



Preliminary Ecological Appraisal

Site Opposite Glenridge House, Doddington, Wooler, Northumberland, NE71 6AL

Equus Design

Status	Issue	Name	Date
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Final	2	Elen Griffin BSc (Hons), MRSB Consultant Ecologist	01/09/2023

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Industry Guidelines and Standards

This report has been written with due consideration to:

Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.

British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Equus Design to undertake a Preliminary Ecological Appraisal (PEA) at Site Opposite Glenridge House, Doddington, Wooler, Northumberland, NE71 6AL (hereafter referred to as “the site”). The survey was required to inform a planning application for development of the existing empty plot of land (hereafter referred to as “the proposed development”).

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in **Table 6** of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	<p>There are three statutory sites within 2km of the site, the closest being Till Riverbanks SSSI located 866m from the site.</p> <p>The site lies within the impact risk zone for the same SSSI however the development is not listed as a possible high risk for this designation.</p> <p>The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre.</p>	<p>No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to Till Riverbanks SSSI and the watercourse along the north eastern boundary providing a direct link to the SSSI along with the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution could occur during construction.</p>	<p>The Local Planning Authority (LPA) may be required to undertake a Habitat Regulations Assessment (HRA) to determine whether there could be any effect on nearby European sites as a result of the proposed development.</p> <p>A Construction Environmental Management Plan (CEMP) will be required, outlining best practice measures to minimise the possibility of pollution and tree damage during construction.</p>
Habitats and flora	<p>There are no notable habitats within the site but deciduous woodland, upland heathland and ancient woodland habitats are present within 2km of the site, the closest being deciduous woodland located 30m from the site.</p> <p>The watercourse along the site boundary is considered to provide some ecological value however this is likely limited due to its shallow nature however it does provide connectivity between the site and designated sites previously mentioned in this report.</p> <p>Other habitats within the site are common and widespread and have low ecological value.</p> <p>No protected or notable plant species were recorded during the survey.</p>	<p>No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to deciduous woodland, indirect effects such as pollution or tree damage could occur during construction.</p> <p>The proposed development will result in the loss of areas of bare ground along with areas of unmanaged successional vegetation. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.</p>	<p>Best practice measures to minimise the possibility of pollution must be implemented during construction.</p> <p>Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).</p>

<p>Herpetofauna</p>	<p>GCN are considered likely absent from the site due to a lack of suitable habitat on the site along with a lack of connectivity between the site and any ponds within 500m of the site.</p> <p>Common amphibians are likely present on the site, specifically within the piles of stone on the site as indicated by the presence of a toad during the site visit.</p> <p>Common reptiles may utilise the site for basking however large numbers are unlikely due to the habitats isolated nature.</p>	<p>No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site.</p> <p>Areas of unmanaged successional vegetation will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.</p>	<p>Owing to the nature of the proposed development and the low potential for impacts to great crested newts and reptiles further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction</p>
<p>Foraging and commuting bats</p>	<p>The lines of trees could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.</p>	<p>It is assumed that the proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats.</p> <p>The proposed development may include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.</p>	<p>A low impact lighting strategy will be adopted for the site during and post-development.</p>
<p>Terrestrial mammals</p>	 <p>Smaller mammals such as hedgehogs may utilise the unmanaged vegetation and the lines of trees for foraging and commuting.</p>	 <p>Areas of unmanaged vegetation will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.</p>	<p>A precautionary working method will be implemented during construction, including the following measures:</p>
<p>Riparian mammals</p>	<p>The site is considered to be unsuitable for both otter and water vole due to a lack of suitable foraging and or burrowing habitat.</p> <p>However, the watercourse on site provides a direct link to larger watercourses which may support riparian mammals.</p>	<p>The proposed development will not result in the loss of any riparian habitats. However, due to the presence of the watercourse within close proximity of the site, indirect effects such as pollution could occur during construction.</p>	<p>Owing to the nature of the proposed development and the low potential for impacts to riparian mammals, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.</p>

