Lime Down Solar Park

Environmental Statement

Volume 3, Appendix 9-1: Ecological Baseline Report (Tracked)

~~**September 2025**~~

May 2026

Revision ~~1~~2

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Schedule of Changes

Revision	Section Reference	Description of Changes	Reason for Revision
2	Paragraph 2.3.6	Amended paragraph to reflect the complete period of surveys along the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 2.6.7 and Paragraph 2.6.8	Updated paragraphs to confirm the extent of remaining un-surveyed land.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.4 and 3.2.7	Updated Heading and paragraph to confirm information presented is based on desk study information.	Updated for Deadline 1 of Examination in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.12	Updated area and percentage of arable habitat presented for the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.26	Updated area and percentage of modified grassland habitat presented for the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.30	Updated paragraph to confirm further detail regarding neutral grassland habitat within the Solar PV Sites.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.45 to 3.2.48	Updated area and percentage of other neutral grassland habitat presented for the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.

Revision	Section Reference	Description of Changes	Reason for Revision
	Paragraph 3.2.69	Add paragraph to provide detail of wooded railway embankments within the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.26	Updated area and percentage of lowland mixed deciduous woodland habitat presented for the Order Limits.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.80 and paragraph 3.2.81	Updated area of and further evaluation.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.84	Updated area and percentage of ruderal/ephemeral vegetation presented for the Order Limits.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.96	Updated lengths of UKHab hedgerows presented for the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.2.10 to paragraph 3.2.13	Updated lengths of watercourses presented for the Cable Route Corridor.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.
	Paragraph 3.3.90 to paragraph 3.3.95	Added paragraphs to include section on aquatic invertebrates.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.

Revision	Section Reference	Description of Changes	Reason for Revision
	Paragraph 3.3.11 and 3.3.17	Updated paragraphs to include further detail on plants and aquatic macrophytes.	Updated for Deadline 1 of Examination following completion of surveys within the Cable Route Corridor and in response to Wiltshire Council's Relevant Representation.

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1 Introduction

1.1.1 Clarkson and Woods Limited has been commissioned by Lime Down Solar Park Limited (the Applicant) to conduct a suite of ecological surveys across the Lime Down Solar PV Sites and Cable Route Corridor (Cable Route Corridor) (as defined in **ES Volume 1, Chapter 2: The Development Area [EN010168/APP/6.1])**.

1.1.2 This report presents the baseline conditions for ecology and biodiversity using information collected as part of a desk study, extended UKHabitat Classification (UKHab) Surveys, and River Condition Assessment (RCA) Surveys.

1.1.3 The information presented in this report has been used to underpin **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1],** in particular to inform the ecological evaluation of the ecological features identified and to characterise the impacts on them considered likely to result from the Scheme.

1.1.4 A suite of species-specific surveys for a range of protected and notable species have been undertaken, details and findings of which are also summarised in this report, with full details provided in separate appendices which are referenced in Section 2.5 below.

1.1.5 Information on the presence of species collected during the surveys will be passed to the county biological records centre in order to augment their records for the area. This is in line with the Chartered Institute of Ecology and Environmental Management (CIEEM) Code of Professional Conduct (Ref 9-1-1).

1.2 Site Description Summary

Solar PV Sites (Lime Down A-E)

1.2.1 The Solar PV Sites are spread over an area comprising approximately 751 ha in north Wiltshire which are broadly situated between the town of Malmesbury to the north and the M4 motorway to the south. When combined, the Solar PV Sites extend over an area covering approximately 4.5 km north to south and 9.5 km east to west. The Solar PV Sites are identified as Lime Down A-E and the location of the Solar PV Sites are shown in **ES Volume 2, Figure 2-1: Elements of the Site [EN010168/APP/6.2]**.

1.2.2 The Solar PV Sites comprise mixed agricultural habitats, largely consisting of open arable fields, grazed pasture and grassland managed for hay or silage cutting. Arable leys and set-aside or fallow parcels were also present across the farmland habitats.

1.2.3 The fields were bounded by an extensive network of hedgerows, that were largely species-rich, which constitute significant, historical ecological features

within the landscape and often included mature standard trees. Several large in-field trees were recorded, of which a small number were noted as having veteran or ancient characteristics.

1.2.4 A series of wet and dry drainage ditches were frequently recorded alongside hedgerow features, with those ditches holding water for extended periods throughout the year most frequently encountered within Lime Down D. Sections of three natural watercourses flow through parts of the Solar PV Sites, all of which are tributaries of the River Avon.

1.2.5 A relatively large number of ponds were recorded within the Solar PV Sites and several parcels of woodland habitat were recorded immediately adjacent to the Solar PV Sites, including some scheduled ancient woodland habitat. Patches of scrub and ruderal/ephemeral vegetation were also noted, often recorded at field boundaries.

1.2.6 A small collection of buildings (either disused or for agricultural-use) were noted within the Solar PV Sites, and associated infrastructure including areas of hard-standing or gravel tracks were recorded occasionally throughout.

1.2.7 Habitats within the Solar PV Sites are generally contiguous with the wider landscape, which broadly comprises mixed-use agricultural land bounded by a network of hedgerows and ditches, with frequent woodland blocks. Small settlements and villages surrounding the Solar PV Sites, including Corston, Sherston and Luckington, are linked largely by minor roads, with the A429 running between Lime Down D and E. The area covered by the Solar PV Sites is bisected by a railway line from east to west, and access between the Solar PV Sites utilises existing railway bridges in places. Several existing, smaller-scale solar developments are also present in the vicinity of the Solar PV Sites.

Cable Route Corridor

1.2.8 The Cable Route Corridor runs approximately 22 km from the Solar PV Sites to the Existing National Grid Melksham Substation, as well as connecting each of the Solar PV Sites. The Cable Route Corridor is of similar character to the Solar PV Sites; habitats generally comprise agricultural fields bounded by hedgerows and ditches, with occasional ponds and blocks of woodland. Several watercourses, railways and roads, including the M4, transect the route.

1.2.9 A full description of the Order Limits is provided in **ES Volume 1, Chapter 2: The Order Limits [EN010168/APP/6.1].**

1.3 Quality Assurance

1.3.1 All ecologists employed by Clarkson and Woods are members or pending members of CIEEM and follow the Institute's Code of Professional Conduct when undertaking ecological work.

1.3.2 This report has been prepared in accordance with the relevant British Standard: *BS42020: 2013 – Biodiversity: Code of Practice for Planning and Development* (Ref 9-1-2). It has been prepared by an experienced ecologist who is a member of CIEEM. The report has also been subject to a two-stage quality assurance review by appropriately experienced ecologists who are full members of CIEEM.

2 Methodology

2.1 Evaluation of Importance

2.1.1 Each recorded ecological feature, whether it is a species, a habitat or a site designated for nature conservation, is described in turn in Section 3 to provide the pre-development baseline conditions on site. Subsequently, an evaluation of each feature's 'ecological importance' is made. The evaluation of ecological importance is informed by the criteria provided within the CIEEM Guidelines for Ecological Impact Assessment (2018) (Ref 9-1-3).

2.1.2 With due consideration to the criteria, each feature is classified on a geographical scale of ascending importance as follows; Negligible, Site, Local, District, County, National and International. The chosen geographic level of importance is considered that which best represents the scale at which the loss of the site's area or population of the feature would have the greatest impact. Where sufficient survey information is not available to determine the importance of a species or habitat present on the site, the importance of the receptor is marked as 'uncertain' and based upon the professional judgement of the author together with available relevant desk study information.

2.1.3 Once importance has been determined for each feature, those of Local importance or above will be considered to be Important Ecological Features (IEFs). Non-IEFs will typically not be considered further within the Environmental Statement (ES). However, where a feature does not qualify as an IEF but is afforded specific legal protection or coverage under a particular legislation or planning policy it will also be assessed in order to ensure the legal and policy compliance of the proposed development.

2.2 Desk Study

2.2.1 A search for 'International' designated sites for nature conservation within 10 km of the Solar PV Sites was undertaken using the Multi-Agency Geographic Information for the Countryside (MAGIC) website (Ref 9-1-4). International sites included Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites, as well as proposed or potential SACs, SPAs and Ramsar sites. The search area was extended to 30 km for International designated sites for which migratory birds or bats are listed as a qualifying feature, or where a site is hydrologically connected to the Scheme.

2.2.2 A search for 'National' designated sites for nature conservation within 5 km of the Solar PV Sites was undertaken using the MAGIC website. National designated sites included Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs).

2.2.3 Information on 'Local' designated sites for nature conservation within 2 km of the Solar PV Sites was obtained from the Wiltshire and Swindon Biodiversity

Records Centre (WSBRC). Locally designated sites included Local Wildlife Sites (LWSs) and Protected Road Verges.

2.2.4 A search for Habitats of Principal Importance (HPI) (also known as Priority Habitats) and registered ancient woodland within 2 km of the Solar PV Sites was undertaken using the Natural England 'Priority Habitats Inventory' (Ref 9-1-5) and 'Ancient Woodland Inventory' (Ref 9-1-6) datasets respectively. Listed Priority Rivers, which are rivers and streams that exhibit a high degree of naturalness, were also searched for using the 'Priority River Habitat' dataset (Ref 9-1-7).

2.2.5 Data pertaining to designated sites and Priority Habitat within the Cable Route Corridor was consulted during the desk study exercise using the same sources. Given the temporary and limited nature of impacts associated with construction activities within the Cable Route Corridor, and that the construction working area will be refined further to an approximate width of 25 m, data pertaining to designated sites and Priority Habitats within a search radius around (i.e. beyond) the Cable Route Corridor was not considered proportionate.

2.2.6 Information pertaining to existing records on legally protected species and species of conservation concern within 2 km of the Solar PV Sites and within 500 m of the Cable Route Corridor was obtained from WSBRC.

2.2.7 The MAGIC website was consulted for records of European Protected Species (EPS) licences issued for mitigation projects concerning EPS within 2 km of the Solar PV Sites and within 500 m of the Cable Route Corridor.

2.2.8 Information held by Natural England pertaining to existing records of great crested newt (GCN) obtained from class licence returns (Ref 9-1-8) and surveys to underpin District Level Licensing schemes (Ref 9-1-9) were consulted.

2.2.9 The Natural England Great Crested Newt – Risk Zones (Swindon and Wiltshire) dataset (Ref 9-1-10) was searched to identify how the land within the Order Limits was distributed between Risk Zones. This dataset identifies areas where the distribution of GCN has been categorised into zones relating to GCN occurrence and the level of impact development is likely to have on this species. Red zones contain key populations of GCN, which are important on a regional, national or international scale and include designated SSSIs for GCN. Amber zones contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal. Green zones contain sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species.

2.2.10 The National Fish Populations Database (NFPD), held by the Environment Agency (EA) and accessed through the EA's Ecology & Fish Data Explorer (Ref 9-1-11), was consulted for freshwater fish monitoring data within the relevant river catchment (Rural Bristol Avon).

2.2.11 A British Trust for Ornithology (BTO) Data Report utilising BTO's long-term ornithological datasets was commissioned to provide information on bird species recorded at a range of spatial scales, primarily from 1-10 km squares.

2.2.12 The distances used in the search radii outlined above are considered proportionate to the scale of protection and likely sensitivity of the features listed above, as well as typical home ranges of wildlife species supported by them. It is considered unlikely that the Scheme would give rise to impacts on designated sites beyond these ranges and so are considered to include the Zone of Influence of the Scheme. The chosen, standard, search radii are considered to remain appropriate when considering the potential for cumulative impacts from other solar development proposals

2.2.13 Ordnance Survey maps (1:25,000) and aerial images of the Solar PV Sites and Cable Route Corridor were examined online (bing.com/maps (Ref 9-1-12) and maps.google.co.uk (Ref 9-1-13) to allow a better understanding of the context of the Scheme and its connections to potentially important habitats, known species records and protected sites.

2.3 Habitat Surveys

2.3.1 A habitat survey was carried out based on standard field methodology set out in the Handbook for Phase 1 Habitat Survey (2010 edition) (Ref 9-1-14Ref 9-1-14) with habitats and baseline conditions being assigned following the UKHab classification system (Ref 9-1-15) and Statutory Biodiversity Metric condition assessments (Ref 9-1-16).

2.3.2 The survey comprised a thorough habitat survey of all accessible land within the Order Limits where accessible and relevant up to 30 m beyond this, to collect baseline habitat inventory and condition information. The survey paid close attention to any potential HPI and habitats listed on the Wiltshire Biodiversity Action Plan (BAP) (Ref 9-1-17).

2.3.3 Botanical names follow Stace (2010) (Ref 9-1-18) for higher plants and Edwards (2020) (Ref 9-1-19) for bryophytes.

2.3.4 A naming system has been applied to the fields within the Solar PV Sites, as presented in **ES Volume 2, Figure 2-2: Field Boundaries and Numbering [EN010168/APP/6.2]**.

2.3.5 The majority of land within the Solar PV Sites was surveyed across several visits between June and September 2023. Additional land was subsequently added to the Order Limits at Lime Down C and D (specifically fields C27, C28, and fields D19 to D24) in February 2024, and further land was added to the Order Limits at Lime Down C in June 2024 (fields C29 to C36). UKHabitat Surveys of these areas were conducted in May 2024 and August 2024 respectively. Land at the Solar PV Sites surveyed between June and September 2023 were subject to update ecological walkover surveys between

May and July 2025. Given the time elapsed since the initial UKHab surveys, it was considered prudent to conduct update walkover surveys to ensure the baseline conditions represented within this report remained accurate, and to record any significant changes in baseline habitat conditions since 2023.

2.3.6 Land within the Cable Route Corridor was subject to UKHab Survey between March and ~~July~~December 2025. Where the initial surveys were constrained due to being undertaken in March/April outside of the optimal botanical survey season (which is May – August inclusive), a further visit was conducted within this optimal survey period to ensure that accurate habitat characterisation and condition assessments were completed. This additional visit was only relevant for some habitats, such as areas of permanent grasslands, and these were visited in either May, June or July 2025.

2.3.7 A Modular River Physical (MoRPh) Survey was undertaken of the watercourses within the Solar PV Sites and Cable Route Corridor. At least five modules (sample points) were undertaken for each distinct reach of the watercourses present to allow for a MoRPh 5 survey to be completed. In some instances where the watercourses were diverse in structure, additional modules were completed. Surveys were completed in line with the guidance provided in the MoRPh Survey Technical Reference Manual 2022 (Ref 9-1-20).

2.3.8 Survey data input and river typing was undertaken using Cartographer (Ref 9-1-21) with reference to The MoRPh Survey Technical Reference Manual and A Guide to Assessing River Condition (part of the rivers and streams component of the Biodiversity Net Gain Metric) (Ref 9-1-22).

2.4 Survey Personnel

2.4.1 Details of surveyors involved in undertaking UKHab and MoRPh Surveys of land within the Order Limits are provided in **Table 9-1-1** below.

Table 9-1-1: Habitat Survey Personnel Details

Surveyor Name	Relevant Qualifications, Accreditations and Professional Membership	Years' Experience
UKHabitat Survey and Habitat Condition Assessments		
Molly Brown	BSc MSc ACIEEM	3
Charlie Durigan	BSc PgCert MSc ACIEEM	11
Mike Hockey	BSc MCIEEM	10
Miranda Jones	BSc Qualifying CIEEM	2
Chris Poole	MSc ACIEEM	6
Adèle Remazeilles	MSc ACIEEM	7

Surveyor Name	Relevant Qualifications, Accreditations and Professional Membership	Years' Experience
Sarah Richards	BSc MSc Qualifying CIEEM	4
Andrew Ross	BSc MSc MCIEEM	15
Henry Sturgess	BSc MCIEEM	10
Peter Timms	BSc MSc MCIEEM	12
Joel Wright	BSc MSc MCIEEM	12
Modular River Physical Survey and River Condition Assessments		
Charlie Durigan	BSc PgCert MSc ACIEEM. Certified for conducting MoRPh Surveys and RCAs	1
Miranda Jones	BSc Qualifying CIEEM. Certified for conducting MoRPh Surveys and RCAs	1
Henry Sturges	BSc MCIEEM. Certified for conducting MoRPh Surveys and RCAs	3
Peter Timms	BSc MSc MCIEEM. Certified for conducting MoRPh Surveys and RCAs	3
Joel Wright	BSc MSc MCIEEM. Certified for conducting MoRPh Surveys and RCAs	1

2.5 Protected and Notable Species Surveys

2.5.1 As part of the UKHab Surveys, an evaluation of the habitats' potential to support notable or protected species was conducted, and any signs of presence were recorded. The methodologies for establishing baseline information on the presence and status of particular protected and notable species are summarised in Section 3. More detailed methodologies for species-specific surveys undertaken are provided in the relevant appendices, which are as follows:

- **ES Volume 3, Appendix 9-2: Badger Survey Report, [EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9-3: Bat Survey Report, [EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9-4: Breeding Bird Survey Report, [EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9-5: Great Crested Newt Survey Report, [EN010168/APP/6.3]**;

- **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**; and
- **ES Volume 3, Appendix 9-7: Wintering Bird Survey Report, [EN010168/APP/6.3]**.

2.6 Limitations

Desk Study

2.6.1 No specific limitations to the desk study were encountered.

2.6.2 The data presented within this report constitutes a summary of the data obtained from the local records centre. Should additional detail be required on any of the records described within this report Clarkson and Woods Ltd. should be contacted.

2.6.3 The desk study data presented within the report should not be seen as exhaustive. Data obtained from within the search radii is highly unlikely to constitute a complete record of habitats and species within the search radii. It is therefore possible that additional habitats and species that may occur within the vicinity of the Scheme that have not been identified within the desk study.

2.6.4 The data search for the Solar PV Sites was obtained in 2023 and for the Cable Route Corridor in 2024 and does not include records made subsequently. The datasets only provide records where information exists and should not be relied upon as a complete listing of all habitat and species records which may occur within the search radii.

Habitat Surveys

2.6.5 All surveys were conducted during the optimum period of the year for habitat surveys, undertaking condition assessments, and for recording botanical species. Where surveys were undertaken outside of the optimum botanical survey period, namely for small sections of the Cable Route Corridor, grassland habitats were revisited during the optimum survey window to complete botanical quadrats and condition assessments. As such, it was possible to adequately classify and assess the nature conservation value of all habitats with confidence.

2.6.6 It must be noted that UKHab and condition assessments are not intended to confirm the presence or absence of all plant species on Site. Instead, they provide a comprehensive assessment of habitat types and dominant species at the time of the survey. Therefore, an exhaustive species list was not collected but species characteristics of the recorded habitats were recorded. Botanical quadrat data is presented in **Biodiversity Net Gain Assessment Report [EN010168/APP/7.12]**.

2.6.7 ~~As of August 2025, approximately 17~~ Approximately 10.57 ha of land within the Cable Route Corridor has not been ~~accessed for~~subject to ecological survey. All un-surveyed land comprises wooded railway embankments which have not been surveyed due to ~~a lack of~~ access ~~permission. Habitats within these areas have therefore not been classified under UKHab and have not been assessed for their potential to support protected species.~~ constraints. An assumption of the likely ~~habitats~~habitat present has been made~~,~~ based on available desk study information (using satellite imagery and open-source datasets~~, where relevant~~), and from visual observations of the ~~context of other habitats present within the local landscape.~~habitat made by surveyors from outside each habitat parcel. The precautionary principle has been applied when considering the habitat classification and suitability of ~~habitats~~habitat for protected species. ~~Access agreements are being sought for these areas, and it is intended for~~

~~2.6.7~~2.6.8 In all ~~currently~~cases, the un-surveyed areas ~~of the Cable Route Corridor~~lie within 'avoidance areas' where trenchless solutions (e.g. Horizontal Directional Drilling (HDD)) will be used to ~~be surveyed. Following completion~~install cables (refer to **ES Volume 1, Chapter 3: The Scheme [EN010168/APP/6.1]**). As such no direct impacts on habitats with these areas or species therein are anticipated as a result of the ~~outstanding~~Scheme, and the lack of ecological survey ~~work,~~information from these areas therefore does not represent a significant limitation to the ~~results~~evaluation of features or the ~~surveys will be submitted into the Examination and amendments to this appendix will be made, if required.~~assessment of impacts presented in **ES Volume 1, Chapter 9: Ecology and Biodiversity [EN010168/APP/6.1**].

Protected and Notable Species Surveys

~~2.6.8~~2.6.9 Limitations associated with species-specific surveys are discussed in full in the aforementioned appendices.

3 Baseline Conditions

3.1 Designated Sites

Statutory Designated Sites

Solar PV Sites

3.1.1 No international designated sites were identified within 10 km of the Solar PV Sites. However, four international designated sites with qualifying mobile species (bats and/or migratory birds) were identified within the wider search radius of 30 km. The search radius was extended for these features due to the highly mobile nature and larger home ranges of these species which can extend beyond 10 km. These designated sites were: the Bath and Bradford on Avon Bats SAC, Severn Estuary SPA and Ramsar site, and Salisbury Plain SPA. The Severn Estuary SAC, along with the Severn Estuary SPA and Ramsar site, is also hydrologically connected to the Scheme and as such will also be taken forward for assessment.

3.1.2 These five international designated sites are summarised in **Table 9-1-2** below. The locations of international designated sites in relation to the Solar PV Sites are shown in **ES Volume 2, Figure 9-1-1: International Statutorily Designated Sites within the Search Area [EN010168/APP/6.2]**.

Table 9-1-2: International Designated Sites within 30 km of the Solar PV Sites

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites (at closest point)	Map Reference (Figure 9-1-1)
Bath and Bradford on Avon Bats SAC	107.86	This SAC comprises extensive networks of caves, mines and man-made tunnels which are used by bats for hibernation, mating and as a staging post prior to dispersal. It also includes areas of calcareous grassland, scrub and woodland which are used as feeding and commuting habitat by the bats. Supports an exceptionally large overwintering population of greater horseshoe bat, with hibernation sites associated with approximately 15% of UK population. The mine system also supports hibernating Bechstein's bat. Lesser horseshoe bat is also present as a qualifying feature, but not a primary reason for designation.	12.56 km south of Lime Down C	1
Severn Estuary SAC	73,715.40	The Severn Estuary lies on the south west coast of Britain at the mouth of four major rivers (the Severn, Wye, Usk, and Avon). The immense tidal range (the second highest in the	23.71 km north-west of	5

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites (at closest point)	Map Reference (Figure 9-1-1)
		world) and classic funnel shape make the Severn Estuary unique in Britain and very rare worldwide. This tidal range creates strong tidal streams and high turbidity, producing communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rocks. The SAC is designated for several Annex I habitats including: • Estuaries; • Mudflats and sandflats not covered by water at low tide; • Sandbanks which are slightly covered by sea water all the time; • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); and • Reefs. Annex II species which are a primary reason for its citation include: • sea lamprey *Petromyzon marinus;* • river lamprey *Lampetra fluviatilis;* and • Twaite shad *Alosa fallax*. The estuarine habitat is also important invertebrate and bird assemblages.	Lime Down A	
Severn Estuary SPA	24,487.91	The Severn Estuary is one of the most important estuaries in the UK for overwintering wildfowl and waders. It supports internationally and nationally important populations of wintering birds. The species of special conservation interest include: • Berwick's swan Cygnus *columbianus bewickii,* • Greater white- fronted goose *Anser albifrons albifrons*, • Dunlin *Calidris alpina alpine*, • Common redshank *Tringa totanus*, • Common shelduck *Tadorna tadorna*, • Gadwall *Anas strepera*.	23.71 km north-west of Lime Down A	3
Severn Estuary Ramsar	24,662.98	The Severn Estuary Ramsar site's qualifying interest features overlap with those of the Severn Estuary SPA an SAC. The site is of particular importance for hosting internationally	23.71 km north-west of Lime Down A	4

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites (at closest point)	Map Reference (Figure 9-1-1)
		important populations of several species of waterbird as well as its migrating fish species. The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. Salmon *Salmo salar*, sea trout *Salmo trutta*, sea lamprey *Petromyzon marinus*, river lamprey *Lampetra fluviatilis*, allis shad *Alosa alosa*, twaite shad *Alosa fallax*, and eel *Anguilla Anguilla* use the Severn Estuary as a key migration route to their spawning grounds in the many tributaries that flow into the estuary. The site is important as a feeding and nursery ground for many fish species particularly allis shad and twaite shad which feed on mysid shrimps in the salt wedge.		
Salisbury Plain SPA	19,714.54	Nationally important populations of Annex I species; 10% of UK population of breeding stone curlew, and 1% of UK population of wintering hen harrier. Further Annex 1 species are supported in small numbers. Nationally important breeding populations of quail (20% UK population) and hobby (1% of UK population).	27.89 km south-east of Lime Down E	2

3.1.3 Four national designated sites for nature conservation were identified within 5 km of the Solar PV Sites, including two SSSIs and two LNRs, designated for calcareous and neutral grassland habitats among other interests, which are summarised in **Table 9-1-3**. This included Harries Ground, Rodbourne SSSI, which is designated for past records of marsh fritillary butterfly *Euphydryas aurinia* and is located immediately adjacent Lime Down E. The nature of the Scheme requires consultation with Natural England on potential impacts to this site, as identified using the SSSI Impact Risk Zone tool on the MAGIC website (Ref 9-1-4). One additional SSSI located within the search area, Stanton St Quinton Motorway Cutting SSSI, is designated solely for its geological features and will not be assessed within **ES Volume 1, Chapter 9: Ecology and Biodiversity, EN010168/APP/6.1**. The locations of national designated sites in relation to the Solar PV Sites are shown in **ES Volume 2, Figure 9-1-2: National Statutorily Designated Sites within 5 km of the Solar PV Sites [EN010168/APP/6.2]**.

