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Environmental Statement

Interim Environmental Report (IER), Volume 1, Chapter 8: Ecology and Biodiversity

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8 Ecology and biodiversity

8.1 Introduction

8.1.1 This chapter of the Environmental Statement (ES) presents the findings of the Environmental Impact Assessment (EIA) of effects on the environment with respect to ecology and biodiversity as a result of the Scheme.

8.1.2 This chapter identifies and proposes measures to address the potential impacts and likely significant effects on the environment with respect to ecology and biodiversity during the construction, operational and maintenance, and decommissioning phases.

8.1.3 The information presented within this chapter has been informed by the Scheme information and description provided in Volume 1, Chapter 2 Scheme description.

8.2 Scope of assessment

8.2.1 Chapter 6 of the Environmental Impact Assessment Scoping Report[1] addressed the potential for the Scheme to result in significant effects on ecology and biodiversity for the construction, operational and maintenance, and decommissioning phases and consequently whether a standalone topic chapter was required in the ES.

8.2.2 Through the adoption of the Scoping Opinion[2], factoring in comments from both the Planning Inspectorate (PINS) and consultees that responded to the Scoping Report, the Secretary of State has confirmed that the ecology and biodiversity assessment should be included in the ES and must assess the scope set out in Table 8-1.

Table 8-1 Ecological receptors scoped in / out of assessment within the ES

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Statutory Designated Sites within 2 km of the Sites and Cable Route Corridor (CRC)	Scoped in	Scoped in	Scoped in	The Scoping Report identified the potential for indirect impacts through pollutants and disturbance to species that utilise the habitat. Following receipt of the Scoping Opinion, this matter remains scoped into the ES.
Statutory Designated Sites greater than 2 km from the Order Limits	Scoped out	Scoped out	Scoped out	In the Scoping Report, it was not deemed likely that designated sites beyond 2 km are at risk of any effects from the Scheme due to distance and lack of impact pathways beyond 2 km (with the exception of the Severn Estuary SAC & Ramsar which is addressed separately below). There are no international designated sites within 10 km and no international designated sites for which bats are a qualifying feature and mitigatory birds within 30 km, and it is highly unlikely that the Scheme would be utilised by qualifying species of any international designated sites beyond these distances. The results of the wintering bird surveys indicate that the Survey Area does not provide a role in maintaining any Special Protection Area (SPA) or Ramsar site populations and is not functionally linked to any SPA or Ramsar sites in the wider area. At this stage, it is proposed that a formal HRA Screening report will not be required, but this will be continually reviewed as survey data is collected and analysed.

[1] Arrow Valley Solar Limited (2026) Arrow Valley Solar. Environmental Impact Assessment Scoping Report. Volume I: Main Report (Document Reference AVS-ATR-GEN-AA-DOC-ENV-000001, Rev. A). Planning Inspectorate Reference EN0110033.
Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0110033-000002-20260327%20Arrow%20Valley%20EIA%20Scoping%20Report%20Volume%201%20Main%20Report%20Rev.%20A.pdf

[2] Planning Inspectorate (2026) Scoping Opinion: Proposed Arrow Valley Solar (Case Reference EN0110033). Adopted on behalf of the Secretary of State pursuant to Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, 7 May 2026.
Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN0110033-000010-Arrow%20Valley%20Solar%20Scoping%20Opinion.pdf

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Severn Estuary Special Area of Conservation (SAC) and Ramsar – Functionally Linked Habitats	Scoped in	Scoped in	Scoped in	Following receipt of the Scoping Opinion, the Inspectorate noted "the River Avon intersects the study area and CRC. It is considered that the River Avon provides functionally linked habitat for species underpinning the Severn Estuary Special Area of Conservation (SAC) and Ramsar designated sites. These species include lamprey, brown/sea trout and European Eel. As such, the Inspectorate considers that the ES should assess the potential impacts to these species, and by extension the sensitive sites, from all phases of development." As such, impacts specific to these functionally linked statutory designations have been scoped into the ES.
Non-statutory designated sites within 1 km of the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified the potential for indirect impacts through pollutants and disturbance to species that utilise the habitat. Following receipt of the Scoping Opinion, this matter remains scoped into the ES.
Non-statutory designated sites greater than 1 km of the Order Limits	Scoped out	Scoped out	Scoped out	In the Scoping Report, it is not deemed likely that non-statutory designated sites beyond 1 km are at risk of any effects from the Scheme due to separation distances and lack of impact pathways beyond 1 km. Following receipt of the Scoping Opinion, this matter remains scoped out of the ES.
Ancient Woodland and veteran trees within 500 m of the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified the potential for indirect impacts through pollutants and disturbance to species that utilise the habitat. Following receipt of the Scoping Opinion, this matter remains scoped into the ES.
Ancient Woodland and veteran trees greater than 500 m of the Order Limits	Scoped out	Scoped out	Scoped out	In the Scoping Report, it is not deemed likely that Ancient Woodland or veteran trees beyond 500 m are at risk of any effects from the Scheme due to the distances and lack of impact pathways beyond 500 m. Following receipt of the Scoping Opinion, this matter remains scoped out of the ES.
Terrestrial habitat (including priority habitats, and priority/ protected plant species) within and up to 50 m of the Order Limits	Scoped in	Scoped out	Scoped in	The Scoping Report identified that construction activities may lead to detrimental impacts on habitats through loss or damage during construction activities. Any operational impacts are limited to periodic maintenance visits and replacement activities, considered to have a minor impact; the provision of precautionary avoidance measures have been provided within the outline Operational Environmental Management Plan (oOEMP). Decommissioning is expected to take 12-24 months with the objective of returning the land to its original use/condition (as far as is practicable) following the 60-year operational lifetime of the project. This will involve removal of solar arrays, substations and Battery Energy Storage System (BESS) and associated infrastructure such as above ground cables, access tracks and fencing. This may result in loss of damage to habitats during decommissioning. Impacts beyond 50 m are considered unlikely and are therefore scoped out across all phases. There would not be any impacts to habitats beyond 50 m. Following receipt of the Scoping Opinion, the scope of this matter remains unchanged.

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Amphibians (including Great crested newt (GCN)) within and up to 250 m of the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that a number of ponds are present within and up to 250 m from the Order Limits and therefore has potential to support a population for GCN and other common amphibians. The construction and decommissioning of the Scheme may result in impacts to terrestrial habitats utilised by amphibians, including GCN. Direct impacts to GCN breeding ponds are not anticipated as there will be no loss of ponds as a result of the Scheme. As such, it was considered that operational impacts were limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which were considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the oOEMP. However, in the Scoping Opinion, the Planning Inspectorate states that "The ES should assess the potential impacts on these species from major component replacement during operation of the proposed development, or otherwise provide the information required to rule out significant effects. This should include agreement with the relevant consultation bodies". Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.
Bats (roosting) within and up to 50 m of the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that direct impacts to potential bat roost features are likely to be avoided through embedded mitigation. There is potential for indirect impacts through disturbance during construction activities (noise, vibration, lighting). Any operational impacts would be limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the oOEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.
Bats (commuting and foraging) within the Sites	Scoped in	Scoped in	Scoped in	The Scoping Report identified that habitats with increased suitability for foraging and commuting bats will largely be retained, although there may be some minor loss. There is the potential for disturbance to foraging and commuting bats during construction. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the oOEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Bats (commuting and foraging) within the CRC	Scoped out	Scoped out	Scoped out	The Scoping Report identified that impacts will be temporary and there will be no significant losses of suitable habitats as the working area will be more restricted than within the Sites. Additionally, due to the nature of the cables being subterranean, there is not expected to be any significant permanent loss of commuting and foraging habitats within the CRC. Precautionary avoidance measures have been provided within the outline Construction Environmental Management Plan (oCEMP), oOEMP and outline Decommissioning Environmental Management Plan (oDEMP), including no night-time working, to ensure compliance with relevant legislation. Following receipt of the Scoping Opinion, this matter remains scoped out of the ES.
Badgers within and up to 30 m of the Order Limits	Scoped in	Scoped out	Scoped in	The Scoping Report identified that badgers are protected primarily for welfare reasons, and the species is not one of nature conservation concern. For this reason, they were scoped out of the assessment within the ES. Appropriate mitigation measures have been included within ES to ensure legal compliance, with the provision of precautionary avoidance measures provided within the oCEMP, oOEMP and oDEMP. However, in the Scoping Opinion, the Planning Inspectorate agrees that impacts during the operational phase can be scoped out of the ES but states that the ES should assess potential impacts during the construction and decommissioning phases of the Scheme. Accordingly, an assessment of the potential impacts on this species during the construction and decommissioning phases is now included as part of the ES.
Breeding birds within the Sites	Scoped in	Scoped in	Scoped in	The Scoping Report identified that habitat loss within the Scheme has potential to result in destruction of individual nests and loss of areas of suitable nesting habitat for ground nesting birds. Embedded mitigation will reduce the potential impacts to birds that utilise hedgerows and trees for nesting. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the oOEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Breeding birds within the CRC	Scoped in	Scoped out	Scoped out	The Scoping Report identified that impacts during the construction phase will be temporary and there will be no significant losses of suitable habitats within the CRC. Precautionary avoidance measures will be provided within the CEMP, OEMP and DEMP to ensure compliance with relevant legislation. In the Scoping Opinion, the Planning Inspectorate state that the ES should contain an assessment of the potential construction impacts on breeding birds. Accordingly, the ES will assess the potential impacts on breeding birds within the CRC during the construction phase of the Scheme. As impacts of construction on breeding birds will be temporary and disturbance of habitats expected to be limited in extent, it is considered that a desk-based assessment will be sufficient, with avoidance and mitigation measures provided in the CEMP. The effects of decommissioning activities are expected to be similar or of a lesser magnitude than construction effects and will be satisfactorily addressed by the DEMP. As such, impacts to breeding birds within the CRC during the decommissioning phase have been scoped out.
Barn owls within and up to 175 m from the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that potential impacts to barn owl may occur through disturbance from construction activities (noise, vibration, light, visual). Direct impacts to barn owl and suitable breeding features will be avoided through embedded mitigation. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the oOEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.
Non-breeding birds within the Sites	Scoped in	Scoped in	Scoped in	The Scoping Report identified that there would be a potential for the loss of habitats and disturbance to wintering bird assemblages during construction and decommissioning phases of the Scheme where wintering birds will likely avoid active construction sites. Habitat retention and enhancement will result in overall gains for wintering bird assemblages during the operational phase, increasing opportunities for winter foraging. In the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts from major component replacement during operation of the Scheme on non-breeding birds within the Sites (or provide further justification for ruling out significant effects). Accordingly, the ES will assess the potential impacts on non-breeding birds within the Sites across all phases of the Scheme. Following feedback from statutory consultees, the scope of non-breeding bird surveys within the Sites was extended to include November & December 2026 to capture use of site by changing bird species assemblages throughout the winter (rather than January & February 2026 only as was originally proposed).

