to south through much of Section 4, as well as the Langton Brook, the River Welland and River Jordon which bisect this section towards the south.
- 8.6.52 Pending habitat survey, areas of woodland and watercourses are considered to be of up to County importance. Remaining habitats are considered likely to be of no more than Local importance.

Section 5: Northamptonshire

- 8.6.53 Section 5 is the southernmost area of the draft Order Limits and is also largely arable and pastureland. There is one small block of ancient semi-natural woodland within the draft Order Limits and several others in the surrounding Study Area, and many other parcels of HPI deciduous woodland including areas within the draft Order Limits at the Upper Nene Valley Gravel Pits.
- 8.6.54 North of Cransley Lodge between towers ZA247 and ZA248 there are areas identified as HPI lowland fen and of good quality semi-improved grassland. There are also small areas of reedbed (a HPI) within the draft Order Limits at the Upper Nene Valley Gravel Pits.
- 8.6.55 River Welland, River Jordon, River Isle, Slade Brook, Swanspool Brook, River Nene and four un-named tributaries fall within this section as well as a large complex of lakes south of the River Nene that comprise the Upper Nene Valley Gravel Pits SSSI.
- 8.6.56 All areas of ancient woodland are irreplaceable. Those present are assessed as being of National importance. The status of the area of lowland fen will need confirming through field surveys but as a precaution it is considered a potential area

of irreplaceable habitat and is of National importance. The remaining areas of HPI are of up to County importance. Remaining habitats are considered likely to be of no more than Local importance.

Protected and/or Notable Species

Bats

- 8.6.57 There are no SACs with bats as a qualifying feature located within a 30 km radius of the draft Order Limits. There are no SSSIs with bats as a qualifying feature located within a 10 km radius of the draft Order Limits.
- 8.6.58 Desk study records of several bat species have been recorded within the draft Order Limits: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Myotis species, noctule bat (*Nyctalus noctula*), brown long-eared bat (*Plecotus auritus*), Daubenton's bat (*Myotis daubentonii*), Natterer's bat (*Myotis nattereri*), Nathusius' pipistrelle (*Pipistrellus nathusii*), barbastelle (*Barbastella barbastellus*), whiskered bat (*Myotis mystacinus*), whiskered/Brandt's bat (*Myotis mystacinus/brandtii*) and serotine (*Eptesicus serotinus*).
- 8.6.59 There are 18 granted Natural England EPSMLs for bats within 2 km of the draft Order Limits which cover the following species: common pipistrelle, soprano pipistrelle, brown long-eared bat and barbastelle. There are none located within the draft Order Limits.
- 8.6.60 Habitats within the draft Order Limits include mature trees, woodland and buildings that are suitable to provide roosting habitat for bats. Woodland, hedgerows, fields and watercourses provide excellent commuting and foraging habitat for a wide range of bat species.
- 8.6.61 Surveys commenced in 2026 and will continue into 2027; the findings will be presented within the ES. Based on the potential for the habitat within and adjoining the draft Order Limits to support a diverse assemblage of bats, on a precautionary basis it is assumed to be of up to Regional importance.
- 8.6.62 Targeted GLTAs, climbed inspections, NBWs, and static bat detector surveys will be undertaken in 2026 and spring 2027 (as required) to confirm the assemblage of foraging and commuting bats, bat roosts, and the status of bats. When planned surveys are complete, results will inform the design of appropriate mitigation, and the assessment of impacts and effects will be presented within the ES.

Beaver

- 8.6.63 There are no existing records of beaver within the Study Area; however, beaver have been reintroduced into Lincolnshire within 5 km of the draft Order Limits to the north of Section 4, and at the Nene Washes within 25 m of the draft Order Limits.
- 8.6.64 It is currently assumed that beaver are absent, and that all sections of the draft Order Limits are of Negligible importance for beaver. However, acknowledging that they are a species which are rapidly increasing in distribution, checks for field signs of beaver will be undertaken alongside proposed otter surveys to confirm this.

Birds

Breeding birds

- 8.6.65 Surveys for breeding birds were carried out between March 2026 and June 2026 including flight activity surveys and walked transects. Analysis of the data is in progress and full details will be provided in the ES. Further surveys, including species-specific surveys (e.g. barn owl) will continue during 2026/2027 and findings will be presented within the ES.

Section 1: South Holland District

- 8.6.1 Section 1 of the Project's draft Order Limits overlaps with the Study Area for National Grid's Grimsby to Walpole project. Previous surveys of this area undertaken between March 2024 and July 2024 identified this area to contain frequent skylark (*Alauda arvensis*) and other farmland specialists included corn bunting (*Emberiza calandra*), grey partridge (*Perdix perdix*), linnet (*Linaria cannabina*), starling (*Sturnus vulgaris*), stock dove (*Columba oenas*), whitethroat (*Curruca communis*) and yellowhammer (*Emberiza citrinella*). Species more associated with wetland habitat were also recorded breeding such as oystercatcher (*Haematopus ostralegus*), avocet (*Recurvirostra avosetta*) and little ringed plover (*Charadrius dubius*). Across the area there were nine Red-listed, 14 Amber-listed, three Schedule 1 species (barn owl, avocet and little ringed plover), and 10 Section 41 species. The final assessment of importance will be determined following the Project-specific surveys being undertaken, but on a precautionary basis the breeding assemblage in Section 1 is therefore considered to be of up to County importance.

Section 2: South Kesteven District

- 8.6.1 The habitats within Section 2 are predominately arable with fewer wet ditches than Section 1 and more hedgerows. Section 2 also contains more frequent areas of mature woodland than the adjoining sections of the route. Based on the range of habitats present Section 2 has the potential to support diverse farmland bird populations, including skylark and a range of Schedule 1 species including barn owl. On a precautionary basis they are currently considered as being of up to County importance.

Section 3: Melton Borough and Section 4: Harborough District

- 8.6.2 Remaining areas of habitat within the draft Order Limits in Sections 3 and 4 consist predominately of arable habitat, with hedgerows, ditches and occasional woodland blocks. These areas of habitat are considered likely to support a more limited breeding assemblage than the other sections of the route but have the potential to support populations of up to District importance.

Section 5: Northamptonshire

- 8.6.3 Pending detailed analysis of the 2026 survey data, it is known that the Upper Nene Valley Gravel Pits SSSI which is located partly within the draft Order Limits for the proposed reconductoring works in Section 5, supports a variety of notable breeding bird species with areas of both open water and marginal habitats.
- 8.6.4 This breeding bird assemblage includes the largest breeding colony of grey herons (*Ardea cinerea*) in the county at a former duck decoy at Titchmarsh within the Thrapston gravel pit complex. The regular breeding assemblage includes mute swan,

gadwall, shoveler, pochard, tufted duck, little grebe, great crested grebe and wading birds such as redshank. In addition, margins, banks and sparsely-vegetated gravel islands within the lagoons provide nesting sites for little ringed plover, ringed plover (*Charadrius hiaticula*), kingfisher (*Alcedo atthis*) and colonies of common tern. Damp grassland, scattered scrub and stands of marginal vegetation at the lagoon edge support breeding reed warbler (*Acrocephalus scirpaceus*), sedge warbler (*A. schoenobaenus*) and the rare Cetti's warbler (*Cettia cetti*), along with water rail (*Rallus aquaticus*), cuckoo (*Cuculus canorus*), yellow wagtail (*Motacilla flava*), grey wagtail (*M. cinerea*) and reed bunting (*Emberiza schoeniclus*).

- 8.6.5 The breeding bird assemblage associated with the Upper Nene Valley Gravel Pits SSSI and surrounding functionally linked land is of **National** importance for breeding birds. Remaining habitats in Section 5 are similar to the habitats in Sections 3 and 4 and are unlikely to be of more than District importance.

Non-breeding birds

- 8.6.6 Surveys for non-breeding birds were carried out between November 2025 and March 2026 including flight activity surveys and walked transects. Analysis of the data is in progress and full details will be provided in the ES; however, a summary of the initial key findings are set out below. Further surveys, where required, will continue during 2026/2027 and findings will be presented within the ES.

Section 1: South Holland District

- 8.6.7 Surveys for non-breeding birds undertaken to date in Section 1 of the draft Order Limits have recorded a range of species typical of fenland arable landscapes, including raptors such as marsh harrier and peregrine. There have been limited observations of significant concentrations of waterbird species, with infrequent records of common crane (*Grus grus*) (maximum of four individuals), pink-footed goose (<100 individuals) and golden plover (<150 individuals) flying over the draft Order Limits. On a precautionary basis the non-breeding bird assemblage is currently considered as being of up to County importance.

Section 2: South Kesteven District, Section 3: Melton Borough and Section 4: Harborough District

- 8.6.8 The non-breeding bird assemblages of Sections 2, 3 and 4 are typified by predominantly resident species associated with arable habitat, with hedgerows, ditches and occasional woodland blocks. A number of raptor species were frequently encountered along these sections, with red kite in particular, abundant throughout. These sections are likely to have a more limited non-breeding bird assemblage than Section 1 of the route but have the potential to support populations of up to District importance.

Section 5: Northamptonshire

- 8.6.9 The Upper Nene Valley Gravel Pits SPA, Ramsar site and SSSI which is located partly within the draft Order Limits for the proposed reconductoring works in Section 5, supports internationally important numbers of non-breeding waterbirds, including shoveler, wigeon, mallard, gadwall, pochard, tufted duck, bittern, coot, cormorant, golden plover, great crested grebe and lapwing.

- 8.6.10 The non-breeding bird assemblage associated with the Upper Nene Valley Gravel Pits SPA, Ramsar site and SSSI, as well as any surrounding functionally linked land is of International importance for non-breeding birds. Remaining habitats in Section 5 are similar to the habitats in Sections 2, 3 and 4 and are unlikely to be of more than District importance.

Great crested newt

- 8.6.11 There are existing records of great crested newt throughout the Study Area, with records present within 250 m of Sections 2, 3 and 4. There are no existing records of great crested newt within the draft Order Limits.
- 8.6.12 There are 15 granted great crested newt Natural England EPSMLs within 2 km of the draft Order Limits, of which two are located within the draft Order Limits, one (dated 2017–2022, destruction and damage to resting place) in Section 2 (South Kesteven District) and one in Section 3 (Melton Borough) (dated 2020–2027 destruction and damage to resting place).
- 8.6.13 A desk-based exercise has been undertaken to identify all known water bodies located within a 250 m radius of the draft Order Limits. These water bodies were then scoped utilising a Geographical Information System (GIS) tool to exclude field ditches and those water bodies where a significant barrier to amphibian movement¹⁰ is present. The following numbers of water bodies were identified for HSI and eDNA surveys in May/June 2026 within 250 m of the draft Order Limits:
- Section 1: South Holland District: 1 no. (none within the draft Order Limits);
 - Section 2: South Kesteven District: 47 no. (including 15 within the draft Order Limits);
 - Section 3: Melton Borough: 126 no. (including 21 within the draft Order Limits);
 - Section 4: Harborough District: 29 no. (including 8 within the draft Order Limits); and
 - Section 5: Northamptonshire: 55 no. (including 11 within the draft Order Limits).
- 8.6.14 The results of the 2026 surveys are being analysed and will be presented in the ES.
- 8.6.15 On a precautionary basis, in the absence of population size class assessments, each great crested newt metapopulation is assumed to be of up to Regional importance.
- 8.6.16 Surveys will continue in 2027 if required and any findings will be presented within the ES.

Reptiles

- 8.6.17 Existing records of slow worm (*Anguis fragilis*), common lizard (*Zootoca vivipara*), and grass snake (*Natrix natrix*) have been identified frequently within the Study Area. No records are located within the draft Order Limits.
- 8.6.18 The habitats within the draft Order Limits provide some areas of habitat potentially suitable to support slow worm, common lizard and grass snake. However, as the majority of the route consists of arable fields in most cases suitable habitat is limited to small linear strips adjoining hedgerows and ditches. Such areas within the draft

¹⁰ This assessment considered both the scale of potential barriers, distance from the breeding pond and the wider geographical context. E.g. a motorway or dual carriageway was considered as an absolute barrier to movement in all cases. However, an 'A road' could be a reason for scoping out when considered in combination with other factors such as distance and/or distribution of suitable habitat.

Order Limits are unlikely to support high numbers of common reptiles, and therefore where they are present common reptile populations are each expected to be of no more than District importance.

- 8.6.19 Adder (*Vipera berus*) distribution within the Study Area is limited with only a small number of sites with recent records of adder and none within the draft Order Limits. The most significant regional site for adder is located at Rockingham Forest which is approximately 17 km to the east of the draft Order Limits.
- 8.6.20 Adder is unlikely to be present within the draft Order Limits but prior to on-site habitat appraisal via the extended UK Habitat Classification survey its presence cannot be entirely ruled out, and if present would be more likely to be associated with the network of woodlands in Section 2 (South Kesteven District).
- 8.6.21 In the unlikely event that adder is present, the population would be of up to Regional importance. The draft Order Limits are considered unlikely to support larger populations of common reptile species and therefore they are each expected to be of no more than District importance.
- 8.6.22 The requirement for further surveys will be determined following the completion of extended UK Habitat Classification surveys. Where further surveys are required these will be undertaken in autumn 2026 (and/or spring 2027) and the findings will be presented within the ES.

