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PRELIMINARY ECOLOGICAL APPRAISAL

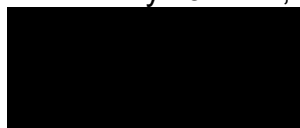
At

Plot 3A - Substation

Wrexham Industrial Estate
Bryn Lane
Wrexham
LL13 9UT

NGR: SJ 39009 50328

Prepared for:	FI Facilities Management Ltd
Written by:	Ysobella Cox, UES Graduate Ecologist
Approved by:	Kathryn James, UES Ecology Project Manager



Date: 22nd October 2023
UES reference: UES03448/33

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EXECUTIVE SUMMARY

United Environmental Services Ltd (UES) was commissioned by FI Facilities Management Ltd to carry out a baseline ecological survey of a parcel of land at Plot 3A, Wrexham Industrial Estate. A desk study and preliminary ecological appraisal (PEA) survey were undertaken on 2nd October 2023, including searches using the Multi Agency Geographic Information Centre (MAGIC).

The PEA provides an assessment of potential ecological impacts associated with the development of the land parcel. The development proposals include the construction of an electrical substation.

The proposed development site has an area of approximately 0.1ha and is dominated by tall ruderal vegetation with areas of mature and young dense scrub. The southern section of the site is mainly comprised of amenity grassland.

The results of the survey combined with the results of the desk study have highlighted the requirement for further work in relation to the following habitats and species:

- **Amphibians** – reasonable avoidance measures (RAMs) to be implemented during the construction phase of the development.
- **Bats** – the dead tree onsite has been assessed as having low potential to support roosting bats. Soft felling techniques to be implemented to minimise any incidental risk of harm to bats, as detailed in section 4.2.2 of this report.
- **Breeding birds** – site clearance, tree felling and vegetation clearance are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If not possible and works need to take place during this period, a targeted nest survey is to be undertaken immediately prior to the works by a suitably qualified ecologist or an ecological clerk of works appointed to oversee the works.
- **Invasive species** – hollyberry cotoneaster *Cotoneaster bullatus* to be eradicated prior to the commencement of works in this area.
- **Ditch** – specific procedures and control measures will need to be implemented to ensure that there is no risk of input into the ditch.

Mitigation measures, as detailed in section 4, should be adhered to, which may in some cases negate the need for further survey work.

This report should be read with appendices 1 to 7, which include results of the desk study, GIS phase 1 habitat mapping, photographs of site and relevant statutory guidance.

1 INTRODUCTION

1.1 Author, surveyors, qualifications and scope of study area

This report is written by Ysobella Cox BSc MBiol, UES Graduate Ecologist. Surveyors include:

- Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist. Tom holds a level 5 Botanical Society for Britain and Ireland (BSBI) field identification skills certificate (FISC), which certifies him as competent to undertake phase 1 habitat and national vegetation classification (NVC) surveys.

The report provides an assessment of the potential ecological impacts associated with the proposed development of a parcel of land at Plot 3A, Wrexham.

The zone of influence considered within the scope of the survey includes all land within the red line boundary. Where relevant, other ecological resources, receptors and important habitats which are spatially separate from the site are considered.

1.2 Survey objectives

UES was commissioned in September 2023 to conduct a PEA of the proposed development site. This was completed in order to:

- Establish baseline conditions and determine the importance of ecological features present or potentially present within the survey area
- Identify key ecological constraints to the project
- Make recommendations for design options to avoid significant effects on important ecological resources at an early stage of development planning
- Identify potential requirement for further surveys for nationally or internationally protected species which may be present on site
- Identify potential requirement for mitigation or compensation, including measures that may be required based on further surveys

1.3 Proposed development

The proposed development includes the construction of an electrical substation.

1.4 Structure of the report

This report is a baseline appraisal that forms the basis for further ecological surveys and Environmental Impact Assessments (EIA) if required. In the majority of cases the preliminary ecological assessment will not provide all the ecological data required by the Local Planning Authority to determine an application, especially in the event that protected habitat or species issues are present or likely.

This report should be read with appendices 1 to 7, which include results of the desk study, GIS phase 1 habitat mapping, photographs of site and relevant statutory guidance.

2 METHODOLOGY

This PEA comprises a desk study and a field survey. The desk study is conducted in order to collate ecological information on species and / or habitats of interest that may be present. The field survey is conducted in order to assess the habitats and their importance, both on site and in the context of their wider surroundings.

2.1 Desk study

The following resources were used to inform the desk study:

- National – Using the UK government's MAGIC website, statutorily protected sites were scoped to a distance of 10km from the application site.
- Local – UES has not been commissioned to undertake an environmental records search at this point.

2.2 Field survey

An ecological walkover survey was carried out on 2nd October 2023 by Tom Kenwright. The purpose of the survey was to identify, record and map dominant habitats types within the development area and highlight any further species surveys that may be required based on the quality of those habitats. When conducting the surveys particular focus was concentrated on the following species and habitat features:

- | | |
|------------------|-------------------------|
| • Amphibians | • Hedgerows |
| • Reptiles | • Plant communities |
| • Badger | • Invasive species |
| • Bats | • Otter |
| • Hazel dormouse | • Water vole |
| • Birds | • White-clawed crayfish |
| • Trees | |

The habitats were assessed by using the phase 1 habitat survey technique, which is a system for environmental audit widely used within the environmental consultancy field. The survey was undertaken in accordance with the methodology in the 'Handbook for phase 1 habitat survey - A technique for environmental audit' (JNCC, 2010) as recommended by Natural England, and in the "Guidelines for Preliminary Ecological Appraisal" (CIEEM, 2017).

The survey area encompasses all of the land within the development footprint and the land to a distance of 30m outside it where accessible. In line with recognised guidelines, ponds were also scoped to a distance of 500m (250m radius from the survey area).

The phase 1 habitat survey methodology was extended to record any signs of habitats suitable to support protected / invasive species and any incidental observations of other noteworthy species.



2.3 Survey limitations

The survey was conducted in October when not all plants are readily identifiable. However sufficient vegetative identification was possible, allowing a robust assessment of habitats to be undertaken. In addition, the area was surveyed in August and September 2011 and June 2022 as part of the PEA for the wider development site; a time of year when most plant species are readily identifiable.