Table 9-1-3: National Designated Sites within 5 km of the Solar PV Sites

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites	Map Reference (Figure 9-1-2)
Harries Ground, Rodbourne SSSI	6.73	Species-rich neutral grassland community and past records of marsh fritillary butterflies.	Immediately adjacent Lime Down E.	2
Corston Quarry and Pond LNR	0.5	Disused limestone quarry with mesotrophic standing water and calcareous grassland habitats.	1.01 km north-east of Lime Down D.	5
Stanton St Quinton Motorway Cutting SSSI	2.54	Important geological features.	1.73 km south of Lime Down E.	1
Sutton Lane Meadows SSSI	3.43	Lowland neutral grassland habitat.	3.67 km south of Lime Down E.	3
Conygre Mead LNR	2.53	Calcareous grassland, damp grassland, pond and woodland habitats.	4.16 km north-east of Lime Down D.	4

Cable Route Corridor

3.1.4 No statutorily designated sites for nature conservation are present within the Cable Route Corridor or immediately adjacent. However, the BaBOA Bats SAC lies approximately 3.77 km to the west of the Cable Route Corridor at the closest point. A 2015 guidance document provided by Natural England and Wiltshire Council (Ref 9-1-23) details a network of sensitive features used by the bat populations of the BaBOA Bats SAC. These include 'Core Roosts', which are defined in the guidance but in summary are those roost sites where large numbers of the relevant bat species are known to regularly hibernate and breed, and which are judged to have a functional and demographic connection with the SAC population.

3.1.5 The guidance also highlights the landscape surrounding these Core Roosts are likely to be of particular importance for populations of the associated species for foraging and commuting and are identified as 'Core Areas'. For the bat species of the BaBOA Bats SAC, the Core Areas have been defined as:

- 4 km surrounding greater horseshoe Core Roosts;
- 2 km surrounding lesser horseshoe Core Roosts; and
- 1.5 km surrounding Bechstein's Core Roosts

3.1.6 Since the publication of this guidance the extent of the consultation zones has undergone amendments. A Core Roost for lesser horseshoe bats near the

village of Grittleton (approximately 2 km to the south of Lime Down C – the precise location is withheld) and a corresponding Core Area were declassified in September 2020 due to the roost no longer having been found to meet the Core Roost criteria as set out in the guidance. In 2024 a new Core Area of 1.5 km was applied around three recently identified Bechstein's bat maternity roosts sites near Lackham, to the south of Chippenham.

3.1.7 An amalgamation of up-to-date Core Areas are presented within the 'Impact Zones for Bat Species' layer on the publicly available 'Wiltshire Planning Explorer' map (Ref 9-1-26). The Cable Route Corridor intersects an Impact Zone for Bat Species for approximately 1.5 km (covering an area of approximately 10.5 ha) to the south east of Corsham. The location of the Impact Zones for Bat Species in relation to the Cable Route Corridor is presented in **ES Volume 2, Figure 9-1-4: Wiltshire Impact Zones for Bats [EN010168/APP/6.2]**.

3.1.8 There are no national statutorily designated sites for nature conservation within the Cable Route Corridor.

Non-Statutory Designated Sites

Solar PV Sites

3.1.9 A total of 37 local designated sites for nature conservation were identified within 2 km of the Solar PV Sites, comprising 36 LWS and one Protected Road Verge. The sites are presented in **Table 9-1-4** below, the locations of which are shown in **ES Volume 2, Figure 9-1-3: Non-Statutorily Designated Sites within 2 km of the Solar PV Sites [EN010168/APP/6.2]**.

Table 9-1-4: Non-Statutory Designated Sites within 2 km of the Solar PV Sites

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites	Map Reference (Figure 9-1-3)
Chalkenhams LWS	5.64	Unimproved, species-rich neutral grassland and woodland habitat.	Immediately adjacent Lime Down E.	8
Brickyard Scrubs LWS	3.96	Species-rich neutral grassland and pond habitats.	Immediately adjacent Lime Down E.	3
Bincombe Wood LWS	17.16	Ancient, semi-natural broadleaved woodland habitat.	Immediately adjacent Lime Down E.	1
Bradfield Wood LWS	9.63	Semi-natural, broadleaved woodland habitat.	Immediately adjacent Lime Down D.	2

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites	Map Reference (Figure 9-1-3)
Lord's Wood LWS	2.73	Ancient broadleaved woodland habitat.	Immediately adjacent Lime Down C.	21
Rodbourne Plantation LWS	2.66	Broadleaved woodland habitat.	Immediately adjacent Lime Down E.	29
Seagry Wood and Oak Hill LWS	38.05	Mixed plantation on ancient woodland site.	Immediately adjacent Lime Down E.	30
Surrendell Wood LWS	12.21	Ancient, semi-natural broadleaved woodland habitat.	Immediately adjacent Lime Down C.	32
Bybrook Meadow LWS	1.99	Unimproved neutral grassland habitat.	0.14 km north of Lime Down A.	6
Bristol Avon River LWS	150.76	Riverine habitat and important drainage functions.	0.23 km north of Lime Down A.	4
Foxley Green LWS	0.87	Calcareous and damp neutral grassland communities.	0.23 km north-east of Lime Down B.	16
West Park Wood – East LWS	4.57	Ancient, semi-natural broadleaved woodland habitat.	0.24 km north-east of Lime Down D.	35
West Park Wood – West LWS	3.3	Ancient, semi-natural broadleaved woodland habitat.	0.24 km north-east of Lime Down D.	36
Lower Easton Town Farm Meadows LWS	2.13	Herb-rich unimproved grassland habitat.	0.27 km north of Lime Down A.	22
Lower Farm Meadows, Sherston LWS	1.37	Calcareous grassland habitat.	0.28 km north of Lime Down A.	23
New House Farm Meadows LWS	6.93	Species-rich limestone and neutral grasslands, and old oak woodland.	0.29 km north-west of Lime Down A.	26
Easton Grey Meadow 2 LWS	1.82	Calcareous grassland and wetland habitats.	0.40 km north of Lime Down B.	13
Easton Grey Meadow 1 LWS	3.35	Calcareous grassland and wetland habitats.	0.42 km north of Lime Down B.	12
Kingway Barn Meadows LWS	4.15	Neutral meadows with ridge and furrow.	0.50 km west of Lime Down E.	20
Townfield Farm Meadows LWS	30.45	Calcareous hay meadow habitat.	0.56 km west of Lime Down C.	33
Brook House Meadow, Luckington LWS	1.78	Pasture and floodplain habitat.	0.60 km north-west of Lime Down C.	5

Site Name	Area (ha)	Reason for Designation	Distance from Solar PV Sites	Map Reference (Figure 9-1-3)
Manor Farm Meadows, Sherston LWS	4.22	Floodplain grassland, including areas of unimproved grassland and limestone banks.	0.61 km north-west of Lime Down A.	25
Cowage Grove LWS	6.45	Oak woodland habitat.	0.64 km east of Lime Down B.	10
Tyning and Tanhouse Meadows LWS	13.84	Limestone grassland habitat.	0.71 km west of Lime Down C.	34
Carrier's Farm Meadows, Sherston LWS	3.98	Unimproved calcareous grassland habitat.	0.74 km west of Lime Down A.	7
Luckington Meadows LWS	1.12	Meadow habitat.	0.86 km west of Lime Down C.	24
Foxley Grove LWS	8.49	Part-ancient woodland habitat.	0.90 km north of Lime Down B.	17
Gauzebrook Meadows LWS	3.53	Unimproved limestone grassland along banks of Gauze Brook.	0.95 km north of Lime Down E.	18
Corston Quarry and Pond LWS	0.49	Disused limestone quarry with mesotrophic standing water and calcareous grassland habitats.	1.01 km north-east of Lime Down D.	9
Ell Wood LWS	12.97	Ancient, semi-natural broadleaved woodland.	1.06 km south of Lime Down E.	14
Foxley Estate – Riverside Pasture LWS	7.54	Limestone grassland habitat above derelict water-meadow.	1.10 km north of Lime Down B.	15
Cranhill Wood LWS	8.87	Ancient woodland habitat with ponds and springs.	1.28 km south-west of Lime Down C.	11
North Draycot Park LWS	13.59	Old parkland with frequent old oak.	1.29 km south of Lime Down E.	27
Hyam Wood LWS	16.77	Ancient, semi-natural broadleaved woodland habitat.	1.39 km north-east of Lime Down B.	19
Littleton Drew Verge	0.18	Protected road verge.	1.74 km south-west of Lime Down C.	37
Stock Wood LWS	16.83	Ancient, semi-natural broadleaved woodland habitat.	1.84 km south of Lime Down D.	31
Oldland's Wood LWS	11.68	Woodland habitat with network of ditches.	1.92 km south-west of Lime Down C.	28

Cable Route Corridor

3.1.10 There are no non-statutory designated sites for nature conservation present within the Cable Route Corridor.

3.2 Habitats

3.2.1 Results of Extended UKHab Surveys of the Solar PV Sites and Cable Route Corridor are presented in the following figures:

- **ES Volume 2, Figure 9.1.8: Baseline Habitats Map – Lime Down A [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.9: Baseline Habitats Map – Lime Down B [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.10: Baseline Habitats Map – Lime Down C [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.11: Baseline Habitats Map – Lime Down D [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.12: Baseline Habitats Map – Lime Down E [EN010168/APP/6.2]**; and
- **ES Volume 2, Figures 9.1.13 to 9.1.24: Baseline Habitats Map – Cable Route Corridor [EN010168/APP/6.2]**.

3.2.2 Target notes recorded during the surveys, associated with the above figures, are presented in Annex A of this report and should be viewed in conjunction with the figures.

Priority Habitats and Ancient Woodland

Desk Study Information

Solar PV Sites

3.2.3 The watercourse known as Gauze Brook (a tributary of the River Avon) which flows through Lime Down D, is listed as a Priority River on the Priority River Habitat data set. No other Priority Habitats (or HPI) or scheduled ancient woodland as listed on Natural England datasets were present within the Solar PV Sites. However, the following Priority Habitats occur within 2 km of the Solar PV Sites are therefore considered capable of being impacted by the Scheme:

- Ancient Woodland;
- Deciduous Woodland;
- Good-quality Semi-improved Grassland;

- Lowland Calcareous Grassland;
- Lowland Meadow
- Traditional Orchard;
- Coastal and Floodplain Grazing Marsh; and
- Priority Habitat River.

3.2.4 The location of Priority Habitats (as revealed by the desk study) in relation to the Solar PV Sites are shown in **ES Volume 2, Figure 9-1-5: Priority Habitats and Ancient Woodland within 2 km of the Solar PV Sites [EN010168/APP/6.2].**

Cable Route Corridor

3.2.5 The following Priority Habitats are present within the Cable Route Corridor:

- Deciduous Woodland; and
- Traditional Orchard.

3.2.6 In addition, Ancient Woodland and Lowland Calcareous Grassland occur directly adjacent to the Cable Route Corridor.

3.2.7 The location of Priority Habitats (as revealed by the desk study) in relation to the Cable Route Corridor are shown in **ES Volume 2, Figure 9-1-5: Priority Habitats and Ancient Woodland within 2 km of the Cable Route Corridor (1 of 2) [EN010168/APP/6.2]** and **ES Volume 2, Figure 9-1-5: Priority Habitats and Ancient Woodland within 2 km of the Cable Route Corridor (2 of 2) [EN010168/APP/6.2].**

Arable

Desk Study Information

3.2.8 Although not an HPI, Farmland Habitats are listed on the Wiltshire BAP. This encompasses a broad range of mixed farming habitat types.

Field Survey Results

Solar PV Sites

3.2.9 Arable habitat was the most frequently encountered habitat across the Solar PV Sites, accounting for approximately 682 ha and nearly 87 % of land coverage across the Solar PV Sites. A variety of arable cultivation regimes and management were present, with the majority of fields given to monoculture cereal crops such as maize, wheat, oats and barley. A smaller proportion of the fields were given to non-cereal crops including broad beans and oilseed rape, and a smaller proportion still given to rotational grass leys.

3.2.10 Owing to the timing of the surveys and rotational management of land within the Solar PV Sites, several fields were recorded as fallow or uncultivated. These areas supported a larger diversity of botanical species, including arable weed species, and were considered to be of elevated value to wildlife compared to the generally monoculture arable fields.

3.2.11 These habitats were classified into the following UKHab habitat types:

- Cereal crops;
- Non-cereal crops; and
- Temporary grass and clover leys.

Cable Route Corridor

3.2.12 Arable habitats also comprised a large proportion of land within the Cable Route Corridor, accounting for approximately ~~254~~261 ha and over ~~55~~56 % of land coverage. As with the Solar PV Sites, the majority of cropland habitats comprised cereal crops. Several fields were recorded as temporary grass and clover leys, sown as part of rotational agricultural practices, with a smaller proportion of fields comprising non-cereal crops and remnant winter stubble from previous crops. Arable weed species were noted throughout, particularly in fallow fields and at field boundaries.

3.2.13 These habitats were classified into the following UKHab habitat types:

- Cereal crops;
- Non-cereal crops;
- Winter stubble; and
- Temporary grass and clover leys.

Evaluation

3.2.14 The land within the cultivated arable fields is of limited intrinsic botanical diversity and is considered to be of **Site Importance** only. It should however be noted that the arable fields do provide habitat for a number of different species such as farmland birds, brown hare and associated plants, and the rotational nature of arable management results in fluctuations in biodiversity value throughout and between years. The relative importance of arable habitats for associated species or species groups is assessed individually within Section 3.3 so as to avoid pseudo-replication within the impact assessment.

Arable Field Margins

Desk Study Information

3.2.15 Arable field margins are an HPI, and also fall under the broad definition of Farmland Habitats as listed on the Wiltshire BAP.

Field Survey Results

Solar PV Sites

3.2.16 The margins of the majority of arable fields across the Solar PV Sites were generally narrow (0.5 to 2 m wide). These margins were typically species-poor and vegetated by a small number of coarse grasses, ruderals and herbaceous species tolerant of agricultural inputs, herbicide and pesticide use.

3.2.17 However, in a number of arable fields, arable field margin habitats over 2 m in width were present, comprising either uncultivated headlands of tussocky grasslands or cultivated land given to unharvested game bird crops such as linseed *Linum usitatissimum*. These were generally 2-12 m wide, although larger blocks of game bird cover crops were present, extending as far as 60-80 m out from the field boundary in a small number of fields in Lime Down C and D, including Fields C22 and D12.

3.2.18 Wide tussocky grassland headlands were present at the margins of several fields in Lime Down D, and to a lesser extent in Lime Down C. Although similar in species composition to the rest of the arable field margins across the Solar PV Sites, these showed evidence of less frequent disturbance with thatch layers present and typically contained a higher abundance and diversity of floral species.

3.2.19 An uncultivated block of land measuring around 200 m x 50 m and dominated by pollen-rich herbs such as red clover *Trifolium pratense* and common birds-foot trefoil *Lotus corniculatus*, as well as a high proportion of bare ground, was present in the south-western corner of Field A11.

3.2.20 In total these habitats covered approximately 6.33 ha of the Solar PV Sites (around 0.78 % of the total area) and represented the following UKHab habitat types:

- Arable field margins – pollen and nectar;
- Arable field margins – tussocky; and
- Arable field margins – game bird mix.

Cable Route Corridor

3.2.21 Arable field margins comprised only a very small proportion of land area within the Cable Route Corridor (less than 0.25 %) and were present in a small

number of arable fields. The field margin habitats recorded within the Cable Route Corridor, where it was considered to be managed specifically for wildlife, constituted either tussocky grassland or disturbed ground that appeared to be cultivated annually and supported arable weed and early colonizing species, which were classified as the following UKHab habitat types:

- Arable field margins – tussocky; and
- Arable field margins – cultivated annually.

Evaluation

3.2.22 Although relatively small in extent, arable field margins are an HPI and likely to provide important refuges and sources of food for a variety of wildlife, as well as providing diversity in an otherwise largely monoculture arable landscape. This habitat is consequently considered to be of **Local Importance.**

Modified Grassland

Desk Study Information

3.2.23 No information pertaining to this habitat type was returned during the desk study; modified grassland is not identified as an HPI or local conservation priority.

Field Survey Results

Solar PV Sites

3.2.24 Several fields across the Solar PV Sites were given to modified grassland habitat, which were either grazed by cattle or sheep or were in grass silage production. This habitat was also present along grassed farm tracks routed through arable habitat in places. This accounted for 75.18 ha, equating to 9.53 % of the total extent of land at the Solar PV Sites. Although small areas of modified grassland were present at Lime Down A, B, C and D, this habitat was mostly prevalent at Lime Down E.

3.2.25 The grassland swards within these fields were generally species-poor and dominated by a small number of competitive and palatable/productive grass species such as perennial ryegrass *Lolium perenne*, Yorkshire fog *Holcus lanatus*, cocksfoot *Dactylis glomerata*, timothy *Phleum pratense*, and meadow grasses *Poa sp*. Herbaceous species were generally limited to those indicative of high fertility such as white clover *Trifolium repens*, creeping buttercup *Ranunculus repens*, docks *Rumex sp.*, plantains *Plantago sp.* and dandelion *Taraxcum agg*. These fields were also typically characterised by short sward heights and uniform structure due to intensive management.

Cable Route Corridor

3.2.26 Modified grassland, and grassland cover in general, comprised a larger proportion of the Cable Route Corridor than at the Solar PV Sites, with livestock grazing frequent throughout. Over ~~25~~27 % of land area (approximately ~~117.15~~125.76 ha) within the Cable Route Corridor was classified as modified grassland; the sward in these field was generally species-poor, owing to high levels of improvement via fertilisers, and favouring palatable grass species.

Evaluation

3.2.27 Modified grassland habitat is ubiquitous in the wider landscape and is of limited intrinsic value for biodiversity. Grassland habitats, particularly cattle-grazed pasture, do provide suitable foraging habitat for a range of species, discussed in Section 1.3 below. Modified grassland habitat is considered to be of **Site Importance**.

Other Neutral Grassland

Desk Study Information

3.2.28 No information pertaining to this habitat type was returned during the desk study; other neutral grassland is not identified as an HPI or local conservation priority.

Field Survey Results

Solar PV Sites

3.2.29 A relatively small extent of habitat across the Solar PV Sites were classified as falling under the UKHab habitat type 'Other neutral grassland'. This habitat covered an area of 12.73 ha or 1.61 % of the total extent of the Solar PV Sites.

3.2.30 Other neutral grassland habitat was generally restricted to a small number of fields or portions of fields within Lime Down E which showed less evidence of intensive agricultural management and input than other grassland parcels at the Solar PV Sites. This habitat was also noted at one field at Lime Down C (field C29) and also occasionally within some field margins elsewhere at Lime Down C. None of the other neutral grassland habitat present within the Solar PV Sites was evaluated as being representative of any Priority Habitat grassland types.

3.2.31 This habitat varied in terms of species-richness, species composition, structure and management where it was present across the Solar PV Sites. A more detailed description of the grassland within each other neutral grassland parcel is provided under the subheadings below:

Field E12

3.2.32 The sward composition in Field E12 was made up of a variety of grass species including crested dogs-tail *Cynosurus cristatus*, perennial ryegrass, cocksfoot,

Yorkshire fog, marsh foxtail *Alopecurus geniculatus*, rough meadow grass *Poa trivialis*, red fescue *Festuca rubra* and common bent *Agrostis capillaris*. A modest range of flowering herbaceous species were also occasionally encountered, including white clover, common sorrel *Rumex acetosa*, creeping buttercup, meadow buttercup *Ranunculus acris*, cut-leaved cranesbill *Geranium dissectumas* well as more rarely encountered species including common birdsfoot trefoil, meadow vetchling *Lathyrus pratensis*, field speedwell *Veronica agrestis* and pyramidal orchid *Anacamptis pyramidalis*.

Field E18

3.2.33 Field E18 was a relatively species-poor grassland with perennial ryegrass prevalent as well as herb/ruderal species indicative of agricultural improvement, including docks, nettle *Urtica dioica*, creeping buttercup and creeping thistle *Cirsium arvense*. However, areas of more diverse grassland were patchily spread within the field, with grass species such as timothy, downy oatgrass, meadow fescue and meadow barley present. Herbaceous species, some of which were indicative of degraded calcareous meadow, were occasionally noted including salad burnet *Sanguisorba minor*, meadow vetchling, black medick *Medicago lupulina*, lady's bedstraw *Galium verum,* hedge bedstraw *Galium mollugo* and meadow salsify *Tragopogon pratensis*.

3.2.34 Given the presence of some indicator species, further consideration was given as to whether Field E18 is representative of the Priority Habitat type 'lowland calcareous grassland' according to the definition provided within the UKHab Classification (Ref 9-1-15). This defines lowland calcareous grassland as a grassland that meets at least two of the following three criteria:

1. >15 species per m^2 (including grasses and excluding bryophytes);
2. >30% cover of broadleaved herbs and sedges (excluding white clover, creeping buttercup and injurious weeds); and
3. <10% cover of rye grasses and white clover.

3.2.35 A fourth criterion relates to the presence of indicator species of flowering plants (from the indicator species list given in the UKHab classification) as given here:

4. At least two indicator species must be present and classed as 'frequent' on the DAFOR scale, and at least three indicator species must be present and classed as 'occasional' on the DAFOR Scale.

3.2.36 Ten 1 m^2 quadrats were undertaken at this field during the optimal time of year for recording botanical interest (June). Full quadrat data and species lists are provided in the **Biodiversity Net Gain Assessment Report [EN010168/APP/7.8]**.

3.2.37 The average species count across quadrats for this field was 12.2 species per m^2 which doesn't meet criterion 1 above.

3.2.38 The grassland did pass criterion 2, with an average of 37% cover of broadleaved herbs.

3.2.39 Average cover of rye grasses and white clover was 18.7%, meaning criterion 3 was not passed.

3.2.40 Of the wildflower indicator species, only three were recorded in this field (bird's foot trefoil, salad burnet and lady's bedstraw). The highest percentage cover for all three species in any one quadrat was 10%, which does not equate to 'frequent' on the DAFOR scale (16-30%), and thus the field does not meet criterion 4.

3.2.41 The grassland in Field E18 only meets one of the defining characteristics of lowland calcareous grassland (broadleaved herb cover) and therefore does not represent this habitat type.

Field E26

3.2.42 Although most of Field E26 comprised species-poor modified grassland cut for silage, the southern portion of this field was evidently subject to less management and agricultural input. The grassland here was of higher species and structural diversity than the rest of the field, with a range of grasses present, typically comprising cock's foot, false oat grass, Yorkshire fog, rough meadow grass, soft brome, tall fescue and timothy, with a low cover of rye grasses and white clover. Several taller herbs such as common knapweed *Centaurea nigra* and oxeye daisy *Leucanthemum vulgare* were well represented. This was similar in composition to a number of field margins at Lime Down C, which were greater than 2m in width and comprised a modest diversity of unmanaged coarse grasses, tall herbs and ruderals.

Field C29

3.2.43 C29 was a hay-cut grassland comprising a variety of grasses, including frequent Yorkshire fog, rough meadow grass, perennial ryegrass, red fescue, sweet vernal grass and occasional false oat grass, timothy and cock's foot, with no one grass species dominant.

3.2.44 Typical herbaceous species present in this field included creeping buttercup, meadow buttercup, common sorrel, with white clover, red clover, chickweed *Stellaria media*, hogweed *Heracleum sphondylium*, pepper-saxifrage *Silaum silaus*, dandelion and ox-eye daisy less frequently encountered.

Cable Route Corridor

3.2.45 ~~Several fields~~One field (CRF114), as well as a small number of field margins and road verges comprising other neutral grassland were recorded within the Cable Route Corridor, typically where land was managed at a lower intensity and concentrated within the northern half of the route. This grassland habitat

type was recorded over ~~15.44~~3.06 ha of land, equating to ~~3.34~~0.66 % of the Cable Route Corridor area. ~~The vast majority of other neutral grassland was considered to represent a good example of this habitat type and was diverse in botanical species composition.~~

3.2.46 CRF114 consisted of a grassland of moderate species diversity, with the sward typically comprising a range of grasses including frequent Yorkshire fog, false oat grass, perennial ryegrass and less-frequently encountered rough meadow grass, sweet vernal grass, soft brome, meadow barley *Hordeum secalinum* and cock's-foot. Herbaceous species within the sward were limited to dandelion, field bindweed and hogweed, as a well as small number species typical of low-input agricultural grasslands, including meadow buttercup, red clover, meadow salsify, common vetch and cut-leaved cranesbill, although these were rarely encountered.

3.2.47 A small number of field margins at the edges of arable/agriculturally improved fields and road verges within the Cable Route Corridor were found to consist of a range of grasses and herbaceous species typically associated with infrequently managed grassland habitat. Coarse grasses, particularly false oat grass, Yorkshire fog, rough meadow grass and cock's foot were well represented within the swards of these areas. In damp places, particularly the northern margin of Field CRF130 and the road verges at CRF138, the sward contained species typical of damp grassland, such as soft rush *Juncus effusus*, willowherbs *Epilobium sp*. and meadowsweet *Filipendula ulmaria*.

3.2.48 None of the other neutral grassland habitat present within the Cable Route Corridor was evaluated as being representative of any Priority Habitat grassland types.

Evaluation

~~3.2.46~~3.2.49 When combined as a whole, the other neutral grassland is of moderate botanical interest and likely to support a diverse range of wildlife, more so than other agricultural land across the Order Limits. Overall, this habitat is considered to be of **Local Importance**.

Traditional Orchard

Desk Study Information

~~3.2.47~~3.2.50 Traditional orchards are an HPI and are listed on the Wiltshire BAP. An area of traditional orchard is present within the Cable Route Corridor according to the Natural England Priority Habitats Inventory.

Field Survey Results

Solar PV Sites

~~3.2.48~~3.2.51 No traditional orchard habitat is present within the Solar PV Sites.