Otter and water vole

- 8.6.23 There are numerous desk study records of water vole and otter throughout the Study Area.
- 8.6.24 Existing water vole records are present within 50 m of the draft Order Limits at Sections 1 (South Holland District) and 3 (Melton Borough). Section 1 (South Holland District) and Section 2 (South Kesteven District) pass through Pinchbeck North Fen and Dunsby Fen respectively and contain a network of fields surrounded by ditches/drains that are likely to provide suitable habitat for water vole. Watercourses and water bodies are less frequent in the other sections of the draft Order Limits, but are likely to include areas of suitable habitat for water vole.
- 8.6.25 Water vole are listed as endangered on both the Great Britain and the England Red List of Mammals (Ref 8.87). While they remain widely distributed across the Study Area, available suitable habitat continues to contract due to a range of factors including agricultural intensification, heavy grazing by livestock, pollution and predation by invasive species including mink.
- 8.6.26 Where present, individual water vole populations within the draft Order Limits and surrounds are likely to be of up to County importance.
- 8.6.27 Existing records of otter are present within 50 m of the draft Order Limits at Section 3 (Melton Borough) and Section 5 (Harborough District). The watercourse network across all sections of the draft Order Limits will contain areas of potentially suitable habitat.
- 8.6.28 Otter are widespread through the Study Area, and it is likely that the majority of watercourses will be utilised by otter. Each otter population within the Study Area is assumed to be of up to County importance.
- 8.6.29 Surveys will continue in 2026/2027 and any findings will be presented within the ES.

Badger

- 8.6.30 Existing records of badger were identified throughout the Study Area and located within 50 m of the draft Order Limits at Sections 3 and 4, and within the draft Order Limits in Section 5.
- 8.6.31 Badger are widespread and legally protected based on welfare concerns, rather than their conservation status. The field margins, hedgerow and woodland within the draft Order Limits provide areas of potentially suitable habitat to support setts. The large areas of arable land that will be impacted will provide areas of foraging habitat, and routes utilised for moving throughout their wider territories.
- 8.6.32 Each badger population is likely to be of no more than Local importance.
- 8.6.33 Surveys will continue in 2026/2027 and any findings will be presented within the ES.

Protected/notable flora/fungi

- 8.6.34 The following existing records of protected plant species (listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended)) have been recorded within the Study Area: bluebell (*Hyacinthoides non-scripta*) within 2 km of Section 2, Section 3 and Section 4 and Section 5; Deptford pink (*Dianthus armeria*) within 2 km of Section 3; and Jersey cudweed (*Pseudognaphalium luteoalbum*) within 2 km of Section 3. No records are located within the draft Order Limits.
- 8.6.35 Currently it is expected that for all route sections populations of notable flora/fungi present are only likely to be of up to District importance.
- 8.6.36 The requirement for further surveys will be determined following the completion of extended UK Habitat Classification surveys. Where further surveys are required, the findings will be presented within the ES.

Terrestrial invertebrates

- 8.6.37 The following records of protected or notable terrestrial invertebrates have been recorded within the Study Area: white-letter hairstreak butterfly (*Satyrrium w-album*) within 2 km of Section 1, Section 3 and Section 5; black hairstreak butterfly (*Satyrrium pruni*) within 2 km of Section 2; purple emperor butterfly (*Apatua iris*), within 2 km of Section 2 and Section 5; dingy skipper (*Erynnis tages*), small heath (*Coenonympha pamphilus*) and grizzled skipper (*Pyrgus malvae*) within 2 km of Section 5. On a precautionary basis, at this stage it is assumed that there could be a small number of sites with higher quality terrestrial habitat suitable to support notable invertebrate populations. Each of these terrestrial invertebrate populations is assumed to be of up to Regional importance.
- 8.6.38 The requirement for further surveys will be determined following the completion of extended UK Habitat Classification surveys. Where further surveys are required, the findings will be presented within the ES.

Aquatic invertebrates

- 8.6.39 There are no existing records for white-clawed crayfish within the Study Area. There are no existing records of notable or protected aquatic invertebrates within the Study Area.
- 8.6.40 Surveys will continue in 2026/2027 and any findings will be presented within the ES.

- 8.6.41 The requirement for further survey for white-clawed crayfish will be reviewed following initial aquatic scoping surveys in 2026. At this stage on a precautionary basis aquatic invertebrate populations are assumed to be of up to Regional importance.

Fish

- 8.6.42 The desk study returned a single record of spined loach associated with the Summer Leys LNR located approximately 1.76 km south west of the draft Order Limits in Section 5.
- 8.6.43 Where further surveys are required, the findings will be presented within the ES.

Invasive non-native plant species (INNPS)

- 8.6.44 Existing records of Japanese knotweed (*Reynoutria japonica*), giant hogweed (*Heracleum mantegazzianum*), Himalayan balsam (*Impatiens glandulifera*) and Virginia creeper (*Parthenocissus quinquefolia*) are located within 2 km of Section 5. There are no existing records of INNPS within the draft Order Limits.
- 8.6.45 INNPS are expected to be present throughout the draft Order Limits. This is likely to include occurrences of species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) (Ref 8.68).
- 8.6.46 The requirement for further surveys will be determined following the completion of extended UK Habitat Classification surveys. Where further surveys are required, the findings will be presented within the ES.

Other SPI

- 8.6.47 Most SPI will be considered under baseline conditions for species or groups of conservation concern. The following are the SPI considered relevant to the assessment that have not been considered elsewhere in this chapter:
- brown hare (*Lepus europaeus*);
 - common toad (*Bufo bufo*);
 - harvest mouse (*Micromys minutus*);
 - hedgehog (*Erinaceus europaeus*); and
 - polecat (*Mustela putorius*).
- 8.6.48 All species have been recorded within the Study Area and potential for effects on these species will be considered in the ES following the completion of baseline surveys where incidental records of SPI are recorded.

Future Baseline

- 8.6.49 The future baseline relates to known or anticipated changes to the current baseline, in the future, in the absence of the Project. Relevant factors in defining the future baseline and considered in this non-statutory DES are described here or will be considered in the ES.
- 8.6.50 A number of pests and diseases that can negatively affect trees and woodland, including ash dieback (*Hymenoscyphus fraxineus*), are present in many areas of

England. These diseases can cause leaf and crown reduction and loss of trees which can change the overall composition of woodlands. Within woodland settings it is likely that gaps created by loss of individual trees would be filled by other trees over time and overall levels of vegetation are likely to remain broadly similar to existing.

- 8.6.51 The current land use associated with the draft Order Limits is predominantly agricultural, and it is unlikely that any change to ecological conditions would occur unless agricultural practices (or other current management regimes) cease, in which case natural habitat succession would be expected. Therefore, it is reasonable to assume that if the Project does not proceed and current conditions are maintained, species abundance and distribution is unlikely to change significantly.
- 8.6.52 Future developments within the draft Order Limits are likely to be limited given the rural setting of most of the route and are likely to be localised, industrial-related developments on land close to existing development. The key anticipated development that has considerable overlap with the draft Order Limits and therefore potential to significantly affect the current baseline is National Grid's Grimsby to Walpole project which will involve the construction of the Western Marsh Substation in Section 1 that will be the starting point for new overhead lines to be created as part of the Project.
- 8.6.53 These (and other (committed)) developments have also been identified with the potential for them to have cumulative effects with the Project; see **Chapter 19 Cumulative Effects**.

8.7 Design, Standard, and Additional Mitigation Measures

- 8.7.1 Mitigation measures to avoid, reduce, manage, or control potential impacts and resulting effects of the Project are typically described and considered in assessment in three groups or types as defined in **Chapter 5 EIA Approach and Methodology** of this non-statutory DES. Each measure considered in this preliminary assessment is described in the relevant section below.

Design Measures

- 8.7.2 The Project and draft Order Limits have been designed to avoid sensitive features/receptors as far as practicable. This is in accordance with the Holford Rules (Ref 8.88) applicable to routeing of new overhead lines and the Horlock Rules (Ref 8.89) which apply to the design and siting of substations.
- 8.7.3 Environmental appraisal has been an integral part of the Project design from the outset, which has meant that the Project has been able to avoid environmentally sensitive features as far as reasonably practicable.
- 8.7.4 National Grid has also embedded measures into the design of the Project to avoid or reduce significant effects that may otherwise be experienced during construction and operation (and maintenance) of the Project.
- 8.7.5 Design measures are those that are intrinsic to and built into the design of the Project, and which have been presented in **Table 4.2** in **Chapter 4 Description of the Project**. Those relevant to ecology and biodiversity include:

- Sensitive routing and siting – the Corridor Preliminary Routing and Siting Study (Ref 8.90) took designated site locations into account and has sought to avoid and reduce as far as practicable effects on sites designated on the basis of their nature conservation importance.
- Wherever practicable appropriate stand-off distances would be applied to sensitive receptors including designated sites and areas of higher importance for habitats and/or species. For ancient woodland and watercourses, the Project will aim to maintain a minimum 15 m buffer, to avoid impacts wherever practicable.
- Utilising existing watercourse crossing points as far as practicable.
- Large or sensitive watercourses, for example those designated as Main River, and those with WFD (Ref 8.91) status, would be crossed by the temporary haul road using (where practicable) temporary clear span bridges in preference to culverts. The width of any required working area would be reduced as far as practicable. All bridges would be clear span, and the foundations would be placed clear of the main channel of the watercourse, where practicable. Where culverts are unavoidable arch culverts, leaving the natural bed undisturbed, or installation with the invert set below the natural bed level for a semi-natural bed to establish within the culvert, will be considered. The final crossing type will be decided as design and assessment develop, and be confirmed and considered in the ES.
- Vegetation clearance will be limited to the minimum practicable area within the draft Order Limits required to undertake the works, and focused on the areas described in **Chapter 4 Description of the Project**, Paragraphs 4.6.32 to 4.6.39.
- Micro-siting of towers would take into account the swing of the overhead line to avoid or minimise loss from notable habitats, including woodland and trees.
- Areas of temporary habitat loss would be reinstated, where practicable, following the completion of construction in each section. Where possible, reinstatement would be back to type of habitat affected or improved/enhanced.

Standard Measures

- 8.7.6 Standard measures are those that would be implemented on a project of this scale and nature regardless of being subject to statutory assessment. As such, it can be assumed these measures will be applied in the assessment.
- 8.7.7 A range of standard measures for the Project will be adopted throughout the duration of the construction phase. A Draft Outline Code of Construction Practice (CoCP) is provided in **Appendix 4A Draft Outline Code of Construction Practice**. Measures relevant to the control and management of impacts that could affect ecology and biodiversity are (refer to **Appendix 4A** for the full description of each measure):
- GG03: a final CoCP (based on the provisions in the Initial Outline CoCP) will be produced prior to the commencement of construction;
 - GG04: appointment of Environmental Managers and Environmental Clerks of Works to monitor implementation of requirements and ensure good practice is employed;
 - GG05: environmental training of construction workers;
 - GG07: requiring a Construction Environmental Management Plan and a Landscape and Ecological Management Plan (LEMP) prior to construction;

- GG09: on reinstatement of land, hedgerows, fences and walls;
- GG10: on retention and protection of sensitive features such as ancient woodland and protected habitats;
- GG12: location of activities that may cause nuisance, away from sensitive features such as residential properties and ecological sites where practicable;
- GG16: storage of hazardous materials away from sensitive receptors;
- GG17: control of surface water run-off;
- GG18: wash down of vehicles and equipment;
- GG20: earthworks and stockpiled soil;
- GG22: construction lighting will be the lowest luminosity necessary to safely perform each task;
- GG25: temporary works pads will be installed in areas where heavy equipment is to be used to reduce disturbance to the ground;
- GG26: working areas will be appropriately fenced where required; for some locations the fence may also serve to provide acoustic and visual screening;
- LV01: the duration of temporary disturbance to landform and vegetation will be kept to a minimum, with progressive reinstatement as soon as practicable following the completion of construction works;
- LV04: construction lighting will be directional and minimised where possible to reduce the intrusion into adjacent properties, protected species and habitats;
- B01: requiring pre-construction species surveys and compliance with relevant protected species licences;
- B02: on the protection of breeding birds and seasonal requirements;
- B03: on reducing risk of animal entrapment in works;
- B04: on control of the spread of invasive weeds;
- B05: on staged vegetation clearance and protection of reptiles;
- B06: on provision of alternative bat roost structures (bat boxes);
- B07: on provision of alternative barn owl breeding sites (barn owl boxes);
- B08: on requirements when crossing or removing hedgerows;
- B09: on habitat or species translocation (if required);
- W02/W03/W04: on measures to reduce impacts on watercourse crossings; and
- AQ01/AQ02: on implementation of dust management measures.