3 RESULTS

3.1 Desk study

A desk study was conducted for the proposed development site and surrounding area. Statutorily protected sites were scoped to a distance of 10km. Further results of the desk study can be found at Appendix 1 – Desk study.

3.1.1 Protected sites

There are no statutorily protected sites within 2km of site but there are fifteen statutorily protected sites (designated for ecological reasons) within 2 – 10km of site:

- Afon Dyfrdwy / River Dee (England) SSSI¹
- Afon Dyfrdwy a Llyn Tegid / River Dee and Bala Lake (England) SAC²
- Chwarel Singret SSSI
- Cloy Brook Pastures SSSI
- Dee Cliffs, Farndon SSSI
- Gatewen Marsh SSSI
- Johnstown Newt Sites SAC
- Llay Bog SSSI
- Marford Quarry SSSI
- Midland Meres & Mosses Phase 2 Ramsar
- Old Pulford Brook Meadows SSSI
- Sontley Marsh SSSI
- Stryt Las a'r Hafod SSSI
- Vicarage Moss SSSI
- Well Rough and Long Plantation SSSI

3.2 Baseline conditions – Habitats

The results of the PEA are also shown on the accompanying map at Appendix 2 – Phase 1 habitat plan. Habitats are colour-coded in accordance with the phase 1 standard. A full botanical species list is provided at Appendix 6.

The local area predominantly consists of industrial units to the west and south, with arable land to the east. The following principle habitat types were characterised on site:

- A2.1 Dense scrub
- A3.1 Scattered broadleaved trees
- C3.1 Tall ruderal
- J1.2 Amenity grassland
- J3.6 Building

3.2.1 A2.1 Dense scrub

There are two areas of the dense scrub within the proposed development site which are separated by an area of tall ruderal vegetation (see Appendix 5 – Photographs, Photograph 1). The northern section of dense scrub is young and contains species including pedunculate oak saplings *Quercus robur*, blackthorn *Prunus spinosa*, dog rose *Rosa canina*, silver birch saplings *Betula pendula*, ash saplings *Fraxinus excelsior*, and bramble *Rubus fruticosus* agg.

¹ Site of Special Scientific Interest

² Special Area of Conservation

The area of dense scrub within the southern section of the site, adjacent to the building, is mature and contains goat willow *Salix caprea*, grey willow *Salix cinerea*, wild cherry saplings *Prunus avium*, and hawthorn *Crataegus monogyna*. Hollyberry cotoneaster is also present within the dense scrub which is an invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (see Appendix 2 – Phase 1 habitat plan, Target Note 1; Photograph 2). The ground flora is mostly bare (Photograph 3), but species present include stinging nettle *Urtica dioica*, dandelion *Taraxacum officinale* agg., common bent *Agrostis capillaris*, Yorkshire fog *Holcus lanatus*, cleavers *Galium aparine*, bramble, herb robert *Geranium robertianum*, broadleaved dock *Rumex obtusifolius*, cow parsley *Anthriscus sylvestris*, and spear thistle *Cirsium vulgare*.

3.2.2 A3.1 Scattered broadleaved trees

There is a single, dead broadleaved tree within the proposed development site which contains potential bat roosting features found to be in the same condition as the previous survey (Target Note 2; Photograph 4).

3.2.3 C3.1 Tall ruderal

There is an area of tall ruderal vegetation surrounding the dense scrub which is dominated by great willowherb *Epilobium hirsutum*, with abundant stinging nettle (Photograph 5). Other species present within the tall ruderal vegetation include creeping thistle *Cirsium arvense*, cleavers, broadleaved dock, spear thistle, hedge bindweed *Calystegia sepium*, and hoary ragwort *Senecio erucifolius*.

3.2.4 J1.2 Amenity grassland

The southern section of the site is comprised of amenity grassland (Photograph 6). Species present include perennial ryegrass *Lolium perenne*, Yorkshire fog, smooth meadow grass *Poa pratensis*, common bent, red fescue *Festuca rubra*, annual meadow grass *Poa annua*, selfheal *Prunella vulgaris*, creeping buttercup *Ranunculus repens*, common daisy *Bellis perennis*, common sorrel *Rumex acetosa*, common mouse-ear *Cerastium fontanum*, common bird's-foot trefoil *Lotus corniculatus*, marsh thistle *Cirsium palustre*, spear thistle, dandelion, common ragwort *Senecio jacobaea*, white clover *Trifolium repens*, common cat's-ear *Hypochaeris radicata*, and dove's-foot crane's-bill *Geranium molle*.

3.2.5 J3.6 Building

There is a single building directly adjacent to the eastern boundary of the proposed development site. It has a corrugated metal roof and the external walls are constructed from redbrick (Photograph 7).

3.3 Baseline conditions – Protected species or resources

As part of the PEA, specific observations of wildlife were also recorded. Wildlife observations focused on protected species, invasive species or species of conservation concern. Habitats

with potential to support protected species were noted with a view to follow up surveys if required.

3.3.1 Amphibians

The terrestrial habitats within the development footprint are broadly suitable for GCNs. The grassland, dense scrub and tall ruderal vegetation may provide sheltered commuting and foraging opportunities.

There are 12 ponds and 3 ditches located within 250m of the proposed development site (see Appendix 4 – Pond plan). Great crested newt presence / absence, population size class assessment and eDNA surveys of the surrounding ponds and ditches were undertaken by UES across March to June 2022 (UES03448/09) as part of the wider development site. The results of the surveys for waterbodies within 250m of the proposed development site are detailed below:

- P9, P32a-c, P39 – P44 and D11 – no access
- P1, P31 and D3 – no evidence of GCN recorded during the surveys. These ponds and ditches also returned negative eDNA results. GCNs are not considered to be present within these ponds and ditches.
- D1 - no evidence of GCNs was found in D1, however samples taken from the ditch returned positive GCN DNA results. This indicates that GCNs use this waterbody, although it is likely to be in very low numbers and / or on a transient basis.

A medium population of GCN were recorded in ponds to the east of the proposed development site; the closest pond (P4) is approximately 370m to the northeast of site. However, given the small size of the development, and the distance between the proposed development and nearest known breeding pond, it is considered that the implementation of reasonable avoidance measures will reduce the risk to GCN to a negligible level.