Cable Route Corridor

~~3.2.49~~3.2.52 The Cable Route Corridor includes a relatively small quantum (0.1 ha) of land shown on the Natural England Priority Habitats Inventory as traditional orchard, set within a larger parcel (0.24 ha) of this habitat shown on Natural England Priority Habitats Inventory.

~~3.2.50~~3.2.53 This parcel is associated with an adjacent residential property and appears to be a remnant of a previously more characteristic orchard, with three apple *Malus domesticus* trees remaining, only one of which is within the Order Limits. Only one apple tree is present within the area intersected by the Cable Route Corridor.

~~3.2.51~~3.2.54 A characteristic feature of traditional orchards is management of the orchard floor through low intensity grazing or cutting. The grassland habitat in which the fruit trees site is not characteristic of traditional orchard comprising regularly mown amenity lawn, maintained at a short uniform height and dominated by perennial ryegrass, with herbaceous species restricted to typical amenity lawn species such as daisy *Bellis perennis*, creeping buttercup and dandelion.

Evaluation

~~3.2.52~~3.2.55 Although small in extent and currently not characteristic of traditional orchard habitats, it is likely to represent a remnant fragment of a Priority Habitat and a habitat targeted for conservation action. It is considered to be of **Local Importance**.

Scrub

Desk Study Information

~~3.2.53~~3.2.56 N/A – not an HPI or local conservation priority.

Field Survey Results

Solar PV Sites

~~3.2.54~~3.2.57 Relatively small and discrete patches of scrub were present in Lime Down A, D. C and E. This generally consisted of unmanaged shrubs at the edges of fields and/or around ponds, although a planted strip of shrubs was present at the western boundary of Field E7.

~~3.2.55~~3.2.58 Prevalent shrub species within this habitat included hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, hazel *Corylus avellana*, field maple *Acer campestre* and bramble *Rubus fruticosus*, although no one species was dominant and as such in all cases this habitat was classified as the UKHab habitat type 'Mixed Scrub'. In total, this habitat covered an area of 0.56 ha

(0.07%) of the total area at the Solar PV Sites, with no patch of scrub larger than 0.25 ha in size.

Cable Route Corridor

~~3.2.56~~3.2.59 Scrub habitat within the Cable Route Corridor was also predominately restricted to small and discrete patches of mixed and bramble scrub in unmanaged areas, for example at roadsides and railway embankments.

~~3.2.57~~3.2.60 A larger extent of scrub was recorded surrounding the Existing National Grid Melksham Substation at the south of the Order Limits. This consisted of a relatively narrow (10-20 m wide) strip of mature mixed scrub, comprising hawthorn, blackthorn, field maple, bramble, young oak *Quercus robur* and ash *Fraxinus excelsior*, and occasional mature poplar trees.

Evaluation

~~3.2.58~~3.2.61 Although this habitat is likely to offer foraging and sheltering resources for a range of protected and notable wildlife species, it is relatively small in extent at across the Order Limits and is fairly ubiquitous in the surrounding landscape. The habitat is considered to be of **Site Importance**.

Woodland

Desk Study Information

~~3.2.59~~3.2.62 None of the woodland within the Order Limits is listed as Ancient Woodland. However, Ancient Woodland was adjacent to the boundary of the Solar PV Sites at several places (see **ES Volume 2, Figure 9-1-5 [EN010168/APP/6.2]**). Parcels of Ancient Woodland included Lord's Wood and Surrendell Wood (adjacent to Lime Down C), Bradfield Wood (adjacent to Lime Down D) and Bincombe Wood (adjacent to Lime Down E).

~~3.2.60~~3.2.63 Several, relatively small and discrete block of woodland listed as the Priority Habitat 'Deciduous Woodland' on Natural England's Priority Habitat Inventory are present adjacent to the Solar PV Sites and within the Cable Route Corridor, as shown on **ES Volume 2, Figures 9-1-5 to 9-1-7 [EN010168/APP/6.2]**.

Field Survey Results

Solar PV Sites

~~3.2.61~~3.2.64 Several blocks of plantation woodland predominately comprising broadleaved tree species, likely originally created to provide shelter belts or for game bird rearing, were present at Lime Down A, B, C and D. This habitat was consistent with the UKHab habitat type 'Other woodland: broadleaved' and was between 10 to 25 years old, approximately. Species typically present within the woodlands included oak, ash, hawthorn, hazel, cherry *Prunus* sp., willows *Salix* sp., silver birch *Betula pendula* and alder *Alnus glutinosa*.

~~3.2.62~~3.2.65 In all cases at the Solar PV Sites woodland was generally uniform in structure with a lack of developing understory, with some browsing pressure from deer evident. Ground flora associated with each area was restricted to a small number of shade tolerant woodland species, including ivy *Hedera helix*, nettle, cleavers *Galium aparine*, ground ivy *Glechoma hederacea* and bramble.

~~3.2.63~~3.2.66 This habitat covered a total of 3.23 ha, equating to 0.41% of the land contained within the Solar PV Sites.

Cable Route Corridor

~~3.2.64~~3.2.67 Woodland encountered within the Cable Route Corridor can be split into the following UKHab woodland categories:

Lowland Mixed Deciduous Woodland

~~3.2.65~~3.2.68 This woodland type was present in some places along the Cable Route Corridor. Where present within the Order Limits, it is relatively young in age (non-ancient), having mostly been planted in the previous 100 years. The largest extent of this woodland type, comprising approximately 4.3 ha, was present just north of the Existing National Grid Melksham Substation. In this location, the woodland comprised plantation woodland circa 50 to 70 years old, dominated by ash but with field maple, oak, hazel, hawthorn and blackthorn present. The woodland understorey in this location was dominated by bramble, coarse grasses and ruderals indicative of nutrient enrichment, although some woodland indicator species, such as bluebell *Hyacinthoides non-scripta*, wood avens *Geum urbanum* and giant fescue *Festuca gigantea* were occasionally encountered.

3.2.69 Several steep, wooded railway embankments lying within the Cable Route Corridor were not surveyed on health and safety grounds. Altogether these areas totalled approximately 10.57 ha of land. All such areas are within 'avoidance areas' and will not be directly impacted by any works, with trenchless technologies (e.g. HDD) being used to install underground cables beneath them. All such areas were assigned as 'Lowland Mixed Deciduous Woodland' on a precautionary basis. From visual observations of the habitat in these areas made from the outer edges, it could be seen that the tree species appeared to typically comprise self-set sycamore along with hawthorn, blackthorn and bramble scrub, although a comprehensive species composition could not be recorded.

Other Woodland; Broadleaved

~~3.2.66~~3.2.70 This habitat type was encountered regularly within the Cable Route Corridor, most notably in areas of woodland which have developed through recent succession, particularly along railway embankments, and regularly comprising featuring self-set sycamore *Acer pseudoplanatus*, hawthorn and blackthorn.

This habitat is also present at broadleaf plantation woodland blocks, likely originally created to provide shelter belts or for game bird rearing

Other Coniferous Woodland

~~3.2.67~~3.2.71 Young plantation woodland was present in two places, one in the north of the Cable Route Corridor close to Lime Down D, and one in the south close to the Existing National Grid Melksham Substation. These predominantly comprised dense, monoculture stands of spruce *Picea* sp. trees with a heavily shaded understorey, with very little resulting ground flora. In total this habitat covered an extent of approximately 4 ha.

Evaluation

~~3.2.68~~3.2.72 Lowland Mixed Deciduous Woodland: Although relatively small in extent across the Order Limits (totalling approximately ~~5.65~~7.38 ha with a further 10.57 ha assumed), this is a Priority Habitat and is likely to support a diverse range of associated woodland flora and fauna. It is not an easily replaceable habitat as it takes many decades to establish and develop. The extent of this habitat within the Order Limits (restricted to the Cable Route Corridor only) is considered to be of **District Importance**.

~~3.2.69~~3.2.73 Other Woodland; Broadleaved: Although not a Priority Habitat, this habitat type nevertheless is likely to support a range of associated wildlife, and adds diversity and connective links to the otherwise largely agricultural setting. It is considered to be of **Local Importance**.

~~3.2.70~~3.2.74 Other Coniferous Woodland: This habitat type is of lower intrinsic value for wildlife compared to other woodland types, and likely only supports a restricted range of associated wildlife. It is relatively small in extent within the Order Limits and can be recreated in the medium term through replanting. This woodland habitat type is considered to be of **Site Importance**.

Ponds

Desk Study Information

~~3.2.71~~3.2.75 Ponds are an HPI and Standing Open Water (including ponds) is a habitat listed on the Wiltshire BAP.

Field Survey Results

Solar PV Sites

~~3.2.72~~3.2.76 31 ponds have been recorded within the Solar PV Sites. These are mainly scattered across Lime Down A, C, D and E, with only one pond present at Lime Down B.

~~3.2.73~~3.2.77 The majority of ponds encountered across the Solar PV Sites were relatively small in size (none covered an area larger than 500 m^2) and were situated at the edges of fields in most cases, with the exception of one pond in the centre of Field C36.

~~3.2.74~~3.2.78 One pond in the east of Field A7 comprised a square, lined man-made agricultural sump. All other ponds varied in terms of condition, structure, water levels and surrounding habitat. All ponds were, however, in moderate to poor condition, with ponds almost universally overshaded by surrounding tall scrub or hedgerows resulting in a general lack of aquatic/marginal vegetation and being silted with leaves, twigs and other organic matter which detrimentally impacted water quality. Several also appeared to be ephemeral and/or dry for most of the year, with nine found to be dry during surveys for GCN (see **ES Volume 3, Appendix 9.5: GCN Survey Report, [EN010168/APP/6.3]** for full details).

~~3.2.75~~3.2.79 Ponds feature frequently in the landscape surrounding the Solar PV Sites, with over 100 present within 250m (refer to **ES Volume 3, Appendix 9.5: GCN Survey Report, [EN010168/APP/6.3]** for full details) and as such the ponds within the Solar PV Sites form part of a local network of ponds for associated supported wildlife.

Cable Route Corridor

~~3.2.76~~3.2.80 A total of 18 ponds were recorded within the Cable Route Corridor, comprising a total of approximately 0.~~55~~54 ha. All ponds form part of the wider network of waterbodies within the local landscape and are considered likely to support toads and other amphibian species, including great crested newt. All ponds were relatively small in size.

Evaluation

~~3.2.77~~3.2.81 Ponds are targeted for conservation at both a national and local scale. Although the majority of agricultural ponds on-site are in relatively poor condition, they are nevertheless likely to support a variety of associated wildlife and form a network of ponds with others in the surrounding landscape. Ponds qualify as being a Priority Habitat if they support species of high conservation importance, including Species of Principal Importance. All on-site ponds have therefore been assumed to constitute Priority Habitat on a precautionary basis, given the likelihood that toads (a Species of Principal Importance) and other amphibians may be present. Ponds are considered to be of **Local Importance**.

Ruderal/Ephemeral

Desk Study Information

~~3.2.78~~3.2.82 N/A – Not a Habitat of Principal Importance

Field Survey Results

Solar PV Sites

3.2.793.2.83 A small number of discrete areas of the Solar PV Sites comprised ground disturbed from farm machinery use. Within these areas ruderal vegetation dominated, such as nettles, thistles, hogweed and great willowherb *Epilobium hirsutum*, as well as a high proportion of bare ground. This habitat accounted for circa 1 ha in total, accounting for around 0.13% of the total area across the Solar PV Sites.

Cable Route Corridor

3.2.803.2.84 Ruderal/ephemeral vegetation was sparsely represented throughout the Cable Route Corridor, recorded at field boundaries, on railway embankments, and in areas of previously arable land that had been removed from cultivation in recent years and left to establish naturally. This habitat type was recorded over approximately 3.1516 ha of land within the Cable Route Corridor (0.68 % of the total area).

Evaluation

3.2.813.2.85 Although this habitat is likely be of some value to wildlife (particularly invertebrates), it is very small in extent across the Order Limits, is very quick to establish and replace, and is ubiquitous in the surrounding landscape. This habitat is considered to be of **Site Importance**.

Urban Habitats

Desk Study Information

3.2.823.2.86 Not Habitats of Principal Importance. 'Built Environment' is a habitat listed on the Wiltshire BAP, which encompasses buildings, gardens, allotments, churchyards, urban green spaces and road verges.

Field Survey Results

Solar PV Sites

3.2.833.2.87 Four agricultural buildings were present at the edges of Fields A11, C25, D17 and E32. Other urban habitats encountered across the Solar PV Sites included hard standing roads, farm tracks (formed of crushed stone and/or bare ground), and discrete areas of bare ground regularly used to store farm equipment and tipped materials. All such habitats were largely devoid of vegetation and subject to regular disturbance.

3.2.843.2.88 In total these habitats covered approximately 6.82 ha of the Solar PV Sites (around 0.86% of the total area) and represented the following UKHab habitat types:

- Artificial unvegetated, unsealed surface;
- Bare Ground; and
- Developed land; sealed surface.

Cable Route Corridor

~~3.2.85~~3.2.89 As with the Solar PV Sites, urban habitat were recorded within the Cable Route Corridor in the form of buildings, roads and tracks, and areas of bare ground, as well as a small area of allotments associated with a complex of farm buildings located just outside the Order Limits. Urban habitats covered approximately 32 ha of land within the Cable Route Corridor (7.42 % of total land cover), and represented the following UKHab habitat types:

- Allotments;
- Artificial unvegetated, unsealed surface;
- Bare Ground; and
- Developed land; sealed surface.

Evaluation

~~3.2.86~~3.2.90 Urban habitats present within the Order Limits offer very limited value for wildlife and are considered to be of **Negligible Importance**. The small collection of buildings may offer roost/nest sites for bats and birds, which are discussed under the 'Bats' and 'Breeding Birds' subheadings in Section 3.3.

Hedgerows

Desk Study Information

~~3.2.87~~3.2.91 All hedgerows are a Habitat of Principal Importance and 'Ancient and/or Species Rich Hedgerows' are listed on the Wiltshire BAP

Field Survey Results

Solar PV Sites

~~3.2.88~~3.2.92 An extensive network of over 84 km of hedgerow bordered the agricultural fields across the Solar PV Sites. Hedgerows within this network varied widely in terms of species diversity, shape, structure, management and condition. However, the majority (over 66 km) of hedgerows were categorised as being species-rich, with woody species frequently encountered including hawthorn, blackthorn, field maple, hazel, elm *Ulmus procera*, dogwood *Cornus sanguinea*, dog rose *Rosa canina*, ash, oak, elder *Sambucus nigra*, spindle *Euonymus europaeus* and sycamore.

~~3.2.89~~3.2.93 A large proportion of the hedgerows also contained at least occasional semi-mature to mature trees (particularly mature oak and ash standards) and many were bordered by drainage ditches which are dry for at least part of the year. The majority of hedgerows were generally in good condition under rotational management regimes.

~~3.2.90~~3.2.94 The following UKHab hedgerow types were all represented within the Solar PV Sites:

- Native hedgerow (4.49 km);
- Native hedgerow – associated with bank or ditch (3.14 km);
- Native hedgerow with trees (3.56 km);
- Native hedgerow with trees – associated with bank or ditch (5.62 km);
- Species-rich native hedgerow (22.81 km);
- Species-rich native hedgerow – associated with bank or ditch (8.61 km);
- Species-rich native hedgerow with trees (22.44 km);
- Species-rich native hedgerow with trees – associated with bank or ditch (12.72 km);
- Line of trees (1.17 km); and
- Line of trees (ecologically valuable) (0.36 km).

Cable Route Corridor

~~3.2.91~~3.2.95 Only relatively small sections of individual hedgerows were present within the Cable Route Corridor, owing to the width of the route. As with the Solar PV Sites, the majority of hedgerows within the Cable Route Corridor were classified as species-rich, and formed a network of connective linear features within the landscape.

~~3.2.92~~3.2.96 The following UKHab hedgerow types were represented within the Cable Route Corridor:

- Native hedgerow (~~4.77~~5.09 km);
- Native hedgerow – associated with bank or ditch (4.~~39~~84 km);
- Native hedgerow with trees (1.~~15~~02 km);
- Native hedgerow with trees – associated with bank or ditch (~~0.95~~1.02 km);
- Species-rich native hedgerow (~~7.38~~8.08 km);
- Species-rich native hedgerow – associated with bank or ditch (~~8.31~~9.54 km);

- Species-rich native hedgerow with trees (~~2.81~~3.01 km);
- Species-rich native hedgerow with trees - associated with bank or ditch (~~7.72~~4.46 km);
- Line of trees (0.87 km);
- Line of trees – associated with bank or ditch (1.02 km); and
- Line of trees (ecologically valuable) (0.33 km).

Evaluation

~~3.2.93~~3.2.97 The hedgerow networks often comprise the most important ecological features within the Solar PV Sites and the Cable Route Corridor and provide foraging, dispersal and sheltering habitat for a variety of mammals, birds, invertebrates, and other species groups. Hedgerows in general are a priority habitat on a national scale, with the best hedgerow examples being targeted for conservation at a local scale. A substantial extent of hedgerow habitat is present within the Order Limits, and overall the hedgerow network is considered to be of **District Importance**.

Ditches and Watercourses

Desk Study Information

3.2.1 Rivers are a Habitat of Principal Importance, and 'Rivers, Streams and Associated Habitat' are listed on the Wiltshire BAP. A section of the watercourse known as Gauze Brook, where it flows through Lime Down D, is listed as a Priority River on the Natural England Priority River Habitat dataset (Ref 9-1-7).

Field Survey Results

Solar PV Sites

3.2.2 Gauze Brook flows roughly south west to north east through the eastern part of Lime Down D and is a tributary of the Avon. Where it flows through Lime Down D, this watercourse exhibited a good degree of naturalness with structurally diverse banksides, bank tops vegetated with a range of riparian trees and shrubs, and several natural channel features such as pools created by fallen trees. The watercourse was approximately 4 to 6 m wide and held flowing water over a gravel/pebble bed. The stream was generally overshaded by the riparian vegetation and there was little in the way of submerged or emergent vegetation.

3.2.3 Another tributary of the River Avon, a stream known as Gabriel's Well, flowed through Lime Down E. This was a fairly sinuous stream around 2 m deep and 2 m wide, holding slightly turbid water with a sluggish flow over a cobble/pebble bed. The banks of this stream were steep and slightly undercut in places and vegetated with riparian trees.

3.2.4 A small stream formed the northern boundary of C24 continuing through Fields C27 and C28, via culvert beneath Pig Lane. This was also relatively narrow (1 - 1.5 m wide) with 1-1.5 m deep, steep banks vegetated with coarse grasses, tall herbs (including meadowsweet *Filipendula ulmaria*) and a hedgerow on its northern bankside. Water within this stream was relatively shallow (less than20 cm deep) and was often dry towards the western end, although some emergent vegetation such as common reed *Phragmites australis* was present indicating seasonal inundation.

3.2.5 A relatively short (circa 270 m long) section of stream bounded the south east of Field B8. This was fairly straight and narrow (1 m -1.5 m wide) appearing have been subject to modification for drainage in the past, with 1 m deep, steep banks vegetated with coarse grasses and tall herbs. Water within this feature was shallow (typically less than 20 cm deep) and was frequently dry in parts, with very little aquatic vegetation.

3.2.6 The total extent of watercourses at the Solar PV Sites was 3.92 km.

3.2.7 Aside from watercourses, an extensive network of field drainage ditches was present across the Solar PV Sites, totaling 12.89 km in length. The majority of ditches were associated with an adjacent field boundary hedgerow, with a small number of exceptions, including ditches at boundaries C24_B4 and D9_B2 refer to **ES Volume 2, Figure 9-6-1: Waterbodies Subject to Detailed Otter and Water Vole Surveys, [EN010168/APP/6.3]** for the location of these ditches) which were open on both sides. In line with UKHab (Ref 9-1-15) and Biodiversity Net Gain (BNG) (Ref 9-1-16) guidance, ditches were only recorded as a feature where they were considered likely to retain water for more than 4 months of the year and/or where they were not associated with a hedgerow. Several other ditches were present at the bases of hedgerows which were generally shallow, dry and did not contain any emergent/marginal vegetation which would be indicative of regular inundation with water, and were thus likely to be dry except following periods of heavy rainfall. In line with the UKHab/BNG guidance, all such 'dry' ditches lying within 2 m of a hedgerow were considered to form part of the structure of the hedgerow and were captured in the relevant hedgerow type (see 'Hedgerows' subheading above) and not recorded as a separate ditch feature.

3.2.8 Wet ditches were most prevalent in Lime Down D, which accounted for around 7.14 km of the 12.89 km of ditch recorded in total across the Solar PV Sites. During the spring and summer months the ditches across the Solar PV Sites were characteristically dry or held very shallow water, as was established during the habitat survey and during water vole and otter surveys (see **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**). Ditches within Lime Down D however appeared to have higher water retention than elsewhere at the Solar PV Sites, including the ditch at boundary D9_B2 which was able to support water voles.

3.2.9 Most ditches (over 73%) were recorded as being in 'poor' condition with the remainder being in 'moderate' condition. No ditches were recorded as being in 'good' condition. It is likely that the relatively poor condition of ditches is due to a combination of low water retention across the ditch network, overshading by adjacent hedgerows and trees preventing growth of aquatic and marginal vegetation, and agricultural inputs having a detrimental effect on water quality.

Cable Route Corridor

3.2.10 Sections of ~~six~~seven watercourses comprising the habitat type 'Other Rivers and Streams' and totalling a ~~combined1.04~~combined 1.18 km in length are present within the Cable Route Corridor, all of which have some hydrological connection with the River Avon. This includes a circa 113 m section of Gauze Brook lying upstream of the Solar PV Sites (labelled CRR8 on **ES Volume 2, Figure 9.1.15 [EN010168/APP/6.2]**), which was dry at the time of survey in April 2025 and appeared to dry up regularly, evidenced by a lack of aquatic and marginal vegetation despite being considerably less subject to overshading than the section of Gauze Brook flowing through Lime Down D.

3.2.11 Other tributaries of the River Avon present within the Cable Route Corridor included Pudding Brook (CRR6 on **ES Volume 2, Figure 9.1.21 [EN010168/APP/6.2]**), as well as a small tributary of Pudding Brook (CRR7 **ES Volume 2, Figure 9.1.20 [EN010168/APP/6.2]**), and Byde Mill Brook (CRR1 **ES Volume 2, Figure 9.1.22 [EN010168/APP/6.2]**). An unnamed stream (CRR2 to CRR5 **ES Volume 2, Figure 9.1.22 [EN010168/APP/6.2]**) was recorded, which appears to eventually discharge into the River Avon some ~~xx~~2.7 km east of the Order Limits, although also appears to be poorly connected on account of several large, culverted sections downstream, two of which appear to be over 100 m in length.

3.2.12 All of the above sections of river within the Cable Route Corridor evidenced good diversity of riparian tree species and bankside structure and were likely to support a range of aquatic and riparian species. However most were negatively influenced by agricultural land use within 10 m of the bank top and extent of silt recorded within the channel bed.

3.2.13 As for the Solar PV Sites, a network of 'wet' ditches were also present throughout the Cable Route Corridor, most of which comprised agricultural drainage features at the boundaries of fields. The total extent of ditches within the Cable Route Corridor was approximately ~~2.63~~3.09 km in length, ~~around~~over half (circa ~~52~~59%) of which were ~~were~~ in 'poor' condition with the remainder being in 'moderate' condition. No ditches were recorded as being in 'good' condition. AS for the Solar PV Sites, it is likely that the relatively poor condition of ditches is due to a combination of low water retention across the ditch network, overshading by adjacent hedgerows and trees preventing growth of aquatic and marginal vegetation, and agricultural inputs having a detrimental effect on water quality.

Evaluation

3.2.14 Although not extensive within the Order Limits, the watercourses present are Priority Habitats and can be expected to be important for a range of aquatic and riparian wildlife, particularly given their connectivity with the River Avon. The network of streams/rivers are considered to be of **District Importance**.

3.2.15 The ditches within the Order Limits are almost universally in relatively poor condition and appear to be regularly dry, which reduces their value to wildlife. However, the extensive network of ditches across the Order Limits are likely to support a range of associated species, particularly in conjunction with the wider watercourse network, and ditches are considered to be of **Local Importance.**

3.3 Protected and Notable Species

3.3.1 This section outlines the results of the habitat suitability assessment for protected and notable species, as well as providing a summary of species-specific surveys completed. Detailed findings of the species-specific surveys are contained within the following appendices:

- **ES Volume 3, Appendix 9.2: Badger Survey Report [EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9.3: Bat Survey Report[EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9.4: Breeding Bird Survey Report [EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9.5: GCN Survey Report [EN010168/APP/6.3]**;
- **ES Volume 3, Appendix 9.6: Otter and Water Vole Survey Report [EN010168/APP/6.3]**; and
- **ES Volume 3, Appendix 9.7: Wintering Bird Survey Report [EN010168/APP/6.3].**

3.3.2 This section also outlines the results of the desk study for protected and notable species, for which species records within 2 km of the Solar PV Sites and 500 m of the Cable Route Corridor are provided, with full details provided in **Table 9-1-5 to Table 9-1-8**. Species records from the year 2000 or later are provided in this report.

Badgers

Survey Methodology

3.3.3 Full details of badger survey methodology are provided in **ES Volume 3, Appendix 9-2: Badger Survey Report [EN010168/APP/6.3].**

Desk Study Information

3.3.4 Badgers *Meles meles* are protected under the Protection of Badgers Act (1992).

3.3.5 The desk study revealed the presence of numerous records of badgers from within [redacted] as well as records from within the Solar PV Sites themselves.

Field Survey Results

3.3.6 Full details of findings related to badgers are provided in **ES Volume 3, Appendix 9-2: Badger Survey Report, [EN010168/APP/6.3]**.

Solar PV Sites

3.3.7 A total of 25 badger setts of varying status and levels of activity have been recorded within Lime Down A-E, along with a number of field signs.