Habitats

- 8.7.8 Where temporary habitat removal is required to facilitate construction, this would be reinstated. Reinstatement would aim to provide habitats of equal or better value to those affected and permanent land take would be compensated. The Project will be required to achieve BNG equivalent to a 10% uplift above the Project baseline. This will be achieved through sensitive design and is also expected to involve a

combination of off-site and on-site habitat creation and/or enhancement. Accordingly, hedgerows scheduled for removal during construction would be reinstated and, where appropriate, would be improved from their baseline condition, e.g. defunct, or species-poor hedgerows would be replanted to achieve species-rich and continuous hedgerows, once re-established.

- 8.7.9 The location of Construction Exclusion Zones would be defined within the Outline LEMP and informed by a pre-construction ecological walkover (to identify any changes to the baseline), a tree survey (to BS 5837:2012 (Ref 8.34)) and in addition would be in line with regional Environment Agency and Internal Drainage Board requirements (excluding required access crossing points). A draft Outline LEMP (**Appendix 6C Draft Outline Landscape and Ecological Management Plan**) has been included alongside the non-statutory DES. This document will be developed as the design progresses and the Outline LEMP provided at DCO submission will also include Retention and Reinstatement Plans, defining the location of specific protective measures (i.e. fencing and signage) detailing habitat reinstatement and creation measures.
- 8.7.10 Wherever possible, habitat connectivity would be retained by using existing access routes, reducing working widths through biodiversity receptors, and maintaining connectivity through green corridors such as hedgerows and watercourses.
- 8.7.11 Where tree surgery to the crown or roots is necessary (such as where tree surgery is required to achieve electrical safety clearances), this would be undertaken in accordance with BS 3998:2010 (Ref 8.92); however, the Project, and specific construction tasks, would take a hierarchical approach to trees: aiming to retain as many trees as possible in the first instance; and avoiding total loss of habitat where possible (i.e. by pollarding and trimming, rather than complete removal, where applicable).
- 8.7.12 Following the completion of the detailed design for the Project, and prior to commencement of construction, all vegetation would be subject to a full tree/vegetation survey and site-specific assessment where vegetation removal may be reduced further than the generalised approach to vegetation detailed above.

Fauna

- 8.7.13 Where construction activities are found to conflict with the presence of legally protected or notable species, method statements would be produced and (where appropriate) construction would only proceed under a derogation licence issued by Natural England. Natural England will only issue a derogation licence in relation to a development proposal if the licensed actions maintain the favourable conservation status of a species or provide a conservation benefit. Thus, overall effects are anticipated to be neutral/beneficial. Species (and habitat) specific mitigation and the requirement for pre-construction surveys and/or monitoring will be developed during production of the ES in accordance with licensing expectations.
- 8.7.14 Section 8.5 sets out the proposed approach to determine the ecological baseline for the Project defining which further field surveys and assessments have been/will be undertaken. Results from these ecological surveys (once completed) will provide a robust baseline for the ES. In addition, pre-construction ecological checks/surveys would be conducted where required.

- 8.7.15 Assuming that baseline surveys confirm the presence of great crested newt within the draft Order Limits, discussions will be held with Natural England to agree a suitable licensing approach.
- 8.7.16 It is expected that great crested newt will be present in at least some sections of the draft Order Limits. The Project will seek to either gain a Project-wide derogation licence from Natural England or utilise a combination of DLL and standard derogation licensing.
- 8.7.17 The majority of the draft Order Limits are located within areas covered by DLL schemes for great crested newt. Sections 2, 3 and part of Section 4 are located within an area where a DLL is administered by Natural England. Parts of Section 4 and Section 5 are located within the DLL area administered by NatureSpace Partnership. Section 1 is not currently within an area where a great crested newt DLL scheme is in place.
- 8.7.18 The design and standard mitigation measures embedded into the Project are expected to be suitable to prevent significant adverse effects occurring for INNPS, amphibians (except great crested newt) and other SPI that may occur within the draft Order Limits (e.g. brown hare, harvest mouse, hedgehog, and polecat).
- 8.7.19 The mechanisms by which mitigation measures will be secured and delivered will be set out in the ES.

Additional Mitigation Measures

- 8.7.20 Additional mitigation measures are those identified through assessment to reduce likely significant adverse environmental effects which may still occur despite the inclusion of the embedded design and standard measures described above.
- 8.7.21 These will be developed and detailed in full within the ES and parallel HRA and include additional mitigation measures to reduce significant effects upon a range of biodiversity receptors, including but not limited to the development of receptor-specific mitigation strategies and method statements. These may be developed as derogation licences for species including but not limited to bats, otter, water vole and badger. In addition, they may include, specific areas of habitat creation if required to compensate for permanent losses of habitats arising as a result of the construction of the Project.
- 8.7.22 Potential requirements include additional mitigation to provide additional habitat or habitat enhancement to benefit skylark and other farmland bird populations; and/or other breeding bird mitigation areas for wider nesting bird populations. In each case the required mitigation requirements will be confirmed in the ES following baseline surveys.
- 8.7.23 Creation of woodland, ditch and hedgerow habitats may also be necessary to compensate for the loss of those habitats removed to enable the construction of the Project.

Enhancement

- 8.7.24 The Project is committed to adopting a sustainable approach to development by proactively taking measures to ensure that the Project leaves the environment in a better condition than it was before development (including but not limited to the delivery of 10% BNG). The Project would seek to provide strategic habitat enhancement and

creation, aiming to identify and implement opportunities to improve habitat quality and connectivity and align with local nature recovery objectives and projects. Such measures may include specific habitat creation and enhancement measures and additional receptor-specific measures such as the creation of habitat piles and installation of bird and bat boxes. Further details will be outlined within the ES.

8.8 Preliminary Assessment of Effects

- 8.8.1 The following section presents the findings of the preliminary assessment of effects upon the ecological features identified in Section 8.6 as a result of construction. The assessment considers features identified to be of local importance and above, where there is the potential for impacts to occur as a result of the Project. In addition, consideration is given to features where, in the absence of mitigation, there is potential for a legal offence.
- 8.8.2 The conclusions of the preliminary assessment are based upon desk study information, surveys completed to date and professional judgement of the features likely to be present. As survey work is ongoing, a precautionary approach to the assessment has been adopted, such that where information about a particular ecological feature is incomplete or uncertain, significant effects have not at this stage been excluded. As a consequence, the significance of effects reported in this assessment may be greater than that reported later in the ES, once all survey data have been collated, the status of these ecological features confirmed, and all mitigation measures identified. An updated assessment will be included within the ES submitted with the application for development consent.
- 8.8.3 The preliminary assessment of effects reported below takes into account the design and standard mitigation measures previously described. This assessment does not take into account any additional mitigation measures at this stage, as these are subject to further design refinement and will be informed by stakeholder engagement and the baseline survey findings.
- 8.8.4 A summary of potential impacts and mitigation measures identified in this preliminary assessment, and likely significance of the resulting effect with that mitigation in place, is provided in **Table 8.11**. Where appropriate for likely significant or notable effects, further explanation is provided in the following sections on construction, and operation and maintenance effects.
- 8.8.5 It is noted that this is an ongoing assessment and is subject to change due to the ongoing design development of the Project, Stage 2 Consultation feedback and further stakeholder engagement. A full assessment will be included within the ES submitted with the application for development consent.

Construction

Statutory designated sites of international nature conservation importance (SPAs, SACs, Ramsar sites)

Section 1: South Holland District

- 8.8.6 The Wash SPA and Ramsar site are located approximately 8.7 km from the draft Order Limits at their closest points. The Nene Washes SPA and Ramsar site are located approximately 26.5 km from the draft Order Limits at their closest points. All

four sites are designated on the basis of the wintering bird populations that they support. Each site is of International importance.

- 8.8.7 While the Project will not result in any habitat loss within the designated areas, there is the potential that areas of habitat within the draft Order Limits may be 'Functionally Linked Land' (FLL). FLL means areas of land or sea occurring outside a designated site which are considered to be critical to, or necessary for, the ecological or behavioural functions in a relevant season of a qualifying feature for which a SPA or Ramsar site has been designated.
- 8.8.8 The Impact Risk Zones for SSSIs (SSSI IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to terrestrial SSSIs posed by development proposals. They define zones around each SSSI which reflect the sensitivities of the features for which the site is notified and indicate the types of development proposal which could potentially have adverse impacts and need further consideration (Ref 8.93).
- 8.8.9 The draft Order Limits are located outside Impact Risk Zones (IRZs) for the SSSIs, for the Wash SPA/Ramsar and the Nene Washes SPA/Ramsar (the Wash SSSI and Upper Nene Valley Gravel Pits SSSI respectively). Based on Natural England guidance (Ref 8.93), it is therefore considered unlikely that qualifying species for the SPAs/Ramsar sites would use these habitats in sufficient numbers that activities such as habitat loss, disturbance and displacement would result in a harmful effect on qualifying features for these SPAs/Ramsar sites. On this basis, land within the draft Order Limits is unlikely to represent FLL.
- 8.8.10 As a result, the Project is considered unlikely to result in significant adverse effects upon the Wash SPA/Ramsar and the Nene Washes SPA/Ramsar. However, given that non-breeding bird survey results are still being analysed, at this stage, impacts on the bird populations for which the SPA/Ramsar site are designated due to habitat loss, degradation or disturbance of FLL habitats cannot be entirely ruled out.
- 8.8.11 Further assessment, with the ES and an accompanying HRA will be submitted with the application for development consent. On a precautionary basis, **significant effects** upon the Wash SPA/Ramsar and the Nene Washes SPA/Ramsar cannot be excluded at this stage of the assessment.
- 8.8.12 The Wash and North Norfolk Coast SAC overlaps the Wash SPA/Ramsar and is located approximately 8.7 km from the draft Order Limits. The SAC is designated for its habitats such as sandbanks, mudflats and coastal lagoons and also includes otter as qualifying features and is of International importance. Potential impact pathways include changes in water quantity, level and flow; and works within or adjacent to watercourses which are hydrologically linked to the SAC have the potential to impact other species. It is located outside the IRZ for its underlying SSSI¹¹, and based on the distance from the draft Order Limits and lack of obvious functional linkage, any effect upon The Wash and North Norfolk Coast SAC is expected to be negligible and **not significant**.

Section 2: South Kesteven District

- 8.8.13 Grimsthorpe SAC is located approximately 2.6 km at its closest point and is designated for its semi-natural dry grassland and scrubland facies (Annex I habitat) and early

¹¹ IRZs are defined for SSSIs, but can be applied to consider potential for harm on the SPAs and Ramsar sites that occupy the same geographic extents.

gentian (Annex II species) and is of International importance. There is no direct loss of habitat from the SAC as a result of the Project; however, potential for impacts as a result of changes in water quality, level and flow and works within or adjacent to watercourses which are hydrologically linked to the SAC, have been considered.

- 8.8.14 The Project is located outside the IRZ for the underlying Grimsthorpe SSSI and based on the distance from the draft Order Limits and the implementation of standard and design measures set out in Section 8.7, no adverse impacts are expected. The effect of the Project on the Grimsthorpe SAC will be negligible and **not significant**.
- 8.8.15 Baston Fens SAC is located approximately 8.2 km from the draft Order Limits at its closest point and is designated for its presence of spined loach (Annex II species) and is of International importance. There are no direct impacts as a result of the Project; however, there may be indirect impacts such as changes in water quality, level and flow and works within or adjacent to watercourses which are hydrologically linked to the SAC. Due to the distance from the Project and with implementation of standard and design measures, any adverse indirect effects of the Project on the SAC are expected to be negligible and **not significant**.

Section 3: Melton Borough

- 8.8.16 Rutland Water SPA and Ramsar site are located 10.9 km from the draft Order Limits. Both of these designated sites include their wintering bird populations as qualifying features and are of International importance. While the Project will not result in any habitat loss within the designated areas, the potential that areas of habitat within the draft Order Limits may be FLL is being considered.
- 8.8.17 The draft Order Limits are located outside IRZs for the Rutland Water SSSI. Therefore, it is considered unlikely that qualifying species for the SPA/Ramsar would use these habitats in sufficient numbers that activities within the draft Order Limits would result in a harmful effect on the qualifying features. On this basis, land within the draft Order Limits is unlikely to represent FLL.
- 8.8.18 As a result, the Project is considered unlikely to result in significant adverse effects on the Rutland Water SPA/Ramsar. However, given that non-breeding bird survey results are still being analysed, at this stage, impacts on the bird populations for which the SPA and Ramsar site are designated, due to habitat loss, degradation or disturbance of FLL habitats, cannot be entirely ruled out.
- 8.8.19 Therefore, on a precautionary basis, **significant effects** cannot be excluded at this stage of the assessment. Further assessment, including a HRA will be presented in the application for development consent.