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Non-breeding birds within the CRC	Scoped out	Scoped out	Scoped out	The Scoping Report identified that impacts will be temporary and there will be no significant losses of suitable habitats. Precautionary avoidance measures have been provided within the CEMP, OEMP and DEMP. In the Scoping Opinion, the Planning Inspectorate requested further clarification on why the results of non-breeding bird surveys carried out in January & February 2026 were considered sufficient to establish a suitably robust baseline for assessment of impacts to non-breeding birds within the CRC. The surveys in January and February 2026 were undertaken on the Sites only and did not include the CRC because impacts to habitats in the CRC will be within a working width of approximately 25m, narrowing at hedgerow crossings. This relatively narrow corridor will not result in significant losses of suitable habitat and habitats will be reinstated following cable installation. Any direct impacts to non-breeding birds (i.e. disturbance) will be temporary and restricted to the construction phase only. Avoidance measures during the construction phase will be implemented to comply with legislation. An assessment of the assemblage of non-breeding birds within the Sites based on desk study data (including designated site citations) and the results of the non-breeding bird surveys to date has found that they support an assemblage of non-breeding birds typical of the agricultural and wetland habitats present, and that this does not meet the SSSI criteria for non-breeding birds. The habitats within the CRC are similar to those within the Sites and as such are likely to support similar bird assemblages. Owing to the temporary nature of construction-phase impacts as outlined above it is considered appropriate that impacts to non-breeding birds can be sufficiently avoided and mitigated through the CEMP.
Hazel dormice within the Order Limits	Scoped out	Scoped out	Scoped out	Not considered to be present within the Scheme and therefore will not be subject to any impacts. Following receipt of the Scoping Opinion, this matter remains scoped out.
Otters within and up to 200 m from the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified potential impacts to otter through disturbance from construction activities (noise, vibration, light, visual). Direct impacts to otter and otter resting sites will be avoided through embedded mitigation. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the OEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Water voles within and up 10 m of the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that water voles are potentially present within watercourses within the Scheme. Embedded mitigation (water course and ditch buffers and standard best practice construction measures including pollution prevention measures) will ensure impacts to the majority of these watercourses are avoided. However, there may be some localised impacts to watercourses, most of which will be temporary, for the construction of the CRC and access for construction of the Sites. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the OEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.
Beavers within the Order Limits	Scoped out	Scoped out	Scoped out	The Scoping Report identified that the presence of beaver is considered unlikely due to there being no known releases within the wider area. Therefore, beavers are scoped out of assessment in the ES. However, any evidence of beaver will be recorded during the otter surveys, and beavers scoped in as necessary. Following receipt of the Scoping Opinion, this matter remains scoped out.
Widespread reptile species within the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that, although assumed to be present within the Scheme in low numbers, any populations of reptiles will be concentrated within habitats (hedgerows, field margins, small woodland coppices) that will largely not be impacted by the Scheme. Where impacts to these habitats occur, these will be localised and the majority will be temporary. Appropriate mitigation measures are included within ES to ensure legal compliance, with the provision of precautionary avoidance measures provided within the CEMP, OEMP and DEMP. This will be reviewed as surveys are undertaken and as the design progresses and reptiles will be scoped in if larger areas of suitable habitat for widespread species of reptile are recorded during the UKHab surveys and if infrastructure and construction areas (or associated habitat clearance activities) are located within any larger areas of suitable habitat. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on these species across all phases of the Scheme unless otherwise agreed with relevant consultation bodies. This matter is now included as part of the assessment in the ES.

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Other priority mammals within the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that, although species such as brown hare and hedgehog are assumed to be present within the Scheme, the majority of the most value habitats to these species will be retained (hedgerows, field margins, small woodland coppices). Where impacts to these habitats occur, these will be localised and the majority will be temporary. Appropriate mitigation measures have been included within the ES to ensure legal compliance, with the provision of precautionary avoidance measures provided within the CEMP, OEMP and DEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on these species across all phases of the Scheme unless otherwise agreed with relevant consultation bodies. This matter is now included as part of the assessment in the ES.
Terrestrial invertebrates within the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that habitat loss within the Scheme has potential to result in destruction of suitable habitats for invertebrates. However, embedded mitigation will ensure the majority of suitable habitats will be retained through construction or limited to temporary impacts only. Decommissioning has potential for the loss of or damage to suitable invertebrate habitats during the 12-24 month decommissioning phase. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the oOEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species from major component replacement during operation of the Scheme or otherwise provide the information required to rule out significant effects. This matter is now included as part of the assessment in the ES. Accordingly, the ES assesses the potential impacts on this species across all phases of the Scheme.
White-clawed crayfish within the Order Limits	Scoped in	Scoped in	Scoped in	The Scoping Report identified that white-clawed crayfish are potentially present within watercourses within the Order Limits. Embedded mitigation (watercourse and ditch buffers and standard best practice construction measures including pollution prevention measures) will ensure impacts to these watercourses are avoided as far as practicable. As set out in Volume 1, Chapter 5 Approach to the assessments (Section 5.7) the necessary mitigation have been secured through the CEMP, OEMP, and DEMP to ensure significant adverse effects do not occur. Any operational impacts are limited to periodic maintenance visits, considered to have a minor impact; and replacement activities, which are considered to result in effects no greater than the construction phase; the provision of precautionary avoidance measures have been provided within the OEMP. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species across all phases of the Scheme or include information demonstrating the absence of a likely significant effect and agreement with relevant statutory bodies. This matter is now included as part of the assessment in the ES.

Topic Ecological receptors	Scoped in / out Construction phase and panel/battery replacement	Operational phase (routine maintenance)	Decommissioning phase	Justification
Watercourses Habitats	Scoped in	Scoped in	Scoped in	The Scoping Report identified that these habitats are present on / adjacent to the Order Limits. Embedded mitigation (watercourse and ditch buffers and standard best practice construction measures including pollution prevention measures) have been provided within the CEMP, OEMP, and DEMP and will ensure that impacts to these watercourses are avoided as far as practicable. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on these habitats across all phases of the Scheme. This matter is now included as part of the assessment in the ES.
Lake Habitats	Scoped out	Scoped out	Scoped out	Not present on / adjacent to the Order Limits or impacted. Following receipt of the Scoping Opinion, this matter remains scoped out.
Pond Habitats	Scoped in	Scoped in	Scoped in	The Scoping Report identified that these habitats are present on / adjacent to the Order Limits and have potential to be impacted. Embedded mitigation (buffers and standard best practice construction measures including pollution prevention measures) have been provided within the oCEMP, oOEMP, and oDEMP and will ensure that impacts to these ponds are avoided. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on these habitats across all phases of the Scheme. This matter is now included as part of the assessment in the ES.
Fish	Scoped in	Scoped in	Scoped in	The Scoping Report identified that these habitats are notable / important communities are potentially present in watercourses and standing waterbodies on / adjacent to the Order Limits. As set out in Volume 1, Chapter 5 Approach to the assessments (Section 5.7) of the Scoping Report, the necessary mitigation have been secured through the oCEMP, oOEMP, and oDEMP to ensure significant adverse effects do not occur. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species across all phases of the Scheme. This matter is now included as part of the assessment in the ES. This will include the assessment of potential impacts on fish from Electromagnetic Fields (EMF) from cable crossing points with the watercourses.
Aquatic Macroinvertebrates	Scoped in	Scoped in	Scoped in	The Scoping Report identified that notable/ important communities are potentially present in watercourses and standing waterbodies on/ adjacent to the Order Limits. As set out in Volume 1, Chapter 5 Approach to the assessments (Section 5.7) of the Scoping Report the necessary mitigation have been secured through the oCEMP, oOEMP, and oDEMP to ensure significant adverse effects do not occur. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species across all phases of the Scheme. This matter is now included as part of the assessment in the ES.
Aquatic Macrophytes	Scoped in	Scoped in	Scoped in	The Scoping Report identified that notable / important communities potentially present in watercourses and standing waterbodies on / adjacent to the Order Limits. As set out in Volume 1, Chapter 5 Approach to the assessments (Section 5.7) of the Scoping Report, the necessary mitigation have been secured through the oCEMP, oOEMP, and oDEMP to ensure significant adverse effects do not occur. However, in the Scoping Opinion, the Planning Inspectorate states that the ES should assess the potential impacts on this species across all phases of the Scheme. This matter is now included as part of the assessment in the ES.

8.3 Consultation

Consultation to date

8.3.1 Table 8-2 provides a summary of all the consultation and engagement undertaken to date relevant to this assessment:

Table 8-2 Summary of the consultation with stakeholders

Stakeholder	Date	Issue consulted on	Addressed in the ES
Environment Agency (EA)	15/04/2026 – meeting	Overview of watercourse BNG requirements.	Consultee comments on the scope of aquatic ecology surveys have been factored into the survey design.
Heart of England Forest	22/04/2026 – meeting	Meeting to discuss adjacent landholding and supporting long term ambitions for nature recovery and landscape.	The Scheme design will consider the function of the Scheme within the wider landscape and adjacent nature recovery initiatives.
Natural England (NE)	17/05/2026 – meeting	Potential impacts to Feckenham Wylde Moor Site of Special Scientific Interest (SSSI) and interactions of the Scheme in general with peat. Potential to extend the survey window for GCN eDNA surveys into July.	Consultee comments have, and continue to, influence the survey design. In addition, consultee comments have identified additional factors, such as interaction with peat, that have been fully considered in the ES.
Worcestershire Wildlife Trust & Warwickshire Wildlife Trust	10/07/2026 – meeting	Alignment of mitigation, compensation and enhancement measures with the Local Nature Reserves (LNRSs). Consideration of ecosystem service delivery. Collaboration with the Heart of England Forest and Vale Landscape Heritage Trust, as well as other landscape-scale projects.	The Scheme design will align with the LNRSs, and the ES will consider the function of the Scheme within the wider landscape. Collaboration with the Heart of England Forest and Vale Landscape Heritage Trust is ongoing.
Vale Landscape Heritage Trust	23/07/2026 – email	Initial contact to introduce the Scheme and request shapefiles of ownership site boundaries to determine proximity from the Order Limits.	Awaiting response from Vale Landscape Heritage Trust.
Natural England (NE)	05/08/2026 – meeting	Approach to the bat surveys. Updates to the ancient woodland open source mapping layer and implications for the Scheme.	Consultee comments on the scope of bat surveys have been factored into the survey design.
Environment Agency (EA)	12/08/2026 – meeting	Scope of aquatic ecology surveys.	Consultee comments on the scope of aquatic ecology surveys have been factored into the survey design.
Heart of England Forest	28/08/2026 – email	Adjacent landholding and supporting long term ambitions for nature recovery and landscape.	The Scheme design will consider the function of the Scheme within the wider landscape and adjacent nature recovery initiatives.

8.4 Legislation, policy, and guidance

Legislation

8.4.1 The below listed legislation has been taken into account in the ecology and biodiversity assessment. Volume 3, Appendix 8.1 Legislation and policy relevant to the ecology and biodiversity assessment, provides further detail on how the below listed legislation has informed the ecology and biodiversity assessment:

- Environment Act 2021[3];
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024[4];
- Conservation of Habitats and Species Regulations 2017 (as amended)[5];
- Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (hereafter referred to as the 'the Ramsar Convention')[6];
- Wildlife and Countryside Act 1981 (as amended)[7];
- Natural Environment and Rural Communities (NERC) Act 2006[8];
- Protection of Badgers Act 1992[9];
- Wild Mammals (Protection) Act 1996[10];
- The Hedgerow Regulations 1997[11];
- The Invasive Alien Species (Enforcement and Permitting) Order 2019[12];
- The Eels (England and Wales) Regulations 2009[13];
- Salmon and Freshwater Fisheries Act 1975[14];
- The Environmental Permitting (England and Wales) Regulations 2016[15];
- Land Drainage Act 1991[16]; and
- Water Environment (WFD) (England and Wales) Regulations 2017[17].