3.3.8 The Solar PV Sites contain significant extents of habitat suitable for foraging by badgers, including the arable and grassland fields, field margins, patches of scrub, woodlands and hedgerows. Badgers predominantly feed on soil invertebrates, particularly earthworms, but will take a wide variety of plant and animal prey items depending on availability. Arable fields have a lower earthworm abundance than permanent grassland fields but may provide seasonal forage in the form of unharvested cereals. The grassland fields, uncultivated margins, woodlands and hedgerows are likely to be more productive for badgers. Woodlands and hedgerows are also likely to be favoured for badgers for sett-building.

Cable Route Corridor

3.3.9 [redacted]

Evaluation

3.3.10 Badgers are clearly present within the Order Limits, and this extent of land undoubtedly falls within the territory of multiple social groups. Badgers are not a species of conservation concern with numbers having increased in recent years, and receive legal protection on a welfare basis due to historic and ongoing persecution. Badgers are considered to be of **Site Importance**.

Bats

Methodology

3.3.11 Full details of bat survey methodology are provided in **ES Volume 3, Appendix 9-3: Bat Survey Report, [EN010168/APP/6.3].**

Desk Study Information

3.3.12 Bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

3.3.13 Seven bat species are listed as Species of Principal Importance, namely barbastelle *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe *Rhinolophus hipposideros*. Bats as a species group are listed on the Wiltshire BAP.

3.3.14 Roosts belonging to the following six species are known to be present with 2 km of the Solar PV Sites as revealed by the desk study:

- Common pipistrelle (five unspecified roosts (locations withheld) plus five EPS licences granted. One licence associated with a breeding roost 0.85 km north west of Lime Down C, three licences associated with a non-breeding roost 0.29 km west of Lime Down C, and one licence associated with a non-breeding roost 0.91 km east of Lime Down E);
- Soprano pipistrelle (two unspecified roosts (locations withheld)-plus one EPS licence associated with a non-breeding roost 0.91 km east of Lime Down E);
- Natterer's bat (four unspecified roosts (locations withheld)-plus one EPS licence associated with a breeding roost 0.85 km north west of Lime Down C);
- Serotine (three unspecified roosts (locations withheld) plus four EPS licences. One EPS licence associated with a breeding roost 0.85 km north west of Lime Down C. Three EPS licences associated with a non-breeding roost 0.29 km west of Lime Down C);
- Brown long-eared bat (eight unspecified roosts (locations withheld) plus two EPS licences. One EPS licence associated with a breeding roost 0.85 km north west of Lime Down C, and one associated with a non-breeding roost 1.45 km south of Lime Down D); and
- Lesser horseshoe bat (three unspecified roosts - locations withheld)).

3.3.15 Roost sites belonging to the following species are known to be present with 2 km of the Cable Route Corridor as revealed by the desk study:

- Common pipistrelle (five unspecified roosts (locations withheld) plus one EPS licence granted, associated with a non-breeding roost);
- Soprano pipistrelle (two EPS licences associated with a non-breeding roost close to the Existing National Grid Melksham Substation);
- Natterer's bat (two unspecified roosts (locations withheld));
- Brown long-eared bat (five unspecified roosts (locations withheld)); and
- Lesser horseshoe bat (six unspecified roosts (locations withheld) plus two EPS licence granted, both associated with non-breeding roosts).

3.3.16 In addition to roost sites, the data search reported numerous bat flight records within 2 km of the Solar PV Sites and 500 m of the Cable Route Corridor. Such records included the following species: barbastelle, serotine, Myotis sp., Daubenton's bat *Myotis Daubentonii*, Natterer's bat, Nyctalus sp., noctule, common pipistrelle, soprano pipistrelle, brown long-eared bat, greater horseshoe and lesser horseshoe.

Field Survey Results

Solar PV Sites – Roosting Bats

3.3.17 Four buildings within or immediately adjacent to the Solar PV Sites have been recorded as having potential (low to moderate) to support roosting bats. A large number of trees (over 600) at the Solar PV Sites have also been recorded as having varying suitability for bat roosts. More details of these features are provided in **ES Volume 3, Appendix 9-3: Bat Survey Report, [EN010168/APP/6.3]**. None of these features have been subject to more detailed survey to confirm the presence/likely absence of roosts as they are all expected to be retained as part of the Scheme.

Cable Route Corridor – Roosting Bats

3.3.18 Four buildings within the Cable Route Corridor have been recorded as having potential (low to moderate) to support roosting bats. A large number of trees (over 200) within the Cable Route Corridor have also been recorded as having varying suitability for bat roosts. More details of these features are provided in **ES Volume 3, Appendix 9-3: Bat Survey Report, [EN010168/APP/6.3]**.

Solar PV Sites – Foraging/Commuting Bats

3.3.19 Bat activity surveys at the Solar PV Sites have revealed a diverse assemblage of at least 10 species of bats using the land within the Solar PV Sites for foraging and commuting around the landscape. Full details and results of bat activity surveys are provided in **ES Volume 3, Appendix 9-3: Bat Survey Report, [EN010168/APP/6.3]**. However, a summary of species recorded is provided here, with relative activity levels by each species indicated in brackets:

- Common pipistrelle (high activity);
- Soprano pipistrelle (moderate activity);
- Nyctalus – aggregation of noctule and Leisler's bat, although the majority of activity is likely to be from noctule (moderate activity);
- Myotis – aggregation of Myotis bat species (low to moderate activity);
- Serotine (low activity);
- Barbastelle (low activity);
- Long-eared bats – assumed to be brown long-eared bat (low activity);
- Lesser horseshoe (low activity);
- Nathusius' pipistrelle (very low activity); and
- Greater horseshoe (very low activity).

Cable Route Corridor – Foraging/Commuting Bats

3.3.20 Whilst no bat activity surveys have been undertaken within the Cable Route Corridor, the assessment of habitats for bats concluded that habitats within the Cable Route Corridor are likely of similar value for bats as those at the Solar PV Sites, and a similar assemblage of bat species are likely supported. Habitats within the Cable Route Corridor are anticipated to be predominantly retained, with any temporary removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such, undertaking specific bat activity surveys was not considered proportionate or necessary.

Evaluation

Roosting Bats

3.3.21 A large number of trees within the Order Limits have the potential to support roosting bats. A small number of buildings within the Order Limits were assessed as having low to moderate potential to support roosting bats.

3.3.22 It is likely that a proportion of trees within the Solar PV Sites and the Cable Route Corridor will support bat roosts used by a variety of those species which are known to roost within trees.

3.3.23 Based on the presence of a relatively high number of features (predominately mature trees, but also occasional buildings) which are suitable to support roosting bats within the Order Limits, the roosting bat assemblage likely supported by the Order Limits is considered to be of **District** importance.

Foraging/Commuting Bats

3.3.24 Bat surveys of the Solar PV Sites have recorded a diverse assemblage of bat species across Lime Down A-E, with at least 10 species recorded utilising the Solar PV Sites for commuting and/or foraging. The level of activity recorded by the surveys was considered to represent a moderate level of bat activity in comparison to other sites Clarkson and Woods have undertaken surveys throughout the south west of England. Overall, given the general assemblage and levels of activity recorded, foraging/commuting bats within the Solar PV Sites are considered to be of **Local Importance**.

3.3.25 This evaluation is also considered appropriate for the Cable Route Corridor on account of the homogeneity of similar lowland farmland habitat across the local landscape, including within the Cable Route Corridor.

Dormice

Methodology

3.3.1 Any hedgerows, scrub and woodlands were assessed during the habitat survey for their suitability to support dormice *Muscardinus avellanarius*. Particular consideration was given to the abundance of food sources within them, density for nesting and overnight shelter and the strength of connectivity to other suitable habitats leading off site. In addition, any direct sightings, nests or feeding signs during the site visit were also recorded.

Limitations

3.3.2 No specific limitations to the habitat assessment for dormice were noted When active, dormice are predominantly nocturnal and arboreal and as such are rarely sighted when conducting daytime habitat assessments. This species also lives in relatively low densities even in optimal habitat, meaning field signs indicating the presence of this species at any site can be difficult to detect.

Desk Study Information

3.3.3 Dormice are protected under the Conservation of Habitats and Species Regulations 2017 (as amended), are a Species of Principal Importance, and are a Wiltshire BAP species.

3.3.4 A single record of dormice was returned by WSBRC within 2 km of the Solar PV Sites, from a woodland known as Dunley Gorse approximately 0.9 km south east of Lime Down C.

Field Survey Results

Solar PV Sites

3.3.5 The open agricultural fields which characterise the majority of the Solar PV Sites are unsuitable for dormice which are highly arboreal.

3.3.6 Suitable habitat is present within the Solar PV Sites in the form of woodland, hedgerows and scrub which are well connected to additional suitable habitat in the surrounding landscape. Suitable habitat within the Solar PV Sites will be predominantly retained as part of the Scheme design, and thus potential for impacts on dormice are consequently low. In light of this no species-specific surveys for dormice have been undertaken in order to identify the presence or likely absence of this species, however their presence on-site within all suitable habitat has been assumed.

Cable Route Corridor

3.3.7 As for the Solar PV Sites, the majority of habitat within the Cable Route Corridor comprises open agricultural fields which are unsuitable for dormice. Suitable habitat is however frequently present within the Cable Route Corridor at the field boundaries in the form of hedgerows, woodland blocks and scrub. Such habitats are anticipated to be predominantly retained, with any temporary removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such no species-specific survey has been undertaken to identify the presence or likely absence of this species, however their presence within all suitable habitat has been assumed on a precautionary basis.

Evaluation

3.3.8 Although the majority of habitat within the Order Limits is unsuitable for dormice, the Order Limits nevertheless comprise a considerable extent of habitat which is suitable for this species. On the assumption that dormice are present within all suitable habitat, populations of the species within the Order Limits would be of **District Importance.**

Beavers

Methodology

3.3.9 Watercourses within the Order Limits were assessed for their suitability to support beavers *Castor fiber*. Particular consideration was given to the depth and substrate of banksides, water levels, abundance of food sources and the strength of connectivity to other suitable habitat in the nearby landscape. In addition, any incidental signs during the site visit were also recorded.

3.3.10 No species-specific survey for beavers has been conducted, although suitable habitat within the Solar PV Sites has been subject to detailed surveys for other riparian mammals (see **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**).

Desk Study Information

3.3.11 Beavers are protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

3.3.12 No records of this species were revealed by the desk study. However, they are known to be present within the wider River Avon catchment which is connected hydrologically downstream of the Solar PV Sites and the Cable Route Corridor.

Field Survey Results

Solar PV Sites

3.3.13 Gauze Brook and Gabriel's Well watercourse provide suitable riparian for beavers, with suitable foraging habitat provided by surrounding riparian vegetation and arable farmland. No evidence of beavers has been recorded at the Solar PV Sites during riparian mammal (otter and water vole) surveys, and this species is considered to be absent currently.

Cable Route Corridor

3.3.14 A small number of watercourses within the Cable Route Corridor provided suitable habitat for beavers, which were close to food sources in the form of riparian vegetation, woodlands and arable farmland. These were namely Pudding Brook, Gauze Brook and Byde Mill Brook, all of which are tributaries of the River Avon. Other watercourses within the Cable Route Corridor were largely unsuitable for beavers, mainly comprising seasonally dry drainage ditches and/or minor watercourse poorly connected to more suitable habitat.

Evaluation

3.3.15 Beavers are not believed to be present currently within the Order Limits but are within the wider river catchment. This species is increasing in abundance in England and expanding their range and could inhabit suitable watercourses within the Order Limits in the future, but are considered of **Site Importance** at present.

Otters

Methodology

3.3.16 Full details of otter *Lutra lutra* survey methodology are provided in **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**.

Desk Study Information

3.3.17 Otters and their resting places are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Otters are a Species of Principal Importance and are a Wiltshire BAP species.

3.3.18 Eight records of otter were returned by WSBRC from within 2 km of the Solar PV Sites, including from watercourses downstream of the Order Limits. Five records of otter from within 500 m of the Cable Route Corridor were also returned. Records consisted of sightings, road casualties, spraints, and feeding remains.

Field Survey Results

Solar PV Sites

3.3.19 Full details of survey findings related to otters are provided in **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**. In summary, evidence of otters was confirmed along Gauze Brook in Lime Down D. Suitable habitat for foraging and holt/rest sites was present along this watercourse as well as Gabriel's Well in Lime Down E, although no holt/rest sites were encountered.

3.3.20 Other watercourses and ditches across the Solar PV Sites are less suitable for otters, but may be used by individuals when moving between rest sites and foraging grounds in conjunction with other terrestrial habitats such as hedgerows and woodland.

Cable Route Corridor

3.3.21 As for the Solar PV Sites, the majority of watercourses within the Cable Route Corridor were of generally poor suitability with many being seasonally dry, although could be used by otters for dispersing through the landscape. Three watercourses within the Cable Route Corridor were of good suitability and are likely to be used by otters, given the relatively ubiquitous presence of this species on watercourses in lowland England following recent population recoveries.

Evaluation

3.3.22 Otters have been confirmed to be using watercourses within Lime Down D and are likely to be using other watercourses within the Order Limits. Otters are considered to be of **District Importance**.

Water Vole

Methodology

3.3.23 Full details of water vole *Arvicola amphibius* survey methodology are provided in **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**.

Desk Study Information

3.3.24 Water voles are protected under the Wildlife and Countryside Act 1981 (as amended), are a Species of Principal Importance, and are a Wiltshire BAP species.

3.3.25 23 records of water voles within 2 km of the Solar PV Sites were returned by WSBRC, primarily from along the River Avon downstream of the Order Limits. A further three records from within 500 m of the Cable Route Corridor, the closest of which was from 0.12 km south of the Existing National Grid Melksham Substation.

Field Survey Results

Solar PV Sites

3.3.26 Full details of survey findings related to water voles are provided in **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**. In summary, surveys have identified evidence of the presence of this species within ditches at Lime Down D. Suitable habitat is also present within Lime Down E, although no evidence of this species has been recorded here and American mink *Neovison vison*, which is a voracious predator of water voles, has been confirmed at Lime Down E. Ditches elsewhere at the Solar PV Sites are suboptimal for water voles due to regularly drying out.

Cable Route Corridor

3.3.27 The majority of watercourses within the Cable Route Corridor comprised poor habitat for water voles, as a result of likely fluctuating water levels, bank substrate, shading, and an absence of foraging opportunities and in-channel vegetation. However, three watercourses offered potentially good habitat (see **ES Volume 3, Appendix 9-6: Otter and Water Vole Survey Report, [EN010168/APP/6.3]**). Such habitats are anticipated to be predominantly retained, with any temporary impacts on habitats for access and cable installation works expected to be reinstated following a relatively short construction period. As such no species-specific survey has been undertaken to identify the presence or likely absence of this species, however their presence within all suitable habitat has been assumed on a precautionary basis.

Evaluation

3.3.28 The population of water voles confirmed at the Solar PV Sites (recorded within Lime Down D only) and assumed to be present within other watercourses along the Cable Route Corridor is of **District Importance**.

Other Mammals

Methodology

3.3.29 The habitats were assessed during the habitat survey for their suitability to support other mammal species of conservation concern, which are potentially present and are capable of being impacted by the proposals. This included, brown hare *Lepus europaeus,* harvest mouse *Micromys minutus*, hedgehog *Erinaceus europaeus* and polecat *Mustela putorius*, all of which are Species of Principal Importance and nearby records of which were revealed by the desk study.

Limitations

3.3.30 No specific limitations to the habitat assessment for other mammals were noted. Although brown hares are active and often observed during the day, both polecats and hedgehogs are predominantly nocturnal, and are unpredictable in their movements and denning behaviour. All three of these species do not leave many distinctive field signs, and as such their detection at any site can be difficult.

3.3.31 Although harvest mice can be detected by the presence of nests, nests are small (5-10 cm) and are usually obscured by vegetation, particularly in the spring and summer months. Harvest mouse numbers fluctuate considerably both within and between years in response to factors such as food availability and weather, making it difficult to identify presence or likely absence during a single habitat assessment survey.

Desk Study Information

3.3.32 Brown hare, harvest mouse, hedgehog and polecat are all Species of Principal Importance and Wiltshire BAP species.

3.3.33 Numerous records of brown hare were returned by the desk study, including from within Lime Down A, D and E and within the Cable Route Corridor.

3.3.34 A single record or harvest mouse from within 2 km of the Solar PV Sites were returned by WSBRC, with a further 36 records from within 500 m of the Cable Route Corridor.

3.3.35 A large number of hedgehog records were returned by WSBRC, including 145 records within 2 km of the Solar PV Sites and 39 records within 500 m of the Cable Route Corridor.

3.3.36 Three records of polecat from within 2 km of the Solar PV Sites as well as two records within 500 m of the Cable Route Corridor were revealed by the desk study.

Field Survey Results

3.3.37 A number of brown hare sightings have been recorded incidentally during a range of ecological surveys conducted at the Solar PV Sites and habitat surveys conducted within the Cable Route Corridor. The mixed farmland fields covering the majority of the land provides suitable habitat for this species.

3.3.38 Tussocky grassland at arable field margins and hedgerow/woodland edges provide suitable habitat for harvest mice. Five harvest mice nests were discovered incidentally during wintering bird surveys at field margins within Lime Down B and D, and a single harvest mouse nest was identified in field margins at Lime Down E during update walkover surveys.

3.3.39 The arable and agricultural grassland habitats across the Solar PV Sites and Cable Route Corridor constitute sub-optimal habitat for hedgehogs. However, field boundary habitats, in particular hedgerows, woodland and scrub provide suitable habitat for this species to shelter, forage and breed.

3.3.40 Polecat favour sheltered habitats with abundant prey such as small woodlands, mature hedgerows, scrub and tall grassland with good rabbit and rodent populations. Suitable habitat is present but relatively poorly represented at the Order Limits. The regular disturbance of ground within the extensive arable habitat is likely to reduce opportunities for significant polecat populations to be present, although given the presence of nearby records, the land within the Order Limits is likely to form part of the home ranges of individual polecats.

3.3.41 It is anticipated that potential for impacts on all four of these species are likely to be low. No species-specific surveys have been undertaken in order to identify the presence or likely absence of these species, however their presence within all suitable habitat across the Order Limits has been assumed.

Evaluation

3.3.42 Brown hares, harvest mice, hedgehogs and polecats are all considered to be of **Local Importance**.

Deer

Desk Study Information

3.3.43 Current UK legislation relevant to deer (the Deer Act 1991 and the Wild Mammals (Protection) Act 1996) imposes close seasons and limitations on the type and calibres of weapons permitted for hunting deer, as well as protection from unnecessary cruelty.

Field Survey Results

3.3.44 No specific deer surveys have been undertaken although several sightings of roe deer *Capreolus capreolus*, red deer *Cervus elaphus* and muntjac *Muntiacus*

reevesi have been made incidentally during ecological surveys conducted within the Order Limits.

Evaluation

3.3.45 Deer species are not a species of conservation concern in the UK with numbers at historically high levels and are not afforded any legal protection from a nature conservation objective. Deer are of **Site Importance**.

Reptiles

Methodology

3.3.46 During habitat surveys areas were assessed for their potential to provide suitable habitats for use by reptile species. These include rough, tussocky grassland, scrub, disturbed land or refugia such as wood piles, rubble or compost heaps. Where present, suitable existing refugia were inspected for sheltering reptiles, and the ground was scanned whilst walking to look for basking species.

Limitations

3.3.47 No specific limitations to the habitat assessment for reptiles were noted.

Desk Study Information

3.3.48 All UK reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) and are Species of Principal Importance. Slow worm *Anguis fragilis*, grass snake *Natrix helvetica* and adder *Vipera berus* are Wilshire BAP species.

3.3.49 A relatively small number of records of slow worm (7 records) and grass snake (5 records) were returned by WSBRC within 2 km of the Solar PV Sites. A small number of records of slow worm (1 record), grass snake (5 records) and common lizard *Zootoca vivipara* (2 records) were returned from within 500 m of the Cable Route Corridor.

Field Survey Results

Solar PV Sites

3.3.50 Suitable habitat for reptiles is limited within the Solar PV Sites, being restricted to hedgerow bases, ditches, and relatively narrow grassland field margins, which are all expected to be predominantly retained as part of the Scheme. Relatively common and widespread reptile species for which local records exist, namely slow worm and grass snake, have been assumed to be present in all suitable habitat. For these reasons, undertaking specific reptile surveys was not considered proportionate.

3.3.51 A grass snake slough was incidentally recorded during a breeding bird survey on 27 June 2023, at a grassland margin at the southern edge of Field C1.

Cable Route Corridor

3.3.52 As for the Solar PV Sites, the majority of habitat within the Cable Route Corridor comprises open agricultural fields which are largely unsuitable for reptiles. Suitable habitat is however present within the Cable Route Corridor at the field boundaries in the form of tussocky field margins, hedgerows, and woodland/scrub edge. Such habitats are anticipated to be predominantly retained, with any temporary removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such no species-specific survey has been undertaken to identify the presence or likely absence of reptiles, however their presence within all suitable habitat has been assumed on a precautionary basis.

Evaluation

3.3.53 Considering the restricted extent and suitability of habitats for reptiles, and their likely presence across the Order Limits at a low or very low density, reptiles are considered to be of **Local Importance** in the context of the Scheme.

Amphibians

Methodology

3.3.54 Full details of amphibian survey methodology are provided in **ES Volume 3, Appendix 9-5: GCN Survey Report, [EN010168/APP/6.3]**.

Desk Study Information

3.3.55 Great crested newt *Triturus cristatus* are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Great crested newt and common toad *Bufo bufo* are Species of Principal Importance, both of these as well as palmate newt *Lissotriton helveticus* are Wiltshire BAP species.

3.3.56 A number of records of GCN from within 2 km of the Solar PV Sites and 500 m of the Cable Route Corridor were revealed from a variety of data sources (**Table 9-1-5** and **Table 9-1-7** refer), as were smaller numbers of records of common toad and common frog *Rana temporaria*. This included records held by WSBRC, as well as records provided by Natural England gathered through class licence returns, granted EPS mitigation licences, and surveys conducted to inform DLL schemes. All land within the Solar PV Sites and Cable Route Corridor falls within either ‘green’ or ‘amber’ Natural England risk zones for GCN.

Field Survey Results

Solar PV Sites

3.3.57 Full details of survey findings related to amphibians are provided in **ES Volume 3, Appendix 9-5: GCN Survey Report, [EN010168/APP/6.3]**. In summary, 63 waterbodies within the Solar PV Sites and up to 250 m beyond have been surveyed for GCN environmental DNA (eDNA), with surveys having confirmed presence of GCN in two ponds within Lime Down C and E. GCN have also been recorded within a further 14 ponds located within 250 m of the Solar PV Sites. A further 18 ponds within the Solar PV Sites and surrounding 250 m have not been sampled due to being dry at the time of survey. Ponds that dry up during the peak GCN breeding season (mid-March to mid-June) are usually of low value for amphibian populations as they do not support required egg and larval development, although ponds that dry only occasionally or in times of drought can be of importance. It has not been possible to survey a further 41 ponds which lie beyond the Solar PV Sites but within the surrounding 250 m due to a lack of access permission.

3.3.58 Terrestrial habitats for amphibians are generally limited in quality and extent across the Solar PV Sites. The Solar PV Sites largely comprised arable or heavily grazed pasture habitat, of sub-optimal suitability for GCN, although amphibians may be found in these habitats in close proximity to breeding ponds. Field boundary habitats, such as tussocky field margins, hedgerows, woodland edge, scrub and ditches provide more suitable foraging/sheltering opportunities but are less well represented at the Solar PV Sites.

Cable Route Corridor

3.3.59 During the desk-based assessment, approximately 130 waterbodies were identified within the Cable Route Corridor and surrounding 250 m. District Level Licensing will be utilised for works within the Cable Route Corridor, which assumes the presence of GCN within local waterbodies and stipulates mitigation and compensation measures to reduce and offset impacts on this species. As such no surveys to determine the presence or likely absence of GCN have been undertaken for ponds within the Cable Route Corridor.

3.3.60 Terrestrial habitat quality within the Cable Route Corridor is similar to the Solar PV Sites, with suboptimal habitats in the form of open arable/grassland fields comprising the majority of land coverage. More suitable habitat at field boundaries is regularly present, however.

Evaluation

3.3.61 Overall, given the network of ponds present within the Order Limits and the surrounding landscape, and the confirmed presence of GCN within the Study Area, amphibians are considered to be of **Local Importance** in the context of the Scheme.

Breeding Birds

Methodology

3.3.62 Full details of breeding bird survey methodology are provided in **ES Volume 3, Appendix 9-4: Breeding Bird Survey Report, [EN010168/APP/6.3]**.

Desk Study Information

3.3.63 All breeding birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended).

3.3.64 A large number of records of bird species of conservation concern (SoCC) within 2 km of the Solar PV Sites and 500 m of the Cable Route Corridor were revealed by the desk study (refer to **Table 9-1-5** and **Table 9-1-7**). Species of conservation concern are those species red or amber listed by the RSPB/BTO (Ref 9-1-24), listed on Schedule 1 or 2 on the Wildlife and Countryside Act 1981 (as amended), Species of Principal Importance, and/or Wiltshire BAP Species. Most records originated from outside of the Solar PV Sites which is likely due to lack of data from within it, rather than an absence of species.

Field Survey Results

Solar PV Sites

3.3.65 Woodland, hedgerows, scrub and trees offer suitable nesting and foraging opportunities for a range of bird species, and arable and grassland habitats across the Solar PV Sites provide habitat of varying suitability for birds of open farmland

3.3.66 The Solar PV Sites as a whole offer suitable habitat for a variety of breeding birds, and the extent of land covered by the Solar PV Sites means this habitat forms a significant proportion of the local landscape. The large open fields provide suitable nesting habitat for ground-nesting species, such as skylark *Alauda arvensis*, with unbroken sightlines typically required by these species for breeding. Field margins also provide nesting opportunities for further farmland species such as grey partridge *Perdix perdix* and yellowhammer *Emberiza citrinella*, as well as providing a valuable foraging resource for a range of species. Margins and standard trees are also likely to be important in supporting prey species for raptors and owls, as well as offering suitable hunting locations for these predators.