Section 4: Harborough District

- 8.8.20 There are no international designated sites within the Study Area that are located in closest proximity to Section 4.

Section 5: Northamptonshire

- 8.8.21 Upper Nene Valley Gravel Pits SPA and Ramsar site are located within the draft Order Limits. The SPA is designated on the basis of wintering populations of bittern, golden plover and gadwall. The Ramsar site is designated on the basis of its use by high numbers of waterbirds during the non-breeding season and the wintering population of mute swan. Both designated sites are of International importance.

- 8.8.22 The SPA and Ramsar site will be subject to impacts as a result of the reconductoring of the existing ZA overhead line route which passes through the SPA/Ramsar. Three existing tower locations are within the SPA/Ramsar (ZA296 to ZA298), and one further tower (ZA299) is directly adjacent to the boundary of the SPA/Ramsar. Towers to the south of the SPA/Ramsar on the approach to Grendon Substation and those to the north fall within a 10 km radius of the SPA/Ramsar and therefore represent potential areas of FLL (Ref 8.50, Ref 8.50).
- 8.8.23 The reconductoring works would require vehicles to utilise routes passing through the SPA/Ramsar to access existing towers and facilitate the replacement of the existing overhead line. At towers ZA297 and ZA298 the use of existing established access tracks is proposed and these works are not expected to result in habitat loss.
- 8.8.24 At tower ZA296 an informal trackway passing through areas of grassland will be utilised and the use of track matting and/or ground levelling may be required on this route to make it suitable for use by large machinery. These works may result in temporary (1–2 years) habitat loss in small areas that would be reinstated following works.
- 8.8.25 Vegetation clearance and temporary habitat loss would also be required around each of the three towers within the SPA/Ramsar (ZA296 to ZA298). In all cases vegetation clearance will be kept to the minimum practicable to undertake the works. The design of the works is ongoing but at this stage on a precautionary basis, could include areas within up to a 70 m square with the existing tower at the centre. This will be refined during the ongoing design work and the final areas of habitat loss expected will be reported in the ES.
- 8.8.26 The methodology for reconductoring works will not require cables to be dropped to ground level. However, there may be some slackening in the cables during removal of the existing cables and their replacement with upgraded wires. As such there is the potential that in discrete locations along the route of the overhead line there will be a need for the removal of vegetation to ensure suitable safety clearances from the overhead line. Clearance will be limited to the minimum practicable, and trees will be reduced in height and retained where possible in preference to their removal.
- 8.8.27 Works within the SPA/Ramsar and in surrounding areas of potential FLL also have the potential to result in temporary disturbance of the bird populations for which the SPA and Ramsar site are designated. Reconductoring will be carried out in sections of several kilometres, with multiple construction teams operating concurrently at different locations. At each location, works (including enabling works and demobilisation) are expected to take approximately 8–12 weeks to complete. Several discrete tower inspections, each lasting a single day, may be required in advance of the main works period.
- 8.8.28 Reconductoring works within the SPA/Ramsar will involve replacement of existing overhead lines only. No new towers are required and overhead lines will remain on the same alignment as the existing routes. Therefore, there will be no change in the risk from collision with overhead lines.
- 8.8.29 Prior to mitigation, the Project has the potential to result in both temporary habitat loss and degradation and/or disturbance of habitat used by SPA/Ramsar site bird populations. This could in turn result in temporary fragmentation of habitats.
- 8.8.30 Efforts will be made to ensure appropriate seasonal timing of the works in order to minimise the potential for disturbance impacts on the SPA/Ramsar site qualifying features. However, this will be dependent on the timing of available power outages to undertake the works, and details of these periods are yet to be confirmed.

- 8.8.31 At this stage, impacts on the bird populations for which the SPA and Ramsar site are designated, due to habitat loss, degradation or disturbance of FLL, cannot be ruled out. Therefore, on a precautionary basis, **significant adverse effects** on the SPA/Ramsar qualifying features cannot be excluded at this stage of the assessment.
- 8.8.32 Non-breeding bird survey data collected during winter 2025–2026 are being analysed and will determine if further survey during winter 2026–2027 is required to inform the ES and subsequent stages of the HRA.
- 8.8.33 The design of avoidance and suitable mitigation/compensation measures (as required) will be undertaken in accordance with the draft Upper Nene Valley Gravel Pits Special Protection Area Guidance and Mitigation Strategy (Ref 8.53).

Statutory designated sites of national nature conservation importance (SSSI, NNR and LNR)

Section 1: South Holland District and Section 2: South Kesteven District

- 8.8.34 Surfleet Lows SSSI is located 0.6 km from the draft Order Limits and is of National importance. The SSSI supports a diverse range of wintering birds and there is potential for areas of habitat within the draft Order Limits to be FLL. At this stage, impacts on bird populations using this SSSI as a result of the Project cannot be ruled out. **Significant adverse effects** cannot be excluded at this stage of the assessment.
- 8.8.35 Dunsby Wood SSSI (an area of ancient woodland) directly adjoins the draft Order Limits and is of National importance. Ancient woodland is an irreplaceable resource.
- 8.8.36 Works within 15 m of Dunsby Wood SSSI will be limited to the cutting of the grass verge adjoining the A15 in order to ensure clear visibility for the proposed construction access south of Dunsby Wood. No trees or scrub will be removed.
- 8.8.37 In accordance with the design measures set out in Section 8.7 the construction works will maintain a minimum 15 m buffer from the SSSI, seeking to extend this where practicable. Due to other constraints on achieving a safe construction access from the A15, only the minimum buffer of 15 m is likely to be achieved for a 100 m section of haul road on the south eastern margin of Dunsby Wood SSSI. However, for the majority of this Section of route it is unlikely it will be necessary to utilise all of the land adjoining the SSSI, and efforts will be made where practicable to maintain a 50 m buffer where no works or storage of materials will occur.
- 8.8.38 With the implementation of the measures set out in the Draft Outline CoCP (see Section 8.7 and **Appendix 4A Draft Outline Code of Construction Practice**) it is likely that it will be possible to reduce disturbance such as dust deposition and light pollution to levels where the impact is negligible.
- 8.8.39 Further assessment of the potential indirect impacts of changes in air quality will be undertaken to assess any potential effects on the areas of ancient woodland within 200 m of the affected road network, which will include all construction haul and access routes.
- 8.8.40 However, prior to the completion of baseline surveys, impacts on this SSSI due to habitat degradation cannot be ruled out and therefore, on a precautionary basis, **significant adverse effects** cannot be excluded at this stage of the assessment.

- 8.8.41 Swinstead Valley SSSI is located 1.1 km from the draft Order Limits and supports calcareous grassland and is of National importance. There are no direct impacts as a result of the Project; however, there may be indirect impacts such as changes in water quality, level and flow, and works within or adjacent to watercourses which are hydrologically linked to the SSSI. Due to the distance from the Project and with implementation of standard and design measures, any adverse indirect effects of the Project on SSSI are expected to be negligible and **not significant**.

Section 3: Melton Borough

- 8.8.42 Twenty Acre Piece SSSI is located adjacent to proposed highways works on the A46/B676 at Sixhills. There are no direct impacts as a result of the Project. The scope of highways works at this location is still being developed, and on a precautionary basis there is the potential for impacts as a result of habitat degradation and pollution (e.g. noise, vibration, dust, air quality changes). The SSSI is located adjacent to an existing slip road and with implementation of standard construction controls and design measures, any adverse indirect effects of the Project on the SSSI are expected to be temporary, at the Local level only, and **not significant**.
- 8.8.43 The River Eye SSSI is located 3.0 km from the draft Order Limits and is of National importance. There are no direct impacts as a result of the Project; however, there may be indirect impacts such as changes in water quality, level and flow, and works within or adjacent to watercourses which are hydrologically linked to the SSSI. Due to the distance from the Project and with implementation of standard and design measures, any adverse indirect effects of the Project on the SSSI are expected to be negligible and **not significant**.

Section 4: Harborough District

- 8.8.44 There are no SSSIs within the Study Area for Section 4, therefore no significant effects will occur.

Section 5: Northamptonshire

- 8.8.45 Upper Nene Valley Gravel Pits SSSI is located within the draft Order Limits. The majority of the SSSI is also designated as a SPA and Ramsar site on the basis of the bird populations which it supports; therefore it is of **International** importance. A section of woodland to the north of the River Nene which is located outside the SPA/Ramsar boundary is of National importance. The SSSI is designated on the basis of its importance for both breeding and wintering bird populations.
- 8.8.46 As described for the SPA/Ramsar at Paragraphs 8.8.22 to 8.8.28, three towers (ZA296 to ZA298) are located within the SSSI and may be subject to adverse impacts due to habitat loss and disturbance arising from the reconductoring works in this section of the route during construction. Prior to mitigation, if these works occurred during the bird nesting season this could result in a temporary (one breeding season) reduction in the available suitable bird nesting habitat and resultant reduction in nesting success.
- 8.8.47 Efforts will be made to ensure appropriate seasonal timing of the works in order to minimise the potential for disturbance impacts on the bird populations for which the SSSI is designated. However, this will be dependent on the timing of available power outages to undertake the works. Details of these periods are yet to be confirmed.

- 8.8.48 Further assessment of the potential indirect impacts of changes in air quality will be undertaken to assess any potential effects on parts of the SSSI located within 200 m of the affected road network, which will include all construction haul and access routes.
- 8.8.49 Impacts on this SSSI and associated bird populations due to habitat loss, degradation or disturbance of functionally linked land, cannot be ruled out. Therefore, on a precautionary basis, **significant effects** cannot be excluded at this stage of the assessment.
- 8.8.50 Birch Spinney and Mawsley Marsh SSSI is located within the draft Order Limits and is of National importance. The existing ZA overhead line oversails the SSSI. There are no existing towers within the SSSI; however, ZA248 is located approximately 55 m to the south of the SSSI.
- 8.8.51 In accordance with the design principles defined in **Chapter 4 Description of the Project**, the design will be developed to ensure that access routes and construction laydown areas are located where they will not result in indirect impacts on the SSSI.
- 8.8.52 The methodology for reconductoring works will not require cables to be dropped to ground level. However, there may be some slackening in the cables during removal of the existing cables and their replacement with upgraded wires. As such, there is the potential that in discrete locations within the SSSI there will be a need for the removal of vegetation to ensure suitable safety clearances from the overhead line. Clearance will be limited to the minimum practicable, and trees will be reduced in height and retained where possible in preference to their removal.
- 8.8.53 While **significant effects** on the SSSI are considered unlikely, at this stage they cannot be ruled out. A full assessment of the impacts and resultant effects will be provided within the ES following the completion of arboricultural surveys and completion of the air quality assessment to consider potential effects of road traffic emissions on the SSSI habitats.
- 8.8.54 Summer Leys LNR is located 1.3 km from the draft Order Limits and is of County importance. The LNR is located within the Upper Nene Valley Gravel Pits SPA and Ramsar site. There will be no direct impacts; however, habitats within the draft Order Limits may provide FLL for qualifying bird species of the SPA/Ramsar site and on a precautionary basis, **significant adverse effects** cannot be excluded at this stage of the assessment.

Non-statutory designated sites (LWSs)

Section 1: South Holland District

- 8.8.55 The following three non-statutory designated sites are located within the draft Order Limits in Section 1:
- Vernatt's Drain LWS;
 - A16 East Verge South of the River Glen LWS; and
 - River Glen Corridor LWS.
- 8.8.56 Two further LWSs are located in close proximity, namely Pinchbeck Marsh LWS which is located within 50 m of the draft Order Limits, and Surfleet Seas End Saltmarsh LWS which is located approximately 100 m from the draft Order Limits.