Policy

8.4.2 The below listed policy has been taken into account in the ecology and biodiversity assessment. Volume 3, Appendix 8.1 Legislation and policy relevant to the ecology and biodiversity assessment provides further detail on how the below listed policy has informed the biodiversity assessment:

- National Policy Statement (NPS) for Energy (EN-1)[18];
- NPS for Renewable Energy Infrastructure (EN-3)[19];
- NPS for Electricity Networks Infrastructure (EN-5)[20];
- National Planning Policy Framework (NPPF) 2026[21];
- Redditch Borough Council (ReBC) Local Plan No4 (Jan 2017)[22];
- Stratford-on-Avon District Council (SoADC) Core Strategy 2011–2031[23];
- Warwickshire, Coventry & Solihull Local Biodiversity Action Plan (LBAP)[24];
- Worcestershire Biodiversity Action Plan[25];
- South Worcestershire Development Plan (SWDP) 2026[26];
- South Warwickshire Local Plan (SWLP) 2026[27];
- Warwickshire, Coventry & Solihull Local Nature Recovery Strategy (LNRS)[28];
- Worcestershire County Council (WoCC) 'Ecology Planning Advice'[29]; and

[3] The Environment Act 2021. Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents
[4] The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024. Available at: https://www.legislation.gov.uk/uksi/2024/48/contents/made
[5] As amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/uksi/2019/579/contents/made
[6] UNESCO (1994) Convention on Wetlands of International Importance especially as Waterfowl Habitat. Available at: https://unesco.org.uk/site/assets/files/14166/convention_on_wetlands_of_international_importance_especially_as_waterfowl_habitat_1971.pdf
[7] Wildlife and Countryside Act 1981. Available at: https://www.legislation.gov.uk/ukpga/1981/69/contents
[8] Natural Environment and Rural Communities (NERC) Act 2006. Available at: https://www.legislation.gov.uk/ukpga/2006/16/contents
[9] Protection of Badgers Act 1992. Available at: https://www.legislation.gov.uk/ukpga/1992/51/contents
[10] Wild Mammals (Protection) Act 1996. Available at: https://www.legislation.gov.uk/ukpga/1996/3/contents
[11] The Hedgerow Regulations 1997. Available at: https://www.legislation.gov.uk/uksi/1997/1160/contents
[12] The Invasive Alien Species (Enforcement and Permitting) Order 2019. Available at: https://www.legislation.gov.uk/uksi/2019/527
[13] The Eels (England and Wales) Regulations 2009. Available at: https://www.legislation.gov.uk/uksi/2009/3344
[14] Salmon and Freshwater Fisheries Act 1975. Available at: https://www.legislation.gov.uk/ukpga/1975/51/contents
[15] The Environmental Permitting (England and Wales) Regulations 2016. Available at: https://www.legislation.gov.uk/uksi/2016/1154/contents
[16] Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009 (SI 2009/3104). Available at: https://www.legislation.gov.uk/uksi/2009/3104/contents
[17] The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. Available at: https://www.legislation.gov.uk/uksi/2017/407/contents
[18] Department for Energy Security and Net Zero (2026) Overarching National Policy Statement for Energy (EN-1). Available at: https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1-2025
[19] Department for Energy Security and Net Zero (2026) National Policy Statement for renewable energy infrastructure (EN-3). Available at: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3-2025
[20] Department for Energy Security and Net Zero (2026) National Policy Statement for Electricity Networks Infrastructure (EN-5). Available at: https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5-2025
[21] Ministry of Housing, Communities & Local Government (2026) National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2
[22] Redditch Borough Council (2017). Borough of Redditch Local Plan No. 4 (2011–2030). Available at: https://www.redditchbc.gov.uk/media/tbodcekr/adopted-borough-of-redditch-local-plan-no4-2011-2030.pdf
[23] Stratford-on-Avon District Council (2016) Stratford-on-Avon District Core Strategy 2011- 2031. Available at: https://www.stratford.gov.uk/planning-building/core-strategy.cfm
[24] Warwickshire Wildlife Trust (2026) Local Biodiversity Action Plan (LBAP). Available at: https://www.warwickshirewildlifetrust.org.uk/LBAP
[25] Worcestershire Biodiversity Partnership (2016) Worcestershire Biodiversity Action Plan. Available at: https://www.worcestershire.gov.uk/council-services/planning-and-developments/environmental-policy/biodiversity-action-plan
[26] South Worcestershire Development Plan (2026) South Worcestershire Development Plan. Available at: https://www.worcester.gov.uk/planning/planning-policy/south-worcestershire-development-plan
[27] Warwick District Council (2026) South Warwickshire Local Plan. Available at: https://www.southwarwickshire.org.uk/swlp/
[28] Warwickshire Coventry and Solihull Local Nature Partnership (2026) Local Nature Recovery Strategy. Available at: https://4d8b06f4.isolation.zscaler.com/profile/d4d21(c)aa-b910-4059-b9bd-d371(d)e614d48/zia-session/?controls_id=fe27823(c)-8ad9-4b16-b127-dc1676a64050&region=lon&tenant=4f6bd1668b31&user=6cc4c449dc91(e)dea1(f)959505a358d14fa6a0c66f3(e)363578af2807258067f564&original_url=https%3(a)%2(f)%2(f)www.wcslnp.co.uk%2(f)lnrs&key=sh-1&hmac=b704ff424d63(a)ba94aa5780ec2(f)99b8b6d59dfbff31(f)b4a4b6b0db5b6161(e)8b5
[29] Worcestershire County Council (2026) The Biodiversity Duty. Available at: https://www.worcestershire.gov.uk/council-services/planning-and-developments/environmental-policy/biodiversity-duty

- WoCC - Worcestershire LNRS[30].

Guidance documents

8.4.3 The ecology and biodiversity assessment has been undertaken in accordance with the following guidance documents:

- Planning Practice Guidance (PPG) (2016)[31]
- Chartered Institute for Ecology and Environmental Management (CIEEM) guidelines for Preliminary Ecological Appraisals[32];
- CIEEM guidelines for Ecological Impact Assessment[33];
- Biodiversity Net Gain (BNG) for Nationally Significant Infrastructure Projects (NSIPs)[34]; and
- Design Manual for Roads and Bridges (DMRB) LA108[35].

8.5 Method of assessment

Establishing the baseline

Study Area

8.5.1 The extent of the Study Area has been determined by the likely spatial scale of potential significant effects using professional judgement, reviewing planning documents associated with other solar NSIPs (including those promoted by the Applicant) and based on current good practice guidance within the CIEEM guidelines[33].

8.5.2 The Study Area for the ecology and biodiversity assessment varies depends on the receptor being assessed as follows:

- Statutory designated sites for nature conservation: Within 2 km of the Order Limits. This area is extended to incorporate designated sites with hydrological or hydrogeological linkages to the Scheme (i.e. Severn Estuary SAC and Ramsar);
- Non-statutory designated sites for nature conservation: Within 1 km of the Order Limits;
- Terrestrial habitat (including Priority Habitats[36], and priority/ protected plant species) within and up to 50 m of the Order Limits;
- Priority habitats and Ancient Woodland and Ancient and Veteran trees within 500 m of the Order Limits;
- Protected and priority species[37]:
  - Amphibians (including GCN) up to 250m from the Order Limits;
  - Bat roosts within and up to 50m from the Order Limits and commuting and foraging bats within the Order Limits;
  - Badger setts within and up to 30m from the Order Limits;
  - Breeding and non-breeding birds within the Order Limits and Barn Owls within and up to 175m from the Order Limits;
  - Otters within and up to 200m from the Order Limits;
  - Water Voles within and up to 10m from the Order Limits;
  - Widespread reptile species within the Order Limits;
  - Other Priority mammal species within the Order Limits;
  - Terrestrial Invertebrates within the Order Limits; and
  - White-Clawed Crayfish within the Order Limits.
- Watercourses[38]: Within 150 m of the Order Limits[39], or up to 2 km for watercourses hydrologically connected to the Scheme[40]. There is an option to extend this area based on professional judgement as necessary (e.g. where Environment Agency monitoring locations outside the Scheme boundary but within the same watercourse may be considered a suitable proxy for aquatic receptors within the Order Limits). This approach was

[30] Worcestershire County Council (2026) The Worcestershire Local Nature Recovery Strategy (LNRS). Available at: https://www.worcestershire.gov.uk/sites/default/files/2026-02/Final%20Publication%20Version_Worcs%20LNRS%20March%202026.pdf
[31] Ministry of Housing, Communities and Local Government (2016) Planning Practice Guidance. Available at: https://www.gov.uk/government/collections/planning-practice-guidance
[32] CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Available at: https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/
[33] CIEEM (2022) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Available at: https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf
[34] Guidance relating to BNG for NSIPs is available at: https://www.gov.uk/government/collections/biodiversity-net-gain-nationally-significant-infrastructure-projects. This also includes a link to the Statutory Biodiversity Metric User Guide (Defra (June 2026) The Statutory Biodiversity Metric: User Guide. Available at: https://assets.publishing.service.gov.uk/media/6a1(d)98e9c7335e2(c)a6daadd5/The_Statutory_Biodiversity_Metric_-_User_Guide_-_June_2026.pdf
[35] Standard for Highways (2020) DMRB LA 108 - Biodiversity. Available at: https://www.standardsforhighways.co.uk/search/af0517ba-14d2-4a52-aa6d-1(b)21(b)a05b465
[36] Priority habitats are those habitats listed in accordance with Section 41 of the Natural Environment and Rural Communities Act 2006(the NERC Act) as being of principal importance for the conservation of biodiversity in England.
[37] Priority species in this context comprise species listed in accordance with Section 41 of the NERC Act; IUCN Red List species; Red and Amber Birds of Conservation Concern; and species that are Nationally Scarce or Rare.
[38] Watercourses include both Main River (as shown on the Environment Agency's Main River Map) and ordinary watercourses (all other watercourses shown on OS mapping not classified as Main River).
[39] Allows for identifying potential effects which could arise through direct/ indirect habitat loss, physical modification, disturbance and/ or changes to water quality/ quantity and those at risk from disturbance due to their proximity to the Scheme. This could be through, for example, overland pollution or mobilisation of fine sediment from the working area.
[40] Hydrologically connected receiving watercourses and any dependant ponds, lakes and designated sites which are potentially at risk due to propagation of effects from watercourses affected within the Order Limits boundaries.

considered but not ultimately adopted as a precautionary approach was deemed more appropriate.;
- Standing waterbodies: Within and immediately adjacent to the Order Limits[41] (extended to 250 m where there is potential suitability for GCN).
- Aquatic receptors within and immediately adjacent to the Scheme (Fish, Aquatic Macroinvertebrates and Aquatic Macrophytes), excepting situations outlined above where this distance is higher.

Desk study and consultation

8.5.3 Baseline data has been gathered from a range of sources through data requests with local biological data record centres and using online resources. This included data gathering in relation to statutory and non-statutory designated sites for nature conservation and protected and priority species.

8.5.4 The following organisations / web resources were consulted and reviewed during the desk study:

- Warwickshire Biological Records Centre (WaBRC)[42];
- Worcestershire Biological Records Centre (WoBRC)[43];
- Multi-Agency Geographic Information for the Countryside (MAGIC) website[44];
- Woodland Trust Ancient Tree Inventory[45];
- Online aerial imagery[46];
- Environment Agency Ecology and Fish Data Explorer website[47];
- Environment Agency Catchment Data Explorer website[48]; and
- Environment Agency Statutory Main River Map[49].

Surveys

8.5.5 At the time of writing, various ecological surveys have been undertaken, are underway, or are planned to be undertaken, as described in Table 8-3 below. Surveys are being undertaken by suitably experienced ecologists, who can demonstrate their competency as per the relevant CIEEM competency criteria.