3.3.67 Woodland blocks within and immediately adjacent the Solar PV Sites, the network of interconnecting hedgerows, and frequent standard trees, provide abundant suitable nesting habitat for a wide range of species including passerines such as tits, finches and thrushes, woodpeckers, corvids, owls and raptors. Limited wetland features, namely ponds and watercourses, are likely to support small numbers of waterbirds, such as ducks and rails.

3.3.68 Full details and results of breeding bird surveys are provided in **ES Volume 3, Appendix 9-4: Breeding Bird Survey Report, [EN010168/APP/6.3]**. A relatively diverse assemblage of breeding birds has been recorded during surveys to date, with a total of 81 species recorded at the Solar PV Sites, including 50 notable species or SoCC.

3.3.69 Frequently recorded species which were primarily associated with open field habitats included: goldfinch *Carduelis carduelis*, grey partridge, jackdaw *Coloeus monedula*, linnet *Linaria cannabina*, red kite *Milvus milvus*, rook *Corvus frugilegus*, skylark, stock dove *Columba oenas*, wheatear *Oenanthe oenanthe*, and woodpigeon *Columba palumbus*. Species confirmed as breeding or deemed probable breeders within at least one of Lime Down A-E included corn bunting *Emberiza calandra,* goldfinch, grey partridge, jackdaw, linnet, skylark, stock dove, woodpigeon, kestrel *Falco tinnunculus*, red kite, reed bunting *Emberiza schoeniclus*, rook, and yellow wagtail *Motacilla flava*. Barn owl *Tyto alba* were recorded as possibly breeding at each of Lime Down A-E, with suitable buildings and/or mature trees with cavities present.

3.3.70 Ground nesting bird species of open farmland recorded at the Solar PV Sites, which are likely to be particularly sensitive to impacts arising from ground-mounted Solar PV development, include a large number of skylarks (circa 164 territories) and small numbers of yellow wagtail (circa 3 territories), quail *Coturnix coturnix* (recorded in Lime Down D only), grey partridge, and corn bunting (recorded in Lime Down D only).

3.3.71 Species typically associated with boundary habitats were recorded across the Solar PV Sites. Frequently recorded species which were widespread across the Solar PV Sites included: dunnock *Prunella modularis*, mistle thrush *Turdus viscivorus*, song thrush *Turdus philomelos*, whitethroat *Sylvia communis*, wren *Troglodytes troglodytes* and yellowhammer. Species confirmed as breeding or deemed probable breeders within at least one of Lime Down A-E included bullfinch *Pyrrhula pyrrhula,* dunnock, mistle thrush, song thrush, willow warbler *Phylloscopus trochilus,* whitethroat, wren, and yellowhammer.

Cable Route Corridor

3.3.72 Whilst no breeding bird surveys have been undertaken within the Cable Route Corridor, the assessment of habitats for breeding birds concluded that habitats within the Cable Route Corridor are likely of similar value for breeding birds as those at the Solar PV Sites, and a similar assemblage of breeding bird species are likely supported. Surveys also identified habitats in some locations within the Cable Route Corridor to be suitable for a range of Schedule 1 species, although no evidence of breeding was noted by surveyors. Habitats within the Cable Route Corridor are anticipated to be predominantly retained, with any temporary removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such,

undertaking specific breeding bird surveys was not considered proportionate or necessary.

Evaluation

3.3.73 The breeding bird assemblage recorded at the Solar PV Sites is considered to be of **District Importance**, given the diversity of species, particularly the diversity of species of conservation concern, and availability of suitable nesting habitat. The scale of the Solar PV Sites also contributes to this classification, as a proportionately large assemblage of birds was recorded during the surveys. This evaluation is also considered appropriate for the Cable Route Corridor on account of the homogeneity of similar lowland farmland habitat across the local landscape, including within the Cable Route Corridor.

Overwintering Birds

Methodology

3.3.74 Full details of overwintering bird survey methodology are provided in **ES Volume 3, Appendix 9-7: Wintering Bird Survey Report, [EN010168/APP/6.3]**.

Desk Study Information

3.3.75 A large number of records of bird SoCC within 2 km of the Solar PV Sites and 500 m of the Cable Route Corridor were revealed by the desk study**.**

Field Survey Results

Solar PV Sites

3.3.76 Full details and results of wintering surveys conducted at the Solar PV Sites are provided in **ES Volume 3, Appendix 9-7: Wintering Bird Survey Report, [EN010168/APP/6.3]**.

3.3.77 Wintering bird surveys have recorded a diverse assemblage of birds, including a moderate diversity of 36 SoCC. Open field habitats supported the greatest diversity of species and abundance of wintering birds including several migrant species, with resident species typical of hedgerows and woodlands generally recorded at the boundaries.

3.3.78 Amongst SoCC recorded which showed a strong association with the Solar PV Sites were relatively large flocks of linnet, skylark, starling *Sturnus vulgaris*, stock dove, wood pigeon, winter thrushes (particularly fieldfare *Turdus pilaris*) and yellowhammer. A restricted range of wading birds including snipe *Gallinago gallinago*, woodcock *Scolopax rusticola* and golden plover *Pluvialis apricaria* were also recorded, all in relatively small numbers, as were some birds of prey such as kestrel and red kite, both of which were repeatedly recorded.

3.3.79 Overall, Lime Down C and E consistently supported higher abundance of notable species, however such variation between Lime Down A-E may be attributable to land management practices at the time of survey, rather than notable difference in the ecological value between Lime Down A-E.

Cable Route Corridor

3.3.80 Whilst no wintering bird surveys have been undertaken within the Cable Route Corridor, the assessment of habitats for overwintering birds concluded that habitats within the Cable Route Corridor are likely of similar value for overwintering birds as those at the Solar PV Sites, and a similar assemblage of overwintering bird species are likely supported. Habitats within the Cable Route Corridor are anticipated to be predominantly retained, with any temporary removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such undertaking specific wintering bird surveys was not considered proportionate or necessary.

Evaluation

3.3.81 The overwintering bird assemblage recorded at the Solar PV Sites is considered to be of **District Importance**, given the diversity of species, particularly the diversity of species of conservation concern. The scale of the Solar PV Sites also contributes to this classification, as a proportionately large assemblage of birds was recorded during the surveys. This evaluation is also considered appropriate for the Cable Route Corridor on account of the homogeneity of similar lowland farmland habitat across the local landscape, including within the Cable Route Corridor.

Terrestrial Invertebrates

Methodology

3.3.82 Any notable invertebrates incidentally noted during the habitat survey were recorded. The habitat was also assessed for its suitability for notable invertebrates, including the presence of specific species known to be foodplants or habitats which may be favoured by invertebrates (such as deadwood or grass tussocks). The habitat structure was also considered, such as mosaics, brownfield or unmanaged areas.

Limitations

3.3.83 No specific limitations to the habitat assessment for invertebrate were noted.

Desk Study Information

3.3.84 The desk study returned records of 32 terrestrial invertebrate Species of Principal Importance from within 2 km of the Solar PV Sites and 500 m of the

Cable Route Corridor (four species of beetle, 10 butterflies, 14 moths, two bee species and one species each of dragonfly and slug).

3.3.85 The local area around the Solar PV Sites is known to be a stronghold for barberry carpet moth *Pareulype berberata*, a Species of Principal Importance which has been subject to target conservation action, including the Butterfly Conservation led Back from the Brink project (Ref 9-1-25).

Field Survey Results

Solar PV Sites

3.3.86 Some of the less frequently encountered habitats at the Solar PV Sites provide opportunities for a range of invertebrate species, particularly within habitats at field edges, such as ditches, hedgerows and woodland, as well as areas of more botanically diverse grassland fields and arable field margins. The mosaic of these habitats are likely to support moderately diverse assemblage of invertebrates associated with farmland, although they are likely to be detrimentally impacted by current farming practices including spray and run-off of pesticides and other treatments. Barberry *Berberis vulgaris* was recorded within some hedgerows in Lime Down C which is likely to attract barberry carpet moth given the known presence of this species in the surrounding landscape.

Lime Down E

3.3.87 Field boundary habitats will largely be retained. The majority of habitat contained within the Solar PV Sites, comprising intensively managed agricultural fields, are not considered to be of high intrinsic value for invertebrates or likely to support notable communities of invertebrate species. For these reasons, it was not considered proportionate to carry out terrestrial invertebrate surveys.

Cable Route Corridor

3.3.88 As for the Solar PV Sites, the majority of habitat within the Cable Route Corridor comprises open agricultural fields which are largely of restricted value for terrestrial invertebrates. Suitable habitat is however present within the Cable Route Corridor at the field boundaries in the form of ditches, field margins, hedgerows, and woodland/scrub edge. Such habitats are anticipated to be predominantly retained, with any temporary removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such no specific survey has been undertaken for terrestrial invertebrates.

Evaluation

3.3.89 For the purposes of the assessment and on a precautionary basis, it is assumed that the Invertebrate assemblage within the Order Limits is of **Local Importance**.

Aquatic Invertebrates

~~White-Clawed Crayfish~~

Methodology

~~3.3.90 Watercourses were appraised for their suitability for white clawed crayfish *Austropotamobius pallipes*, with factors such as water levels, water quality, channel substrate, presence of potential refuges and connectivity to other suitable habitat all considered. In addition, any incidental evidence of non-native crayfish (such as sightings and burrows) where searched for, as presence of non-native species typically indicates the absence of white-clawed crayfish due to competition pressure and mortality from disease.~~

3.3.90 Any notable aquatic invertebrates incidentally observed during the habitat survey or species-specific surveys (e.g. for great crested newts, water voles and otters) were recorded. Aquatic habitats were also assessed for suitability for notable aquatic invertebrates.

Limitations

3.3.91 No specific limitations to the habitat ~~appraisal~~assessment for ~~white-clawed crayfish~~aquatic invertebrates were noted.

Desk Study Information

~~3.3.92 White-clawed crayfish are protected under the Wildlife and Countryside Act 1981 (as amended), are a Species of Principal Importance, and are a Wiltshire BAP species.~~

~~3.3.93 Seven records of this species were returned by WSBRC from within 2 km of the Solar PV Sites, mainly from the River Avon downstream of the Solar PV Sites. No records of this species were returned within 500 m of the Cable Route Corridor.~~

3.3.92 One record of aquatic invertebrates was returned by WSBRC. This was a single record of a common whirligig beetle *Gyrinus natator* from a waterbody approximately 0.94 km north-east of the Solar PV Sites. This is a relatively common and widespread species and is not a Species of Principal Importance but is a county notable species for Wiltshire.

Field Survey Results

Solar PV Sites

~~3.3.94 Suitable habitat for white-clawed crayfish is present at the Gauze Brook and Gabriel's Well watercourses in Lime Down D and E as well as a small number of wet ditches directly connected to these watercourses. This species has been assumed to be present within these features, particularly as no evidence of non-~~

~~native crayfish has been identified within them during other ecological surveys conducted to date. These features are anticipated to be retained and protected as part of the Scheme. For these reasons, no specific survey for white-clawed crayfish has been conducted.~~

~~3.3.95 The network of watercourses and ditches elsewhere at the Solar PV Sites are unsuitable for this species due to regular drying out and/or a lack of connectivity to other suitable habitat, and this would not sustain a population.~~

3.3.93 A total of 31 ponds were recorded within the Solar PV Sites which varied in terms of structure, condition and water levels, although were typically lacking in aquatic vegetation and held water of generally poor quality (refer to 'Ponds' subheading in Section 3.2). The ponds were also relatively small in size (none were greater than 500 m^2) and overall were considered unlikely to support notable assemblages or rare species of aquatic invertebrates. The network of wet ditches and streams present within the Solar PV Sites are likely to support aquatic invertebrates which use flowing water, particularly the Gauze Brook and Gabriel's Well watercourses which show a high degree of naturalness. However, the majority of the ditch network was considered likely to represent relatively poor habitat for invertebrates, primarily due to high levels of artificial channel engineering, low water retention/permance, poor water quality and lack of aquatic/marginal vegetation. All aquatic habitats are to be predominantly retained and protected through embedded mitigation measures, and for these reasons, it was not considered proportionate to carry out detailed aquatic invertebrate surveys.

Cable Route Corridor

~~3.3.96~~3.3.94 ~~The majority of watercourses~~Similarly, aquatic habitats within the Cable Route Corridor ~~comprised poor habitat for white-clawed crayfish, as a result of low or absent water levels, silted channel bed, few refuges or vegetation, and poor connectivity to more suitable habitat. However, a small number of watercourses offered potentially suitable habitat, including Pudding Brook, Byde Mill Brook and directly connected tributaries of these streams.~~comprise a number of ponds, small streams and wet ditches which can be expected to support common aquatic invertebrate assemblages typical of the local agricultural landscape. Such habitats are anticipated to be predominantly retained, with any temporary ~~impacts on habitats~~removal of habitat for access and cable installation works expected to be reinstated following a relatively short construction period. As such no ~~species-~~specific survey has been undertaken ~~to identify the presence or likely absence of this species, however their presence within all suitable habitat has been assumed on a precautionary basis~~for aquatic invertebrates.

Evaluation

3.3.95 For the purposes of the assessment and on a precautionary basis, it is assumed that the aquatic invertebrate assemblage within the Order Limits is of **Local Importance**.

White-Clawed-Crayfish

Methodology

3.3.96 Watercourses were appraised for their suitability for white clawed crayfish *Austropotamobius pallipes*, with factors such as water levels, water quality, channel substrate, presence of potential refuges and connectivity to other suitable habitat all considered. In addition, any incidental evidence of non-native crayfish (such as sightings and burrows) where searched for, as presence of non-native species typically indicates the absence of white-clawed crayfish due to competition pressure and mortality from disease.

Limitations

3.3.97 No specific limitations to the habitat appraisal for white-clawed crayfish were noted

Desk Study Information

3.3.98 White-clawed crayfish are protected under the Wildlife and Countryside Act 1981 (as amended), are a Species of Principal Importance, and are a Wiltshire BAP species.

3.3.99 Seven records of this species were returned by WSBRC from within 2 km of the Solar PV Sites, mainly from the River Avon downstream of the Solar PV Sites. No records of this species were returned within 500 m of the Cable Route Corridor.

Field Survey Results

Solar PV Sites

3.3.100 Suitable habitat for white-clawed crayfish is present at the Gauze Brook and Gabriel's Well watercourses in Lime Down D and E as well as a small number of wet ditches directly connected to these watercourses. This species has been assumed to be present within these features, particularly as no evidence of non-native crayfish has been identified within them during other ecological surveys conducted to date. These features are anticipated to be retained and protected as part of the Scheme. For these reasons, no specific survey for white-clawed crayfish has been conducted.

3.3.101 The network of watercourses and ditches elsewhere at the Solar PV Sites are unsuitable for this species due to regular drying out and/or a lack of connectivity to other suitable habitat, and this would not sustain a population.

Cable Route Corridor

3.3.102 The majority of watercourses within the Cable Route Corridor comprised poor habitat for white-clawed crayfish, as a result of low or absent water levels, silted channel bed, few refuges or vegetation, and poor connectivity to more suitable habitat. However, a small number of watercourses offered potentially suitable habitat, including Pudding Brook, Byde Mill Brook and directly connected tributaries of these streams. Such habitats are anticipated to be predominantly retained, with any temporary impacts on habitats for access and cable installation works expected to be reinstated following a relatively short construction period. As such no species-specific survey has been undertaken to identify the presence or likely absence of this species, however their presence within all suitable habitat has been assumed on a precautionary basis.

Evaluation

~~3.3.97~~3.3.103 On the assumption that ~~dormice~~white-clawed crayfish are present within all suitable habitat, populations of the species within the Order Limits would be of **District Importance**.

Freshwater Fish

Methodology

3.3.1 Watercourses were appraised for their suitability for fish, with factors such as water levels/retention, water quality, presence and diversity of aquatic/riparian vegetation, potential movement barriers, and structural diversity within the channel providing a variety of flow patterns all considered.

Limitations

3.3.2 No specific limitations to the habitat appraisal for fish were noted.

Desk Study Information

3.3.3 European eel *Anguilla anguilla* is protected under the Eels (England and Wales) Regulations. Brown/sea *Salmo trutta* is protected under the Salmon and Freshwater Fisheries Act. European eel and brown/sea trout are both Species of Principal Importance. European eel, brown trout/sea trout, common bullhead *Cottus gobio* and brook lamprey *Lampetra planeri* are all Wiltshire BAP species.

3.3.4 All of the above species have been recorded at several points within the local River Avon catchment, as revealed by the desk study (**Table 9-1-5** and **Table 9-1-7** refers).

Field Survey Results

Solar PV Sites

3.3.5 Suitable habitat for fish at the Solar PV Sites is restricted to the principal watercourses of Gauze Brook and Gabriel's Well in Lime Down D and E. Fish species recorded in local watercourses in the desk study have been assumed to be present in these features given that they contain suitable water levels and potential foraging opportunities. These features are anticipated to be retained and protected as part of the Scheme. For these reasons no specific survey for fish has been conducted.

3.3.6 The network of watercourses and ditches elsewhere at the Solar PV Sites are unsuitable for this species due to regular drying out for most of the year and/or a lack of connectivity to other suitable habitat.

Cable Route Corridor

3.3.7 Suitable habitat for fish at the Solar PV Sites is restricted to the principal watercourses of Byde Mill Brook and Pudding Brook. Where it intersects the Cable Route Corridor upstream of the Solar PV Sites, Gauze Brook was noted to be dry during habitat surveys in April and June 2025, with no aquatic vegetation present, indicating regular drying out. It is possible that this section of Gauze Brook supports fish during periods of inundation with water, but is unlikely to year-round. Elsewhere within the Cable Route Corridor, the majority of the watercourse and ditch network offered poor habitat for fish, mainly due to being regularly dry and/or poorly connected to more suitable habitat. Works at principal watercourses along the Cable Route Corridor are expected to adopt trenchless technologies to minimise impacts to aquatic/riparian ecology. All other watercourses/ditches are to be predominantly retained, with any temporary impacts on habitats for access and cable installation works expected to be reinstated following a relatively short construction period As such no species-specific survey has been undertaken to identify the presence or likely absence of fish species within watercourses along the Cable Route Corridor, however their presence within all suitable habitat has been assumed on a precautionary basis.

Evaluation

3.3.8 The assemblages and populations of fish assumed to be present at watercourses within the Order Limits are considered to be of **Local Importance.**

Plants

Methodology

3.3.9 Botanical species noted within various habitats during the habitat survey were recorded and were used to characterise habitats corresponding to the UKHab categories. Botanical quadrats (1 m x 1 m) were used at certain habitats to confirm habitat type and condition, namely grassland fields and grassy field margins, and all species noted in quadrats were recorded. Incidental observations of notable plants made during other species-specific surveys were also recorded.

Limitations

3.3.10 UKHabitat assessments are not intended to confirm the presence or absence of all plant species on Site. Instead, they provide a comprehensive assessment of habitat types and dominant species at the time of the survey. Therefore, an exhaustive species list was not collected but species characteristics of the recorded habitats were recorded.

Desk Study Information

3.3.11 The desk study returned several records of 71 plant species~~,~~ (including six primarily aquatic species), which are all considered notable at a national or county level and/or Wilshire BAP species. This included two Species of Principal Importance, namely cornflower *Centaurea cyanus* and shepherd's needle *Scandix pecten-veneris*.

Field Survey Results

3.3.12 Botanical quadrat data for relevant habitat types are presented in **ES Volume 7, Biodiversity Net Gain Assessment Report [EN010168/APP/7.8]**.

Solar PV Sites

3.3.13 Habitats across the Order Limits are generally typical of intensively managed agricultural land, with limited opportunities for notable botanical communities to thrive.

3.3.14 However, a small number of uncommon arable weed species were infrequently recorded during ecological surveys conducted across the Solar PV Sites, including scattered rye brome *Bromus secalinus* in several arable fields at Lime Down A, B, C and E, as well as a population of shepherd's needle and occasional narrow-fruited cornsalad *Valerianella dentata* occurring in Field B6.

3.3.15 Other arable plants noted included field pansy *Viola arvensis*, occasionally noted in Fields C9, C27, D19, D22 and E33, a good population of broad-leaved spurge *Euphorbia exigua* in C10, sharp-leaved fluellin *Kickxia elatine* in A11, small numbers of yellow-juiced poppy *Papaver lecoqii* in C20, wild oat *Avena*

sativa in D19 and D20, field madder *Sherardia arvensis* in D19, and scarlet pimpernel *Anagallis arvensis* in B6, D19 and D22. Scattered common poppy *Papaver rhoeas* was noted to be relatively ubiquitous across arable fields in Lime Down A to E.

3.3.16 Several grassland fields were assessed as being other neutral grassland. These have a higher botanical diversity and constitute the most likely areas to support notable plant species within the Solar PV Sites, although none of the species noted in the desk study were recorded in this habitat at the Solar PV Sites.

3.3.17 Aquatic macrophytes were infrequently encountered within the ponds, ditches and watercourses at the Solar PV Sites, likely due to a combination of general low water permanence and poor water quality, and overshading of waterbodies by dense hedgerows and woodlands. No protected or notable aquatic macrophytes, including any species within the desk study, were recorded at the Solar PV Sites.

Cable Route Corridor

~~3.3.17~~3.3.18 As for the Solar PV Sites, the habitats within the Cable Route Corridor are considered typical in diversity and quality for their surroundings, with arable habitats being dominant, and grassland, woodland and aquatic habitats being rarer. No Species of Principal Importance or other species noted in the desk study were recorded incidentally or in grassland quadrats during habitat surveys, although this does not necessarily mean they are absent.

Evaluation

~~3.3.18~~3.3.19 Given the presence of habitats with elevated botanical interest, including populations of uncommon arable weed species, the Order Limits are considered to be of **Local Importance** for notable plants.

Invasive Non-Native Species

Methodology

~~3.3.19~~3.3.20 Invasive Non-native Species (INNS), such as Japanese knotweed *Fallopia japonica* and Himalayan Balsam *Impatiens glandulifera* were searched for and recorded, as were signs of INNS animal species such as American mink.

Desk Study Information

~~3.3.20~~3.3.21 It is illegal to release or cause the spread on INNS in the wild under the Wildlife and Countryside Act 1981 (as amended) and the Invasive Alien Species (Enforcement and Permitting) Order 2019.

~~3.3.21~~3.3.22 Records of three animal INNS and eight plant INNS within 2 km of the Solar PV Sites were returned by the desk study. This included a previous record of

grey squirrel *Sciurus carolinensis* from within the boundary of Lime Down E (**Table 9-1-6** refers). Three animal INNS and three plant INNS have also been recorded within 500 m of the Cable Route Corridor (**Table 9-1-8** refers).

Field Survey Results

~~3.3.22~~3.3.23 Field signs of American mink have been recorded along watercourses in Lime Down E.

~~3.3.23~~3.3.24 A small number of incidental sightings of grey squirrel and muntjac were recorded in Lime Down C during ecological surveys.

~~3.3.24~~3.3.25 No observations of any other invasive non-native species have been made during the fieldwork carried out to date. Species particularly closely searched for were Himalayan balsam, Japanese knotweed, giant hogweed *Heracleum mantegazzianum*, floating pennywort although none were recorded.

Evaluation

~~3.3.25~~3.3.26 Invasive Non-native Species are not of any importance to biodiversity but will be included within the ecological assessment due to being subject to legislative matters.