- 8.8.57 Vernatt's Drain LWS and River Glen Corridor LWS will be oversailed by the new overhead line route. Small-scale vegetation clearance may be required on the route of the overhead line to facilitate the installation of temporary scaffolding or similar either side of the watercourse. No works are likely to be required within the channel to protect users of these watercourses during cable installation works. No haul road crossing of these watercourses is proposed.
- 8.8.58 Efforts will be made to minimise works required within these LWSs and the implementation of the measures outlined in the draft Outline CoCP (see Section 8.7 and **Appendix 4A Draft Outline Code of Construction Practice**) will act to reduce the potential for disturbance or degradation of the LWS through adjacent works. On this basis it is likely that adverse effects will be reduced to a level that they are temporary (up to one year), reversible and at up to the Local level only and **not significant**.
- 8.8.59 Part of the A16 East Verge South of the River Glen LWS lies within the draft Order Limits. It is likely that a small section of the LWS (approximately 10–20 m width) will be crossed to enable construction of the haul route leading to small-scale habitat loss. The area will be reinstated after construction. The extent of further habitat loss or degradation due to construction of the new overhead lines' approach to the Western Marsh Substation (to be constructed as part of the Grimsby to Walpole project) will be determined through ongoing design work and will be reported in the ES.
- 8.8.60 Therefore, at this stage of the assessment on a precautionary basis, it is assumed that there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.61 No habitat loss is expected from Pinchbeck Marsh LWS. Based on the implementation of the design measures outlined in Section 8.7 and controls within the draft Outline CoCP (see **Appendix 4A Draft Outline Code of Construction Practice**), it is likely that adverse effects will be reduced to a level that they are temporary (up to one year), reversible and at the Local level only, therefore **not significant**.
- 8.8.62 Surfleet Seas End Saltmarsh LWS was identified in the Study Area as having the potential for impact pathways. It is located 0.1 km from the draft Order Limits and designated on the basis of river, marsh and calcareous grassland habitats. Based on the implementation of the design measures outlined in Section 8.7, and controls within **Appendix 4A Draft Outline Code of Construction Practice**, any adverse impacts of the Project on the LWS are expected to result in effects that are negligible and **not significant**.
- 8.8.63 Prior to mitigation there is the potential for impacts during construction on LWSs and potential LWSs located within the Study Area but more than 200 m from the draft Order Limits. However, based on the implementation of standard and design measures, any adverse indirect effects of the Project on LWSs are expected to be negligible and **not significant**.

Section 2: South Kesteven District

- 8.8.64 There are five LWSs partially within the draft Order Limits for Section 2:
- South Forty Foot Drain LWS;
 - Norwood LWS;
 - Twyford Wood LWS;

- Haconby Drive Drain LWS; and
- Corby Glen Road Verge LWS.

- 8.8.65 South Forty Foot Drain LWS is of County importance and will be oversailed by the new overhead lines and a new crossing of the drain is proposed for the haul road. As a result, there is the potential for impacts on both terrestrial and aquatic habitats. Efforts will be made to minimise the impacts on the LWS through minimising vegetation clearance and use of a temporary bridge where practicable, to limit and degradation of aquatic habitats. However, on a precautionary basis for the preliminary assessment it is assumed there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.66 A small section of Norwood LWS is located within the draft Order Limits. However, this area of habitat will be retained and is not proposed for clearance as part of the Project. The haul road and proposed tower locations are located more than 50 m from the LWS and with the design and avoidance measures set out in Section 8.7 in place, are unlikely to result in adverse impacts on the LWS.
- 8.8.67 Works within 15 m of the LWS will be limited to proposed use of an informal farm track located in close proximity to the south western boundary of the LWS. In the absence of habitat survey data for this location to confirm current conditions, and the requirement for ground preparation works to enable construction, the potential for adverse effects on the adjoining LWS cannot be ruled out. On a precautionary basis, it is assumed that there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.68 The south western corner of Twyford Wood LWS is located within the draft Order Limits. This section of the LWS is not ancient woodland and is of County importance. Efforts will be made during evolution of the design to remove the requirement for undertaking works within the boundary of the LWS. However, at this stage it is possible that vegetation clearance to enable positioning of machinery required for the tensioning of cables may be required. If this is the case then loss of woodland habitat of up to 0.7 ha would result in a **significant adverse effect** at up to the County level.
- 8.8.69 Haconby Drive Drain LWS and Corby Glen Road Verge LWS are located partially within the draft Order Limits. While small levels of habitat loss are expected, these are likely in each case to be a small percentage of the overall LWS. As a precaution, at present they are considered in each case as a **potential significant adverse effect** at up to the County level. The extent of habitat losses will be confirmed and this assessment revisited in the ES.
- 8.8.70 Spring Wood Edenham LWS is located directly adjacent to the draft Order Limits. However, taking into account the design measures outlined in Section 8.7 and controls within **Appendix 4A Draft Outline Code of Construction Practice**, a buffer of at least 15 m from the woodland edge will be maintained during construction.
- 8.8.71 Based on the implementation of these measures, any adverse impacts of the Project on Spring Wood Edenham LWS are expected to result in effects that are negligible and **not significant**.
- 8.8.72 Breache's Wood LWS is designated on the basis of its ancient woodland habitat. Ancient woodland is an irreplaceable resource and the LWS is considered to be of up to National importance. Part of the northern extent of the LWS is currently within the draft Order Limits. In addition, an existing access track will pass within 15 m of the LWS. At present it is considered unlikely that any vegetation clearance or ground

levelling associated with the use of the adjacent access track will be required. However, on a precautionary basis as the design for this element of the design is ongoing, it is assumed for the preliminary assessment that there is the potential for disturbance or habitat degradation as a result of these works.

- 8.8.73 Taking into account the design measures outlined in Section 8.7 for the remainder of the woodland, a retained buffer of a minimum of 15 m will be maintained to minimise the potential for disturbance/habitat degradation.
- 8.8.74 Any adverse effect on the LWS as a result of the Project is unlikely to be significant at the National level but in the absence of further information relating to the adjacent access track on a precautionary basis, it is assumed that there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.75 Prior to mitigation there is potential for remaining LWSs and potential LWSs located within 200 m of the draft Order Limits to be subject to indirect impacts during construction due to disturbance (vibration, dust, air quality, light, noise and visual). However, given that all data to undertake these assessments are not yet available, it is assumed on a precautionary basis that there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.76 Prior to mitigation there is the potential for impacts during construction on those LWSs and potential LWSs located within the Study Area but more than 200 m from the draft Order Limits. However, based on the implementation of standard and design measures, any adverse indirect effects of the Project on LWS are expected to be negligible and **not significant**.

Section 3: Melton Borough

- 8.8.77 There are three LWS partially within the draft Order Limits for Section 3:
- Oak Plantation Hedgerow LWS;
 - Scalford Brook LWS; and
 - Gipsy Nook Verge LWS.
- 8.8.78 Oak Plantation Hedgerow LWS and Gipsy Nook Verge LWS may be subject to areas of temporary habitat loss during construction. However, any areas impacted are likely to represent a small part of the site and will be subject to reinstatement following completion of construction. With construction controls set out in **Appendix 4A Draft Outline Code of Construction Practice** in place, the Project is considered likely to result in a temporary adverse effect on each of the LWSs which in each case would be relevant at the Local level only and **not significant**.
- 8.8.79 Scalford Brook LWS is of County importance and will be crossed by the proposed new overhead lines and associated haul road. There is the potential for construction of the Project to result in temporary habitat loss both within the Scalford Brook LWS and directly adjoining it.
- 8.8.80 Efforts will be made to minimise impacts on the LWS through minimising vegetation clearance and use of a temporary bridge where practicable to limit degradation of aquatic habitats. Areas impacted will be reinstated following construction.
- 8.8.81 On a precautionary basis, in the absence of survey data for the preliminary assessment it is assumed there is the potential for a **significant adverse effect** at up to the County level.

- 8.8.82 In addition, there are a total of 25 potential, candidate or historic LWSs partly within the draft Order Limits in Section 3. Efforts will be made during detailed design to avoid impacts to these sites. Further survey work will establish the nature and importance of any ecological features associated with the potential/candidate/historic LWSs that may be affected by the works. However, at present there is a risk of habitat loss/degradation and/or disturbance, therefore on a precautionary basis it is assumed construction works could result in **significant adverse** effects at up to the County level at each of these sites.
- 8.8.83 Prior to mitigation there is potential for remaining LWSs and potential LWSs located within 200 m of the draft Order Limits to be subject to indirect impacts during construction due to disturbance (vibration, dust, air quality, light, noise and visual). However, given that all data to undertake these assessments are not yet available, it is assumed on a precautionary basis that there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.84 Prior to mitigation there is the potential for impacts during construction on those LWSs and potential LWSs located within the Study Area but more than 200 m from the draft Order Limits. However, based on the implementation of standard and design measures, any adverse indirect effects of the Project on LWSs are expected to be negligible and **not significant**.

Section 4: Harborough District

- 8.8.85 There is one LWS partially within the draft Order Limits for Section 4. Hammer's Lodge Farm Field LWS is located on the route of proposed access tracks to the west of the existing overhead lines and is of County importance. Two temporary access routes would be utilised during construction. Both pass through the LWS which is designated on the basis of its grassland habitats. The access tracks do not appear to follow existing tracks and further survey is required to establish the habitats present and the impacts of temporary habitat loss in these locations. Assuming that the use of track matting is suitable to prevent long-term damage of the habitat present, it is likely any adverse effects would be temporary and reversible.
- 8.8.86 However, pending results of the field surveys, on a precautionary basis this preliminary assessment assumes construction works could result in a **significant adverse effect** at up to the County level.
- 8.8.87 Prior to mitigation there is the potential for impacts during construction on those LWSs and potential LWSs located within the Study Area but more than 200 m from the draft Order Limits. However, based on the implementation of standard and design measures, any adverse indirect effects of the Project on LWS are expected to be negligible and **not significant**.

Section 5: Northamptonshire

- 8.8.88 There are five LWS partially within the draft Order Limits for Section 5:
- Vivians Covert LWS;
 - Wilby Meadows Stream LWS;
 - Earls Barton Lock Lake LWS;
 - Upper Nene Valley Gravel Pits LWS;
 - Grendon Lakes North LWS.

- 8.8.89 Vivians Covert LWS is of County importance and designated on the basis of its lowland deciduous woodland habitat. Tower ZA277 is located within the LWS, and there will be the requirement for clearance of woodland habitat from within the LWS to enable access for reconductoring works. This could also result in disturbance or degradation of adjacent habitat. Clearance will be kept to the minimum practicable but on a precautionary basis, at present there is assumed to be the potential for a **significant adverse effect** at up to County level. This assessment will be updated in the ES with further baseline survey data and design detail expected to enable the conclusions to be refined.
- 8.8.90 Wilby Meadows Stream LWS is located partially within the draft Order Limits and is of County importance. Only a small section of the LWS lies within the draft Order Limits and it is likely that in accordance with the design principles set out in **Chapter 4 Description of the Project** it can be retained to avoid any habitat loss from within the LWS. On that basis it is likely that with draft CoCP measures in place, any adverse impacts can be reduced to the level where the resultant effects on the CWS are likely to result in no more than a temporary adverse effect at the Local level that is **not significant**.
- 8.8.91 Earls Barton Lock Lake LWS, Grendon Lakes North LWS and Upper Nene Valley Gravel Pits LWS are all located partially within the draft Order Limits. Each is of County importance and includes sections that overlap with the Upper Nene Valley Gravel Pits SPA and Ramsar site which are of International importance for wintering birds. As described for works within the SPA/Ramsar there is the potential for habitat loss and disturbance arising from the reconductoring works in this section of the route during construction. Efforts will be made to ensure appropriate seasonal timing of the works. However, this will be dependent on the timing of available power outages to undertake the works, and details of these periods are yet to be confirmed. At this stage there is considered to be the potential for a **significant adverse effect** on each LWS at up to the County level.
- 8.8.92 Prior to mitigation there is potential for remaining LWSs and potential LWSs located within 200 m of the draft Order Limits to be subject to indirect impacts during construction due to disturbance (vibration, dust, air quality, light, noise and visual). However, given that all data to undertake these assessments are not yet available, it is assumed on a precautionary basis that there is the potential for a **significant adverse effect** at up to the County level.
- 8.8.93 Prior to mitigation there is the potential for impacts during construction on those LWSs and potential LWSs located within the Study Area but more than 200 m from the draft Order Limits. However, based on the implementation of standard and design measures, any adverse indirect effects of the Project on LWSs are expected to be negligible and **not significant**.

Habitats

Ancient woodland

- 8.8.94 Ancient woodland is an irreplaceable resource and all areas of ancient woodland are of National importance.
- 8.8.95 Consideration of the potential for effects upon ancient woodlands located within the draft Order Limits, or within 50 m of the draft Order Limits, is provided below. For all of these woodlands the potential for adverse impacts as a result of changes in air quality

and dust deposition due to construction traffic cannot be ruled out at this point as these elements of the air quality assessment are yet to be undertaken. The potential for adverse effects arising from these impacts will be assessed within the ES.

- 8.8.96 For remaining ancient woodland within a 200 m radius of the affected road network, at this stage it is not possible to rule out the potential for adverse effects arising from changes in air quality or dust deposition. The potential for adverse effects on these sites will be assessed within the ES when the air quality assessment has been completed. At this stage on a precautionary basis, the potential for a **significant adverse effect** on these areas of ancient woodland cannot be ruled out.
- 8.8.97 For all other ancient woodlands within the Study Area based on the implementation of the control measures within **Appendix 4A Draft Outline Code of Construction Practice**, any impacts of the Project on ancient woodland habitats are expected to result in a negligible and **not significant effect**.

Section 1: South Holland District

- 8.8.98 There are no known areas of ancient woodland within or adjacent to the draft Order Limits in Section 1.