Birds	<p>The lines of trees on the site will provide nesting habitat for common birds and some foraging habitat.</p> <p>The site is considered unsuitable for notable overwintering or breeding bird populations.</p> <p>Schedule 1 birds are likely absent from the site due to a lack of suitable habitat.</p>	It is assumed that no habitats suitable for nesting birds will be removed as a part of the proposed development.	If any works including pruning are to be undertaken to the trees along the site boundaries then works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the trees/vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.
Invertebrates	<p>The site is considered unlikely to support large or notable populations of invertebrates.</p> <p>The tree stumps on site and the watercourse may provide suitable habitat for small assemblage of invertebrates.</p>	The tree stumps along with unmanaged vegetation will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.	Retention of the tree stumps insofar as possible.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Equus Design to undertake a Preliminary Ecological Appraisal (PEA) at Site Opposite Glenridge House, Doddington, Wooler, Northumberland, NE71 6AL (hereafter referred to as “the site”). The survey was required to inform a planning application for development of the existing empty plot of land (hereafter referred to as “the proposed development”).

A plan showing the proposed development will be provided in Appendix 1 when available.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. An Environmental Assessment completed by George Dodds & Co in December 2014 (George Dodds & Co, 2014) was provided as a baseline assessment for the site. However the report provided was for a building to the north of the site and not for the site itself. The report concluded that there was no evidence to suggest large numbers of bats utilising the building on site at the time of the survey and that the only other species of note present on the site was nesting birds in the form of house sparrows utilising the building on site. The installation of bat boxes was recommended with no further survey work.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference NT 99711 32343 and has an area of approximately 0.1ha comprising areas of bare ground with pioneer species present throughout the site and a small watercourse running along the south eastern boundary. It is surrounded by scattered residential dwelling and agricultural land. The wider landscape comprises of further areas of agricultural land and moorland with the River Till present to the south west of the site. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

This report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation. To achieve this, the following steps have been taken:

- A desk study has been carried out.

- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species.

- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.

- Potential impacts on features of value, as a result of the proposed development, have been identified.

- Recommendations for further surveys and mitigation have been made.

- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a review of the magic.gov.uk database for statutory designated sites within a 2km radius of the site. Landscape value and the presence of notable habitats as well as granted European Protected Species Licence (EPSL) and notable species records held on magic.gov.uk database has also been considered where these are within influencing distance of the site.

2.2 Field Survey

The survey was undertaken by Elen Griffin BSc (Hons), MRSB, Consultant Ecologist, Natural England Bat Licence Number: 2023-11211-CL17-BAT and Accredited Agent on Level 2 Natural England Bat Licence Number: 2016-22843-CLS-CLS) on 10th August 2022.

An extended habitat survey was undertaken, following the methodology set out in The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

For ease of reading, scientific names are omitted from this report for widespread, ubiquitous and well-known species. Scientific names are only included where deemed necessary in conveying correct information to the reader, for example where common names differ regionally or in specialised, notable, unusual or challenging taxa, or if there is any ambiguity in identification (e.g where a species can only be identified to genus level).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

A visual inspection of the trees on the site was undertaken from ground level using binoculars and, where accessible and safe to do so, an internal inspection of any features which bats could use for roosting was completed using an endoscope, torch and ladders. Trees were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a tree that are correlated with use by bats

Classification	Feature of tree and its context
Moderate to high	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. Trees with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.

(Difficult to separate moderate or high value trees from ground level without a close up inspection)	
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential to be used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators.
Negligible	Unsuitable for use by bats.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape and the ecology and biology of species as currently understood.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

The ground level tree assessment was undertaken in summer when foliage was present on the trees and this obscured visibility in places.

No proposed development plans were available at the time of writing this report and therefore a detailed impact assessment could not be made. This report should be updated once the plans are available.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within 2km radius of the site, including their reasons for notification, are provided in Table 2 below. The presence of non-statutory designated sites within 2km cannot be established without biological records data from the local records centre.

The site lies within the impact risk zone for Till Riverbanks Site of Special Scientific Interest. The proposed development type is not listed as a possible high risk with regard to this designation.