3.3.2 Reptiles

The dense scrub and field margins, where the sward has grown slightly longer, could be used by commuting and foraging common reptile species. However, no evidence of reptiles was identified during the walkover survey, and no reptiles were recorded during the presence / absence surveys conducted April to September 2022 of the wider development site (UES03448/08).

3.3.3 Badger

The habitats onsite mainly consists of dense scrub, tall ruderal vegetation and amenity grassland which may provide some foraging and commuting opportunities for badgers *Meles meles*. No evidence of badger activity, including setts, mammal runs or hairs, was identified during the walkover survey. However, an outlier sett is known to be present within the wider development boundary (UES03448/33).

3.3.4 Bats

There is a single building located directly adjacent to the eastern boundary of the proposed development site. The building was assessed as having negligible potential to support roosting bats during the walkover survey undertaken by UES for the PEA of the wider development site (UES03448/01).

There is a single, dead tree within the proposed development site which may support roosting bats due to the presence of potential roosting features (Target Note 2). The tree was assessed as having moderate potential to support roosting bats during a ground-level tree assessment undertaken by UES in 2022 (UES03448/06). As such, the tree was subjected to further aerial inspections in 2022 (UES03448/16) where the tree was downgraded to having low potential to support roosting bats.

3.3.5 Hazel dormouse

The habitats on site are relatively unsuitable for dormice *Muscardinus avellanarius*, as there are no woodlands or hedgerows onsite. Therefore, hazel dormouse are not considered to be present onsite.

3.3.6 Birds

The areas of dense scrub, tall ruderal vegetation and scattered tree all provide suitable nesting opportunities for breeding birds in the summer.

The following species were recorded within the proposed development site during breeding bird surveys conducted by UES March to August 2022 (UES03448/11): bullfinch *Pyrrhula pyrrhula*, goldfinch *Carduelis carduelis*, blue tit *Cyanistes caeruleus*, chiffchaff *Phylloscopus collybita*, wren *Troglodytes troglodytes*, robin *Erithacus rubecula*, blackcap *Sylvia atricapilla* and whitethroat *Curruca communis*. Whitethroat and bullfinch are both red list species (either BoCC or PSBW).

3.3.7 Trees

The tree on site may be protected by a Tree Preservation Order (TPO), for which a check has not been undertaken.

3.3.8 Hedgerows

There are no hedgerows onsite.

3.3.9 Plant communities

No plant communities or individual species were recorded on site which are afforded statutory protection in their own right.

3.3.10 Invasive species

Hollyberry cotoneaster was identified within the dense scrub which is an invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (Target Note 1; Photograph 2).

3.3.11 Otter, water vole and white-clawed crayfish

There is a ditch located approximately 5m to the west of the proposed development site. The ditch is almost entirely shaded by dense scrub and has predominantly unvegetated banks, lacking sufficient foraging opportunities for water voles. The ditch is also considered to be unsuitable for otters due to the lack of fish on which to forage and a lack of connectivity to the larger watercourses within the wider landscape that would cause them to be used for commuting purposes. Furthermore, the substrate is unlikely to provide refugia, breeding and foraging opportunities for white-clawed crayfish. Therefore, it is unlikely that otter, water vole and white-clawed crayfish will be present onsite.

3.3.12 Hedgehog

The areas of dense scrub, tall ruderal and grassland on site may provide suitable foraging and commuting opportunities for hedgehogs.

4 EVALUATION AND RECOMMENDATIONS

This section provides a brief assessment of the likely impacts associated with the proposed development on the receptors identified during the walkover survey and desk study. It also includes any mitigation and compensation measures which may be required for the proposed development to proceed.

4.1 Habitats

4.1.1 Designated sites

The sites identified during the desk study were cross-referenced with the survey area relevant to this report. The closest statutorily protected site is Afon Dyfrdwy / River Dee SSSI, which lies approximately 2.38km to the east of the proposed development site.

Given the distances from site and the scale of development, it is considered unlikely that the proposed development will have any direct or indirect impact on this or any other designated sites. The proposed development is purely industrial / commercial and does not have a residential aspect. As such, it is considered that the proposed development will not result in any additional significant recreational pressure upon any of the protected sites within the local area.

4.1.2 Trees

There is a single dead tree within the proposed development site.

Construction impacts

Site clearance and setting out will involve the direct loss of the tree on site as an ecological resource.

Mitigation

Not applicable.

Compensation

It is not feasible to include replacement landscaping within the development boundary; however, significant landscaping including tree planting, will be undertaken as part of the wider site development.

Operational impacts

No operational impacts are envisaged.

4.1.2 Watercourse

A ditch is present along the eastern site boundary, approximately 5m from the proposed development site.

Construction impacts

Site clearance and construction works could result in pollution to the ditch to the west of the proposed development site.

Mitigation

Specific procedures and control measures will need to be implemented to ensure that there is no risk of input into the ditch. These measures should be set out by the contractors prior to the commencement of works and will need to be agreed with the Local Planning Authority and other statutory consultees. These measures should conform to best practice guidance and include the cleaning of all machinery and equipment before use on site to prevent contamination of the watercourse with foreign abiotic and biotic materials.

The proposed development site is located approximately 5m from the ditch, which should be maintained as a buffer zone to protect it from disturbance and to reduce the risk of pollution. The buffer zone should be adequately fenced off and no vegetation clearance or other construction activities should take place within it.

Compensation and enhancement

Not applicable.

Operational impacts

No operational impacts are envisaged.

4.2 Species

4.2.1 Amphibians

GCN are known to be present in ponds within the surrounding area and the land to the east of the site, due to GCN surveys undertaken by UES.

Construction impacts

Potential impacts include direct harm, injury and / or death to individuals.

Mitigation

The works on site should be completed under the following reasonable avoidance measures, in order to safeguard GCN in the event that they are present on site at the time of works:

- The grassland and scrub is to be mown / cleared to have a sward length below 10cm. The sward length is to be reduced gradually in order to give any amphibians present time to move off site of their own accord. The mown / cleared area will then be maintained with a short sward until the works on site have been completed.
- Any potential hibernacula will be removed from the working area by a suitably experienced ecologist, and placed in a suitable area close to site. Hibernacula could include piles of rubble, bricks, loose soil, debris, brash piles etc.

- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45 degree angle to allow amphibians to escape. Any open excavations should be checked for amphibians in the morning prior to start of works on site.
- Materials will be stored on pallets off the ground in order to reduce the risk of amphibians sheltering underneath them.
- UES will remain on-call throughout the development and if any newts are encountered, work on site is to stop immediately and ecological advice is to be sought. UES can be contacted directly on 01565 757788.

Operational impacts

No operational impacts are envisaged.

4.2.2 Bats

There is a single tree within the proposed development site, which has been assessed as having low potential to support roosting bats.

Construction impacts

If bats are roosting within the tree during felling, they are at risk of direct harm and disturbance and the roosts will be lost permanently. Inappropriate landscaping could also result in the severing of commuting corridors used by bats as well as the loss of foraging habitats.

Mitigation

In accordance with BCT guidelines, no further survey work is required, however, soft felling techniques should be implemented to minimise any incidental risk of harm to bats. The tree must be removed in sections, which will be lowered to the ground and left for a period of 24 hours before removing them from the site.

Compensation and enhancement

It is not feasible to include replacement roosting opportunities within the development boundary; however, numerous bat boxes will be installed and significant landscaping will be undertaken as part of the wider site development.

Operational impacts

No operational impacts are envisaged.

4.2.3 Birds

There are a number of habitats, such as dense scrub, tall ruderal vegetation and a tree which could support breeding birds.

Construction impacts

Tree felling and vegetation removal could result in the direct loss of nests, any individuals within the nests and of available nesting territories if conducted during the breeding season.

Mitigation

Site clearance, tree felling, and vegetation removal (including enabling works) are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works.

Compensation and enhancement

It is not feasible to include replacement nesting opportunities within the development boundary; however, numerous bird boxes will be installed and significant landscaping will be undertaken as part of the wider site development.

Operational impacts

No operational impacts are envisaged.

4.2.4 Invasive species

A stand of hollyberry cotoneaster was identified within the dense scrub. Hollyberry cotoneaster is listed under Schedule 9 of the Wildlife and Countryside Act 1981. As such, it is an offence to plant or otherwise cause this species to grow in the wild.

Construction impacts

Site clearance and setting out could result in the disturbance and dispersal of hollyberry cotoneaster on and off site.

Mitigation

Invasive species will need to be eradicated prior to the start of works in this area, in order to ensure that they do not spread across the site or onto adjacent areas. It is essential that a competent and qualified person carries out any herbicide treatment.

These species can be eradicated by chemical treatment with a glyphosate herbicide or through mechanical means such as excavation. Any herbicide treatment should be undertaken by trained operatives holding the relevant licences.

Operational impacts

If hollyberry cotoneaster is eradicated prior to the start of works on site, no further operational impacts are envisaged. However, complete eradication is an ongoing process, and if it is not treated as such, it can return and continue to spread. This could become more acute with increased activity on site.



5 CONCLUSION

The proposed development site has an area of approximately 0.1ha and is dominated by tall ruderal vegetation with areas of mature and young dense scrub. The southern section of the site is mainly comprised of amenity grassland.

The preliminary ecological appraisal has highlighted potential issues with the following ecological receptors on or adjacent to site: amphibians, invasive species, breeding birds, bats and watercourses. Provided these issues are addressed in accordance with the recommendations detailed in this report, the development may proceed without adversely impacting the aforementioned ecological receptors.



6 REFERENCES

CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal* (Second Edition).

DEFRA (2019). *MAGIC* [online]. Available at: <http://magic.defra.gov.uk/>.

JNCC (2010). *Handbook for Phase 1 habitat survey: A technique for environmental audit*.

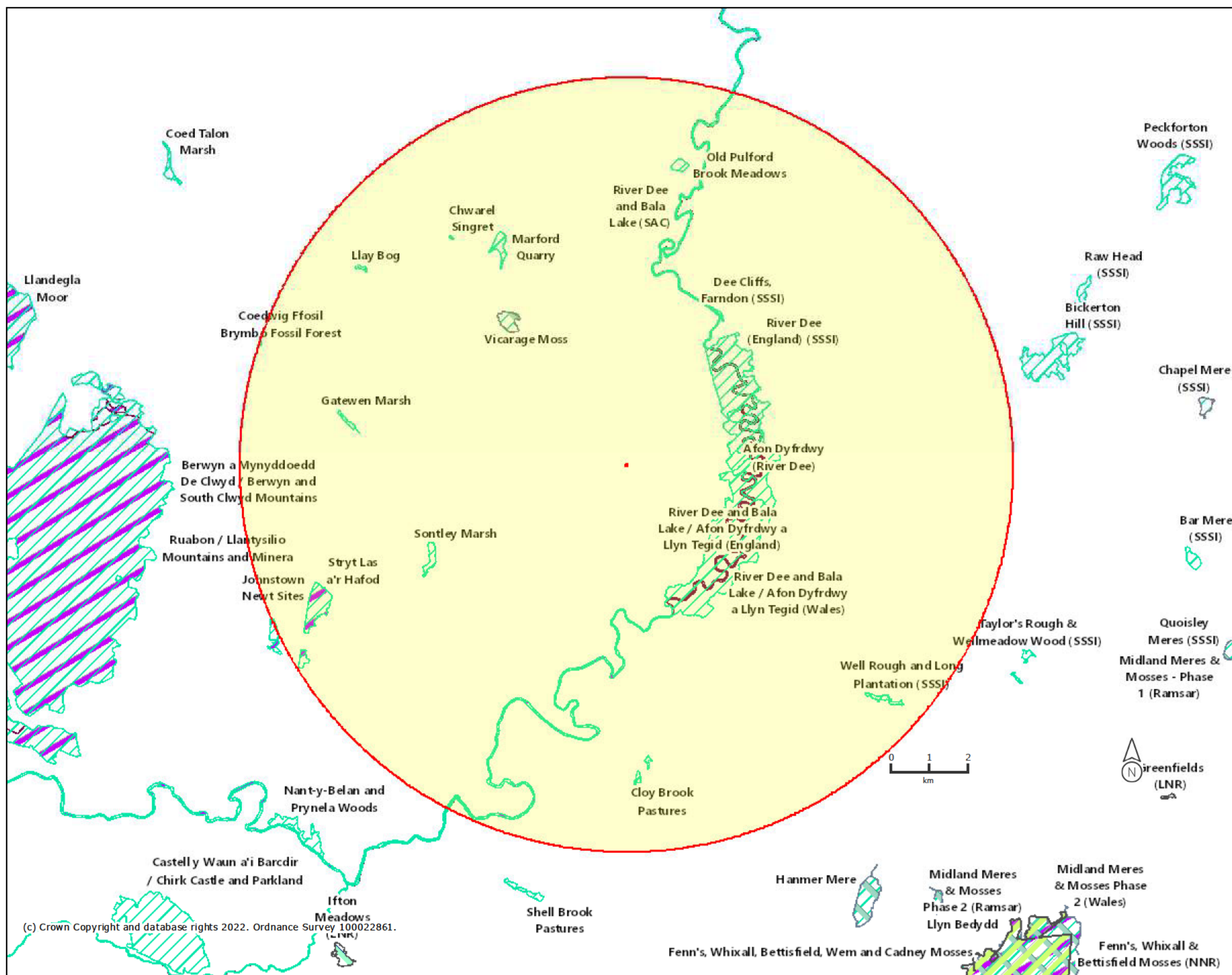
MHCLG (2021). National Planning Policy Framework (NPPF).