Table 9-1-5: Records of Protected and Notable Species Derived from the Desk Study (Solar PV Sites)

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Mammals						
Terrestrial Mammals	*Meles meles*	Eurasian Badger	WSBRC[1]	15 records of setts and 34 field records within 2 km	The precise locations of recorded setts are withheld due to the risk of persecution. Field records consisted of sightings, field signs and road casualties. The closest field record was made within the boundary of Lime Down C at Grid Reference ST859832, and comprised latrines recorded in 2014.	2000 - 2021
Bats	*Barbastella barbastellus*	Barbastelle	WSBRC	1 field record (no roosts) within 2 km	1.79 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881184)	2019
Bats	*Eptesicus serotinus*	Serotine	WSBRC	[redacted]	Closest field record 0.7 km north of Lime Down E at Corston (Grid Reference ST925839) Roost locations withheld.	2013 - 2020

[1] Records returned by Wiltshire & Swindon Biological Records Centre

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
			Granted NE EPS Mitigation Licences[2]	4 licences granted within 2 km	• One bat licence impacting serotine through damage of a breeding site and of a resting place approximately 0.85 km north-west of Lime Down C from 2017-2027 (2017-28944-EPS-MIT-2). • One bat licence impacting serotine through damage of a resting place approximately 0.29 km west of Lime Down C from 2016-2021 (2016-21478-EPS-MIT). • Two bat licences impacting serotine at the same location through damage of a resting place approximately 0.29 km west of Lime Down C from 2016-2021 (2016-21478-EPS-MIT and 2016-21478-EPS-MIT-1).	2016 - 2017

[2] Obtained from Natural England's publicly available dataset containing granted European Protected Species mitigation licence applications issued by Natural England

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Bats	*Myotis Sp.*	Myotis Bat species	WSBRC	6 field records (no roosts) within 2 km	Closest record 0.7 km north of Lime Down E at Corston (Grid Reference ST925839)	2019 - 2020
Bats	*Myotis daubentonii*	Daubenton's Bat	WSBRC	1 field record (no roosts) within 2 km	1.4 km north of Lime Down B at the River Avon ((Grid Reference ST895871)	2000
Bats	*Myotis nattereri*	Natterer's Bat	WSBRC	1 field record and 4 roost records within 2 km	0.55 km south east of Lime Down D (Grid Reference ST9133282728) Roost locations withheld	2014 - 2018
			Granted NE EPS Mitigation Licences	1 licence granted within 2 km	One bat licence impacting Natterer's Bat through damage of a breeding site and of a resting place approximately 0.85 km north-west of Lime Down C from 2017-2027 (2017-28944-EPS-MIT-2).	2017
Bats	*Nyctalus Sp.*	Nyctalus Bat species	WSBRC	3 field records (no roosts) within 2 km	Closest record 0.55 km south east of Lime Down D (Grid Reference ST9133282728)	2019 - 2020
Bats	*Nyctalus noctula*	Noctule Bat	WSBRC	5 field records (no roosts) within 2 km	Closest record 0.18 km east of Lime Down E (Grid Reference ST9341782970)	2013 - 2021
Bats	*Pipistrellus*	Pipistrelle Bat species	WSBRC	[redacted]	Roost locations withheld	2002 – 2018

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Bats	*Pipistrellus pipistrellus*	Common Pipistrelle	WSBRC	[redacted]	[redacted]	2009 - 2021
			Granted NE EPS Mitigation Licences	5 licences granted within 2 km	• One bat licence impacting common pipistrelle through damage of a breeding site and of a resting place approximately 0.85 km north-west of Lime Down C from 2017-2027 (2017-28944-EPS-MIT-2). • One bat licence impacting common pipistrelle through damage of a resting place approximately 0.29 km west of Lime Down C from 2016-2021 (2016-21478-EPS-MIT). • Two bat licences impacting common pipistrelle at the same location through damage of a	2015 - 2017

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					resting place approximately 0.29 km west of Lime Down C from 2016-2021 (2016-21478-EPS-MIT and 2016-21478-EPS-MIT-1). • One bat licence impacting common pipistrelle through destruction of a resting place approximately 0.91 km east of Lime Down E in 2015 (2015-10613-EPS-MIT).	
Bats	*Pipistrellus pygmaeus*	Soprano Pipistrelle	WSBRC	[redacted]	[redacted]	2014 - 2021
			Granted NE EPS Mitigation Licences	1 licence granted within 2 km	One bat licence impacting common and soprano pipistrelle through destruction of a resting place approximately 0.91 km east of Lime Down E in 2015 (2015-10613-EPS-MIT).	2015
Bats	*Plecotus Sp.*	Long-eared Bat species	WSBRC	[redacted]	[redacted]	2013 - 2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 2 km	(Grid Reference ST9133282728) Roost location withheld	
Bats	*Plecotus auritus*	Brown Long-eared Bat	WSBRC	[redacted]	[redacted]	2002 - 2019
			Granted NE EPS Mitigation Licences	2 licences granted within 2 km	• One bat licence impacting brown long-eared bat through damage of a breeding site and of a resting place approximately 0.85 km north-west of Lime Down C from 2017-2027 (2017-28944-EPS-MIT-2). • One bat licence impacting brown long-eared bat through destruction of a resting place approximately 1.45 km south of Lime Down D from 2018 to 2028 (2018-33919-EPS-MIT).	2017 - 2018
Bats	*Rhinolophus ferrumequinum*	Greater Horseshoe Bat	WSBRC	1 field record (no roosts) within 2 km	1.79 km south of Lime Down D at Hullavington Airfield (Grid Reference	2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					ST9024881179).	
Bats	*Rhinolophus hipposideros*	Lesser Horseshoe Bat	WSBRC	[redacted]	[redacted]	2011 - 2019
Bats	*Chiroptera Sp*	Unidentified Bat	WSBRC	[redacted]	[redacted]	2000 - 2020
Terrestrial Mammals	*Lutra lutra*	Eurasian Otter	WSBRC	8 records within 2 km	Records consist of sightings, spraints, and road casualties. Closest record 0.45 km north of Lime Down A along the Sherston Avon (Grid Reference ST86138598). Several records also from Gauze Brook at Corston, east of Lime Down E.	2009 – 2020
Terrestrial Mammals	*Arvicola amphibius*	European Water Vole	WSBRC	23 within 2 km	Closest record 0.73 km north west of Lime Down C along the River Avon at Luckington (Grid Reference ST839841). Several records also from the Sherston Avon to the north of Lime Down B..	2000 - 2009

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Terrestrial Mammals	*Muscardinus avellanarius*	Hazel Dormouse	WSBRC	1 record within 2 km	Recorded 0.9 km south of Lime Down C at Dunley Gorse (Grid Reference ST851814)	2021
Terrestrial Mammals	*Lepus europaeus*	Brown Hare	WSBRC	40 records within 2 km	Closet records include sightings made within the boundaries of Lime Down A, Lime Down D and Lime Down E, at Grid References ST862845, ST891838, and ST92358215 respectively.	2000 - 2021
Terrestrial Mammals	*Micromys minutus*	Harvest Mouse	WSBRC	1 record within 2 km	Remains present within owl pellet recorded 1.9 km north east of Lime Down E (Grid Reference ST944845)	2014
Terrestrial Mammals	*Erinaceus europaeus*	West European Hedgehog	WSBRC	145 records within 2 km	Closest record 0.07 km south east of Lime Down A (Grid Reference ST8679485176) . The majority of records are associated with nearby settlements, including Sherston, Luckington, Alderton, Hullavington, Corston and Stanton St Quinton.	2005 - 2022
Terrestrial Mammals	*Mustela putorius*	Polecat	WSBRC	3 records within 2 km	Closest record 0.34 km south of Lime Down B at Norton (Grid	2004 - 2020

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Reference ST884844)	
Amphibians and Reptiles						
Amphibians	*Bufo bufo*	Common Toad	WSBRC	9 records within 2 km	Closest record 0.39 km north of Lime Down A at Sherston (Grid Reference ST855857).	2000 - 2021
			Froglife 'Toads on Roads' project	1 toad crossing within 2 km	An active toad crossing is present approximately 1.05 km north east of Lime Down D at Corston.	N/A
Amphibians	*Rana temporaria*	Common Frog	WSBRC	6 records within 2 km	Closest record 0.57 km west of Lime Down E (Grid Reference ST9157982523) .	2000 - 2021
Amphibians	*Triturus cristatus*	Great Crested Newt	WSBRC	30 records within 2 km	Closest record 0.62 km west of Lime Down C at Alderton (Grid Reference ST84258269)	2000 - 2021
			Granted NE EPS Mitigation Licences	3 Licences Granted within 2 km	• One licence allowing damage and destruction of a resting place located approximately 0.90 km south of Lime Down D from 2017-2018 (2017-28843-EPS-MIT) • One licence allowing destruction of a resting place located approximately 1.98 km south	2011 - 2018

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					of Lime Down E from (EPSM2011-3167) • One licence allowing destruction of a resting place located approximately 1.98 km south of Lime Down E (EPSM2012-4030)	
			NE Class Licence Returns[3]	16 class licence returns within 2 km	• Two located approximately 0.03 km from Lime Down A • One located approximately 0.54 km west of Lime Down C • Five located approximately 0.99 km west of Lime Down A • Two located approximately 1.86 km east of Lime Down E • Six located approximately 1.87 km south of Lime Down D	2017
			NE GCN Pond	Four positive records within 2 km	The two closest positive records were made close to northern and	2018

[3] Obtained from Natural England's publicly available dataset containing class licence returns for the survey of great crested newts for scientific (including research) or educational purposes. Note only records of presence are included within the dataset.

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
			Surveys for DLL[4]		southern boundaries of Lime Down E	
			NE GCN Risk Zones	N/A	All areas of Lime Down A to E fall within either an Amber or Green Risk Zone (Figure 9-5-4 refers)	N/A
			NE GCN Strategic Opportunity Areas	N/A	The majority of land within Lime Down A to E falls within either a 'Core' or 'Fringe' Strategic Opportunity Area for great created newts.	N/A
Reptiles	*Anguis fragilis*	Slow-worm	WSBRC	7 records within 2 km	Closest record 0.4 km north east of Lime Down E at Rodborne (Grid Reference ST9342383395).	2004 - 2019
Reptiles	*Natrix helvetica*	Grass Snake	WSBRC	5 records within 2 km	Closest record 0.28 km south of Lime Down E (Grid Reference ST934812).	2000 - 2019
Birds						
Birds	*Tyto alba*	Barn Owl	WSBRC	22 records within 2 km, including 12 records of breeding sites	The precise locations of recorded breeding sites are withheld due to the risk of persecution.	2000 - 2021

[4] Obtained from Natural England's publicly available dataset containing great crested newt eDNA and Habitat Suitability Index (HSI) survey results for ponds surveyed for District Level Licensing between 2017 and 2019.

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Other records consisted of sightings, pellets and casualties. This included a sighting within the boundary of Lime Down C at Grid Reference ST908838 in 2005.	
Birds	*Panurus biarmicus*	Bearded Tit	WSBRC	1 record within 2 km	Recorded 1.4 km south west of Lime Down C (Grid Reference ST846812)	2005
Birds	*Phoenicurus ochruros*	Black Redstart	WSBRC	2 records within 2 km	The locations of both records are imprecise, but were made at Sherston to the west/north west of Lime Down A	2019
Birds	*Emberiza calandra*	Corn Bunting	WSBRC	3 records within 2 km	Locations imprecisely recorded.	2008 - 2017
Birds	*Cuculus canorus*	Cuckoo	WSBRC	1 record within 2 km	Location imprecisely recorded, but made at Easton Grey to the north of Lime Down B	2005
Birds	*Numenius arquata*	Curlew	WSBRC	1 record within 2 km	Location imprecisely recorded, but made at Luckington to the west of Lime Down C	2022
Birds	*Turdus pilaris*	Fieldfare	WSBRC	10 records within 2 km	Most locations imprecisely recorded, although 1 record at 1.75 km south of Lime Down D at Hullavington	2005 - 2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Airfield (Grid Reference ST9024881175) .	
Birds	*Pluvialis apricaria*	Golden Plover	WSBRC	10 records within 2 km	Most locations imprecisely recorded, although 1 record at 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175) .	2006 - 2019
Birds	*Locustella naevia*	Grasshopper Warbler	WSBRC	1 record within 2 km	Recorded 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175)	2019
Birds	*Tringa ochropus*	Green Sandpiper	WSBRC	6 records within 2 km	Closest record 1.8 km north west of Lime Down A (Grid Reference ST840861).	2006 - 2008
Birds	*Chloris chloris*	Greenfinch	WSBRC	10 records within 2 km	Closest record 0.41 km north east of Lime Down D (Grid Reference ST917842).	2005 2019
Birds	*Perdix perdix*	Grey Partridge	WSBRC	1 record within 2 km	Recorded 1.7 km north west of Lime Down A (Grid Reference ST842862)	2000
Birds	*Anser anser*	Greylag Goose	WSBRC	1 record within 2 km	Recorded 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175	2019
Birds	*Larus argentatus*	Herring Gull	WSBRC	2 records	Closet location imprecisely recorded, but	2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 2 km	made close to Alderton to the west of Lime Down C	
Birds	*Falco subbuteo*	Hobby	WSBRC	4 records within 2 km	Locations imprecisely recorded.	2017 - 2019
Birds	*Upupa epops*	Hoopoe	WSBRC	1 record within 2 km	Recorded 1.85 km south east of Lime Down E at Lower Seagry (Grid Reference ST957810)	2008
Birds	*Delichon urbicum*	House Martin	WSBRC	11 records within 2 km	Closest record 0.11 km north of Lime Down A (Grid Reference ST858855).	2004 - 2019
Birds	*Passer domesticus*	House Sparrow	WSBRC	10 records within 2 km	Closest record 0.33 km north of Lime Down A at Sherston (Grid Reference ST857857).	2009 - 2020
Birds	*Alcedo atthis*	Kingfisher	WSBRC	44 records within 2 km	Closest record 0.3 km north west of Lime Down A at Sherston (Grid Reference ST854856). The majority of records arise from the River Avon at Sherston, to the north west of Lime Down A.	2004 - 2010
Birds	*Vanellus vanellus*	Lapwing	WSBRC	20 records within 2 km	Closest record within boundary of Lime Down A (Grid Reference ST864855). A flock of 100+ were recorded here during February 2006	2006 - 2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Birds	*Acanthis cabaret*	Lesser Redpoll	WSBRC	2 records within 2 km	Closest record 0.97 km north west of Lime Down A at Sherston (Grid Reference ST857857).	2009 - 2018
Birds	*Dryobates minor*	Lesser Spotted Woodpecker	WSBRC	1 record within 2 km	Recorded 0.58 km north of Lime Down D (Grid Reference ST898847)	2012
Birds	*Linaria cannabina*	Linnet	WSBRC	6 records within 2 km	Most locations imprecisely recorded, although 1 record at 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175) .	2008 - 2019
Birds	*Egretta garzetta*	Little Egret	WSBRC	5 records within 2 km	Closest record 0.94 km north east of Lime Down D at Corston (Grid Reference ST924841).	2015 - 2020
Birds	*Poecile palustris*	Marsh Tit	WSBRC	5 records within 2 km	Closest record 0.18 km south of Lime Down C at Surrendell Wood (Grid Reference ST867824).	2008 - 2019
Birds	*Ichthyaetus melanocephalus*	Mediterranean Gull	WSBRC	1 record within 2 km	Location imprecisely recorded.	2008
Birds	*Falco columbarius*	Merlin	WSBRC	1 record within 2 km	Location imprecisely recorded.	2019
Birds	*Turdus viscivorus*	Mistle Thrush	WSBRC	4 records within 2 km	Closest record 0.94 km north east of Lime Down D at Corston (Grid	2004 - 2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Reference ST924843).	
Birds	*Falco peregrinus*	Peregrine	WSBRC	3 records within 2 km	Closest record 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175)	2017 - 2019
Birds	*Milvus milvus*	Red Kite	WSBRC	11 records within 2 km, including 1 record of breeding site	The precise locations of recorded breeding sites are withheld due to the risk of persecution. Closest record 0.94 km north east of Lime Down D at Corston (Grid Reference ST924839)	2007 - 2019
Birds	*Turdus iliacus*	Redwing	WSBRC	2 records within 2 km	Closest record 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175)	2017- 2019
Birds	*Emberiza schoeniclus*	Reed Bunting	WSBRC	1 record within 2 km	Location imprecisely recorded.	2017
Birds	*Alauda arvensis*	Skylark	WSBRC	9 records within 2 km	Closest record 1.12 km north of Lime Down A at Sherston (Grid Reference ST855865). Several locations imprecisely recorded.	2005 - 2019
Birds	*Muscicapa striata*	Spotted Flycatcher	WSBRC	7 records within 2 km	Closest record 0.28 km north of Lime Down A at Sherston (Grid Reference ST863859).	2006 - 2019

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Birds	*Sturnus vulgaris*	Starling	WSBRC	9 records within 2 km	Closest record 0.39 km north of Lime Down A at Sherston (Grid Reference ST855857)	2004 - 2019
Birds	*Apus apus*	Swift	WSBRC	43 records within 2 km	Closest record within boundary of Lime Down A (Grid Reference ST85248328). Nesting was recorded in a nearby building here during June 2014. The majority of records arise from the nearby settlements of Sherston, Luckington, and Hullavington.	2004 – 2020
Birds	*Passer montanus*	Tree Sparrow	WSBRC	1 record within 2 km	Recorded 0.74 km north east of Lime Down D at Corston (Grid Reference ST922841)	2009
Birds	*Saxicola rubetra*	Whinchat	WSBRC	1 record within 2 km	Location imprecisely recorded.	2019
Birds	*Scolopax rusticola*	Woodcock	WSBRC	3 records within 2 km	Two locations imprecisely recorded, although 1 record at 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175) .	2017 - 2019
Birds	*Motacilla flava*	Yellow Wagtail	WSBRC	1 record within 2 km	Location imprecisely recorded.	2017
Birds	*Emberiza citrinella*	Yellowhammer	WSBRC	30 records	Closest record 0.1 km south of Lime Down E at	2005 - 2020

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 2 km	Chalkenhams LWS (Grid Reference ST929815)	
Invertebrates						
Invertebrates (Beetles)	*Gyrinus natator*	Common Whirligig	WSBRC	1 record within 2 km	Recorded 0.94 km north east of Lime Down D at Corston (Grid Reference ST924843)	2004
Invertebrates (Beetles)	*Microrhagus pygmaeus*	A Beetle	WSBRC	2 records within 2 km	Both records 1.6 km south of Lime Down E (Grid Reference ST939798)	2000
Invertebrates (Butterflies)	*Erynnis tages*	Dingy Skipper	WSBRC	1 record within 2 km	Recorded 1.99 km south west of Lime Down C (Grid Reference ST831817)	2012
Invertebrates (Butterflies)	*Hamearis lucina*	Duke of Burgundy	WSBRC	3 records within 2 km	Precise locations withheld due to sensitivity	2006
Invertebrates (Butterflies)	*Pyrgus malvae*	Grizzled Skipper	WSBRC	2 records within 2 km	Closest record 1.99 km south west of Lime Down C (Grid Reference ST831817)	2006 - 2012
Invertebrates (Butterflies)	*Euphydryas aurinia*	Marsh Fritillary	WSBRC	2 records within 2 km	Precise locations withheld due to sensitivity	2000
Invertebrates (Butterflies)	*Apatura iris*	Purple Emperor	WSBRC	1 record within 2 km	Precise location withheld due to sensitivity	2010
Invertebrates (Butterflies)	*Coenonympha pamphilus*	Small Heath	WSBRC	33 records within 2 km	Closest record 0.05 km south west of Lime Down C (Grid Reference ST848826)	2000 - 2020
Invertebrates (Butterflies)	*Lasiommata megera*	Wall	WSBRC	2 records	Recorded 0.94 km north east of Lime Down D at	2004 - 2006

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 2 km	Corston (Grid Reference ST924843)	
Invertebrates (Butterflies)	*Limenitis camilla*	White Admiral	WSBRC	1 record within 2 km	Location imprecisely recorded.	2006
Invertebrates (Moths)	*Pareulype berberata*	Barberry Carpet	WSBRC	39 records within 2 km	Precise locations withheld due to sensitivity	2007 - 2015
Invertebrates (Moths)	*Timandra comae*	Blood-vein	WSBRC	2 records within 2 km	Closest record 0.2 km south of Lime Down E (Grid Reference ST932813)	2003 - 2020
Invertebrates (Moths)	*Lycia hirtaria*	Brindled Beauty	WSBRC	1 record within 2 km	Recorded 0.2 km south of Lime Down E (Grid Reference ST932813)	2003
Invertebrates (Moths)	*Spilosoma lutea*	Buff Ermine	WSBRC	3 records within 2 km	Closest record 0.2 km south of Lime Down E (Grid Reference ST932813)	2003 - 2021
Invertebrates (Moths)	*Tyria jacobaeae*	Cinnabar	WSBRC	2 records within 2 km	Closest record 0.94 km north east of Lime Down D at Corston (Grid Reference ST924843)	2004 - 2021
Invertebrates (Moths)	*Ennomos fuscantaria*	Dusky Thorn	WSBRC	1 record within 2 km	Recorded 0.2 km south of Lime Down E (Grid Reference ST932813)	2003
Invertebrates (Moths)	*Malacosoma neustria*	Lackey	WSBRC	3 records within 2 km	Closest record at the western boundary of Lime Down E at Bincombe Wood, made in May 2022	2020 - 2022
Invertebrates (Moths)	*Caradrina morpheus*	Mottled Rustic	WSBRC	1 record within 2 km	Recorded 1.57 km north west of Lime Down C	2020

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					(Grid Reference ST830843)	
Invertebrates (Moths)	*Scotopteryx chenopodiata*	Shaded Broad-bar	WSBRC	1 record within 2 km	Recorded 1.83 km east of Lime Down E (Grid Reference ST95148270)	2022
Invertebrates (Moths)	*Hemistola chrysoprasaria*	Small Emerald	WSBRC	1 record within 2 km	Recorded 0.19 km south of Lime Down E (Grid Reference ST932813)	2003
Invertebrates (Moths)	*Diarsia rubi*	Small Square-spot	WSBRC	1 record within 2 km	Recorded 1.57 km north west of Lime Down C (Grid Reference ST830843)	2020
Invertebrates (Moths)	*Eulithis mellinata*	Spinach	WSBRC	1 record within 2 km	Recorded 1.57 km north west of Lime Down C (Grid Reference ST830843)	2020
Invertebrates (Moths)	*Spilosoma lubricipeda*	White Ermine	WSBRC	3 records within 2 km	Closest record at the northern boundary of Lime Down E at Grid Reference ST928820	2003 - 2020
Invertebrates (Dragonflies)	*Sympetrum striolatum*	Common Darter	WSBRC	3 records within 2 km	Closest record 0.92 km north west of Lime Down A at Sherston (Grid Reference ST85058605)	2004 - 2011
Invertebrates (Hymenoptera)	*Bombus ruderarius*	Red-shanked Carder Bee	WSBRC	1 record within 2 km	Recorded adjacent to the north east boundary of Lime Down E at Brickyard Scrubs LWS (Grid Reference ST929832)	2010
Invertebrates (Molluscs)	*Arion (Arion) ater*	Large Black Slug	WSBRC	2 records within 2 km	Closest record 0.18 km south of Lime Down C at Surrendell Wood (Grid	2004 - 2017

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Reference ST867824).	
Crustaceans	*Austropotamobius pallipes*	White-clawed Crayfish	WSBRC	7 records within 2 km	Closest record 0.6 km north of Lime Down A along the Sherston Avon (Grid Reference ST861861)	2003 - 2005
Fish						
Jawless Fish	*Lampetra planeri*	Brook Lamprey	WSBRC	2 records within 2 km	Both records from the Sherston Avon, the closest of which was 0.6 km north of Lime Down A (Grid Reference ST86118611)	2008
			EA Fish Data Explorer	N/A	Recorded at several points along the River Avon and wider catchment, including from a monitoring station at Sherston in 2016 and 2022 and elsewhere downstream.	2011 - 2022
Bony Fish	*Anguilla anguilla*	European Eel	WSBRC	1 record within 2 km	Recorded 0.94 km north east of Lime Down D at Corston (Grid Reference ST924843)	2004
			EA Fish Data Explorer	N/A	Recorded at monitoring stations along the River Avon downstream of the site.	2002 - 2022
Bony Fish	*Cottus gobio*	Bullhead	WSBRC	7 records within 2 km	All records from the Sherston Avon, the closest of which was 0.52 km north west of	2008

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Lime Down A (Grid Reference ST85188557)	
			EA Fish Data Explorer	N/A	Recorded at several points along the River Avon and catchment, including from a monitoring station at Sherston between 2005 and 2022. Also recorded at monitoring stations along Gauze Brook and Gabriel's Well downstream of the Site, in 2000-2013 and 2016 respectively.	2000 - 2022
Bony Fish	*Salmo trutta*	Brown Trout	EA Fish Data Explorer	N/A	Recorded at several points along the River Avon and wider catchment, including from a monitoring station at Sherston between 2005 and 2016 and elsewhere downstream. Also recorded at a monitoring station along Gauze Brook upstream of the Site in 2000.	2000 - 2022
Plants						
Flowering Plants	*Berberis vulgaris*	Barberry	WSBRC	48 records within 2 km	Precise locations withheld due to sensitivity	2007 - 2015

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Montia fontana*	Blinks	WSBRC	1 record within 2 km	Recorded 1.6 km south of Lime Down E (Grid Reference ST9333679809)	2015
Flowering Plants	*Montia fontana subsp. chondrosperma*	Blinks	WSBRC	3 records within 2 km	Closest record 1.6 km south of Lime Down E (Grid Reference ST9333679809) .	2015 - 2018
Flowering Plants	*Anagallis arvensis subsp. foemina*	Blue Pimpernel	WSBRC	1 record within 2 km	Recorded within boundary of Lime Down D (Grid Reference ST887832) in 2013	2013
Flowering Plants	*Juncus subnodulosus*	Blunt-flowered Rush	WSBRC	1 record within 2 km	Recorded 0.94 km north east of Lime Down E (Grid Reference ST924843)	2004
Flowering Plants	*Plantago coronopus*	Buck's-horn Plantain	WSBRC	2 records within 2 km	Closest record 1.78 km south of Lime Down E (Grid Reference ST867824).	2016 - 2019
Flowering Plants	*Ruscus aculeatus*	Butcher's-broom	WSBRC	3 records within 2 km	Locations imprecisely recorded.	2017 - 2018
Flowering Plants	*Nepeta cataria*	Cat-mint	WSBRC	1 record within 2 km	Recorded 0.19 km south of Lime Down D (Grid Reference ST886829)	2008
Flowering Plants	*Ceratocapnos claviculata*	Climbing Corydalis	WSBRC	3 records within 2 km	All records from Seagry Wood to the east of Lime Down E. Closest record 0.32 km away at Grid Reference ST9406281701	2004 - 2018
Flowering Plants	*Cardamine bulbifera*	Coralroot Bittercress	WSBRC	1 record within 2 km	Recorded 0.32 km north of Lime Down A at Sherston (Grid	2015

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Reference ST8547385615)	
Flowering Plants	*Petroselinum segetum*	Corn Parsley	WSBRC	4 records within 2 km	3 records from within the boundary of Lime Down D, at the following Grid References ST887832, ST890832, and ST891832. All made in 2013	2008 - 2013
Flowering Plants	*Centaurea cyanus*	Cornflower	WSBRC	1 record within 2 km	Recorded 0.62 km north of Lime Down A at Sherston (Grid Reference ST8595085978	2015
Flowering Plants	*Carex pseudocyperus*	Cyperus Sedge	WSBRC	1 record within 2 km	Recorded 0.94 km north east of Lime Down D at Corston (Grid Reference ST924843)	2010
Flowering Plants	*Euphorbia exigua*	Dwarf Spurge	WSBRC	6 records within 2 km	4 records from within the boundary of Lime Down D, at the following Grid References ST890832, ST891828, ST891835, and ST891832. All made in 2013. Another record made in 2007 arises from within the boundary of Lime Down C, at Grid Reference ST859828	2007 - 2013
Flowering Plants	*Inula helenium*	Elecampane	WSBRC	1 record within 2 km	Recorded 0.67 km north of Lime Down C (Grid Reference ST85128428)	2017