[41] Standing waterbodies include both ponds and lakes (lakes are waterbodies greater than 2 ha in size).
[42] Warwickshire County Council (2026) Warwickshire Biological Records Centre. Available at: https://www.warwickshire.gov.uk/environment-ecology/warwickshire-biological-records-centre
[43] Worcestershire Biological Records Centre (2024). Available at: https://www.wbrc.org.uk/WBRC/index.html
[44] Natural England (2026) MAGIC: Multi-Agency Geographic Information for the Countryside. Available at: https://magic.defra.gov.uk/home.htm
[45] Woodland Trust (2026) Ancient Tree Inventory. Available at: https://ati.woodlandtrust.org.uk/
[46] Assessed using available aerial imagery at https://www.google.com/maps/.
[47] Environment Agency (2021). Ecology & Fish Data Explorer. Available at: https://environment.data.gov.uk/ecology/explorer/
[48] Bromsgrove District Council and Redditch Borough Council (2009) Strategic Flood Risk Assessment Level 1 Report. Available at: https://www.worcestershire.gov.uk/sites/default/files/2022-10/bromsgrove_district_council_and_redditch_borough_council_sfra_level_1.pdf
[49] Department for Environment Food and Rural Affairs (2026) Hydrology Data Explorer. Available at: https://environment.data.gov.uk/hydrology/explore

Table 8-3 Completed, ongoing and planned surveys

Survey	Description	Status	Timeline
Designated Sites for Nature Conservation	Non-statutory designations within and immediately adjacent to the Scheme are being surveyed and assessed as part of the habitat surveys. Habitat classification and mapping has been undertaken in accordance with the UK Habitat Classification (Version 2)[50] (UKHab). Habitats have been recorded to at least Level 3 of the UKHab hierarchy, i.e. broad habitats such as neutral grassland or dense scrub. Wherever possible, surveys recorded to at least Level 4 of the UKHab hierarchy so that habitats of ecological importance, e.g. priority habitats, could be identified. Habitat type and condition have been recorded to enable completion of the Statutory Biodiversity Metric[51].	Ongoing	May 2026 – September 2026.
Terrestrial habitats (including priority habitats, and priority/ protected plant species)	Habitat surveys are being undertaken within the Order Limits, which includes the Sites and the CRC, where access is possible at the time of surveys. Habitat classification and mapping has been undertaken in accordance with the UK Habitat Classification (Version 2)[50] (UKHab). Habitats have been recorded to at least Level 3 of the UKHab hierarchy, i.e. broad habitats such as neutral grassland or dense scrub. Wherever possible, surveys recorded to at least Level 4 of the UKHab hierarchy so that habitats of ecological importance, e.g. priority habitats, could be identified. Habitat type and condition have been recorded to enable completion of the Statutory Biodiversity Metric[51]. The UKHab surveys have also recorded the locations of any invasive non-native species (INNS) of plant identified. The optimum period for habitat surveys is between April and September, and every effort has been made to complete surveys within this window. Where access constraints prevented this, and it is necessary to survey areas outside of the optimum period, this will be clearly set out and any limitations to the survey identified.	Ongoing	May 2026 – September 2026. Where it is deemed necessary to undertake surveys outside of this period, this will be clearly set out and any limitations identified.
Aquatic habitats and species (fish and aquatic macroinvertebrates and macrophytes)	Modular River Physical (MoRPh) surveys will be undertaken to inform both the EIA and BNG strategy. MoRPh survey efforts aligned with BNG guidance[51] and will survey at least 20% of the total length of the watercourse within the Order Limits unless agreed otherwise with the relevant LPA and statutory bodies. Where possible, survey reaches will be aligned to key points of interaction with the Scheme (e.g. at access route or CR crossing locations). MoRPh surveys will only be undertaken on watercourses more distant from the Order Limits within the Study Area where impact pathways to the feature were identified. Although the optimal period for conducting MoRPh surveys is in May and September (when aquatic vegetation is clearly apparent, but not too developed that it obscures the view of the channel), MoRPh surveys can be undertaken at any time of year provided that they are not undertaken under low flow or high flow conditions. Fish eDNA surveys will be undertaken in parallel with the MoRPh surveys, where required for the watercourse i.e. habitat conditions are suitable for fish and no recent Environment Agency fish data are available for the watercourse. Aquatic macroinvertebrate surveys will also be undertaken within the Study Area where habitats were identified as suitable, and no recent Environment Agency data is available. A stratified sampling approach will be taken to provide cover across the Order Limits. Aquatic macroinvertebrate surveys will be undertaken in accordance with Environment Agency standards[52] within relevant survey seasons, in this instance autumn (September-November 2026). Data on presence of notable aquatic macrophytes will be collected during the habitat surveys (see above). Other than surveys of ponds as part of the UKHab survey and for GCN (described below), no further pond surveys are anticipated at the time of writing, given that all ponds will be retained with an appropriate buffer. Furthermore, habitat connectivity between ponds is not expected to be adversely impacted as a result of the Scheme. Aquatic ecology survey approach is being developed in consultation with the Environment Agency.	Planned	September 2026 – November 2026

[50] UK Habitat Classification v2.0 system under licence (© UKHAB LTD, under licence. No onward licence implied or provided. All rights reserved [https://ukhab.org/register/]).
[51] Defra (2023) Statutory biodiversity metric tools and guides. Available at https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides
[52] Environment Agency (2009). Freshwater macro-invertebrate sampling in rivers. Operational Instruction 018_08. Issued 16/06/2009.

Survey	Description	Status	Timeline
Amphibians	For GCN , waterbodies within and up to 250 m from the Scheme have been identified. Where there are no barriers to amphibian movement, and waterbodies are connected to the Scheme by suitable habitats, these were subject to Habitat Suitability Index (HSI) assessment[53] for GCN where access could be secured. Where suitable breeding waterbodies for GCN were identified during the HSI assessment, they were subject to an environmental DNA (eDNA) survey with reference to industry standard methodology[54]. The recommended survey period for eDNA survey is 15 April to 30 June. The majority of eDNA surveys were undertaken during this period, however due to delays in being able to access third party land, surveys were extended into July 2026. Evidence suggests that GCN can be reliably detected using both eDNA capture methods from April to August[55], and this has been discussed with Natural England. Where access limitations prevented surveys of waterbodies, unless there is compelling evidence to support a conclusion of absence, a precautionary approach will be undertaken whereby presence of GCN is assumed.	Completed	April 2026 – July 2026
Bats	Bat surveys are being undertaken with reference to industry bat survey guidance[56]: Roosts – Preliminary roost assessment comprised ground-level inspections of all trees and structures within the Scheme, and up to 50 m where appropriate (for example, in targeted locations where Scheme impacts are considered to extend to this distance) and where access was secured. These assessments were undertaken within the Sites (excluding sub-Site 1(f), which was included within the Order Limits at a later date) between February and May 2026. At the time of writing, surveys within the CRC and sub-Site 1(f) are ongoing. Depending on the findings of the above surveys and risk to the features, further surveys may be required to determine whether bat roosts are present or likely absent, although such surveys are expected to be minimal as buildings and trees with bat suitability will largely be retained with an appropriate buffer to avoid impacts.	Ongoing	Ground level inspections of trees and structures – February 2026 – May 2026 within all of the Sites, except sub-Site 1(f). Surveys of the CRC & sub-Site 1(f) ongoing at the time of writing.
	Activity – An assessment of habitat suitability is being undertaken using a combination of satellite imagery and site walkovers. Most of the area covered by the Sites is of limited value for bats, comprising open arable farmland. Habitats around the edges of the arable fields, along hedgerows and watercourses, provided suitable connective habitat within the Sites, and there were some smaller pockets of suitable bat habitat including scrub, small woodlands and waterbodies within the Sites. At a landscape scale, Sites 1, 2 and 3 are located amongst larger areas of higher quality habitats for bats (such as more extensive areas of woodland, and watercourses including the River Avon and River Arrow), and it is likely that the connective habitat within the Sites provide connectivity between these habitats in the context of the wider landscape. On the basis of the above, and with reference to bat survey guidance, the Sites are provisionally assessed as providing 'moderate' suitability for foraging and commuting bats. At the time of writing, bat activity surveys are currently being undertaken within the Sites. Automated static detectors have been deployed for at least five consecutive nights per month in 36 locations across the Sites between April and October 2026, as shown in Volume 2, Figure 8-3 Static bat detector locations. To aid with understanding bat use of the Sites habitats, static bat detectors have been positioned in the central areas of arable fields, and each will be 'paired' with a static detector positioned on the closest field boundary such as a hedgerow or woodland edge. The purpose is to provide comparative data between the field centre and the field boundary hedgerow/ woodland edge. As less bat activity is typically expected in the field centres, the pairing of detectors allows comparison on a selection of fields to see whether evidence aligns with this concept and to gain an indication of the use of different parts of the fields, considering that the field centres would be the typical habitat type directly impacted by the Scheme.	Ongoing	Activity surveys – April 2026 – October 2026.

[53] Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus) Herpetological Journal 10 (4), 143-155 (2000). Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. The great crested newt Habitat Suitability Index (HSI) is a quantitative measure of aquatic habitat quality for great crested newt. The HSI is a number between 0 and 1, derived from an assessment of ten habitat variables known to influence the presence of newts.
[54] Biggs, et al (2014) Technical Advice Note for Field and Laboratory Sampling of Great Crested Newt eDNA in Analytical and methodological development for improved surveillance of the Great Crested Newt. Defra Project WC1067. Appendix 5. Freshwater Habitats Trust, Oxford
[55] Harper, L. et al (2025) Extending sampling approaches for great crested newt (Triturus cristatus) eDNA monitoring. British Ecological Society (DOI: 10.1002/2688-8319.70160). Available at: https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/2688-8319.70160 .
[56] Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

Survey	Description	Status	Timeline
	The bat survey guidance[56] recommends that night-time bat walkover (NBW) surveys are used in conjunction with automated static detectors. NBW surveys require surveyors to walk pre-defined routes for 2-3 hours during the evening, using bat detectors to record bat species, locations, and behaviour. NBW surveys can provide useful data, for example they can visually observe and confirm the number of individual bats that may be present. However, NBW surveys provide only a snapshot of bat activity within a limited area of the Sites and generally concentrate survey effort along accessible linear features. As a result, they are less effective at characterising bat activity within arable field habitats, where access may be restricted by standing crops, crop protection requirements and health and safety constraints. The proposed static detector surveys provide substantially greater temporal coverage than could reasonably be achieved through NBW surveys across a site of this scale. Due to the size of the Scheme and relative homogeneity and the Sites, and the likely retention of the majority of suitable bat foraging and commuting habitats, it is considered that using increased numbers of automated static detectors in-lieu of NBW surveys provide a reliable and efficient dataset to inform the design, mitigation, baseline and assessment. Nevertheless, following ongoing analysis it has been concluded that a small number of targeted NBW will be conducted in particularly suitable locations to support the results of the static bat detector surveys. Some targeted bat trapping has also been undertaken to provide more detailed information on the presence/likely absence of more cryptic species i.e. Myotis which cannot be reliably identified to species-level based on audio analysis alone. Bat activity surveys were not considered necessary for the cable route, as construction-related impacts would be temporary and limited in extent, with affected habitats reinstated shortly after works are completed.		
Badgers	Badger surveys were carried out between February and April 2026. The survey included all of the Sites and up to 30 m from the Order Limits (where access could be secured). Surveys within the CRC are ongoing and are being carried out in conjunction with UKHab surveys. During the surveys, surveyors walked the Sites to identify any evidence of Badger activity, including setts and field signs, such as latrines, dung pits and prints, in line with good practice guidance[57]. During other surveys, incidental observations of Badger evidence were also recorded.	Completed for the Sites. Planned for the CRC.	Surveys of the Sites were carried out between February 2026 and April 2026. Surveys of the CRC to be undertaken in due course, during autumn and winter 2026.
Breeding birds	Breeding bird surveys were undertaken within the Sites, as this is where impacts to breeding birds are anticipated. To ensure full coverage of the Sites, they were split into 12 transect routes. Six survey visits per transect were undertaken between late March and early July 2026. The survey methodology followed good practice guidance[58]. No targeted breeding bird surveys were undertaken of the CRC as impacts will be temporary and there will be no significant loss of suitable habitats. Construction-phase impacts can be avoided through implementation of standard mitigation measures. For the purposes of the assessment, the assemblage of breeding birds present within the CRC has been based on desk study data, including designated site citations, the habitats present and the results of the breeding bird surveys from within the Sites where habitats are comparable.	Completed	March 2026 – July 2026.