APPENDICES

Appendix 1 – Desk study

Statutorily Designates Sites (10km)



Legend

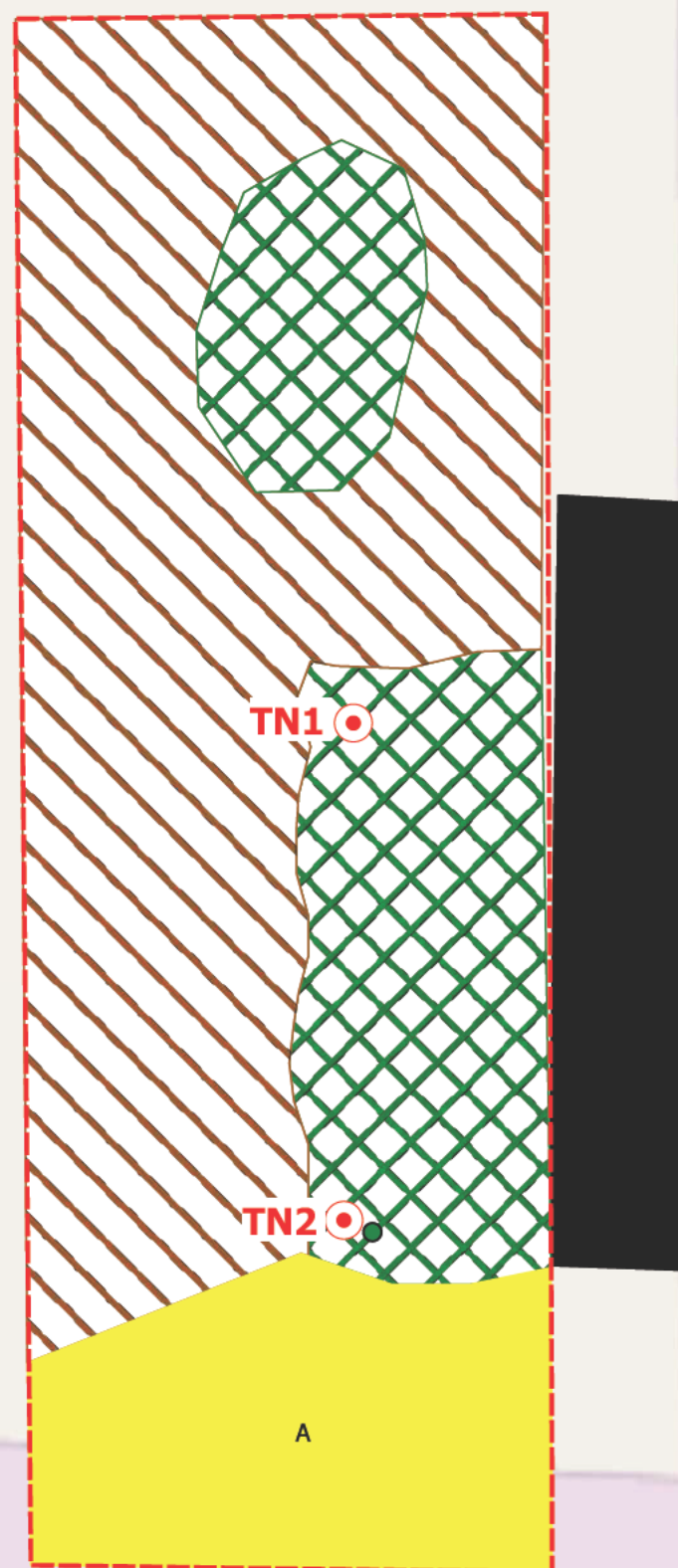
- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Ramsar Sites (Wales)
- Sites of Special Scientific Interest (England)
- Sites of Special Scientific Interest (Wales)
- Special Areas of Conservation (England)
- Special Areas of Conservation (Wales)
- Special Protection Areas (England)
- Special Protection Areas (Wales)