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Lemna gibba*	Fat Duckweed	WSBRC	1 record within 2 km	Recorded 0.11 km north east of Lime Down E, within a woodland pool at Brickyard Scrubs LWS (Grid Reference ST930832)	2015
Flowering Plants	*Rumex pulcher*	Fiddle Dock	WSBRC	3 records within 2 km	Closest record 0.33 km north of Lime Down A at Sherston (Grid Reference ST857857).	2005 - 2015
Flowering Plants	*Lithospermum arvense*	Field Gromwell	WSBRC	1 record within 2 km	Recorded 0.19 km south of Lime Down D (Grid Reference ST886829)	2008
Flowering Plants	*Stachys arvensis*	Field Woundwort	WSBRC	1 record within 2 km	Recorded within the boundary of Lime Down D Grid Reference ST887832,	2013
Flowering Plants	*Poa compressa*	Flattened Meadow-grass	WSBRC	1 record within 2 km	Recorded 0.83 km north west of Lime Down C at Luckington (Grid Reference ST83758411)	2017
Flowering Plants	*Fritillaria meleagris*	Fritillary	WSBRC	1 record within 2 km	Recorded 0.11 km north of the boundary of Lime Down E at Harries Ground, Rodbourne SSSI (Grid Reference ST932823)	2015
Flowering Plants	*Angelica archangelica*	Garden Angelica	WSBRC	1 record within 2 km	Recorded 0.68 km north of Lime Down A at Sherston (Grid Reference ST8604886052) .	2015

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Anacamptis morio*	Green-winged Orchid	WSBRC	1 record within 2 km	Location imprecisely recorded.	2017
Flowering Plants	*Rosa tomentosa*	Harsh Downy-rose	WSBRC	1 record within 2 km	Recorded 0.98 km north west of Lime Down C at Luckington (Grid Reference ST83758411)	2017
Flowering Plants	*Viola canina*	Heath Dog-violet	WSBRC	2 records within 2 km	Closest record 1.61 km south of Lime Down C (Grid Reference ST84848072).	2018 - 2021
Flowering Plants	*Valerianella carinata*	Keeled-fruited Cornsalad	WSBRC	3 records within 2 km	Closest record 0.78 km north west of Lime Down C at Luckington (Grid Reference ST8386084129) .	2005 - 2015
Flowering Plants	*Epilobium palustre*	Marsh Willowherb	WSBRC	1 record within 2 km	Recorded 0.94 km north east of Lime Down D at Corston (Grid Reference ST924843)	2004
Flowering Plants	*Bromus commutatus*	Meadow Brome	WSBRC	2 records within 2 km	Locations imprecisely recorded.	2018
Flowering Plants	*Colchicum autumnale*	Meadow Saffron	WSBRC	8 records within 2 km	All records 1.72 km south west of Lime Down C at Grid Reference ST83278173	2010-2020
Flowering Plants	*Valerianella dentata*	Narrow-fruited Cornsalad	WSBRC	4 records within 2 km	3 records from within the boundary of Lime Down D, at the following Grid References ST88808305, ST8880283055, and ST8898283026.	2007 - 2013

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Rorippa microphylla*	Narrow-fruited Water-cress	WSBRC	1 record within 2 km	Recorded 0.71 km south west of Lime Down C (Grid Reference ST843822)	2017
Flowering Plants	*Poa angustifolia*	Narrow-leaved Meadow-grass	WSBRC	1 record within 2 km	Recorded 1.87 km south west of Lime Down C (Grid Reference ST83278167)	2019
Flowering Plants	*Eleocharis acicularis*	Needle Spike-rush	WSBRC	1 record within 2 km	Recorded 0.9 km north east of Lime Down D at Corston (Grid Reference ST924839)	2005
Flowering Plants	*Silene noctiflora*	Night-flowering Catchfly	WSBRC	1 record within 2 km	Recorded 0.19 km south of Lime Down D (Grid Reference ST886829)	2008
Flowering Plants	*Veronica catenata*	Pink Water-speedwell	WSBRC	5 records within 2 km	Closest record 0.23 km north of Lime Down A at Sherston (Grid Reference ST858856).	2014 - 2018
Flowering Plants	*Ranunculus fluitans*	River Water-crowfoot	WSBRC	1 record within 2 km	Recorded 1.89 km north west of Lime Down A (Grid Reference ST83278167)	2018
Flowering Plants	*Mentha suaveolens*	Round-leaved Mint	WSBRC	1 record within 2 km	Location imprecisely recorded.	2017
Flowering Plants	*Bromus secalinus*	Rye Brome	WSBRC	5 records within 2 km	Closest record 0.04 km north of the boundary of Lime Down E (Grid Reference ST931822).	2013-2017
Flowering Plants	*Onobrychis viciifolia*	Sainfoin	WSBRC	3 records within 2 km	Closest record 1.1 km north west of Lime Down C (Grid Reference ST84108465)	2010 - 2017

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Scandix pecten-veneris*	Shepherd's-needle	WSBRC	3 records within 2 km	Closest record 0.93 km south of Lime Down D (Grid Reference ST889821)	2019
Flowering Plants	*Rosa stylosa*	Short-styled Field-rose	WSBRC	2 records within 2 km	Closest record 0.89 km south of Lime Down D at Hullavington (Grid Reference ST898823)	2011 - 2015
Flowering Plants	*Bromus racemosus*	Smooth Brome	WSBRC	7 records within 2 km	1 record from within the boundary of Lime Down E at Grid Reference ST92998299, made in 2015	2015 - 2021
Flowering Plants	*Medicago arabica*	Spotted Medick	WSBRC	1 record within 2 km	Location imprecisely recorded.	2017
Flowering Plants	*Poa humilis*	Spreading Meadow-grass	WSBRC	2 records within 2 km	Closest record 1.9 km south of Lime Down D (Grid Reference ST93367950)	2017 - 2019
Flowering Plants	*Anthemis cotula*	Stinking Chamomile	WSBRC	4 records within 2 km	1 record from within the boundary of Lime Down D at Grid Reference ST887832, made in 2013	2012 - 2015
Flowering Plants	*Helleborus foetidus*	Stinking Hellebore	WSBRC	1 record within 2 km	Recorded 0.5 km south of Lime Down D (Grid Reference ST89858287)	2017
Flowering Plants	*Trifolium fragiferum*	Strawberry Clover	WSBRC	1 record within 2 km	Location imprecisely recorded.	2015
Flowering Plants	*Carex hostiana*	Tawny Sedge	WSBRC	1 record within 2 km	Recorded just beyond the boundary of Lime Down E within plantation woodland at Grid Reference ST926827	2010

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Epipactis purpurata*	Violet Helleborine	WSBRC	1 record within 2 km	Recorded 0.81 km south of Lime Down E (Grid Reference ST939806)	2003
Flowering Plants	*Meconopsis cambrica*	Welsh Poppy	WSBRC	1 record within 2 km	Location imprecisely recorded.	2017
Flowering Plants	*Ulex gallii*	Western Gorse	WSBRC	1 record within 2 km	Recorded 0.27 km east of Lime Down E within Seagry Wood (Grid Reference ST9404381622)	2018
Flowering Plants	*Salvia verbenaca*	Wild Clary	WSBRC	2 records within 2 km	Closest record 0.34 km north of Lime Down A at Sherston (Grid Reference ST857857).	2005
Flowering Plants	*Viola tricolor*	Wild Pansy	WSBRC	1 record within 2 km	Recorded 1.75 km south of Lime Down D at Hullavington Airfield (Grid Reference ST9024881175) .	2019
Flowering Plants	*Lathyrus aphaca*	Yellow Vetchling	WSBRC	1 record within 2 km	Recorded 1.93 km south east of Lime Down C (Grid Reference ST832817).	2019
Flowering Plants	*Papaver dubium subsp. lecoqii*	Yellow-juiced Poppy	WSBRC	3 records within 2 km	Locations imprecisely recorded.	2015 - 2017

Table 9-1-6: Records of Invasive Non-Native Species Derived from the Desk Study (Solar PV Sites)

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Animals						
Terrestrial Mammals	*Neovison vison*	American Mink	WSBRC	1 record within 2 km	1.5 km north of Lime Down B, along the River	2020

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Avon at Easton Grey (Grid Reference ST880873).	
Terrestrial Mammals	*Muntiacus reevesi*	Chinese Muntjac	WSBRC	6 records within 2 km	Closest record 0.18 km north of Lime Down A (Grid Reference ST858855)	2010 - 2021
Terrestrial Mammals	*Sciurus carolinensis*	Eastern Grey Squirrel	WSBRC	30 records within 2 km	Closest record within the boundary of Lime Down E (Grid Reference ST930830). Recorded in a tree in 2002	2002 - 2021
Plants						
Flowering Plants	*Lamiastrum galeobdolon subsp. argentatum*	Garden Yellow Archangel	WSBRC	5 records within 2 km	Closest record 0.4 km north east of Lime Down D (Grid Reference ST917842).	2008 - 2021
Flowering Plants	*Impatiens glandulifera*	Himalayan Balsam	WSBRC	4 records within 2 km	Closest record 0.9 km south of Lime Down E (Grid Reference ST938805).	2015 - 2019
Flowering Plants	*Fallopia japonica*	Japanese Knotweed	WSBRC	1 record within 2 km	Closest record 0.9 km south west of Lime Down E (Grid Reference.ST9200081000)	2009
Flowering Plants	*Rosa rugosa*	Japanese Rose	WSBRC	1 record within 2 km	Location imprecisely recorded	2005
Flowering Plants	*Crocosmia pottsii x aurea = C. x crocosmiiflora*	Montbretia	WSBRC	3 records within 2 km	Locations imprecisely recorded	2017
Flowering Plants	*Myriophyllum aquaticum*	Parrot's-feather	WSBRC	2 records within 2 km	Closest record 1.58 km south of Lime Down E (Grid Reference ST93457985).	2015 - 2017

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Rhododendron ponticum*	Rhododendron	WSBRC	2 records within 2 km	Closest record 0.82 km east of Lime Down B (Grid Reference ST93457985).	2010 - 2017
Flowering Plants	*Cotoneaster horizontalis*	Wall Cotoneaster	WSBRC	2 records within 2 km	Closest record 0.77 km west of Lime Down C at Luckington (Grid Reference ST83858412).	2017 - 2022

Table 9-1-7: Records of Protected and Notable Species Derived from the Desk Study (Cable Route Corridor)

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Mammals						
Terrestrial Mammals	*Meles meles*	Eurasian Badger	WSBRC[5]	[redacted] m	[redacted]	2000 - 2022
Bats	*Barbastella barbastellus*	Barbastelle	WSBRC	2 field record (no roosts) within 500 m	340m from cable route, Lakeside Farm, Sevington, next to M4 (Grid Reference ST86277901)	2015
Bats	*Eptesicus serotinus*	Serotine	WSBRC	[redacted]	[redacted]	2015 - 2023
Bats	*Myotis Sp.*	Myotis Bat species	WSBRC	18 field records (no roosts)	Closest record 0.13 km Pudding Brook, next to A4 (Grid	2015 - 2023

[5] Records returned by Wiltshire & Swindon Biological Records Centre

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 500 m	Reference ST88987186)	
Bats	*Myotis nattereri*	Natterer's Bat	WSBRC	[redacted]	[redacted]	2001 - 2018
Bats	*Nyctalus Sp.*	Nyctalus Bat species	WSBRC	1 field record (no roosts) within 500 m	Closest record 0.55 km south east of Lime Down D (Grid Reference ST9133282728)	2019
Bats	*Nyctalus noctula*	Noctule Bat	WSBRC	17 field records (no roosts) within 500 m	0.12 km – Chequers Farm, Reference ST88987186	2015 - 2023
Bats	*Pipistrellus*	Pipistrelle Bat species	WSBRC	[redacted]	[redacted]	2000 – 2018
Bats	*Pipistrellus pipistrellus*	Common Pipistrelle	WSBRC	[redacted]	[redacted]	2000 - 2023
			Granted NE EPS Mitigation Licences	1 licence granted within 500 m	• One licence permitting destruction of a resting place for common pipistrelle Lakeside Farm, next to M4	2016

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					2016-19652-EPS-MIT-1 From 2016-2026	
Bats	*Pipistrellus pygmaeus*	Soprano Pipistrelle	WSBRC	24 field records and no roost records within 500 m	Closest field record 0.12 km Chequers Farm (Grid Reference ST88987186)	2015 - 2023
			Granted NE EPS Mitigation Licences	2 licences granted within 500 m	Two bat licences permitting destruction of a resting site in the same location close to the Existing National Grid Melksham Substation. 2015-16028-EPS-MIT 2015-2020 2015-16028-EPS-MIT-1 2016-2020	2015 - 2016
Bats	*Plecotus Sp.*	Long-eared Bat species	WSBRC	3 field records and 3 roost records within 500 m	Closest field record 0.55 km south east of Lime Down D (Grid Reference ST9133282728) Roost location withheld	2000 - 2023
Bats	*Plecotus auritus*	Brown Long-eared Bat	WSBRC	3 field records and 5 roost records within 500 m	Closest field record 0.2 km Chequers Farm (Grid Reference ST889987186) Roost locations withheld	2000 - 2021
Bats	*Rhinolophus ferrumequinum*	Greater Horseshoe Bat	WSBRC	2 field records (no roosts)	Nearest record is 0.31 km, near Boyds Farm	2012 - 2015

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 500 m	(Grid Reference ST881676).	
Bats	*Rhinolophus hipposideros*	Lesser Horseshoe Bat	WSBRC	14 field records and 6 roost records within 500 m	Closest field record 0.2 km Chequers Farm (Grid Reference ST889987186) Roost locations withheld	2006 - 2023
			Granted NE EPS Mitigation Licences	2 licences granted within 500 m	• One licence impacting non-breeding lesser horseshoe. Lakeside Farm, next to M4 2016-19652-EPS-MIT-1. From 2016-2026 • One licence impacting non-breeding lesser horseshoe. 2018-33546-EPS-MIT-1. 2018 -2028	2016
Bats	*Chiroptera Sp*	Unidentified Bat	WSBRC	9 field records and 1 roost records within 500 m	Closest field record 0.15 km away, near to the Existing National Grid Melksham Substation (Grid Reference ST887665) Roost locations withheld	2000 - 2024
Terrestrial Mammals	*Lutra lutra*	Eurasian Otter	WSBRC	5 records within 500 m	Records consist of sightings, spraints, and feeding remains. Closest record 0.12 km from Order Limits near to the Existing National Grid Melksham	2007 – 2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Substation (Grid Reference ST887665).	
Terrestrial Mammals	*Arvicola amphibius*	European Water Vole	WSBRC	3 records within 500 m	Closest record 0.12 km from cable route, near to sub station (Grid Reference ST887665).	2000 - 2020
Terrestrial Mammals	*Lepus europaeus*	Brown Hare	WSBRC	20 records within 500 m	Closet records include sightings made within Order Limits, near railway line near Hayward's Patch ST88248282	2003 - 2024
Terrestrial Mammals	*Oryctolagus cuniculus*	European Rabbit	WSBRC	16 records including 1 record of burrow within 500 m	Closest records include sightings made within Order Limits, near railway line near Hayward's Patch ST88248282	2010 - 2022
Terrestrial Mammals	*Micromys minutus*	Harvest Mouse	WSBRC	36 records within 500 m	4 records within Order Limits (near Chippenham Lane ST8803763	2021
Terrestrial Mammals	*Erinaceus europaeus*	West European Hedgehog	WSBRC	39 records within 500 m	Records distributed all along search area..Closest record 0.04 km from Order Limits (near Silver Street B3353) Grid Reference ST881688.	2005 - 2022
Terrestrial Mammals	*Mustela putorius*	Polecat	WSBRC	2 records within 500 m	Closest record 0.25 km from Order Limits, close to A4 Bath Road near Chippenham	2004 - 2009

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					(Grid Reference ST894720)	
Amphibians and Reptiles						
Amphibians	*Bufo bufo*	Common Toad	WSBRC	12 records within 500 m	Closest record 0.2 km at Lakeside Farm (Grid Reference ST8639078930) .	2015 - 2021
			Froglife 'Toads on Roads' project	2 toad crossing 2 within 500 m	Corston Quarry and Pond LNR (981) Easton Lane (653)	N/A
Amphibians	*Rana temporaria*	Common Frog	WSBRC	8 records within 500 m	Closest record 0.2 km of site. Lakeside Farm (Grid Reference ST8639078930) .	2000 - 2021
Amphibians	*Triturus cristatus*	Great Crested Newt	WSBRC	41 records within 500 m	3 records within site boundaries: (Grid References ST893666, ST8947366527, ST8946770055)	2000 - 2021
			Granted NE EPS Mitigation Licences	8 Licences Granted within 500 m	3 licenses on substation site: (Centroid Grid Ref: ST89596610) 2017-28124-EPS-MIT-2 (16/01/2018-31/01/2018) 2017-28124-EPS-MIT (28/03/2017 - 31/03/2018) 2017-28124 EPS-MIT-1	2015 - 2020

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					(31/05/2017-31/01/2018) 3 licences near The Roebucks (Grid Ref: ST88906989): 2017-28727-EPS-MIT-2 (30/10/2017-31/12/2018) 2017-28727-EPS-MIT (04/05/2017-30/04/2018) 2017-28727-EPS-MIT-1 (09/10/2017-31/12/2018) 1 licence in Thingley (Grid Ref: ST89407008) 2014-3282-EPS-MIT (03/09/2014-30/092015) 1 Licence at Lakeside Farm: Grid Ref: ST86337892 2016-21709-EPS-MIT (09/05/2016-01/11/2020)	
			NE Class Licence Returns[6]	4 class licence returns	• 1 licence return within Order Limits:	2014-2017

[6] Obtained from Natural England's publicly available dataset containing class licence returns for the survey of great crested newts for scientific (including research) or educational purposes. Note only records of presence are included within the dataset.

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 500 m	(Grid Ref: ST86308520 3 returns within 500 m: • Lakeside Farm: Grid Ref: ST86307888 • Thingley: Grid Ref: ST8939699 • Thingley: Grid Ref: ST89707009	
			NE GCN Pond Surveys for DLL[7]	Two positive records within 500 m	One record at Lucknow Plantation (Grid Ref: ST86017878) One record near Thingley (Grid Ref: ST89467006)	2018
			NE GCN Risk Zones	N/A	All areas of Lime Down A to E fall within either an Amber or Green Risk Zone (Figure 9-5-4 refers)	N/A
			NE GCN Strategic Opportunity Areas	N/A	The majority of land within Cable Route Corridor falls within either a 'Core' or 'Fringe' Strategic Opportunity Area for great created newts.	N/A
Reptiles	*Anguis fragilis*	Slow-worm	WSBRC	1 record within 500 m	Closest record 0.4 km, near to Westrop (Grid	2015

[7] Obtained from Natural England's publicly available dataset containing great crested newt eDNA and Habitat Suitability Index (HSI) survey results for ponds surveyed for District Level Licensing between 2017 and 2019.

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Reference ST879697).	
Reptiles	*Natrix helvetica*	Grass Snake	WSBRC	5 records within 500 m	Closest record 0.11 km (near to Existing National Grid Melksham Substation) Grid Reference ST887665.	2010 - 2020
Reptiles	*Zootoca vivipara*	Common Lizard	WSBRC	2 records within 500 m	Both records near to Existing National Grid Melksham Substation (West of) grid ref: ST888662	2008
Birds						
Birds	*Tyto alba*	Barn Owl	WSBRC	21 records within 500 m, including 10 records of breeding sites	The precise locations of recorded breeding sites are withheld due to the risk of persecution. One record is within the Order Limits near Kingsway Barn Farm in 2021 (grid ref: ST918832)	2000 - 2021
Birds	*Chroicocephalus ridibundus*	Black-headed Gull	WSBRC	96 records within 500 m	Locations imprecisely recorded (ST8870)	2005 - 2021
Birds	*Fringilla montifringilla*	Brambling	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8680).	2021
Birds	*Pyrrhula pyrrhula*	Bullfinch	WSBRC	9 records within 500 m	Locations imprecisely recorded	2014 2021
Birds	*Cettia cetti*	Cetti's Warbler	WSBRC	21 records within 500 m	Location imprecisely recorded	2019 - 2021

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Birds	*Streptopelia decaocto*	Collared Dove	WSBRC	13 records within 500 m	Locations imprecisely recorded	2006 - 2021
Birds	*Larus canus*	Common Gull	WSBRC	95 record within 500 m	Location imprecisely recorded, (ST8870)	2005 - 2021
Birds	*Actitis hypoleucos*	Common Sandpiper	WSBRC	58 records within 500 m	Closest record is 0.2 km from cable route boundary. Sevington Lake (ST87057893)	2006 - 2021
Birds	*Sterna hirundo*	Common Tern	WSBRC	44 records within 500 m	Location imprecisely recorded (ST8870)	2005 - 2021
Birds	*Fulica atra*	Coot	WSBRC	33 records within 500 m	Closest record 0.45 km. Located near Rodbourne Grid ref:: ST929832	2005 - 2021
Birds	*Phalacrocorax carbo*	Cormorant	WSBRC	50 records within 500 m	Location imprecisely recorded (ST8870)	2005 - 2021
Birds	*Loxia curvirostra*	Crossbill	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8870)	2020
Birds	*Cuculus canorus*	Cuckoo	WSBRC	4 records within 500 m	Locations imprecisely recorded, closest is ST875766	2015 - 2021
Birds	*Numenius arquata*	Curlew	WSBRC	2 records within 500 m	Location imprecisely recorded (ST8870)	2021
Birds	*Prunella modularis*	Dunnock	WSBRC	31 records within 500 m	Closest record located near Staveall Farm (ST880735)	2005
Birds	*Turdus pilaris*	Fieldfare	WSBRC	36 records	Closest record location is North of Easton (0.26 km of cable	2015 - 2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 500 m	route). ST8922071183	
Birds	*Mareca strepera*	Gadwall	WSBRC	16 records within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2005 - 2021
Birds	*Spatula querquedula*	Garganey	WSBRC	1 record within 500 m	Location imprecisely recorded (Grid ref: ST8870)	2006
Birds	*Pluvialis apricaria*	Golden Plover	WSBRC	7 records within 500 m	Most locations imprecisely recorded, although 2 records 0.26 km from cable route (grid ref: ST875852)	2006 - 2021
Birds	*Bucephala clangula*	Goldeneye	WSBRC	5 records within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2006 - 2019
Birds	*Larus marinus*	Great Black-backed Gull	WSBRC	8 record within 500 m	Locations imprecisely recorded (grid references: ST8870 & ST8482)	2005 - 2021
Birds	*Podiceps cristatus*	Great Crested Grebe	WSBRC	73 records within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2005 - 2021
Birds	*Ardea alba*	Great White Egret	WSBRC	1 record within 500 m	Location imprecisely recorded (grid ref: ST8870)	2020
Birds	*Tringa ochropus*	Green Sandpiper	WSBRC	3 records within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2019 - 2020
Birds	*Chloris chloris*	Greenfinch	WSBRC	10 records within 500 m	Locations imprecisely recorded (grid references: ST8870 & ST8777)	2006 - 2021
Birds	*Ardea cinerea*	Grey Heron	WSBRC	38 records	Most locations imprecisely	2006 - 2021

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
				within 500 m	recorded, but closest record is North of Top lane (0.11 km from cable route site). Grid ref: ST887665	
Birds	*Perdix perdix*	Grey Partridge	WSBRC	4 records within 500 m	Closest record located in Westrop, 0.21 km from cable route (ST884701)	2012 - 2021
Birds	*Motacilla cinerea*	Grey Wagtail	WSBRC	11 records within 500 m	Closest record located North of Chapel Knapp, 0.25 km from cable route (ST883683)	2006 - 2021
Birds	*Anser anser*	Greylag Goose	WSBRC	14 records within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2005 - 2021
Birds	*Larus argentatus*	Herring Gull	WSBRC	47 records within 500 m	Locations imprecisely recorded (grid references: ST8870, ST8482 & ST8869)	2008 - 2021
Birds	*Falco subbuteo*	Hobby	WSBRC	6 records within 500 m	Locations imprecisely recorded (grid references: ST8870, ST8783, ST8680 & ST8482)	2017 - 2021
Birds	*Delichon urbicum*	House Martin	WSBRC	17 records within 500 m	Closest record within cable route Order Limits, West of Sheldon Corner (grid ref: ST880735)	2005 - 2021
Birds	*Passer domesticus*	House Sparrow	WSBRC	15 records within 500 m	Closest record within cable route Order Limits, West of Sheldon Corner	2005 - 2021