Section 2: South Kesteven District

- 8.8.99 A small section at the northern extent of Breache's Wood (PAWS) and a small section at the south western extent of Norwood/East Woods (ASNW) are located within the draft Order Limits. These areas of ancient woodland are also both designated as LWSs. As described in Paragraphs 8.8.72 to 8.8.74 taking into account the design measures in place, a retained buffer of 15 m will be maintained around the majority of each woodland to reduce the potential for adverse impacts. However, at this stage, the potential for vegetation clearance and/or ground levelling associated with the use of the adjacent access track means that on a precautionary basis, it is assumed at this stage that there is the potential for a temporary **significant adverse effect** at up to County level to occur at each woodland. A more detailed assessment will be undertaken in the ES when more information is available.
- 8.8.100 Small sections of Little Osgrove Wood and Herricho Wood are located within the draft Order Limits. In accordance with the design principles defined in **Chapter 4 Description of the Project**, the design will be developed to ensure that there is no habitat loss from within the ancient woodland sites. In addition, the CoCP will ensure that a minimum 15 m buffer zone surrounding the ancient woodland will not be subject to works, to minimise the potential for disturbance.
- 8.8.101 Based on the implementation of these measures, any impacts of the Project on ancient woodland habitats adjoining or within the Study Area are likely to be minimised. However, pending the completion of the air quality and dust assessments, a precautionary approach has been taken to the assessment and it is assumed there is the potential for a temporary **significant adverse effect** at up to County level to occur at each woodland. A more detailed assessment will be undertaken in the ES when more information is available.

Section 3: Melton Borough and Section 4: Harborough District

- 8.8.102 There are no known areas of ancient woodland within or adjacent to the draft Order Limits in Sections 3 or 4.

Section 5: Northamptonshire

- 8.8.103 Cransley Wood is located adjacent to a track proposed for providing access for reconductoring works in Section 5. Prior to survey to confirm baseline conditions and confirmation of any works required to enable use of the access track, on a precautionary basis it is assumed that there is potential for a **significant adverse effect** at up to County level. A more detailed assessment will be undertaken in the ES when more information is available.

Terrestrial habitats

- 8.8.104 Desk study information indicates that the majority of the draft Order Limits consists of cropland of limited biodiversity importance with regular wet ditches and hedgerows.
- 8.8.105 In accordance with the design and standard measures identified and set out in Section 8.7, the Project will seek to avoid and minimise sensitive habitat wherever practicable. The extent and duration of habitat losses will differ across the Sections of the Project.

Section 1: South Holland District and Section 2: South Kesteven District

- 8.8.106 Within Sections 1 and 2 there is the potential for permanent and temporary habitat loss to enable the construction of new towers, the erection of new overhead lines, WMEL-A Substation and an associated temporary haul route, compounds and laydown areas. While the majority of habitat impacted will be areas of cropland of limited biodiversity value, there are expected to be ditches, hedgerows, grassland, woodland and trees that will be directly impacted.
- 8.8.107 While control measures will minimise the risk of indirect impacts, the potential for disturbance or degradation of habitats outside the draft Order Limits cannot at this stage be ruled out.
- 8.8.108 The majority of habitats impacted can be readily reinstated and therefore the majority of resulting effects on habitats are expected to be temporary and reversible. However, at this stage on a precautionary basis, the initial assessment assumes there is the potential for permanent and temporary **significant adverse effects** on habitats (excluding ancient woodland) at up to the County level.

Section 3: Melton Borough

- 8.8.109 Terrestrial habitats in Section 3, east of the proposed WMEL-B Substation will be subject to similar impacts to those described for Sections 1 and 2.
- 8.8.110 Section 3 south of the proposed WMEL-B Substation consists of reconductoring, and therefore is likely to require smaller areas of permanent and temporary habitat loss to enable machinery to access existing towers and replace existing conductor wires. Vegetation clearance will be kept to the minimum practicable and on the route of the existing overhead lines, the majority of the draft Order Limits would be retained and no works will be required. It would only be necessary to remove existing vegetation where safety clearances are not currently achieved. In such circumstances trees will be reduced in height and retained in preference to their full removal.
- 8.8.111 At this stage on a precautionary basis the initial assessment assumes there is the potential for permanent and temporary **significant adverse effects** on habitats (excluding ancient woodland) at up to the County level.

Section 4: Harborough District and Section 5: Northamptonshire

- 8.8.112 Within Sections 4 and 5 the Project will consist of reconductoring works only, with the conductor wires being replaced and reuse of existing towers and the existing substation at Grendon. These works will require temporary access routes, temporary working areas, at or in close proximity to existing towers. The majority of the draft Order Limits will be retained and no works will be required. The area of potential fen habitat north east of Mawsley between ZA247 and ZA248 will be avoided wherever practicable and it is assumed at this stage that it will not be crossed by access routes.
- 8.8.113 At this stage, on a precautionary basis the initial assessment assumes there is the potential for permanent and temporary **significant adverse effects** on habitats (excluding ancient woodland) at up to the County level.
- 8.8.114 Survey work will continue during 2026 to characterise the terrestrial habitat types and their constituent flora and fauna, within and adjacent to the draft Order Limits. Survey findings will also confirm the condition of relevant habitats, and inform the design of appropriate mitigation and the assessment of effects which will be reported fully in the ES.
- 8.8.115 In the absence of supplementary survey findings and confirmed additional mitigation measures, significant effects on terrestrial habitats within the draft Order Limits cannot be excluded at this stage of the assessment.

Aquatic habitats

- 8.8.116 Direct impacts upon aquatic habitats would include those associated with the numerous crossings of watercourses required to enable site access and construction of a haul route within Sections 1 to 3.
- 8.8.117 Impacts from overhead lines would be minimised through the setting back of towers from the channel and marginal habitats. The stringing of the overhead line could potentially result in temporary loss or damage to watercourses and ditches at crossing points (total number to be confirmed when the design is finalised) within the draft Order Limits. The stringing methodology will seek to minimise any potential impacts to watercourses during construction and any impacts are likely to be temporary.
- 8.8.118 Within Sections 1 to 3 it is currently anticipated that there will be approximately 180 watercourse crossings. The design of these elements will seek to minimise impacts through reducing the footprint of these works as far as practicable. However, with the best practice construction methods and reinstatement of these habitats post-construction, the associated effects upon aquatic habitats are likely to be temporary.
- 8.8.119 Temporary crossings of watercourses are also likely to be required in Sections 4 and 5 to enable access for reconductoring. Existing bridges/culverts will be used and strengthened where necessary in order to minimise the potential ecological impact of new crossings.
- 8.8.120 Further assessment of potential indirect impacts due to construction activities, including changes in water quality, will be undertaken and reported within the ES.
- 8.8.121 Survey work will continue through the remainder of 2026 to characterise the terrestrial and aquatic habitat types, and their constituent flora and fauna, within and adjacent to the draft Order Limits. Survey findings will also confirm the condition of relevant habitats and inform the design of appropriate mitigation or compensation measures and the assessment of impacts and enhancement, which will be developed fully in the ES.

- 8.8.122 In the absence of supplementary survey findings and confirmed additional mitigation measures, **significant adverse effects** on aquatic habitats within the draft Order Limits cannot be excluded at this stage of the assessment.

WFD water bodies

- 8.8.123 The Project interacts with a number of WFD water bodies which have the potential to be impacted by crossings, runoff, sedimentation and pollution. Further details of the water environment baseline are provided within **Chapter 10 Water Environment**.
- 8.8.124 With design and standard mitigation measures in place, effects are likely to be temporary and reversible, and no likely significant effects are expected.

Protected and/or notable species

Bats

- 8.8.125 Bats surveys are ongoing and will continue into 2027 as required.
- 8.8.126 When survey work is more progressed, the importance of the bat assemblages present within and surrounding the draft Order Limits will be assessed using the guidance provided within the UK Bat Mitigation Guidelines (Ref 8.94).
- 8.8.127 As the design is finalised, the impacts on foraging and commuting habitats and habitats that support roosting bats or have the potential to support roosting bats (trees/woodlands), will be avoided where practicable.
- 8.8.128 The Project may result in direct loss of suitable foraging and commuting habitat, severance of habitats and indirect impacts during construction such as noise, vibration and lighting.
- 8.8.129 Within Sections 1, 2 and 3 (east of WMEL-A) there is the potential for larger areas of clearance; however, given the predominately arable landscape it is considered unlikely that temporary impacts would result in notable impacts on the wider movement of bat populations through the local landscape.
- 8.8.130 Within Section 3 (south of WMEL-A) and Sections 4 and 5 the reconductoring works are expected to require minimal clearance to existing flight lines. Therefore, adverse effects on bat foraging/commuting routes are unlikely.
- 8.8.131 Where impacts to roosting bats cannot be avoided, a licence from Natural England would be required to permit derogation.
- 8.8.132 Survey work will continue in 2026/2027 to inform the assessment of impacts and effects and the design of appropriate mitigation to be presented in the ES. Further survey findings will also be used to confirm any licensing and enhancement requirements. On a precautionary basis, significant adverse effects on bats (foraging, commuting and roosting) which could in each case be a **significant adverse effect** at up to District level, cannot be excluded at this stage of the assessment.

Great crested newt

- 8.8.133 The results of great crested newt surveys undertaken in June 2026 are being analysed and will be reported in the ES.
- 8.8.134 As the design is finalised, direct impacts upon ponds and water bodies will be avoided where practicable. However, potentially suitable aquatic and terrestrial

habitat for great crested newts also includes areas of potentially suitable terrestrial habitat within 250 m. The Project may therefore result in direct impacts upon great crested newt through habitat loss/severance during construction, due to the establishment of construction compounds and access routes and within the footprint of substations and towers.

- 8.8.135 Additionally, there is a risk of machinery and traffic killing or injuring great crested newts if they are present within the draft Order Limits during construction activities.
- 8.8.136 Where impacts upon great crested newts cannot be avoided, a licence from Natural England would be required to permit activities that would otherwise be unlawful.
- 8.8.137 Survey work will continue in 2026/2027 to inform the assessment of impacts and effects and the design of appropriate mitigation to be presented in the ES. Further survey findings will also be used to confirm any licensing and enhancement requirements. On a precautionary basis at this stage of the assessment, prior to the agreement of licensing approach and associated requirements for additional mitigation, **significant adverse effects** on great crested newt metapopulations could in each case be significant at up to Regional level.

Reptiles

- 8.8.138 Where suitable habitat for widespread reptile species (slow worm, common lizard, grass snake or adder) is present, there is the potential for habitat loss and direct killing/injury during site clearance works. In addition, there is the potential for disturbance through noise, vibration and lighting during construction. Habitat could also be degraded or fragmented due to construction works.
- 8.8.139 Where possible suitable areas of habitat for reptiles will be avoided. However, it is likely that at least some areas of suitable habitat will need to be cleared. Surveys will be undertaken in autumn 2026 and spring 2027 to confirm presence of any notable reptile populations.
- 8.8.140 **Appendix 4A Draft Outline Code of Construction Practice** includes measures to avoid and reduce potential impacts to the minimum practicable.
- 8.8.141 Findings of the surveys will be used to inform the assessment of impacts and effects, and details of any appropriate mitigation and enhancement, which will be developed fully and presented within the ES.
- 8.8.142 On a precautionary basis, significant adverse effects on reptiles cannot be excluded at this stage of the assessment.

Otter

- 8.8.143 Where suitable habitat for otter is present, there is the potential for disturbance through noise, vibration, lighting and increased human presence on-site. Habitat degradation could potentially occur through pollution of habitats and there is also a risk of machinery and traffic killing or injuring otters if they are present during construction activities.
- 8.8.144 In the first instance, works would be located to avoid the loss of any otter holts or resting places. If it is not possible to avoid impacts on otter holts, a licence from Natural England would be sought to permit derogation from legislation.
- 8.8.145 **Appendix 4A Draft Outline Code of Construction Practice** includes measures to avoid and reduce potential impacts to the minimum practicable.

- 8.8.146 Survey work will continue in the remainder of 2026 and spring 2027, to confirm the status of otter. Findings will be used to inform the assessment of impacts and effects, and details of any appropriate mitigation and enhancement, which will be developed fully and presented within the ES.
- 8.8.147 On a precautionary basis, **significant adverse effects** on otter cannot be excluded at this stage of the assessment.

Beaver

- 8.8.148 It is assumed that beaver is absent from the draft Order Limits. Therefore, no impacts or resultant effects on beaver are expected. This assumption will be confirmed as part of the survey work to be undertaken prior to DCO application.