Appendix 2 – Phase 1 habitat plan

Target note 1 – Hollyberry cotoneaster *Cotoneaster bullatus*

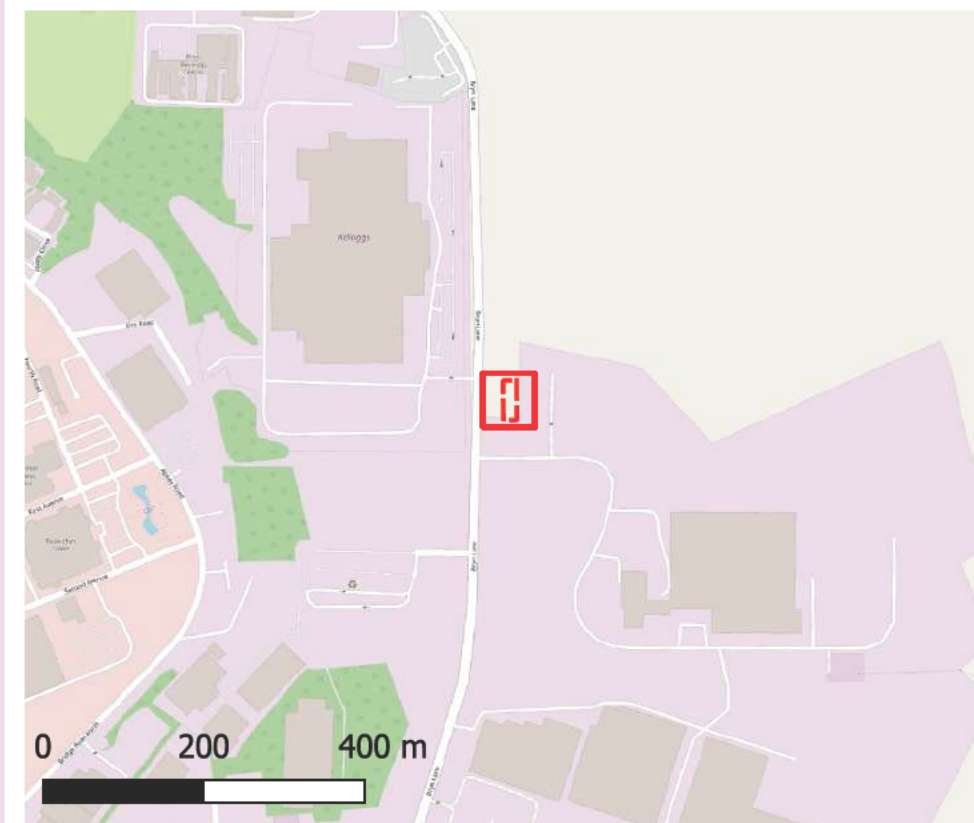
Target note 2 – Dead tree with potential roosting features



0 15 30 m

Preliminary Ecological Appraisal

**Site: Plot 3A (Substation),
Wrexham**
NGR: SJ 39009 50328
Author: Ysobella Cox
Date: 16.10.2023



Key

-  A2.1 - Dense scrub
-  A3.1 - Broadleaved scattered trees
-  C3.1 - Tall ruderal
-  J1.2 - Amenity grassland
-  J3.6 - Buildings
-  Target Notes
-  Survey boundary

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Appendix 3 – Aerial photographs