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					(grid ref: ST880735)	
Birds	*Falco tinnunculus*	Kestrel	WSBRC	26 records within 500 m	Closest record within cable route Order Limits, West of Sheldon Corner (grid ref: ST880735)	2005 - 2021
Birds	*Alcedo atthis*	Kingfisher	WSBRC	52 records within 500 m	Most locations imprecisely recorded, but closest record is North of Top lane (0.11 km from cable route site). Grid ref: ST887665	2005 - 2024
Birds	*Vanellus vanellus*	Lapwing	WSBRC	10 records within 500 m	Closest record within 5 metres of cable route (Grid Reference ST881735).	2006 - 2021
Birds	Larus fuscus	Lesser Black-backed Gull	WSBRC	51 records within 500 m	Record within Order Limits near Hayward's Patch (grid ref: ST88468292)	2005 - 2023
Birds	*Linaria cannabina*	Linnet	WSBRC	7 records within 500 m	Record within Order Limits (West of Sheldon Corner). Grid ref: ST880736	2012 - 2021
Birds	*Egretta garzetta*	Little Egret	WSBRC	4 records within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2019 - 2020
Birds	*Hydrocoloeus minutus*	Little Gull	WSBRC	1 record within 500 m	Locations imprecisely recorded (grid ref: ST8870)	2005
Birds	*Anas platyrhynchos*	Mallard	WSBRC	92 records within 500 m	Most locations imprecisely recorded; closest record is 0.35 km from Order Limits (West of	2005 - 2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Rodbourne). Grid ref: ST907836	
Birds	*Poecile palustris*	Marsh Tit	WSBRC	1 record within 500 m	Closest record 0.18 km south of Lime Down C at Surrendell Wood (Grid Reference ST867824).	2017
Birds	*Anthus pratensis*	Meadow Pipit	WSBRC	5 records within 500 m	Locations imprecisely recorded (grid ref: ST8870 & ST8971)	2006 - 2020
Birds	*Ichthyaetus melanocephalus*	Mediterranean Gull	WSBRC	11 records within 500 m	Location imprecisely recorded.(grid ref:ST8870)	2005 - 2021
Birds	*Falco columbarius*	Merlin	WSBRC	1 record within 2 km	Location imprecisely recorded (ST8680)	2019
Birds	*Turdus viscivorus*	Mistle Thrush	WSBRC	22 records within 500 m	Most locations imprecisely recorded, but closest record is North of Top lane (0.11 km from cable route site). Grid ref: ST887665	2008 - 2023
Birds	*Gallinula chloropus*	Moorhen	WSBRC	27 records within 500 m	Closest record 0.32 km of Order Limits (West of Rodbourne). Grid ref: ST907836	2008 - 2021
Birds	*Caprimulgus europaeus*	Nightjar	WSBRC	2 records within 500 m	Closest record 0.22 km from cable route (Southwest of Chapel Knapp). Grid ref: ST882676	2021
Birds	*Pandion haliaetus*	Osprey	WSBRC	1 record within 500 m	Location imprecisely	2006

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					recorded (ST8870)	
Birds	*Falco peregrinus*	Peregrine	WSBRC	4 records within 500 m	Locations imprecisely recorded (ST8870 & ST8680)	2017 - 2020
Birds	*Anas acuta*	Pintail	WSBRC	10 records within 500 m	Locations imprecisely recorded (ST8870)	2005 - 2021
Birds	*Aythya ferina*	Pochard	WSBRC	19 records within 500 m	Locations imprecisely recorded (ST8870)	2005 - 2021
Birds	*Milvus milvus*	Red Kite	WSBRC	18 records within 500 m, including 4 records of breeding sites	The precise locations of recorded breeding sites are withheld due to the risk of persecution. Closest record 0.1 km West f Newlands Farm (Grid Reference ST887665)	2011 - 2023
Birds	*Tringa totanus*	Redshank	WSBRC	1 record within 500 m	Locations imprecisely recorded (ST8870)	2006
Birds	*Phoenicurus phoenicurus*	Redstart	WSBRC	7 records within 500 m	Locations imprecisely recorded (ST8870)	2017 - 2021
Birds	*Turdus iliacus*	Redwing	WSBRC	32 records within 500 m	Closest record 0.25 km of cable route boundary. North of Easton (grid ref: ST8922071183)	2014 - 2021
Birds	*Emberiza schoeniclus*	Reed Bunting	WSBRC	17 records within 500 m	Record within Order Limits, South of Grain Store Barn (grid ref: ST87708250)	2008 - 2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Birds	*Corvus frugilegus*	Rook	WSBRC	32 records within 500 m	Closest record 5m from Order Limits. West of Sheldon Corner (grid ref: ST881735)	2004 - 2021
Birds	*Acrocephalus schoenobaenus*	Sedge Warbler	WSBRC	13 records within 500 m	Locations imprecisely recorded (ST8870)	2005 - 2020
Birds	*Tadorna tadorna*	Shelduck	WSBRC	2 records within 500 m	Locations imprecisely recorded (ST8870)	2021
Birds	*Spatula clypeata*	Shoveler	WSBRC	51 records within 500 m	Locations imprecisely recorded (ST8870)	2005 - 2021
Birds	*Alauda arvensis*	Skylark	WSBRC	15 records within 500 m	Closest record within Order Limits (West of Sheldon Corner). Grid ref: ST880735	2005 - 2023
Birds	*Mergellus albellus*	Smew	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8870)	2015
Birds	*Gallinago gallinago*	Snipe	WSBRC	4 records within 500 m	Closest record is 0.32 km from Order Limits, near Thingley Bridge Farm (grid ref: ST889693)	2006 - 2021
Birds	*Turdus philomelos*	Song Thrush	WSBRC	24 records within 500 m	Closest record 0.11 km from Order Limits, near Surrendell Wood. Grid ref: ST867824	2006 - 2021
Birds	*Accipiter nisus*	Sparrowhawk	WSBRC	7 records within 500 m	Closest record 0.1 km from Order Limits. Thingley Crossroads. (ST894698)	2005 - 2024

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Birds	*Muscicapa striata*	Spotted Flycatcher	WSBRC	22 records within 500 m	Closest record 0.16 km from Order Limits. Fagot Heath. Grid ref: ST877740 (Grid Reference ST863859).	2006 - 2021
Birds	*Sturnus vulgaris*	Starling	WSBRC	13 records within 500 m	Closest record 0.25 km. North of Chapel Knapp. Grid ref: ST883683	2006 - 2021
Birds	*Columba oenas*	Stock Dove	WSBRC	13 records within 500 m	Closest record 0.2 km of Order Limits. Chapscroft Wood (ST873739)	2018 - 2021
Birds	*Apus apus*	Swift	WSBRC	26 records, including 1 nest within 500 m	Closest record within 75m of Order Limits. Near Chapel Knapp (Grid Reference ST882686). Nesting was recorded in a nearby during June 2018. .	2005 – 2023
Birds	*Strix aluco*	Tawny Owl	WSBRC	5 records within 500 m	Closest record 0.11 km from Order Limits. North of Top Lane (grid ref: ST887665)	2006 - 2021
Birds	*Anas crecca*	Teal	WSBRC	13 records within 500 m	Location imprecisely recorded (ST8870)	2005 - 2021
Birds	*Oenanthe oenanthe*	Wheatear	WSBRC	6 records within 500 m	Locations imprecisely recorded. (gird refs: ST8682, ST8482 & ST8680)	2017 - 2021
Birds	*Saxicola rubetra*	Whinchat	WSBRC	2 records within 500 m	Locations imprecisely recorded (grid	2017 - 2020

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					refs: ST8870 & ST8680)	
Birds	*Curruca communis*	Whitethroat	WSBRC	10 records within 500 m	Record within Order Limits near Starveal Farm (grid ref: ST880736)	2019 - 2021
Birds	*Mareca penelope*	Wigeon	WSBRC	8 records within 500 m	Location imprecisely recorded (ST8870)	2005 - 2021
Birds	*Phylloscopus trochilus*	Willow Warbler	WSBRC	13 records within 500 m	Closest record 0.21 km from Order Limits. Bincombe Wood (grid ref: ST923823)	2005 - 2023
Birds	*Scolopax rusticola*	Woodcock	WSBRC	6 records within 500 m	Locations imprecisely recorded (grid refs: ST8870, ST8482 & ST8680)	2015 - 2019
Birds	*Columba palumbus*	Woodpigeon	WSBRC	61 records within 500 m	Closest record 0.11 km from Order Limits. Surrendell Wood (grid ref: ST867824)	2006 - 2021
Birds	*Troglodytes troglodytes*	Wren	WSBRC	48 records within 500 m	Closest record 0.11 km from Order Limits. Starveall Farm (grid ref: ST879734)	2004 - 2023
Birds	*Emberiza citrinella*	Yellowhammer	WSBRC	27 record within 500 m	Closest record 0.1 km from Order Limits. North of Easton. Grid ref: ST893709	2000 - 2023
Birds	*Larus michahellis*	Yellow-legged Gull	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8870)	2006
Invertebrates						

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Invertebrates (Beetles)	*Ochthebius poweri*	*Rockface Beetle*	WSBRC	1 record within 500 m	0.2 km from Order Limits, at Lakeside. Grid ref: ST8639078930	2015
Invertebrates (Beetles)	*Agelastica alni*	*Alder Leaf Beetle*	WSBRC	1 record within 500 m	Record is 0.15 km from Order Limits, Boyds Farm (grid ref: ST88246775).	2021
Invertebrates (Butterflies)	*Hamearis lucina*	Duke of Burgundy	WSBRC	2 records within 500 m	Locations withheld due to sensitivity	2006
Invertebrates (Butterflies)	*Cupido minimus*	Small blue	WSBRC	1 record within 500 m	Locations withheld due to sensitivity	2011
Invertebrates (Butterflies)	*Coenonympha pamphilus*	Small Heath	WSBRC	12 records within 500 m	Closest record 0.02 km south west of Lime Down C (Grid Reference ST848826)	2000 - 2010
Invertebrates (Butterflies)	*Lasiommata megera*	Wall	WSBRC	4 records within 500 m	Closest record 0.43 km of Order Limits. South of Sevington (ST87157844)	2006 - 2011
Invertebrates (Butterflies)	*Satyrium w-album*	White-letter Hairstreak	WSBRC	2 records within 500 m	Closest record 0.44 km of Order Limits. East of Easton. Grid ref: ST898706	2008
Invertebrates (Moths)	*Tyria jacobaeae*	Cinnabar	WSBRC	1 record within 500 m	Closest record 0.02 km of Order Limits. East of lower Grove. Grid ref: ST87207663	2021
Invertebrates (Moths)	*Malacosoma neustria*	Lackey	WSBRC	1 record within 500 m	Record not precisely located. ST9282	2022
Invertebrates (Moths)	*Euplagia quadripunctaria*	Jersey Tiger	WSBRC	1 record within 500 m	Closest record 0.47 km from Order Limits. Southwest of	2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Chippenham (ST89497232)	
Invertebrates (Hymenoptera)	*Bombus ruderarius*	Red-shanked Carder Bee	WSBRC	1 record within 500 m	Recorded adjacent to the north east boundary of Lime Down E at Brickyard Scrubs LWS (Grid Reference ST929832)	2010
Invertebrates (Hymenoptera)	*Osmia bicolor*	Red-tailed Mason Bee	WSBRC	1 record within 500 m	Closest record is 0.3 km form Order Limits. Southwest of Chapel Knapp.	2012
Invertebrates (Molluscs)	*Arion (Arion) ater*	Large Black Slug	WSBRC	1 record within 500 m	Closest record 0.11 km south of Lime Down C at Surrendell Wood (Grid Reference ST867824).	2017
Plants						
Flowering Plants	*Berberis vulgaris*	Barberry	WSBRC	1 record within 500 m	Precise locations withheld due to sensitivity	2023
Flowering Plants	*Anagallis arvensis subsp. foemina*	Blue Pimpernel	WSBRC	1 record within 500 m	Recorded 0.225 km from Order Limits (Grid Reference ST887832) in 2013	2013
Flowering Plants	*Hyacinthoides non-scripta*	Bluebell	WSBRC	31 records within 500 m	Closest record 0.11 km from Order Limits. Surrendell Wood. ST867824	2004 - 2023
Flowering Plants	*Buxus sempervirens*	Box	WSBRC	4 records within 500 m	Closest record 0.11 km from Order Limits. Surrendell Wood. ST867824	2017 - 2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Euphorbia platyphyllos*	Broad-leaved Spurge	WSBRC	1 record within 500 m	Record is 0.37 km from Order Limits. Kent's Bottom (grid ref: ST864771)	2023
Flowering Plants	*Nepeta cataria*	Cat-mint	WSBRC	1 record within 500 m	Recorded 0.2 km south of Lime Down D (Grid Reference ST886829)	2008
Flowering Plants	*Gentianella germanica*	Chiltern Gentian	WSBRC	1 record within 500 m	Record is 0.3 km from Order Limits near. Eastlays Quarry. Grid ref: ST881676	2012
Flowering Plants	*Glebionis segetum*	Corn Marigold	WSBRC	1 record within 500 m	Record is 0.36 km from Order Limits near.Yatton Keynell (ST86997632)	2016
Flowering Plants	*Petroselinum segetum*	Corn Parsley	WSBRC	6 records within 500 m	Closest record is within Order Limits. ST885831	2008 - 2023
Flowering Plants	*Polygonum rurivagum*	Cornfield Knotgrass	WSBRC	1 record within 500 m	Record is 0.12 km from Order Limits. ST87147463	2016
Flowering Plants	*Centaurea cyanus*	Cornflower	WSBRC	2 records within 500 m	Closest record 0.36 km of Order Limits. Grid Reference ST86997632	2016 – 2019
Flowering Plants	*Euphorbia exigua*	Dwarf Spurge	WSBRC	6 records within 500 m	1 record within Order Limits. Near Kingway covert (Grid ref: ST859828	2007 - 2023
Flowering Plants	*Lemna gibba*	Fat Duckweed	WSBRC	1 record within 500 m	Recorded 0.49 km from Order Limits within a woodland pool at Brickyard Scrubs LWS (Grid Reference ST930832)	2015

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Foeniculum vulgare*	Fennel	WSBRC	2 records within 500 m	Closest record 0.36 km of Order Limits. Southwest of Chippenham. Grid reference: ST89827158	2020 - 2023
Flowering Plants	*Rumex pulcher*	Fiddle Dock	WSBRC	1 record within 500 m	Closest record 0.27 km. North of Westrop. (Grid Reference ST88557034).	2016
Flowering Plants	*Lithospermum arvense*	Field Gromwell	WSBRC	1 record within 500 m	Recorded 1.5m from Order Limits. ST885831	2008
Flowering Plants	*Stachys arvensis*	Field Woundwort	WSBRC	1 record within 500 m	Recorded within 0.19 km of Order Limits. Grid Reference ST887832,	2013
Flowering Plants	*Blysmus compressus*	Flat-sedge	WSBRC	1 record within 500 m	Recorded within 0.4 km within Order Limits. Grid ref: ST868747	2015
Flowering Plants	*Gaudinia fragilis*	French Oat-grass	WSBRC	2 records within 500 m	Closest record 0.4 km from Order Limits. ST89036929	2017 – 2018
Flowering Plants	*Sanguisorba officinalis*	Great Burnet	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8677)	2023
Flowering Plants	*Lactuca virosa*	Great Lettuce	WSBRC	5 records within 500 m	Closest record is 70m from Order Limits. Easton. ST890704	2023
Flowering Plants	*Rosa tomentosa*	Harsh Downy-rose	WSBRC	2 record within 500 m	Closest record 0.25 km from Order Limits. Ladbrookeside. Grid ref: ST88876937	2015 - 2018
Flowering Plants	*Valerianella carinata*	Keeled-fruited Cornsalad	WSBRC	2 records within 500 m	Closest record 0.39 km.	2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Northwest of Thingley. Grid Reference ST899705	
Flowering Plants	*Tilia platyphyllos*	Large-leaved Lime	WSBRC	1 record within 500 m	Locations imprecisely recorded. (ST9066)	2018
Flowering Plants	*Epilobium palustre*	Marsh Willowherb	WSBRC	1 record within 500 m	Locations imprecisely recorded. (ST8776)	2023
Flowering Plants	*Bromus commutatus*	Meadow Brome	WSBRC	2 records within 500 m	Locations imprecisely recorded. (ST8679 & ST8873)	2023
Flowering Plants	*Valerianella dentata*	Narrow-fruited Cornsalad	WSBRC	4 records within 500 m	Closest record 1.5m from Order Limits. Grid Reference ST885831.	2007 - 2013
Flowering Plants	*Poa angustifolia*	Narrow-leaved Meadow-grass	WSBRC	2 records within 500 m	Closest record 0.36 km from Order Limits. Boyd's Farm Quarry. Grid ref: ST87986770	2015 - 2023
Flowering Plants	*Silene noctiflora*	Night-flowering Catchfly	WSBRC	3 records within 500 m	Closest record 20 m from Order Limits. Grid Reference ST886829)	2008
Flowering Plants	*Groenlandia densa*	Opposite-leaved Pondweed	WSBRC	1 record within 500 m	Closest record 0.25 km from Order Limits. ST88746933	2018
Flowering Plants	*Veronica catenata*	Pink Water-speedwell	WSBRC	2 records within 500 m	Closest record 0.4 km (Grid Reference ST84468267).	2017
Flowering Plants	*Vulpia myuros*	Rat's-tail Fescue	WSBRC	1 record within 500 m	Recorded 0.3 km from Order Limits. Northeast of Thingley. Grid ref: ST898705	2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Flowering Plants	*Mentha suaveolens*	Round-leaved Mint	WSBRC	1 record within 500 m	Location imprecisely recorded (grid ref: ST8873)	2023
Flowering Plants	*Bromus secalinus*	Rye Brome	WSBRC	1 record within 500 m	Recorded 0.15 km from Order Limits. Bradfield Farm. Grid ref: ST891828	2013
Flowering Plants	*Onobrychis viciifolia*	Sainfoin	WSBRC	1 record within 500 m	Location imprecisely recorded. (grid ref: ST8873)	2023
Flowering Plants	*Rosa sherardii*	Sherard's Downy-rose	WSBRC	1 record within 500 m	Recorded 0.17 km from Order Limits near Chapel Knapp. ST88386815	2019
Flowering Plants	*Aphanes australis*	Slender Parsley-piert	WSBRC	1 record within 500 m	Recorded 0.46 km from Order Limits. Grid ref: ST87626857	2019
Flowering Plants	*Bromus racemosus*	Smooth Brome	WSBRC	6 records within 500 m	Closest record 0.23 km from Order Limits. Near Rodbourne (Grid ref: ST92998299)	2015 - 2023
Flowering Plants	*Medicago arabica*	Spotted Medick	WSBRC	2 records within 500 m	Closest record 0.36 km from Order Limits. ST89827158	2020 - 2023
Flowering Plants	*Anthemis cotula*	Stinking Chamomile	WSBRC	2 records within 500 m	Closest record is 0.18 km from Order Limits. Grid ref: ST887832 made in 2013	2013 - 2023
Flowering Plants	*Trifolium fragiferum*	Strawberry Clover	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8870)	2016
Flowering Plants	*Carex hostiana*	Tawny Sedge	WSBRC	1 record within 500 m	Recorded 50 m from Order Limits within plantation woodland at	2010

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Grid Reference ST926827	
Flowering Plants	*Hypericum androsaemum*	Tutsan	WSBRC	1 record within 500 m	Location imprecisely recorded (ST8866)	2020
Flowering Plants	*Papaver dubium subsp. lecoqii*	Yellow-juiced Poppy	WSBRC	4 records within 500 m	Locations imprecisely recorded. Grid references: ST8868, ST8971, ST8969 & ST8774	2016 - 2023
Flowering Plants	*Pyrola rotundifolia subsp. rotundifolia*	A subspecies of Round-leaved Wintergreen	WSBRC	2 records within 500 m	Closest record is 0.43 km from Order Limits. Boyd's Farm Quarry. Grid ref: ST88046751	2014 - 2015

Table 9-1-8: Records of Invasive Non-Native Species Derived from the Desk Study (Cable Route Corridor)

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
Animals						
Terrestrial Mammals	*Neovison vison*	American Mink	WSBRC	1 record within 500 m	365 m south of Cable Route Corridor at South Brook near Melksham (Grid Reference ST896654).	2023
Terrestrial Mammals	*Muntiacus reevesi*	Chinese Muntjac	WSBRC	5 records within 500 m	Closest record from with Cable Route Corridor at Easton (Grid Reference ST89037033)	2015 - 2023
Terrestrial Mammals	*Sciurus carolinensis*	Eastern Grey Squirrel	WSBRC	9 records within 500 m	Closest record within the boundary of Lime Down E (Grid Reference ST926827).	2002 - 2023

Species Group	Scientific Name	Common Name	Source	No. Records	Location	Date Range
					Recorded in 2004	
Plants						
Flowering Plants	*Impatiens glandulifera*	Himalayan Balsam	WSBRC	3 records within 500 m	Closest record 0.21 km north of Cable Route Corridor near Sherston (Grid Reference ST86038534).	2016 - 2023
Flowering Plants	*Fallopia japonica*	Japanese Knotweed	WSBRC	2 records within 500 m	Closest record 0.26 km east of Cable Route Corridor at Thingly (Grid Reference. ST898704)	2015
Flowering Plants	*Cotoneaster horizontalis*	Wall Cotoneaster	WSBRC	1record within 500 m	0.42 km west of Cable Route Corridor at Boyd's Farm Quarry (Grid Reference ST880675).	2015

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Annex A - Target Notes

4.1.1 Target notes recorded during Extended UKHab Surveys of the Solar PV Sites and Cable Route Corridor between June 2023 and July 2025 are presented in the below tables (Table A1 to Table A6). These tables correspond to target notes represented on the following figures:

- **ES Volume 2, Figure 9.1.8: Baseline Habitats Map – Lime Down A [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.9: Baseline Habitats Map – Lime Down B [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.10: Baseline Habitats Map – Lime Down C [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.11: Baseline Habitats Map – Lime Down D [EN010168/APP/6.2]**;
- **ES Volume 2, Figure 9.1.12: Baseline Habitats Map – Lime Down E [EN010168/APP/6.2]**; and
- **ES Volume 2, Figures 9.1.13 to 9.1.24: Baseline Habitats Map – Cable Route Corridor [EN010168/APP/6.2]**.

Table A1: Target Notes – Lime Down A

Number	Target Note
1	Rabbit burrow.
2	Brown hare.
3	Mammal path through hedge.
4	Mammal path through hedge.
5	Brown hare.
6	Rabbit warren at base of oak.
7	Rabbit burrow.
8	Brown hare.
9	Barn owl pellet.

Table A2: Target Notes – Lime Down B

Number	Target Note
1	Roe deer.
2	Rubble pile at base of hedgerow, suitable for sheltering reptiles and amphibians.

Number	Target Note
3	Rabbit burrow.
4	Brown hare.
5	Mammal path, with badger guard hairs noted on fence.
6	Large rubble and stone pile at woodland edge, suitable for sheltering reptiles and amphibians.
7	Manure pile along edge of field track, with limited reptile potential.

Table A3: Target Notes – Lime Down C

Number	Target Note
1	Barn owl flushed, with potential roosting features in large, dying ash.
2	Brown hare.
3	Two brown hare.
4	Piles of old hay and tree stumps, with limited potential for reptiles and invertebrates.
5	Pheasant hopper.
6	Deadwood pile in field corner with potential for sheltering reptiles, amphibians and hedgehog.
7	Pile of stone aggregate, sand and rubble with potential for sheltering reptiles and amphibians.
8	Water tower.
9	Willow scrub surrounding pond.
10	Pheasant hopper.
11	Small group of trees and scrub at convergence of hedgerows.

Table A4: Target Notes – Lime Down D

Number	Target Note
1	Rabbit burrow in field margin.
2	Badger latrine.
3	Rabbit burrow in field margin.
4	Convergence of watercourses, forming pool.
5	Mammal path through hedgerow.
6	Two small, wooden huts.
7	Area of loose stone aggregate.
8	Frequent mammal paths at field boundaries.
9	Badger snuffle holes.

Number	Target Note
10	Roe deer.
11	Roe deer.
12	Spoil heap covered in ruderals and bramble scrub with potential for sheltering reptiles and amphibians.
13	Roe deer.
14	Sporadic blackthorn scrub along boundary.
15	Brown hare.

Table A5: Target Notes – Lime Down E

Number	Target Note
1	Pheasant hoppers.
2	Log pile suitable for sheltering reptiles, amphibians and hedgehog.
3	Log pile suitable for sheltering reptiles, amphibians and hedgehog.
4	Mammal path with badger guard hair noted on fence.
5	Small patch of dense mixed scrub.
6	Frequent mammal paths at field boundaries.
7	Small patch of bramble scrub.
8	Harvest mouse nest present at field margin.

Table A6: Target Notes – Cable Route Corridor

Number	Target Note
1	Damp area in corner of field fed by running wet ditch from north, with large crack willow, rushes, water dropwort, watercress.
2	Historic rock pile structure; potential wildlife refuge, similar to a dry stone wall.
3	Roe deer and brown hare.
4	Scrub surrounding P177; species include blackthorn, hawthorn, elm and elder.
5	Stand of elm in field corner.
6	Drystone wall remnants with potential for sheltering amphibians and reptiles.
7	Drystone wall remnants within hedge with potential for sheltering amphibians and reptiles.
8	Dry stone wall with hawthorn, elder and bramble growth. Evidence of remnant, defunct hedgerow.
9	Rabbit burrow - tunnel quickly narrows and rabbit droppings present in entrance.
10	8 m wide grass margin.

Number	Target Note
11	Small earth hollows with ruderals, and short grass patches with calcareous species in southern part of field.
12	Area of rank, overgrown modified grassland and ruderals within electric fenced area. Log pile suggests tree has recently been removed. Potential for sheltering reptiles, and for nesting birds.
13	Post and rail fence overgrown with rank grasses.
14	Post and rail fence overgrown with rank grasses and ruderals. Two small goat willow trees noted.
15	Large pile of rotting hay - limited suitability for sheltering reptiles.
16	Rabbit hole in use.
17	Badger snuffle holes and mammal paths along hedge.
18	Log and manure pile at hedge base, suitable hibernaculum.
19	Brown hare.
20	Spoil heap with potential for sheltering reptiles.
21	Rabbit warren along hedge.
22	Rabbit warren at field access.
23	Two brown hares.
24	Large oak with hollow trunk - suitable for barn owl nesting.
25	Ash tree suitable for barn owl nesting.
26	Ash tree suitable for barn owl nesting.
27	[redacted].
28	Badger latrine.
29	Badger latrine.
30	Brown hare.
31	Brown hare.
32	Frequent mammal paths and push throughs at field boundaries.