[57] Harris S., Cresswell P. and Jefferies D. (1989) Surveying badgers. Mammal Society – No9.
[58] Bird Survey & Assessment Steering Group. (2023). Bird Survey Guidelines for assessing ecological impacts, v.1.1.1. Available at: https://birdsurveyguidelines.org

Survey	Description	Status	Timeline
Barn owls	During the breeding bird surveys and UKHab survey, habitats within the Order Limits are being assessed for potential suitability for nesting, roosting or foraging Barn Owls. Surveys are following good practice guidance[59]. Additionally, trees and buildings within the Sites were assessed from ground level for their suitability for nesting and roosting Barn Owl. This was undertaken alongside the ground level tree and building inspections for bats, described above. The need for any further surveys will be determined based on the findings of the above surveys and risk to features.	Ongoing	Surveys of the Sites were carried out between February 2026 and April 2026. Surveys of the CRC to be undertaken in due course, during autumn and winter 2026.
Non-breeding birds	Non-breeding bird surveys were undertaken within the Sites, as this is where impacts to non-breeding birds are anticipated. To ensure full coverage of the Sites, the survey area was split into seven transect routes, which were surveyed in January 2026 and February 2026. The survey methodology followed good practice guidance[60]. No targeted non-breeding bird surveys were proposed for the CRC as impacts will be temporary and there will be no significant losses of suitable habitats. For the purposes of the assessment, the assemblage of non-breeding birds present within the CRC has been based on desk study data, including designated site citations, the habitats present and the results of the non-breeding bird surveys from within the Sites where habitats are comparable.	Noting that the non-breeding bird surveys did not cover the full survey season (November to February), the Applicant intends to carry out further surveys in November and December 2026.	January 2026 and February 2026 Further surveys planned for November 2026 and December 2026.
Otters	Watercourses, waterbodies, and suitable terrestrial habitat within and up to 200 m from the Order Limits (where considered to be appropriate and where access could be secured) are being surveyed for suitability and presence of Otters, in line with current guidance[61]. This includes a habitat suitability assessment, immediately followed by an Otter presence/ likely absence survey of all suitable habitats. Surveys between June and September are considered to be sub-optimal for Otters. However, restrictions on land access has meant that it has been necessary to undertake some surveys during this period. This has been clearly set out and any limitations to the survey identified. Depending on the findings and risk to the features, further surveys may be required.	Ongoing	April 2026 – Autumn 2026
Water voles	Watercourses and waterbodies within and adjacent to the Scheme (where considered to be appropriate and access can be secured) are being assessed for their suitability to support Water Voles, in line with current guidance[62] and in parallel with the Otter surveys described above. Any incidental evidence of Water Vole activity noted during the Otter (or any other) surveys was recorded. Depending on the findings and risk to the features, further surveys may be required to determine whether Water Voles are present or likely absent. This would comprise two separate presence/ likely absence visits, one early season (mid-April to June) and one late season (July to September). Each survey visit would be undertaken at least two months apart. Taking into account the project timescales, at least one of these visits would need to be undertaken during 2027.	Ongoing	April 2026 – Autumn 2026
Reptiles	Targeted reptile surveys are not currently proposed. During the UKHab surveys an assessment of the habitats to support widespread reptile species has been undertaken, and areas of particular suitability mapped. The presence of reptiles will be assumed in suitable habitats. In addition, incidental records of reptiles identified during other surveys will be recorded.	N/A	N/A

[59] Shawyer, C. R. (2011) 'Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment: Developing Best Practice in Survey and Reporting'. IEEM, Winchester.
[60] Bird Survey & Assessment Steering Group. (2024). Bird Survey Guidelines for assessing ecological impacts. Available at: https://birdsurveyguidelines.org 10/03/2026
[61] Findlay & White (2026) The Otter Field Survey & Monitoring Handbook: A Practical Guide to Field and Camera-Trap Surveys. Available at: https://pelagicpublishing.com/products/the-otter-field-survey-and-monitoring-handbook
[62] Dean, M (2021) Water Vole Field Signs and Habitat Assessment: A Practical Guide to Water Vole Surveys. Available at: https://pelagicpublishing.com/products/water-vole-field-signs-and-habitat-assessment

Survey	Description	Status	Timeline
Other priority mammals	Targeted surveys for other priority mammals are not proposed. During the UKHab surveys, an assessment of the habitats to support other priority mammals has been undertaken. The presence of other priority mammals will be assumed in suitable habitats. In addition, incidental records of other priority mammals identified during other surveys will be recorded.	N/A	N/A
Terrestrial invertebrates	During the UKHab surveys an assessment of the suitability of the habitats to support priority terrestrial invertebrates has been undertaken. Where habitats that have potential to support priority terrestrial invertebrate assemblages are present, and could be significantly impacted by the Scheme, further surveys may be undertaken. These would be completed with reference to the appropriate survey methodology for the invertebrate group(s).	N/A	N/A
White clawed crayfish	During UKHab surveys and Otter/ Water Vole surveys, assessments of the suitability of watercourses to support White-Clawed Crayfish has been undertaken. Where there are direct impacts to watercourses with suitability to support White-Clawed Crayfish, these will be subject to White-Clawed Crayfish eDNA surveys. Surveys will follow good practice guidance[63] where required.	N/A	April 2026 – October 2026, if required

Determining value

8.5.6 A number of criteria have become accepted as a means of assessing the nature conservation importance of a receptor which are set out in A Nature Conservation Review[64] and the CIEEM guidelines[33] and include diversity, rarity, and naturalness.

8.5.7 The nature conservation importance or potential importance of an ecological receptor was determined within the following geographic context:

- International;
- National;
- Regional;
- County; and
- Local.

8.5.8 The criteria for defining receptor value is set out in Table 8-4, adapted from DMRB LA 108[35] (which draws upon CIEEM's guidelines for Ecological Impact Assessment[33]). A further 'Scheme' category has been assigned to receptors of less than 'Local' importance, and 'Negligible' has been assigned to features of no particular intrinsic nature conservation importance.

8.5.9 Features that have been identified to be of less than local importance are not considered to be important ecological receptors and as such have not been considered within the impact assessment, ensuring that the assessment focuses only on those impacts which are potentially significant. Habitats or species which are present for which there may be a potential breach of legislation have been considered to be Important Ecological receptors (IEFs), even if the feature itself is not considered to be of significant intrinsic nature conservation importance, such as INNS. Such features may still warrant consideration within the design of the Scheme or may require mitigation measures to be implemented to ensure legal compliance. This has been set out in the ES as appropriate.

[63] Peay S. (2003) Monitoring the White-clawed Crayfish Austropotamobius pallipes. Conserving Nature 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough. Available at: https://publications.naturalengland.org.uk/publication/72042
[64] Frazer J.F.D. (1977). A Nature Conservation Review, Edited by D. A. Ratcliffe. Cambridge University Press, Cambridge, England Vol. 1 s. Available at: https://archive.org/details/natureconservati0001unse

Table 8-4 Criteria for determining the value of ecology and biodiversity ecological receptors

Importance level	Sites	Habitats	Species
International or European	▪ Sites of Community Importance (SCIs); ▪ Special Protection Areas (SPAs) and potential SPAs (pSPAs); ▪ Special Areas of Conservation (SACs) and candidate or possible SACs (cSACs or pSACs); ▪ Wetlands of International Importance (Ramsar sites); ▪ Biogenetic Reserves, World Heritage Sites (where recognised specifically for their biodiversity value) and Biosphere Reserves; and ▪ Areas which meet the published selection criteria for those sites listed above but which are not themselves designated as such.	Not applicable	Resident, or regularly occurring, populations of species which can be considered at an international or European level where: ▪ The loss of these populations would adversely affect the conservation status or disruption of the species at an international or European scale; ▪ The population forms a critical part of a wider population at this scale; or ▪ The species is at a critical phase of its life cycle at an international or European scale.
UK or national	▪ Site of Special Scientific Interest (SSSI); ▪ National Nature Reserve (NNR); ▪ Marine Protected Areas (MPA) including Marine Conservation Zones (MCZ); ▪ Areas which meet the published selection criteria for those sites listed above but which are not themselves designated as such; and ▪ Areas which meet the published selection criteria for those sites listed above but which are not themselves designated as such.	▪ Areas of UK Biodiversity Action Plan (BAP) priority habitats; ▪ Habitats included in the relevant statutory list of priority habitats; ▪ Areas of irreplaceable habitats including: o Ancient Woodland; o Blanket bog; o Ancient or veteran trees; o Limestone pavement; o Sand dunes; o Salt marsh; o Lowland fen. ▪ Areas of habitat which meet the definition for habitats listed above but which are not themselves designated or listed as such.	Resident, or regularly occurring, populations of species which can be considered at UK or national level where: ▪ The loss of these populations would adversely affect the conservation status or disruption of the species at a UK or national scale; ▪ The population forms a critical part of a wider population at this scale; or ▪ The species is at a critical phase of its life cycle at a UK or national scale.
Regional	Designated sites (non-statutory) for nature conservation.	Areas of habitats identified (including for restoration) in regional plans or strategies (where applicable).	Species including: ▪ resident, or regularly occurring, populations of species which can be considered at an international, European, UK or national level where: o the loss of these populations would adversely affect the conservation status or distribution of the species at a regional scale; or o the population forms a critical part of a wider regional population; or o the species is at a critical phase of its life cycle. ▪ Species identified in regional plans or strategies.

Importance level	Sites	Habitats	Species
County or equivalent authority	Wildlife or nature conservation sites designated at a county (or equivalent) level including: ▪ Local Wildlife Sites (LWS); ▪ Local Nature Conservation Sites (LNCS); ▪ Local Nature Reserves (LNR); ▪ Sites of Importance for Nature Conservation (SINC); ▪ Sites of Nature Conservation Interest (SNCI); ▪ County Wildlife Sites (CWS); and ▪ Protected Road Verge (PRV).	Areas of habitats identified in county or equivalent authority plans or strategies (where applicable).	Species including: ▪ resident, or regularly occurring, populations of species which can be considered at an international, European, UK or national level where: o the loss of these populations would adversely affect the conservation status or distribution of the species at a regional scale; or o the population forms a critical part of a wider regional population; or o the species is at a critical phase of its life cycle. ▪ Species identified in regional plans or strategies.
Local	Wildlife or nature conservation sites designated at a local level including: ▪ LWS; ▪ LNCS; ▪ LNRs; ▪ SINCs; ▪ SNCIs; ▪ Sites of Local Importance for Nature Conservation (SLINC); ▪ PRV.	Areas of habitat considered to appreciably enrich the habitat resource within the local context including features of importance for migration, dispersal, or genetic exchange.	Populations or communities of species considered to appreciably enrich the habitat resource within the local context including features of importance for migration, dispersal or genetic exchange.
Scheme	N/A	Areas of habitat which are lower value than 'Local' but which nevertheless are of higher value within the context of the Scheme boundary.	Species populations whose conservation value is restricted to the Scheme boundary and which are not considered particularly important within the wider local area e.g. where the species is typically common and widespread, the population is small or transient, and/or the Scheme does not provide habitat supporting a notable proportion of the local population or an important ecological function.

Impact assessment

Determining impact magnitude

8.5.10 Once the baseline was established following the completion of the ecology field surveys, an ecological impact assessment was undertaken, based on the Guidelines for Ecological Impact Assessment in the UK and Ireland produced by the CIEEM[33].

8.5.11 Where impacts are identified, details have been provided within the assessment to characterise these in terms of their extent, magnitude, and duration. Both adverse and beneficial impacts have been discussed, and impacts characterised in terms of how they occur, i.e., direct, indirect, secondary, or cumulative. Impacts can be permanent or temporary and can include:

- Direct loss and degradation of wildlife habitats;
- Fragmentation and isolation of habitats;
- Mortality and injury to species;
- Disturbance to species from noise, light, and other visual stimuli;
- Changes to key habitat features; and
- Changes to the local hydrology, water quality and/ or air quality.

8.5.12 Consideration is given to whether:

- Any processes or key characteristics have been removed or changed;
- There has been an effect on nature, extent, structure, and function of component habitats;
- There is an effect on the average population size and viability of component species.

8.5.13 Functions and processes acting outside the formal boundary of a designated site have also been considered, particularly where a site falls within a wider ecosystem e.g., wetland site.

8.5.14 Some ecosystems can tolerate a degree of minor changes, such as localised or temporary disturbance or changes in physical conditions, without such changes harming their function or importance. For this assessment, ecological and biodiversity effects have been considered in the light of any information available about the capacity of ecosystems to accommodate change. Significant effects have been determined as being either adverse or beneficial.

8.5.15 The conservation importance of undesignated habitats and species within a defined geographical area (International to Local) has been used to inform the assessment as to whether the effects of the proposals are likely to be significant.