Plot 3A (Substation), Wrexham

Close aerial photograph

— Development boundary





Plot 3A (Substation), Wrexham

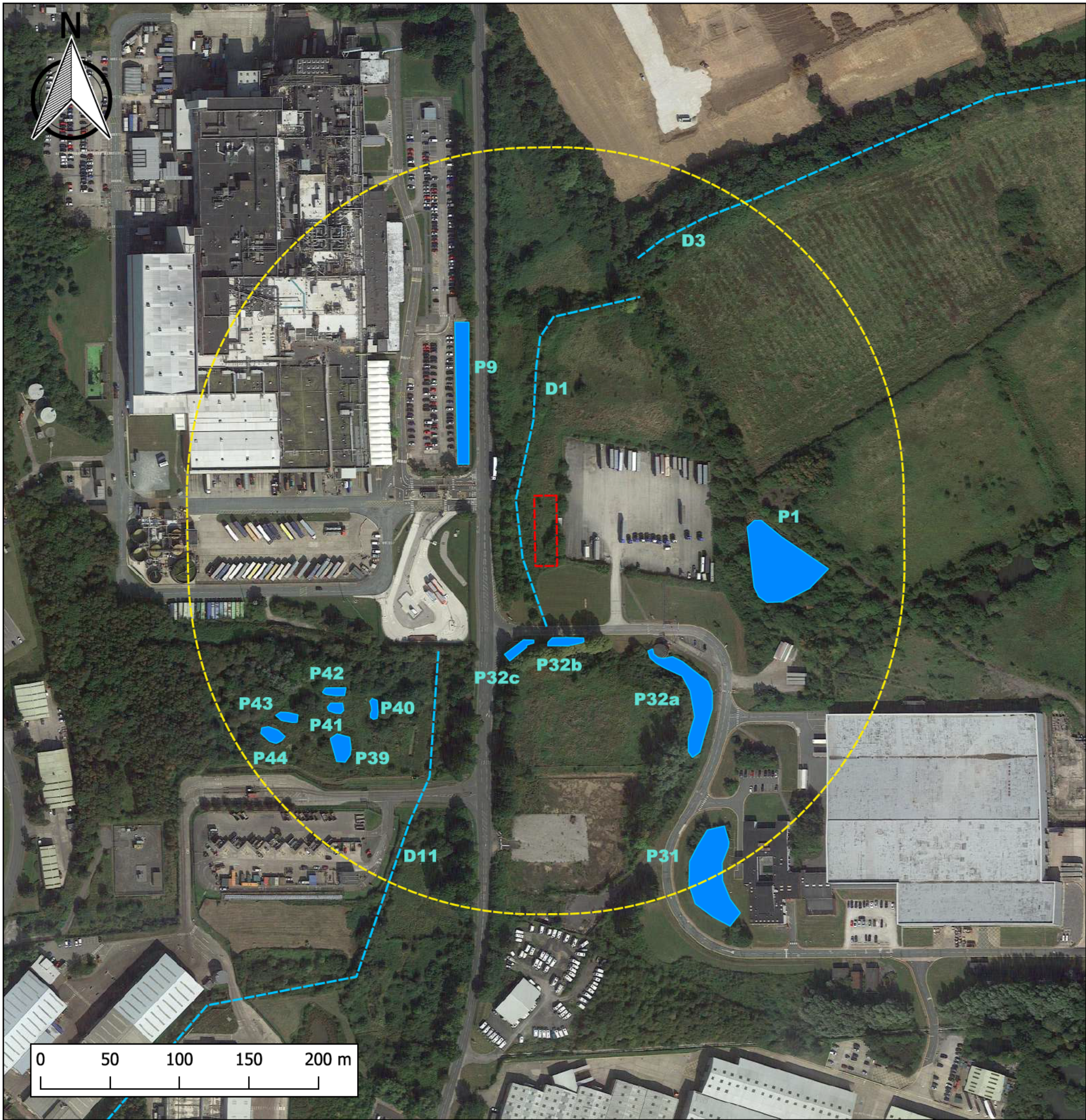
Wide aerial photograph

→ Site location



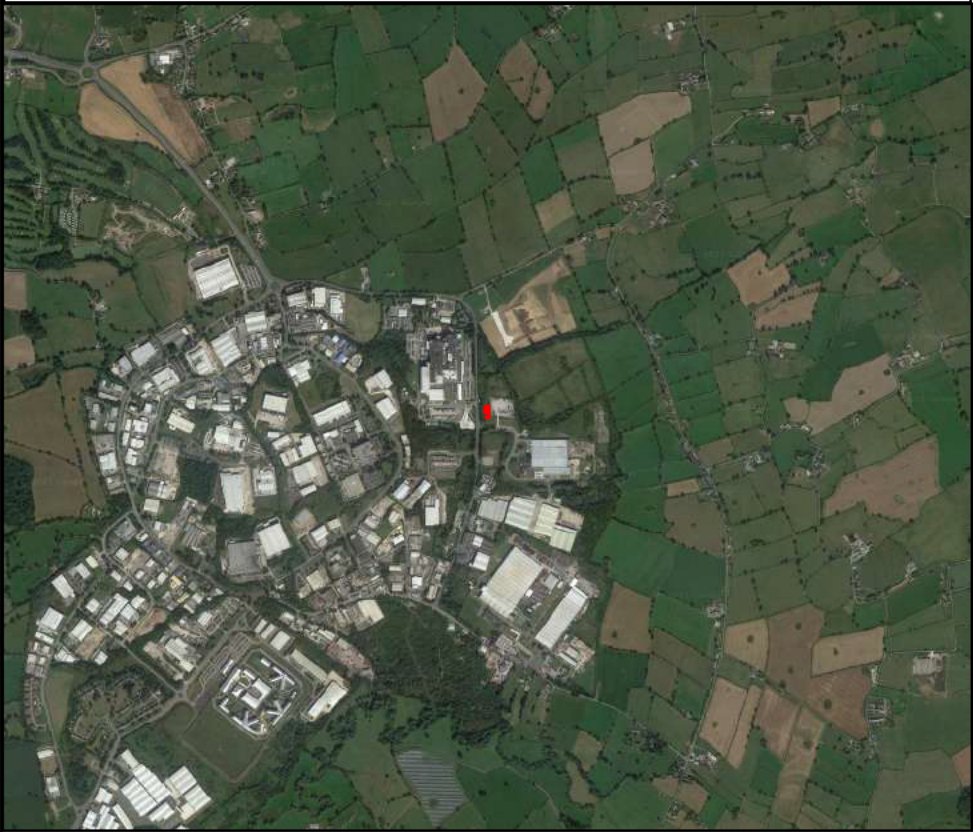


Appendix 4 – Pond plan



Pond Plan

Site: Plot 3A - Substation
NGR: SJ 39009 50328
Author: Kathryn James
Date: 23/10/23



- KEY:**
- Development boundary
 - 250m buffer
 - Ponds / ditches

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Appendix 5 – Photographs



Photograph 1. Dense scrub within the proposed development site.



Photograph 2. Hollyberry cotoneaster identified within the dense scrub.



Photograph 3. The understorey of the dense scrub.



Photograph 4. A dead tree within the proposed development site, showing potential roosting features.



Photograph 5. Tall ruderal vegetation within the proposed development site.



Photograph 6. Amenity grassland within the southern section of the proposed development site.



Photograph 7. The structure of the roof and external walls of the building adjacent to the site.



Appendix 6 – Botanical species list

Scientific name	Common name
<i>Agrostis capillaris</i>	Common bent
<i>Anthriscus sylvestris</i>	Cow parsley
<i>Bellis perennis</i>	Common daisy
<i>Betula pendula</i>	Silver birch
<i>Calystegia sepium</i>	Hedge bindweed
<i>Cerastium fontanum</i>	Common mouse-ear
<i>Cirsium arvense</i>	Creeping thistle
<i>Cirsium palustre</i>	Marsh thistle
<i>Cirsium vulgare</i>	Spear this le
<i>Cotoneaster bullatus</i>	Hollyberry cotoneaster
<i>Crataegus monogyna</i>	Hawthorn
<i>Epilobium hirsutum</i>	Great willowherb
<i>Festuca rubra</i>	Red fescue
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleavers
<i>Geranium molle</i>	Dove's-foot cranesbill
<i>Geranium robertianum</i>	Herb robert
<i>Holcus lanatus</i>	Yorkshire fog
<i>Hypochaeris radicata</i>	Common cat's-ear
<i>Lolium perenne</i>	Perennial rye grass
<i>Lotus corniculatus</i>	Common bird's-foot trefoil
<i>Poa annua</i>	Annual meadow grass
<i>Poa pratensis</i>	Smooth meadow grass
<i>Prunella vulgaris</i>	Selfheal
<i>Prunus avium</i>	Wild cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Quercus robur</i>	Pedunculate oak
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rosa canina</i>	Dog rose
<i>Rubus fruticosus</i> agg.	Bramble
<i>Rumex acetosa</i>	Common sorrel
<i>Rumex obtusifolius</i>	Broadleaved dock
<i>Salix caprea</i>	Goat willow
<i>Salix cinerea</i>	Grey willow
<i>Senecio erucifolius</i>	Hoary ragwort
<i>Senecio jacobaea</i>	Common ragwort
<i>Taraxacum officinale</i> agg.	Dandelion
<i>Trifolium repens</i>	White clover
<i>Urtica dioica</i>	Stinging nettle



Appendix 7 – Planning and statutory context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Habitats

Section 7 of the Environment Act (Wales) places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists, and encourage others to take such steps.

Amphibians

Great crested newts

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 7 of the Environment (Wales) Act 2016.

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural Resources Wales (NRW) team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by NRW is required for the legal implementation of a mitigation scheme.

An NRW mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack and common toad are also listed under Section 7 of the Environment (Wales) Act 2016.