Breeding birds

- 8.8.149 Habitats outside the designated sites are expected to support a range of common farmland birds and have the potential to support specially protected species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
- 8.8.150 It is assumed that through implementation of the design and control measures set out in Section 8.7, the extent of vegetation clearance will be kept to the minimum practicable. However, there is the potential for a temporary reduction in the available nesting habitat during construction, and potential for disturbance of nesting birds using retained habitats adjoining the draft Order Limits due to noise, construction traffic movements and increased human activity.
- 8.8.151 Further survey will be undertaken in summer 2026/spring 2027 (as required) to confirm the status of breeding birds and to inform the assessment of impacts and effects and the design of appropriate mitigation and enhancement, which will be further developed and presented within the ES.
- 8.8.152 On a precautionary basis it is not possible at this stage to exclude the potential for **significant adverse effects** on breeding birds.

Non-breeding birds

- 8.8.153 Non-breeding bird surveys undertaken during winter 2025–2026 identified limited observations of significant concentrations of waterbird species flying over the draft Order Limits. On a precautionary basis, the non-breeding bird assemblage in Section 1 is currently considered as being of up to County importance. Sections 2, 3 and 4 are likely to have a more limited non-breeding bird assemblage than Section 1 of the route but have the potential to support populations of up to District importance.
- 8.8.154 The non-breeding bird assemblage associated with the Upper Nene Valley Gravel Pits SPA, Ramsar site and SSSI, as well as any surrounding functionally linked land is of International importance for non-breeding birds. Remaining habitats in Section 5 are similar to the habitats in Sections 2, 3 and 4 and are unlikely to be of more than District importance.
- 8.8.155 It is assumed that through implementation of the design and control measures set out in Section 8.7, the extent of vegetation clearance will be kept to the minimum practicable. However, there is the potential for a temporary reduction in the foraging habitat available for non-breeding birds during construction due to noise, construction traffic movements and increased human activity.

- 8.8.156 The potential impact on non-breeding birds is likely to be more pronounced within those areas of substation and new overhead line construction (i.e. Sections 1, 2 and Section 3 east of WMEL-B Substation) where the duration and extent of works will be greater. Within areas where only reconductoring works are required, the works areas will be smaller and more temporary in nature.
- 8.8.157 Further survey will be undertaken in winter 2026/2027 (as required) to confirm the status of non-breeding birds and to inform the assessment of impacts and effects and the design of appropriate mitigation and enhancement, which will be further developed and presented within the ES.
- 8.8.158 On a precautionary basis it is not possible at this stage to exclude the potential for **significant adverse effects** on non-breeding bird populations.

Water vole

- 8.8.159 Where suitable water vole habitat exists, there is a risk of construction works impacting watercourses and associated riparian habitat causing incidental mortality of protected species. Furthermore, there may be suitable habitats within and/or adjacent to the draft Order Limits that could be impacted by proposed works (e.g. through habitat loss, disturbance and fragmentation).
- 8.8.160 **Appendix 4A Draft Outline Code of Construction Practice** includes measures to avoid and reduce potential impacts to the minimum practicable. However, if impacts to water vole burrows cannot be avoided, a licence from Natural England will be sought to permit derogation.
- 8.8.161 On a precautionary basis, **significant adverse effects** on water vole cannot be excluded at this stage of the assessment.

Fish

- 8.8.162 Notable fish species have been recorded within the Study Area. There is a risk that habitats supporting protected and notable fish species will potentially be impacted during construction and maintenance by transmission line infrastructure, supporting structures and associated haul road and maintenance routes. Short-term impact on habitat connectivity, fragmentation, degradation and disturbance cannot be discounted at this stage, as well as the risk of incidental mortality of protected fish species during construction works.
- 8.8.163 As outlined in **Appendix 4A Draft Outline Code of Construction Practice**, where any in-channel watercourse works are required, works will be completed outside fish spawning season (March 16 to June 16 inclusive) and fish migratory seasons (species-specific, dependent on the water body). Where impacts upon notable fish species cannot be avoided, appropriate permits may be required, such as an FR2 licence from the Environment Agency.
- 8.8.164 **Appendix 4A Draft Outline Code of Construction Practice** includes measures to avoid and reduce potential impacts to the minimum practicable.
- 8.8.165 Survey information collected in 2026 will be used to confirm the status of species present and inform the assessment of impacts and any appropriate mitigation and enhancement, which will be developed fully and presented within the ES.
- 8.8.166 A precautionary approach has therefore been taken and **significant adverse effects** on fish cannot be excluded at this stage of the assessment.

Badger

- 8.8.167 Badger surveys are ongoing. However, given the scale of the Project it is likely that there will be multiple badger territories associated with the land within the draft Order Limits.
- 8.8.168 The Project will result in the loss of habitat features such as hedgerows, scrub and areas of woodland with the potential to support badger setts.
- 8.8.169 In addition, there is the potential for general disturbance impacts during construction from noise, vibration, temporary site lighting and increased vehicle movements.
- 8.8.170 On a precautionary basis, **significant adverse effects** on badger cannot be excluded at this stage of the assessment.

Protected and/or notable plants

- 8.8.171 Vegetation surveys are ongoing. However, it is possible that the draft Order Limits could support populations of protected and/or notable plant species.
- 8.8.172 The design and control measures set out in Section 8.7 will be implemented to avoid and reduce impacts wherever possible. However, pending survey results on a precautionary basis, **significant adverse effects** on protected and/or notable plants cannot be excluded at this stage of the assessment.

Aquatic macroinvertebrates

- 8.8.173 There is a risk that habitats suitable for protected and notable aquatic macroinvertebrate species will be impacted by proposed construction works, e.g. habitat loss, fragmentation and disturbance and a risk of incidental mortality of aquatic macroinvertebrates.
- 8.8.174 **Appendix 4A Draft Outline Code of Construction Practice** includes measures to avoid and reduce potential impacts to the minimum practicable.
- 8.8.175 Survey work is ongoing in 2026 to confirm the status of aquatic macroinvertebrates and inform assessment of construction-related effects and design of appropriate mitigation plans if required. Survey site selection has been based on crossing point locations where culverts, bridges and/or outfalls have the potential to influence macroinvertebrate populations. Surveys will inform the assessment of impacts and any appropriate mitigation and enhancement, which will be developed fully and presented within the ES.
- 8.8.176 A precautionary approach has been taken and **significant adverse effects** on aquatic macroinvertebrates cannot be excluded at this stage of the assessment.

Terrestrial Invertebrates

- 8.8.177 Survey work will be undertaken to confirm if habitats impacted by the Scheme support protected or notable populations of terrestrial invertebrates.
- 8.8.178 The design and control measures set out in Section 8.7 will be implemented to avoid and reduce impacts wherever possible. However, pending survey results on a precautionary basis, significant adverse effects on terrestrial invertebrate populations cannot be excluded at this stage of the assessment.

Aquatic macrophytes

- 8.8.179 There is a risk of construction works impacting watercourses and associated aquatic macrophytes causing incidental mortality of protected species. Furthermore, there may be suitable habitats within and/or adjacent to the draft Order Limits that could be impacted by proposed works (e.g. through habitat loss, disturbance and fragmentation).
- 8.8.180 **Appendix 4A Draft Outline Code of Construction Practice** includes measures to avoid and reduce potential impacts to the minimum practicable.
- 8.8.181 Survey work is ongoing in 2026 to confirm the status of aquatic macrophytes and inform the assessment of impacts and any appropriate mitigation and enhancement, which will be developed fully and presented within the ES. On a precautionary basis, **significant adverse effects** on aquatic macrophytes cannot be excluded at this stage of the assessment.

Operation and maintenance

Designated sites

- 8.8.182 The Wash SPA, Ramsar site and Nene Washes SPA and Ramsar site are designated for their bird interest. There is potential for collision mortality to occur during operation of the Project. This will be confirmed once baseline bird surveys are complete and the results presented within the ES.
- 8.8.183 On a precautionary basis, **significant adverse effects** upon these designated sites, associated with collision risk and subsequent killing/injury of bird species which are qualifying features, cannot be excluded at this stage.

Habitats

- 8.8.184 The operation of the Project is only expected to result in small-scale habitat losses and therefore the resultant effect on habitats is expected to be negligible and **not significant**.
- 8.8.185 Maintenance tasks are not likely to cause any adverse impacts or significant effects on habitats. There is the potential for maintenance to include refurbishment or replacement of infrastructure, which would be more intrusive. However, impacts and resulting effects would be equal to or less than those associated with construction of the Project, which are set out in **Table 8.11** and are not therefore assessed separately.

Protected and/or notable species

Birds: breeding and non-breeding

- 8.8.186 There is potential for collision mortality to occur during operation of the Project. This will be assessed once baseline surveys are complete and the results presented within the ES and HRA Report. Therefore, on a precautionary basis, **significant adverse effects** upon both the breeding and non-breeding bird populations through collision risk and subsequent killing/injury of bird species which are qualifying features, cannot at this stage be excluded.

Table 8.11 Preliminary summary of ecology and biodiversity effects

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Section 1: South Holland District				
Construction				
The Wash SPA/Ramsar site	International	Potential loss, degradation or disturbance of functionally linked land.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
The Wash and North Norfolk Coast SAC	International	Potential changes in water quality level and flow in hydrologically linked watercourses.	Not required.	Negligible and Not Significant (Neutral, Not Significant).
Nene Washes SPA/Ramsar site	International	Potential loss, degradation or disturbance of functionally linked land.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

¹² Equivalent conclusion in generic assessment methodology provided in brackets.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Surfleet Lows SSSI	National	Construction pollution (e.g. noise, vibration, air quality, dust, light, visual). Potential for hydrological connectivity.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Dunsby SSSI	National	Habitat loss and degradation. Construction pollution (e.g. noise, vibration, air quality, dust, light, visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Swinstead Valley SSSI	National	Potential for hydrological connectivity.	None	Negligible and not significant.
A16 East Verge South of the River Glen LWS (N.B. covered by both a statutory and non-statutory designation)	County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual) and disruption of hydrological links that can affect Groundwater Dependent Terrestrial Ecosystem (GWDTE).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to County level, Significant (up to Moderate Adverse, Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Non-statutory designated sites (Vernatt's Drain LWS and River Glen Corridor LWS)	County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual) and disruption of hydrological links that can affect GWDTE.	None	Temporary adverse effect at up to Local level, Not Significant (up to Minor Adverse, Not Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Non-statutory designated sites (Pinchbeck Marsh LWS)	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None	Temporary adverse effect at up to Local level, Not Significant (up to Minor Adverse, Not Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Non-statutory designated sites (Surfleet Seas End Saltmarsh LWS)	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None	Negligible and not significant.
All other non-statutory designated sites within the Study Area	Up to County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None	Negligible and not significant.
Habitats (excluding ancient woodland)	Up to County	Habitat loss and degradation.	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).		County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Bat assemblage	Up to Regional	Temporary habitat loss and potential disturbance of foraging/commuting bats and roosts.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Great crested newt	Up to Regional	Habitat loss (aquatic and terrestrial). Habitat severance, or degradation. Disturbance (e.g. pollution). Direct mortality.	Requirement to be confirmed within the ES and dependent on the agreed licensing approach.	Potential significant adverse effect at Regional level (Major adverse – Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Otter; Water vole;	Up to County	Habitat loss.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Fish		Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).		Further assessment required following completion of ecology surveys, to be recorded within the ES.
Badger	Up to Local	Loss of setts and foraging habitat. Habitat severance.	Requirement to enable licensing to be confirmed within the ES.	Potential adverse effect at up to Local level (Minor adverse, Not Significant).
Breeding birds	Up to County	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Non-breeding birds	Up to County	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Protected and/or notable plants	Up to District	Habitat loss.	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to District level (Moderate

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution).		adverse, Not Significant).
Terrestrial invertebrates	Up to Regional	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Aquatic macroinvertebrates Aquatic macrophytes	Up to Regional	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Reptiles	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirements for legislative compliance to be included in the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Section 2: South Kesteven District				
Grimsthorpe SAC	International	Changes in water quality, level and flow and works within or adjacent to watercourses which are hydrologically linked.	None required.	Negligible and Not Significant (Neutral, Not Significant).
Baston Fens SAC	International	Changes in water quality, level and flow and works within or adjacent to watercourses which are hydrologically linked.	None required.	Negligible and Not Significant (Neutral, Not Significant).
South Forty Foot Drain LWS; Norwood LWS; Twyford Wood LWS; Haconby Drive Drain LWS; Corby Glen Road Verge LWS.	County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Breache's Wood LWS	Up to National	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
				Further assessment required following completion of ecology surveys, to be recorded within the ES.
Spring Wood Edenham LWS	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None required	Negligible and Not Significant (Neutral, Not Significant).
Other non-statutory designated sites within 200 m of draft Order Limits (Swinstead Road Verges North LWS)	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
All other non-statutory designated sites within the Study Area	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None	Negligible and Not Significant (Neutral, Not Significant).
Breache's Wood PAWS; Norwood/East Woods (ASNW); Little Osgrove Wood and Herricho Wood Ancient Woodland	Up to National	Disturbance and degradation (e.g. pollution (vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential temporary significant adverse effect at up to County level (Moderate adverse – Significant).
Habitats (excluding ancient woodland)	Up to County	Habitat loss and degradation.	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse,

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).		Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Bat assemblage	Up to Regional	Temporary habitat loss and potential disturbance of foraging/commuting bats and roosts.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Great crested newt	Up to Regional	Habitat loss (aquatic and terrestrial). Habitat severance, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES and dependent on the agreed licensing approach.	Potential significant adverse effect at Regional level (Major adverse – Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Otter; Water vole; Fish	Up to County	Habitat loss. Habitat severance/fragmentation, or degradation.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Disturbance (e.g. pollution, lighting, noise, vibration).		completion of ecology surveys, to be recorded within the ES.
Badger	Up to Local	Loss of setts and foraging habitat. Habitat severance.	Requirement to enable licensing to be confirmed within the ES.	Potential adverse effect at up to Local level (Minor adverse, Not Significant).
Breeding birds	Up to County	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Non-breeding birds	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Protected and/or notable plants	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to District level (Moderate adverse, Not Significant).