8.5.16 For habitats, conservation status is determined by the sum of the influences acting on the habitat that may affect its extent, structure, and functions as well as its distribution and its typical species within a given geographical area.

8.5.17 For species, conservation status is determined by the sum of influences acting on the species concerned that may affect its abundance and distribution within a given geographical area.

8.5.18 When assessing potential effects on conservation importance, the known or likely background trends and variations in status have been taken into account. The level of ecological resilience or likely level of ecological conditions, which would allow the population of a species or area of habitat to continue to exist at a given level or continue to increase along an existing trend or reduce a decreasing trend, has been estimated where appropriate to do so.

8.5.19 The assessment of potential impacts has been undertaken with the inclusion of embedded mitigation for the Scheme; see Volume 1, Chapter 2 Scheme description for further information. The assessment then identifies relevant impacts and considers any additional measures that can be incorporated to avoid impacts, and any additional mitigation or compensation measures required. This iterative approach aligns with the mitigation hierarchy[33]:

- Avoidance: Seek options that avoid harm to ecological receptors (for example, by locating on an alternative site);
- Mitigation: Negative effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed (for example, through a condition or planning obligation);
- Compensation: Where there are significant residual negative ecological and biodiversity effects despite the mitigation proposed, these should be offset by appropriate compensatory measures; and
- Additionally, projects should seek to provide enhancements which are net benefits for biodiversity over and above the requirements for avoidance, mitigation or compensation.

8.5.20 The criteria for defining impact magnitude are set out in Table 8-5.

Table 8-5 Criteria for determining impact magnitude

Magnitude	Criteria	
Major	Adverse	▪ Permanent/ irreversible damage to an ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact negatively affects the integrity or key characteristics of the resource.
	Beneficial	▪ Permanent addition of, improvement to, or restoration of a ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact positively affects the integrity or key characteristics of the resource.
Moderate	Adverse	▪ Temporary/ reversible damage to a ecological receptor; ▪ The extent, magnitude, frequency, and / or timing of an impact negatively affects the integrity or key characteristics of the resource.
	Beneficial	▪ Temporary addition of, improvement to, or restoration of a ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact positively affects the integrity or key characteristics of the resource.
Minor	Adverse	▪ Permanent and irreversible damage to a ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact does not affect the integrity or key characteristics of the resource.
	Beneficial	▪ Permanent addition of, improvement to, or restoration of a ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact does not affect the integrity or key characteristics of the resource.
Negligible	Adverse	▪ Temporary and reversible damage to a ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact does not affect the integrity or key characteristics of the resource.

Magnitude	Criteria	
	Beneficial	▪ Temporary addition of, improvement to, or restoration of a ecological receptor; ▪ The extent, magnitude, frequency, and/ or timing of an impact does not affect the integrity or key characteristics of the resource.
No change	No observable impact, either positive or negative	

Determining effect significance

8.5.21 An assessment has been made of the significance of residual effects, i.e. the significance of the effects that are predicted to remain after the implementation of all committed mitigation measures.

8.5.22 The significance of effect is determined by considering the relationship between the importance of the biodiversity receptor, and the impact magnitude. Effect significance has been described and reported using the following terms: Very large, Large, Moderate, Slight, or Neutral. The approach to the derivation of significance is as detailed within Table 8-6.

Table 8-6 Significance of effect matrix

		Impact magnitude				
		Major	Moderate	Minor	Negligible	No change
Receptor importance	International or European importance	Very large	Large or very large	Moderate or large	Slight	Neutral
	UK or national importance	Large or very large	Moderate or large	Slight or moderate	Slight	Neutral
	Regional importance	Moderate or large	Moderate	Slight	Neutral or slight	Neutral
	County or equivalent authority importance	Slight or moderate	Slight	Neutral or slight	Neutral or slight	Neutral
	Local importance	Slight	Neutral or slight	Neutral or slight	Neutral or slight	Neutral

8.5.23 For the purposes of the assessment and in accordance with good practice, where more than one significance level is shown in Table 8-6, professional judgement has been used to clarify the differentiation and conclude the effect.

8.5.24 Very large, Large, and Moderate effects are considered 'significant'. Slight and Neutral effects are 'not significant'. The effects can be either adverse or beneficial.

8.6 Baseline conditions

The Scheme and ecological context

8.6.1 The Scheme is predominantly located between the towns of Alcester and Evesham in a rural landscape characterised by agricultural land with occasional villages and individual properties. The Scheme is split into four separate Sites across the counties of Worcestershire and Warwickshire which is where the built development will be located (solar panels, battery storage and other associated infrastructure); see Volume 2, Figure 1.1 Scheme location. Agricultural land is located across all aspects of the Sites. The Sites comprise primarily large arable fields with boundary hedgerows and individual trees. There are occasional small woodland coppices, grassland pasture fields, and agricultural buildings. Watercourses and ponds are also present within and adjacent to the Sites.

8.6.2 Alongside the Sites, the Scheme also comprises the CRC, which links Sites 1 to 4 to each other and to the Point of Connection (PoC) at the National Grid Electricity Transmission (NGET) Feckenham Substation, which is located north of Site 1. Similarly to the Sites, the CRC passes through mainly agricultural land, comprised of both arable and pasture fields with associated hedgerow boundaries. The CRC also intercepts small woodland coppices, watercourses and roads.

8.6.3 The Study Area is located across three Water Framework Directive (WFD) operational catchments: Avon – Midlands West; Avon Rural Rivers and Lakes; and Avon Urban Rivers and Lakes, which has been historically impacted by phosphate pollution.

8.6.4 The Study Area is intersected by six Main Rivers of note: the River Avon, River Arrow, Piddle Brook, Ban Brook, Littleton Brook, and Noleham Brook, as well as various unnamed watercourses (all of which are tributaries of the River Avon). There are numerous Environment Agency species monitoring sites present within the Order Limits / adjacent to the Scheme.

8.6.5 Dispersed within the Order Limits are approximately 70 waterbodies of varying sizes.

Embedded mitigation

8.6.6 The development of the ecology and biodiversity assessment for the Scheme has taken into consideration the embedded mitigation as defined in Volume 1, Chapter 2 Scheme Description, Section 2.7 of this ES and design evolution outlined in Volume 1, Chapter 4 Alternatives of this ES. For ecology and biodiversity this includes:

- E-GEN.1 - Implementation of Outline Construction Environmental Plan (oCEMP);
- E-GEN.2 - Implementation of Landscape and Ecological Management Plan (LEMP);
- E-GEN.3 - Implementation of Outline Operational Environmental Management Plan (oOEMP);
- E-GEN.4 - Implementation of Outline Decommissioning Environmental Management Plan (oDEMP);
- E-B.1 - Delivery of Biodiversity Net Gain through the landscape design;
- E-B.2 - Minimisation of the creation of new watercourse or ditch crossings;
- E-B.3 - Minimisation of the creation of new hedgerow crossings; and
- E-B.4 - Buffer zones between sensitive environmental features and the developable area

Survey and desk study summary

8.6.7 Baseline information, from desk study and survey data, is set out in Table 8-7. Volume 2, Figure 8.1 Designated sites and other important ecological receptors, shows the location of statutory and non-statutory designated sites for nature conservation within 2 km and 1 km of the Order Limits, respectively. Volume 2, Figure 8.2 Priority Habitats and veteran trees, shows the location of priority habitats and veteran trees within 1 km of the Scheme. Volume 2, Figure 16.2 Waterbodies and watercourses, shows watercourses within 1 km of the Scheme, which encompasses the main extent of the aquatic Study Area. Table 8-7 shows baseline information and (where available) preliminary findings from completed and ongoing survey work for all identified ecological receptors that were scoped into the ES. A preliminary assessment of the value of these receptors has been included in Table 8-7. These are subject to change depending on the outcomes of ongoing ecological survey work. The timelines for ongoing and planned surveys detailed below are summarised in Table 8-3 above.

Table 8-7 Summary of preliminary baseline results

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
Designated Sites for Nature Conservation	No international sites for nature conservation are present within 10 km of the Scheme, nor are there any international sites with bats as a qualifying feature or migratory birds within 30 km of the Scheme. The Severn Estuary SAC, SPA and Ramsar lies downstream of watercourses that pass through the Scheme within the catchment. There are six statutory designated sites for nature conservation within 2 km of the Scheme. The closest of these is Wylde Moor, Feckenham Site of Special Scientific Interest (SSSI), located approximately 130 m west of CRC1. There are 19 non-statutory designated sites for nature conservation present within 1 km of the Order Limits. Of these, the following are in closest proximity to the Site: ▪ Six are partially within the Order Limits: Alcester Broom Disused Railway LWS (sub-Site 2(b)); Lady's Coppice and Morton Bank LWS (CRC1); Piddle & Whitsun Brooks LWS (CRC1); River Arrow LWS (CRC3); River Avon and Tributaries LWS (CRC3); Shurnock Meadows LWS (CRC1); ▪ Six are adjacent: Abbots Morton Road Verge LWS (sub-Sites 1(c), 1(e)); Fox Covert LWS (sub-Sites 3(e), 3(f)); Long Wood & Commissioners Wood LWS (sub-Site1(a)); Sands Meadow LWS (CRC1); Slade Wood LWS (sub-Site 1(a)); Weethley Wood and Bank Complex LWS (sub-Sites 1(c), 1(b)). In addition to the above non-statutory designations, there are an additional 25 Potential Local Wildlife Sites (pLWS) within 1 km of the Scheme. Although not officially designated, these are sites that have been identified as	All designated sites that fall within the Order Limits were subject to UKHab surveys. Full details of the outcomes of these surveys will be presented in a separate Appendix to this ES chapter. An assessment of potential impacts on designated sites within the Order Limits and within 2 km and 1 km for statutory and non-statutory designations will be undertaken as part of the Environmental Impact Assessment (EIA).	SAC – International SPA – International Ramsar - International SSSI – National LWS and pLWS - County

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
	potentially significant for nature conservation and are reported by Local Ecological Record Centres (LERCs) in record searches, so consideration of potential impacts to these sites will also be made. Of these, the following are located in closest proximity to the Site: ▪ Two are partially within the Order Limits: Meadow near Broom pLWS (CRC3) and Cleeve Road pLWS (CRC3). ▪ Two, while not within the Order Limits, are entirely surrounded by it: Dunnington Plum Orchard pLWS (sub-Site 2(a)) and Bush Wood pLWS (sub-Sites 1(e), 1(c)). ▪ Six are immediately adjacent to the Order Limits: Grassland near Bevington Waste pLWS (sub-Sites 1(c), 1(d)); Marcliff Hill Orchard pLWS (CRC3); The Ling Ground and Weethley Wood pLWS (sub-Sites 1(c), 1(e)); Collet's Farm Hedge pLWS (sub-Site 3(f)); Dorsington Manor Farm Hedge pLWS (sub-Site 3(g)); Ragley Park Woods pLWS (sub-Site 2(a)).		
Terrestrial Habitats (including Priority/ Irreplaceable Habitats and priority/ protected plant species)	The desk study returned records of the following Priority Habitats within the Study Area (up to 1km from the Order Limits for Priority Habitats): ▪ Ancient woodland – Two partially within the Order Limits, six adjacent, eight within 500m. ▪ Coastal and floodplain grazing marsh – closest 14m south of sub-Site 2(e). ▪ Deciduous woodland – 27 discrete parcels within the Study Area. ▪ Good quality semi-improved grassland – closest 2m north-east of sub-Site 3(d) ▪ Lowland meadow – with CRC1. ▪ Traditional orchard – 32 discrete parcels within Study Area. Five within the Order Limits – in Sub-sites 2(a), 2(d), 3(b), 3(f) and 3(g). ▪ Wood-pasture & parkland – Oversley Park (0.85km north of sub-Site 2(b)) and Ragley Hall (0.6km north of sub-Site 2(a)). Several watercourses are present within and adjacent to the Order Limits, including the River Avon, River Arrow and Piddle & Whitsun Brooks. More detail on these can be found within the Aquatic Habitats section of this table.	UKHab surveys are ongoing. A preliminary summary of the results below is provided. Full details of the outcomes of then UKHab surveys will be detailed in an Appendix to this chapter. Most of the Sites comprise arable fields with uncultivated field margins of neutral grassland and some native hedgerow boundaries (with and without trees). Areas of permanent grassland made up a relatively low proportion of the Sites, and that which was present was of relatively low quality. Where more diverse grassland was present, this was very limited in extent and located in field edges. Aside from those within the six LWSs which were partially within the Order Limits, there were no additional areas of Priority grassland identified. Some areas of scrub habitat were present, however these were again small and limited in extent and restricted to edges of fields. Overall, most of the habitats within the Sites comprised relatively low quality habitats. It should be noted that the UKHab surveys were undertaken predominantly between July and September 2026 during an exceptionally hot and dry summer resulting in widespread drought conditions across much of England. Although these conditions may have reduced the visibility of certain habitat characteristics and indicator species, the overall results are considered robust and reliable. However, a degree of additional uncertainty remains, and confidence in the findings is therefore slightly lower than would ordinarily be expected. Any potential impacts to Priority Habitats will be assessed as part of the EIA. Results from the UKHab surveys will be used to inform the assessment and will be used to inform a Biodiversity Net Gain (BNG) assessment using the Statutory Biodiversity Metric.	Ancient Woodlands – National Coastal/Floodplain Grazing Marsh – County Deciduous Woodland – County Good quality semi-improved grassland – Local Lowland meadow - County Traditional Orchard – County Wood-pasture & parkland - County