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Reptiles

Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix natrix* and adder *Vipera berus* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure any of the species listed above
- Sell, offer, advertise or transport for sale a live or dead animal of the species listed above

If a proposed development is likely to have an impact on these reptiles the local statutory nature conservation organisation must be consulted.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* receive full protection under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. Read together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture any sand lizards or smooth snakes
- Deliberately, intentionally or recklessly disturb sand lizards or smooth snakes in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of such an animal
- Damage or destroy breeding sites or resting places of such animals
- Intentionally or recklessly disturb sheltering sand lizards or smooth snakes, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead sand lizards or smooth snakes, any part of such an animal or anything derived from such an animal

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

All reptile species (except for smooth snake) are also listed under Section 7 of the Environment (Wales) Act 2016.

Badger

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

Hazel dormouse

Hazel dormice *Muscardinus avellanarius* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture dormice
- Deliberately, intentionally or recklessly disturb dormice in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of dormice
- Intentionally or recklessly disturb sheltering dormice, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead dormouse, any part of a dormouse or anything derived from a dormouse

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Dormice are also listed under Section 7 of the Environment (Wales) Act 2016.

Bats

In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (known as the “Habitats Regulations”). The Wildlife and Countryside Act is the domestic implementation of the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] ... uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by NRW.

The Environment (Wales) Act 2016 also lists the following bat species as species of principle importance under Section 7:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Brown long-eared bat *Plecotus auritus*
- Greater horseshoe *Rhinolophus ferrumequinum*
- Lesser horseshoe *Rhinolophus hipposideros*

Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The Environment (Wales) Act 2016 offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status' of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Trees

Trees may be protected on an individual or group level through a Tree Preservation Order (TPO). In order to carry out works to trees with a TPO, prior written consent must be obtained from the Local Planning Authority. Trees may also be protected through a condition of planning consent or designated conservation areas.

Hedgerows

The Hedgerow Regulations are made under Section 97 of the Environment Act 1995 and came into operation on 1st of June 1997. They aim to protect important hedgerows in the countryside by controlling their removal through a system of notification to the Local Planning Authority.

A hedgerow can only be considered for classification as "important" if it, or the hedgerow of which the section belongs to is over 20m in length (or which meets a hedgerow at either end) and has existed for 30 years or more.

Plants

Schedule 8 of the Wildlife & Countryside Act 1981 (as amended) lists a number of plant species which are protected under Section 13 of the same legislation. As such, it is an offence to:

- Intentionally or recklessly pick, uproot or destroy a plant, or any seeds or spores attached to it, which is listed on Schedule 8
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead wild plant on Schedule 8, any part of the plant or anything derived from the plant

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

The Conservation of Habitats and Species Regulations 2017 extends European legislative protection to a further subset of plants. It is therefore an offence to pick, collect, cut, uproot, destroy or trade any plant listed in Schedule 4 of these Regulations, unless the appropriate licence is first obtained.

A large number of species of vascular plants, lichens, algae, fungi, mosses, stoneworts and liverworts are also protected through planning policy as species of principal importance, as required under Section 7 of the Environment Act (Wales) 2016.

Invasive Plant Species

A number of invasive, non-native plant species are listed under Schedule 9 (Part II) of the Wildlife and Countryside Act 1981 (as amended). The most commonly encountered listed species in ecological surveys are Japanese knotweed *Fallopia japonica*, Montbretia *Crocosmia x crocosmiiflora* and variegated yellow archangel *Lamiastrum galeobdolon subsp. argentatum*. Section 14(2) of this Act makes it an offence to *plant or otherwise cause to grow in the wild* any plant listed on Schedule 9 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

A number of invasive, non-native plants species are listed under Schedule 2 (Part II) of the Invasive Alien Species (Enforcement and Permitting) Order 2019. The most commonly encountered listed species in ecological surveys are Himalayan balsam *Impatiens glandulifera* and giant hogweed *Heracleum mantegazzianum*. Section 3 of this Act make it an offence to *plant or otherwise causes to grow in the wild* any plant which is listed on Schedule 2 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

Soil or plant material contaminated with non-native and invasive plants can cause ecological damage and may be classified as controlled waste. It is an offence to keep, treat or dispose of waste that could harm the environment or human health. If there is any doubt, contact the local authority or Environment Agency.

Japanese knotweed has an extensive root system and new plants can regenerate rapidly from the smallest fragments of rhizomes. Material containing this species is classed as “controlled waste” under the Environmental Protection Act (Duty of Care) Regulations 1991. The disposal of such waste requires all involved parties to follow a strict code of practice and maintain adequate records regarding their conduct.

Otter

European otter *Lutra lutra* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture otters
- Deliberately, intentionally or recklessly disturb otters in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of otters
- Intentionally or recklessly disturb sheltering otters, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead otter, any part of an otter or anything derived from otter

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Otters are also listed under Section 7 of the Environment (Wales) Act 2016.

Water vole

Water voles *Arvicola amphibius* are protected by the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take water vole
- Possess or control live or dead water vole or any part of a water vole
- Intentionally or recklessly damage destroy or obstruct access to any structure or place which a water vole uses for shelter or protection, or disturb water vole using such a place
- Sell, offer, advertise or transport live or dead water voles for sale

Licences are available from NRW to allow activities that would otherwise be an offence, including:

- Scientific or educational purposes
- For the purposes of ringing or marking
- Conserving wild animals or introducing them into particular areas
- Preserving public health or public safety
- Preventing the spread of disease
- Preventing serious damage to any form of property or to fisheries

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Water voles are also listed under Section 7 of the Environment (Wales) Act 2016.

White-clawed crayfish

White-clawed crayfish *Austropotomobius pallipes* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure white-clawed crayfish
- Sell, offer, advertise or transport for sale a live or dead white-clawed crayfish

If a proposed development is likely to have an impact on white-clawed crayfish then the local statutory nature conservation organisation must be consulted.

Penalties for offences include unlimited fines (formerly up to £5000), plus up to six months imprisonment, for each offence committed.

Their inclusion on the EC Habitats Directive allows areas to be designated as Special Areas of Conservation (SAC) for the presence of white-clawed crayfish. Such a designation brings legal protection under the Conservation of Habitats Regulations 2017, this includes how the site is managed and what development can occur on and in proximity to these sites.

White-clawed crayfish are also listed under Section 7 of the Environment (Wales) Act 2016.

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2018). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online.