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Terrestrial invertebrates	Up to Regional	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Aquatic macroinvertebrates Aquatic macrophytes	Up to Regional	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Reptiles	Up to District	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirements for legislative compliance to be included in the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES
Section 3: Melton Borough				
Rutland Water SPA/ Ramsar site	International	Potential loss, degradation or disturbance of functionally linked land.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
				Further assessment required following completion of ecology surveys, to be recorded within the ES.
Twenty Acre Piece SSSI	National	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None	Temporary adverse effect at the Local level Not Significant (Minor adverse – Not Significant).
River Eye SSSI	National	Potential for hydrological connectivity.	None	Negligible and not significant.
Oak Plantation Hedgerow LWS and Gipsy Nook Verge LWS	County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	None	Temporary adverse effect at the Local level Not Significant (Minor adverse – Not Significant).
Scalford Brook LWS	County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
All potential historic or candidate LWS within the draft Order Limits	Each up to County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual)).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Other non-statutory designated sites within 200 m of draft Order Limits (Hedgerow S of High View, off Nott'm Rd LWS; Elm Hedgerow LWS; Waltham Mature Ash LWS; Freeby Wood LWS; Nottingham Road Hedgerow LWS)	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual)).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
All other non-statutory designated sites within the Study Area	County	Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual)).	None	Negligible and Not Significant (Neutral, Not Significant)
Habitats (excluding ancient woodland)	Up to County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual)).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
				surveys, to be recorded within the ES.
Bat assemblage	Up to Regional	Temporary habitat loss and potential disturbance of foraging/commuting bats and roosts.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Great crested newt	Up to Regional	Habitat loss (aquatic and terrestrial). Habitat severance, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES and dependent on the agreed licensing approach.	Potential significant adverse effect at Regional level (Major adverse – Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Otter; Water vole; Fish	Up to County	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Badger	Up to Local	Loss of setts and foraging habitat. Habitat severance.	Requirement to enable licensing to be confirmed within the ES.	Potential adverse effect at up to Local level (Minor adverse, Not Significant)
Breeding birds	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Non-breeding birds	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Protected and/or notable plants	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to District level (Moderate adverse, Not Significant).

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Terrestrial invertebrates	Up to Regional	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Aquatic macroinvertebrates Aquatic macrophytes	Up to Regional	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Reptiles	Up to District	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirements for legislative compliance to be included in the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Section 4: Harborough District				
Hammer's Lodge Farm Field LWS	County	Habitat loss and degradation.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).		Further assessment required following completion of ecology surveys, to be recorded within the ES.
All other non-statutory designated sites within the Study Area	County	Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).	None	Negligible and Not Significant (Neutral, Not Significant).
Habitats (excluding ancient woodland)	Up to County	Habitat loss and degradation. Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Bat assemblage	Up to Regional	Temporary habitat loss and potential disturbance of foraging/commuting bats and roosts.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Great crested newt	Up to Regional	Habitat loss (aquatic and terrestrial). Habitat severance, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES and dependent on the agreed licensing approach.	Potential significant adverse effect at Regional level (Major adverse – Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Otter; Water vole; Fish	Up to County	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Badger	Up to Local	Loss of setts and foraging habitat. Habitat severance.	Requirement to enable licensing to be confirmed within the ES.	Potential adverse effect at up to Local level (Minor adverse, Not Significant).
Breeding birds	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
				surveys, to be recorded within the ES.
Non-breeding birds	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Protected and/or notable plants	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to District level (Moderate adverse, Not Significant).
Terrestrial invertebrates	Up to Regional	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Aquatic macroinvertebrates Aquatic macrophytes	Up to Regional	Habitat loss. Habitat severance/fragmentation, or degradation.	Requirement to be confirmed within the ES	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Disturbance (e.g. pollution, lighting, noise, vibration).		completion of ecology surveys, to be recorded within the ES.
Reptiles	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirements for legislative compliance to be included in the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Section 5: Northamptonshire

Upper Nene Valley Gravel Pits SPA/Ramsar site	International	Habitat loss and degradation. Potential loss, degradation or disturbance of functionally linked land.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Upper Nene Valley Gravel Pits SSSI	National	Habitat loss and degradation. Potential loss, degradation or disturbance of functionally linked land.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Birch Spinney and Mawsley Marsh SSSI	National	Construction pollution (e.g. noise, vibration, air quality, dust, light and visual). Habitat loss and degradation.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Summer Leys LNR	County	Potential loss, degradation or disturbance of functionally linked land.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Vivians Covert LWS	County	Habitat loss and degradation. Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
Wilby Meadows Stream LWS	County	Habitat loss and degradation. Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential adverse effect at up to Local level (Minor adverse, Not Significant). Further assessment required following completion of ecology surveys, to be recorded within the ES.
Earls Barton Lock Lake LWS; Grendon Lakes North LWS and Upper Nene Valley Gravel Pits LWS	County	Habitat loss and degradation. Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
All other non-statutory designated sites within the Study Area	County	Disturbance (e.g. pollution, vibration, dust, air quality, light, noise and visual).	None	Negligible and Not Significant (Neutral, Not Significant).
Cransley Wood Ancient Woodland	Up to National	Disturbance and degradation (e.g. pollution, vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
				surveys, to be recorded within the ES.
Habitats (excluding ancient woodland)	Up to County	Habitat loss and degradation. Disturbance (e.g. pollution (vibration, dust, air quality, light, noise and visual).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to the County level (Moderate adverse, Significant) cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Bat assemblage	Up to Regional	Temporary habitat loss and potential disturbance of foraging/commuting bats and roosts.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Great crested newt	Up to Regional	Habitat loss (aquatic and terrestrial). Habitat severance, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES and dependent on the agreed licensing approach.	Potential significant adverse effect at Regional level (Major adverse – Significant). Further assessment required following completion of ecology

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
				surveys, to be recorded within the ES.
Otter; Water vole; Fish	Up to County	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Badger	Up to Local	Loss of setts and foraging habitat. Habitat severance.	Requirement to enable licensing to be confirmed within the ES.	Potential adverse effect at up to Local level (Minor adverse, Not Significant).
Breeding birds	Up to National	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Non-breeding birds	Up to National	Habitat loss. Habitat severance/ fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Direct mortality.		surveys, to be recorded within the ES.
Protected and/or notable plants	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution).	Requirement to be confirmed within the ES.	Potential significant adverse effect at up to District level (Moderate adverse, Not Significant).
Terrestrial invertebrates	Up to Regional	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Aquatic macroinvertebrates Aquatic macrophytes	Up to Regional	Habitat loss. Habitat severance/fragmentation, or degradation. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Reptiles	Up to District	Habitat loss. Habitat severance/fragmentation, or degradation.	Requirements for legislative compliance to be included in the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following

Important Ecological Feature	Importance	Impact	Additional Mitigation	Likely Significance of Effect ¹²
		Disturbance (e.g. pollution, lighting, noise, vibration). Direct mortality.		completion of ecology surveys, to be recorded within the ES.
Operation/maintenance				
The Wash SPA/Ramsar/SSSI; Nene Washes SPA/Ramsar	International	Collision mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Habitats	Up to Regional	Habitat loss. Disturbance (e.g. pollution, lighting, noise, vibration).	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.
Birds; breeding and non-breeding	International	Collision mortality.	Requirement to be confirmed within the ES.	Potential significant adverse effect cannot at this stage be excluded. Further assessment required following completion of ecology surveys, to be recorded within the ES.

Alternative Scenarios

- 8.8.187 As described in Section 4.4 of **Chapter 4 Description of the Project**, there are elements of the Project which have not been fixed at this stage. Therefore, flexibility needs to be considered in this non-statutory DES. Two potential alternative scenarios are outlined in **Table 4.3** and are assessed in **Table 8.12**.
- 8.8.188 This assessment considers each scenario, together with the assumptions and mitigation measures described in this chapter. It provides a qualitative appraisal of the potential changes to the preliminary conclusions reported in this section, should these scenarios occur.
- 8.8.189 **Table 8.12** presents the conclusions of this appraisal, supported by appropriate qualitative justification, to ensure that any potentially significant effects are identified in this DES. If these alternative scenarios remain under consideration in the application for development consent, they will be appropriately assessed in the ES.

Table 8.12 Preliminary assessment of alternative scenarios

Scenario	Potential Change in Impacts	Potential Change in Effects
1. No or reduced haul roads	This scenario would reduce the extent of habitat clearance required to construct the Project in Sections 1, 2 and 3, and replace the proposed haul road with alternative access arrangements used by smaller vehicles and requiring the use of track matting. It is expected that access routes would be more flexible than for a haul road, giving greater scope to avoid potential impacts through sensitive routeing. Therefore, in Sections 1, 2 and 3, the potential changes could act to remove or reduce significant adverse effects on habitats. As a knock-on effect, the reduction in the extent of habitat losses also has the potential to reduce adverse impacts on species populations, in particular for birds, bats and water vole. For birds, the reduction in habitat losses could reduce impacts on areas of potentially functionally linked land associated with nearby SPA/Ramsar sites. For bats and water voles, the changes could reduce the number of crossings of hedgerows and watercourses, which has the potential to reduce or remove the potential for significant adverse effects within Sections 1, 2 and 3. In Sections 4 and 5 of the Project, no changes are expected. The works proposed are reconductoring only and no haul road is proposed.	This may result in the removal or reduction of significant adverse effects on habitats in Sections 1, 2 and 3. In addition it may reduce or remove significant adverse effects on birds, bats and water vole. New significant effects as a result of this scenario are unlikely, but could occur if the change introduces new areas of vegetation clearance that were not previously impacted and which support significant protected species populations.
2. Off-site construction compound near Melton Mowbray	This scenario would reduce or remove potential impacts arising from construction compounds in Section 3. This would include a reduction in the habitat impacted during construction and therefore could reduce potential significant adverse effects on habitats. In addition, it has the potential to reduce potential significant adverse effects on birds, bats and water vole. However, based on the size of the construction compound in the context of the wider Project, any positive impacts are likely to represent a minor improvement only. The off-site construction compound would be located within an existing light industrial area and is unlikely to result in habitat losses or impacts on species that would generate new or different significant adverse effects.	This may result in the reduction of significant adverse effects on habitats, bats, water vole and birds. However, it is unlikely to remove significant adverse effects and any reduction is likely to be a minor improvement only.

8.9 Monitoring

- 8.9.1 Monitoring will be required following the implementation of mitigation to ensure it is successful and meets the requirements of permits/licences. Monitoring requirements

will be described in detail and presented in the ES once the ongoing surveys are complete (and a detailed dataset obtained), and mitigation and enhancement measures have been developed.

- 8.9.2 Monitoring requirements will be included within the Outline LEMP that will accompany the ES.

8.10 Further Assessment

- 8.10.1 The ES will present a full detailed assessment in accordance with CIEEM guidance (Ref 8.8), taking into account the results of ongoing baseline surveys to be undertaken through the remainder of 2026 and during spring 2027 as required. The assessment will set out the expected significance of the effect on important ecological features during construction and operation (including maintenance), and will consider the importance of the feature, as well as the magnitude, duration, and reversibility of the potential effect.
- 8.10.2 The ES will include details of any additional mitigation required to address potential significant effects arising from construction and operation of the Project. This may include additional habitat creation and/or details of additional working approaches or controls required to avoid, reduce or minimise the effects of the Project.
- 8.10.3 The **Appendix 8A Habitats Regulations Assessment Stage 1: Screening Report** has been prepared to inform this chapter. The full HRA Report will be produced in parallel with the ES and submitted with the application for development consent. Where required, the HRA Report will consider if the Project could result in adverse effects on the integrity of any European site and its conservation objectives, either alone or in combination with other plans/projects.
- 8.10.4 A BNG assessment, and details of the expected licence approach for each protected species where licensing is expected to be required, will be appended to the ES.

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