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
Ancient/ veteran trees	The desk study identified numerous records of veteran trees within 500 m of the Order Limits, including four veteran trees within CRC1, one veteran tree located within sub-Site 1(c) and one veteran tree within CRC3.	Additional ancient/ veteran trees are being recorded during UKHab surveys. Criteria for defining veteran trees are set out under the Biodiversity Gain Requirements (Irreplaceable Habitats) regulations 2024[65]. Determination of veteran trees will follow a multidisciplinary approach in collaboration with an arboricultural specialist and are considered potentially veteran when features are present including: ▪ Significant decay features such as deadwood, hollowing or signs of advanced decay in the trunk or major limbs; ▪ A large girth, depending on and relative to species, site and management history; and ▪ A high value for nature, especially in hosting rare or specialist fungi, lichens and deadwood invertebrates. Data on recorded ancient/ veteran trees within the Order Limits will be reported in the Appendix to this chapter for habitats.	National
Amphibians	WaBRC and WoBRC returned records of amphibians, including GCN, within 1 km of the Order Limits. The closest includes three records of GCN within CRC1. There were also records of Smooth Newt *Lissotriton* vulgaris, Common Toad *Bufo bufo* and Common Frog *Rana temporaria* within 2 km of the Order Limits, including the CRC. There are approximately 230 waterbodies within or up to 250 m from the Order Limits, which have potential to support breeding populations of amphibians including GCN. Of these, 56 were within the Order Limits. Hedgerows, arable field margins and small woodland coppices within the Order Limits provide suitable terrestrial habitat for amphibians.	A total of 185 ponds/ waterbodies were identified within 250 m of the Order Limits, with connectivity via suitable terrestrial habitat. 100 of these were subject to a Habitat Suitability Index (HSI) assessment for GCN, and 52 have so far been assessed through eDNA surveys. 10 returned a positive eDNA result for GCN and of these, two were within the Order Limits, one within 50 m of the Order Limits, five within 100 – 250 m of the Order Limits, and two that are now beyond 250 m of the Order Limits as a result of design changes. Full details of the outcomes of the GCN surveys will be detailed in an Appendix to this chapter.	Local
Bats	WaBRC and WoBRC returned numerous records of bats within 2 km of the Order Limits, the closest being six records immediately adjacent to CRC1. The majority of the Scheme comprises open arable farmland of limited value for bats. Within the Order Limits, the small woodland coppices, hedgerows, dense scrub, waterbodies and watercourses provide more suitable bat foraging and commuting habitat and there is connectivity to suitable habitat within the surrounding landscape. The more suitable habitats within the Order Limits provide potential foraging and commuting opportunities for a range of bat species. At a landscape scale, Sites 1, 2 and 3 (sub-Sites 3(e), 3(f), and 3(g)) are located amongst higher suitability habitats for bats, with many woodlands and waterbodies present which will likely provide high quality bat foraging habitat and roosting opportunities. It is likely that the hedgerows and other suitable habitats in Sites 1, 2 and 3 (sub-Sites 3(e), 3(f), and 3(g)) provide	**Roosting bats:** Structures and trees were assessed for presence of potential roost features (PRFs) and their overall bat roost potential (BRP) was classified in accordance with industry guidance[66] as follows: Structures/buildings: ▪ Negligible: No obvious features likely to be used by roosting bats however an element of uncertainty remains; ▪ Low: A structure with one or more potential roost sites that could be used by individual bats opportunistically throughout the year; ▪ Moderate: A structure with one or more potential roost sites that could be used by multiple bats but which are unlikely to support a roost of high conservation status i.e. maternity or hibernation roost; and	Roosting bats – County Foraging & Commuting bats - County

[65] The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024, SI 2024/48. Schedule: Irreplaceable habitats. Available at: https://www.legislation.gov.uk/uksi/2024/48/schedule/made
[66] With reference to bat survey guidelines (Collins, 2023): PRF-I are suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats. PRF-M are suitable for multiple bats and may therefore be used by a maternity colony. Available at: https://www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-4th-edition

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
	connectivity between foraging areas and roost sites. Site 3 (sub-Sites 3(a), 3(b), 3(c) and 3(d)) and Site 4 are set within what are likely to be lower suitability habitats with more extensive areas of arable land and fewer woodlands and watercourses. On the basis of the above, and with reference to bat survey guidance[56], the Sites are provisionally assessed as providing 'moderate' suitability for foraging and commuting bats.	▪ High: A structure with one or more potential roost sites obviously suitable for use by larger numbers of bats on a regular basis including for maternity or hibernation. Trees: ▪ PRF-I: Suitable for individual bats or very small numbers of bats; and ▪ PRF-M: Suitable for multiple bats and may be used by a maternity colony. The results of the ground level tree and building inspections are summarised as follows: ▪ No confirmed roosts were identified; ▪ Nine buildings were assessed to have low bat roost potential and three were assessed to have negligible potential; ▪ A collection of farm buildings are also present immediately adjacent to Site 3 into which access has not yet been possible; and ▪ 346 trees were identified with bat roost potential comprising 74 PRF-M and 272 PRF-I trees. Depending on the risk to the individual PRFs, further surveys may be required to determine whether bat roosts are present or likely absent. **Bat activity:** Static bat detector surveys were completed in April, May, June and July 2026. Data analysis is ongoing, but the following species have been recorded: ▪ Common Pipistrelle; ▪ Soprano Pipistrelle; ▪ Long-eared species; ▪ Noctule ▪ Barbastelle; ▪ Myotis species; ▪ Serotine; and ▪ Lesser Horseshoe.	
Badgers	WaBRC and WoBRC returned one Badger record from within 1 km of the Order Limits, located approximately 640 m west of CRC1. Suitable habitats are present within the Order Limits for foraging and commuting Badgers such as hedgerows, small woodland coppices and cropland. Hedgerows, scrub and woodland areas also provide opportunities for sett creation.	Badger surveys were carried out between February and April 2026. In total, 25 setts were identified within the Sites. This included: ▪ Nine main; ▪ Three subsidiary; ▪ Three annexe; and ▪ 10 outliers. In addition to these, there were also seven potential setts that were either disused former setts with no clear evidence of current use by Badgers, or the burrow entrances were inaccessible to surveyors to fully assess. As disused setts are not legally protected, these	Scheme

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
		additional potential setts have been excluded from further assessment here. The highest concentration of Badger setts was within Site 2. Across the Sites, Badger setts tended to be located within hedgerows, woodland edges, areas of scrub and boundaries, and no setts were present in prominent locations within Sites. Six setts had a 30 m buffer overlapping with the area within which infrastructure is proposed to be sited, and 11 setts had a 30 m buffer overlapping with the proposed location of the perimeter fencing. In all situations it is considered feasible to avoid impacts to Badger setts through the detailed design stage post-consent, so that the 30 m buffers around the setts are designed into the embedded mitigation of the Scheme and are up-to-date at the time of construction commencing.	
Breeding birds	WaBRC and WoBRC returned numerous records of breeding birds which are summarised below, including species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), within 1 km of the Order Limits. Habitats within the Order Limits such as hedgerows, grassland field margins, riparian habitats along watercourses and small woodland coppices, within the Order Limits, are suitable to support a range breeding bird species. In addition, the larger arable fields have suitability for ground nesting species such as Skylark. Warwickshire Biological Records Centre identified recent records (since 2016) of 129 bird species within 1 km of the Order Limits, of which of 114 were recorded during the core breeding season (period of March to August inclusive). This included: ▪ 31 species on the BoCC Red List (black-tailed godwit; common ringed plover; corn bunting; cuckoo; curlew; Eurasian skylark; Eurasian whimbrel; European herring gull; fieldfare; grey wagtail; house sparrow; lapwing; lesser redpoll; linnet; marsh tit; merlin; mistle thrush; pochard; ruff; spotted flycatcher; starling; tree pipit; whinchat; woodcock; yellowhammer; arctic tern; common house martin; dunlin; swift; greenfinch; yellow wagtail); ▪ 45 species on the BoCC Amber List (redwing; song thrush; black-headed gull; black-necked grebe; common gull; common reed bunting; common sandpiper; common tern; dunnock; bullfinch; great black-backed gull; green sandpiper; greenshank; greylag goose; kestrel; lesser black-backed gull; mallard; meadow pipit; oystercatcher; pintail; redshank; redstart; sanderling; shelduck; short-eared owl; snipe; stock dove; tawny owl; teal; marsh harrier; osprey; willow warbler; wood sandpiper; Caspian gull; wren; great white egret; moorhen; rook; sedge warbler; shoveler; sparrowhawk; wheatear; whitethroat; wigeon; woodpigeon);	The results of the breeding bird surveys undertaken between late March and early July 2026 are currently being analysed, however preliminary findings are summarised below: ▪ One Annex 1 species was recorded during the breeding bird surveys (little egret); ▪ 24 Amber Listed (BOCC) species were recording during the breeding bird surveys, including, dunnock, gadwall, great white egret, greylag goose, grey wagtail, kestrel, lesser black-backed gull, mallard, meadow pipit, moorhen, oystercatcher, quail, common redstart, reed bunting, rook, stock dove, sparrowhawk, song thrush, sedge warbler, tawny owl, whitethroat, willow warbler, woodpigeon and wren; ▪ Seventeen Red Listed (BOCC) species were recorded during the breeding bird surveys, including corn bunting, cuckoo, cetti's warbler, greenfinch, herring gull, house martin, house sparrow, linnet, mistle thrush, skylark, spotted flycatcher, starling, swift, whinchat, woodcock, yellowhammer and yellow wagtail; ▪ Seven Schedule 1 species were recorded during the breeding bird surveys, including barn owl, cetti's warbler, hobby, kingfisher, peregrine, quail and red kite; and ▪ Ground nesting birds, such as skylark, corn bunting and yellow wagtail were observed during the breeding bird surveys. Yellow wagtail observations (31 observations) came exclusively from Sites 3 and 4, with corn bunting (34 observations) predominantly also from Site 3 and 4. Skylark were observed a total of 713 times throughout the breeding bird survey period, often displaying breeding behaviour.	Ground-nesting birds – County Other breeding birds - Local

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
	▪ 11 species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended): Kingfisher; black tern; brambling; Cetti's warbler; garganey, hobby, little gull, little ringed plover; mediterranean gull; peregrine; red kite; ▪ 19 species listed as species of principal importance for conservation of biodiversity in England (black-tailed Godwit, common reed bunting, cuckoo, curlew, European herring gull, Eurasian skylark, hawfinch, house sparrow, lapwing, lesser redpoll, linnet, marsh tit, spotted flycatcher, starling, tree pipit, turtle dove, western yellow wagtail wryneck and yellowhammer); ▪ Six species listed on Annex 1 of the Birds Directive (black tern, black-tailed godwit, kingfisher, short-eared owl, western marsh harrier and wryneck); and ▪ Three species listed on the Warwickshire Local BAP (biodiversity action plan) (lapwing, snipe, song thrush). Worcestershire Biological Records Centre identified recent records (since 2016) of four bird species within 1 km of the Order Limits. All of these records were recorded during the core breeding bird season (period of March to August inclusive). This includes: ▪ Three species on the Red List of BoCC5: Eurasian Skylark; cuckoo; lapwing); ▪ Zero species on the Amber List of BoCC5; ▪ Zero species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); ▪ One species listed on Annex 1 of the Birds Directive (red kite); and ▪ Zero species listed on the Worcestershire Local BAP.		
Barn Owls	Neither WaBRC or WoBRC returned records of Barn Owls within 1 km of the Order Limits. Habitats within the Order Limits, such as mature trees, small woodland coppices, pasture and field margins, have potential to support breeding, foraging and commuting Barn Owls.	The results of the breeding bird surveys undertaken between late March and early July 2026 are currently being analysed, alongside the results of the UKHab surveys undertaken to-date and the results of the ground level tree and building inspections. However a preliminary assessment of findings is provided below. Barn owls or barn owl evidence was observed a total of 12 times during the breeding bird surveys, with breeding behaviour displayed regularly. Breeding behaviour included barn owls perched in potential roost or nest locations and barn owls in-flight, carrying food. Other general foraging and commuting behaviour was observed. These observations range from both extents of the entire Scheme and in-between. Potential breeding behaviour was noted predominantly to the far-west of the Scheme within Site 2, adjacent to Wood Bevington.	Local
Non-breeding birds	WaBRC and WoBRC returned records of birds within 1 km of the Order Limits, which have the potential to use the Order Limits and surrounding landscape	Non-breeding bird surveys within the Sites were undertaken in January and February 2026. A total of 66 bird species were	Local

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
	for passage and overwintering, such as Black-Tailed Godwit and Green Sandpiper. Habitats within the Order Limits have potential to support aggregations of non-breeding birds, such as Corn Bunting.	recorded within the Survey Area during the surveys, of which 33 were priority species[67,68,69]. The results suggest that the assemblage recorded is fairly typical of the predominantly agricultural habitats present. The results indicate that the Survey Area does not provide a role in maintaining any SPA or Ramsar site populations and is not functionally linked to any SPA or Ramsar sites in the wider area (the closest of which is the Severn Estuary SPA and Ramsar site located approximately 50 km south west of the Scheme).	
Otters	WaBRC and WoBRC returned two records of Otters within 1 km of the Order Limits, the closet located 210 m northeast of CRC3. The majority of the Order Limits comprise arable land which is sub-optimal for Otters. However, there are numerous watercourses, ditches and waterbodies with suitability for foraging and commuting Otters within and adjacent to the Order Limits, and which are well connected to the wider landscape and River Arrow and River Avon. There is also suitable terrestrial habitat, such as woodland and tree lines along watercourses, which may provide opportunities for sheltering Otters (including holts).	Otter habitat suitability and presence/ likely absence surveys are currently ongoing at the time of writing, and the results have not yet been analysed. The preliminary assessment of the value of the site for this species has been estimated using professional judgement and knowledge of habitats present within the Scheme at the time of writing.	County
Water Voles	WaBRC and WoBRC returned no Water Vole records within 1 km of the Order Limits. The Warwickshire, Coventry & Solihull LNRS states that there is a population of Water Voles present within Noleham Brook, which is approximately 100 m northeast of Site 3. A tributary of the Noleham Brook is located directly adjacent to Site 3. There are numerous watercourses, ditches and other waterbodies within and adjacent to Order Limits that may have suitability for Water Voles.	Water Vole habitat suitability surveys are currently ongoing and the results have not yet been analysed. The preliminary assessment of the value of the site for this species has been estimated using professional judgement and knowledge of habitats present within the Scheme at the time of writing.	Local

[67] UK Government (1981) Wildlife and Countryside Act 1981, Schedule 1: Birds which are protected by special penalties. Available at: https://www.legislation.gov.uk/ukpga/1981/69/schedule/1
[68] British Trust for Ornithology et al. (2021) *Birds of Conservation Concern 5 (BOCC5)*. Available at: https://www.bto.org/our-work/science/publications/reports/birds-conservation-concern
[69] Department for Environment, Food and Rural Affairs and Natural England (2022) *Habitats and Species of Principal Importance in England ('Section 41 habitats and species')*. Available at: https://www.gov.uk/government/publications/habitats-and-species-of-principal-importance-in-england

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
Widespread reptile species	WaBRC and WoBRC returned Grass Snake records within 1 km of the Order Limits, the closest being located approximately 340 m from sub-Site 3(g). No records of other reptile species were provided. The arable and grassland pasture fields within the Order Limits are generally considered to be of low suitability for reptiles due to the limited vegetation cover and levels of disturbance from agricultural management. Hedgerows, arable field margins and small woodland coppices provide suitable terrestrial habitat for widespread species of reptiles. Waterbodies may also support foraging habitat for Grass Snake.	During UKHab surveys undertaken between May and July 2026, an assessment of the habitats to support widespread reptile species was undertaken. This assessment will continue to be updated as the habitat surveys progress. Extensive areas of suitable reptile habitat have not been identified to date, but the field margins and hedgerows provide some suitability, albeit limited in extent. To date, two incidental observations of Grass Snake have been recorded during other surveys. At present, based on preliminary findings of the ongoing habitat surveys, which have not identified extensive areas of suitable reptile habitat, it is the current expectation that additional reptile surveys will not be required. The presence of reptiles will, however, be assumed in all suitable habitat.	Local
Other Priority mammals	WaBRC and WoBRC returned records of Brown Hares, Hedgehogs and Polecats within 1 km of the Order Limits, the closest being brown hare within sub-Sites 2(a) and 2(d). Habitats within the Order Limits such as grassland field margins, hedgerows, woodland edges and small woodland coppices have potential to support other priority mammals, such as Brown Hare, Hedgehog and Polecat. The arable fields themselves are also suitable for brown hares.	During the UKHab surveys undertaken between May and July 2026, an assessment of the habitats to support other priority mammals was undertaken. This assessment will continue to be updated as the habitat surveys progress. Brown Hare – this species has been frequently observed by surveyors within the Sites during other surveys. The field margins and open arable fields provide suitable habitat for them, and the network of uncultivated field margins provides good opportunities for foraging and refuge for leverets from predators and farming activities. Hedgehogs –The field margins and hedgerows provide some connectivity for hedgehogs, although where crop fields are larger this is more limited. Uncut field margins over the winter and hedgerows provide suitable opportunities for hibernating. Hedgehogs are primarily insectivores and as such widespread use of agricultural chemicals at the Order Limits is likely to have a detrimental effect on the suitability of the Order Limits for this species. Polecat – generally favour landscapes with networks of hedgerows and small woodlands both of which are present. Rabbits are usually a major food source through the winter and although some evidence of rabbit warrens in abandoned badger setts was observed, they are not thought to be widespread on the Order Limits. As polecats have large habitat ranges, it is possible that parts of the Order Limits are part of polecat territories, given the presence of records within 1 km of the Scheme. No observations of this species or evidence of them has been identified during surveys (to date).	Local

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
		Further surveys for other Priority mammals are not considered necessary, as presence is assumed due to the presence of suitable habitat within the Scheme, but the potential for significant impacts to arise on these species will be assessed as part of the EIA.	
Terrestrial invertebrates	WaBRC and WoBRC returned numerous records of notable terrestrial invertebrates within 1 km of the Order Limits. Records include Purple Emperor, Brown Hairstreak and White-Letter Hairstreak which are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). White-Letter Hairstreak records were present within sub-Site 2(d) and sub-Site 3(g). Brown Hairstreak records are present within CRC1. Habitats within the Order Limits such as field margins, hedgerows, small woodland coppices, large trees, dead trees/ sources of deadwood and scrub have potential to support notable invertebrates.	During the UKHab surveys undertaken between May and July 2026, an assessment of the habitats to support priority terrestrial invertebrates was undertaken. This assessment will continue to be updated as the habitat surveys progress. The arable habitats encountered to date are common and widespread in the local area and are unlikely to be of high importance for notable invertebrate species. At present, based on preliminary findings of the ongoing habitat surveys, terrestrial invertebrate surveys are not considered necessary as presence of terrestrial invertebrates can be assumed based on presence of suitable habitat. This will be continuously reviewed as the habitat surveys progress.	Local
White-clawed crayfish	WaBRC and WoBRC returned no White-Clawed Crayfish records within 1 km of the Order Limits. Watercourses and waterbodies within and adjacent to the Order Limits have potential to support White-Clawed Crayfish.	White-Clawed Crayfish habitat suitability surveys are currently ongoing at the time of writing, and the results have not yet been analysed.	TBC – Assessment Ongoing
Aquatic habitats	The desk study identified nine watercourses within the Study Area (i.e. within 150 m of the Order Limits). Of these were six Main Rivers (River Avon, River Arrow, Piddle Brook, Ban Brook, Littleton Brook, and Noleham Brook) and three ordinary watercourses. Of these, eight are within or intersect the Order Limits: ▪ Brandon Brook – within CRC1; ▪ Unnamed tributary of the Piddle Brook – within CRC1; ▪ Piddle Brook – within CRC1; ▪ Ban Brook – within sub-Site 1(c) and adjacent to sub-Sites 1(d), 2(c), 2(d); ▪ River Arrow – adjacent to sub-Sites 2(b), 2(e), within CRC3; ▪ River Avon – within CRC3; ▪ Gate Inn Brook, within CRC5, within Site 4; and ▪ Unnamed tributary of the Noleham Brook – within Site 3, between sub-Sites 3(f) and 3(g). One was adjacent to the Order Limits but did not intersect with it: ▪ Unnamed tributary of the Littleton Brook – adjacent to sub-Sites 3(b) and 3(c). The other watercourses within the Study Area are field drainage ditches and small streams. Within 2 km of the Order Limits, there are several additional watercourses which receive flow from the watercourses identified within 150 m of the Order Limits. The only Main Rivers within this wider 2 km Study Area for	Aquatic habitat surveys are planned/ ongoing, and the results have not yet been analysed.	Local

Ecological receptor	Summary of desk study baseline data	Summary of field survey data	Preliminary assessment of value
	hydrologically connected watercourses are Bow Brook, Whitsun Brook, Broadway Brook, and Bretforton Brook. All watercourses present in the Study Area fall within the Avon-Midlands West, Avon Rural Rivers and Lakes, and Avon Urban Rivers and Lakes WFD Operational Catchments. The WFD waterbodies within the Study Area range from being at Poor to Moderate overall status. Reasons for Not Achieving Good (RNAG) for these waterbodies are predominantly related to phosphate pollution resulting from poor livestock management (diffuse source) and sewage discharge (point source).		
Fish	The Environment Agency Ecology & Fish Data Explorer returned recent records (<5 years old) of Brown/ Sea Trout and European Eel for the River Arrow within the Study Area. There were no recent records of other notable fish species within the watercourses present in the Study Area, including Salmon, Sea Lamprey, River Lamprey, Allis Shad and Thwaite Shad (which are listed within the Severn Estuary SAC and Ramsar site designations).	Fish surveys are planned, and no data are currently available.	Local
Aquatic macro-invertebrates	The desk study has identified aquatic habitats within the Study Area (see aquatic habitats section in this table), which have the potential to support notable communities of aquatic macroinvertebrates.	Aquatic macroinvertebrate surveys are planned, and no data are currently available.	Local

Arrow Valley Solar