Table 2: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural England
Till Riverbanks Site of Special Scientific Interest (SSSI)	866m south west	The site known as Till Riverbanks is situated in a former glacial lake basin to the north east of the Cheviot Hills where the rivers Till and Glen meander through a large, flat sandy floodplain. It is an important invertebrate site, supporting very rich ground and water beetle communities. Rapid fluctuations in the river water levels, including periodic flooding, have produced unstable riverside cliffs, with broad, sparsely vegetated beaches and oxbow features which together support many specialist invertebrate species. Till Riverbanks is regarded as the best known site for this association of invertebrates in the North East of England.
River Tweed Special Area of Conservation (SAC) and SSSI	1034m south west	The River Tweed drains a large catchment on the east coast of the UK, with sub-catchments in both Scotland and England. It shows a strong nutrient gradient along its length, with oligotrophic (nutrient-poor) conditions in its headwaters, and nutrient-rich lowland conditions just before it enters the sea at Berwick. The river has a high ecological diversity which reflects the mixed geology of the catchment. Stream water-crowfoot <i>Ranunculus penicillatus</i> ssp. <i>pseudofluitans</i> , a species of southern rivers and streams, here occurs at its most northerly location as does fan-leaved water-crowfoot <i>R. circinatus</i> , along with river water-crowfoot <i>R. fluitans</i> , common water-crowfoot <i>R. aquatilis</i> , pond water-crowfoot <i>R. peltatus</i> and a range of hybrids.

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 3.

Table 3: Weather conditions during the survey

Date:	10/08/2023
Temperature	18°C
Humidity	87%
Cloud Cover	100%
Wind	3mph
Rain	Light/intermittent

Habitats and Flora

The following habitats are present within and adjacent to the site:

Open mosaic habitats on previously developed land with scattered tall herb, ruderal and scrub communities and bare ground -u1a, 10, 16, 17

Line of trees – w1g6

Watercourse – r2b

A description and photograph of each habitat is provided in Table 4.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 4: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
<p>Open mosaic habitats on previously developed land with scattered tall herb, ruderal and scrub communities and bare ground -u1a, 10, 16, 17</p>	<p>The site consists of an area of previously developed/cleared land as evident by areas of bare ground along with predominantly early successional plant species. Plant species identified on the site include; Ragwort (F), willow herb (A), stinging nettle (A), creeping thistle (O), pineapple weed (O), bitter dock (F), creeping buttercup (F), bramble (O), self set willow (R), white cover (F) and some Yorkshire frog (R). Large areas of bare ground were noted along with what appeared to be fairly new/fresh piles of soil debris, as evident by the lack of growth over the piles.</p>	 <p>The photograph section contains two images. The top image shows a large, rounded pile of brown soil debris in the center of a field of tall green weeds and grasses. In the background, there are trees and a building. The bottom image shows a similar scene from a different angle, with a dirt path leading through the vegetation towards a building in the distance.</p>

<p>Line of trees – w1g6</p>	<p>A line of trees is present along the northern boundary of the site which is dominated by Lawson’s cypress trees with scattered elder (R), ash (R), and sycamore (R).</p>	
<p>Watercourse – r2b</p>	<p>A small stream is present along the south eastern boundary of the site. At the time of the survey the water level was extremely low and the banks steep. Vegetation covered the vast majority of the area further indicating the low level of the water. Vegetation identified included; Watercress (A), willow herb (F), common rush (O), forget-me-not (O), goosefoot (O) and common mallow (F).</p>	

Fauna

An assessment of the suitability of the site for protected or notable species is provided in Table 5.

Table 5: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability
Herpetofauna	<p>Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). A review of aerial imagery indicates the presence of one pond within 500m of the site. The pond is located approximately 388m north west of the site. Urban and agricultural infrastructure including tarmac roads, buildings and modified grassland along with a second watercourse to the north separate the site and the identified pond. Such landscape features are suboptimal for great crested newts due to a lack of refuge from predation. As a result and given the distance of these ponds from the site, these landscape features are likely to represent a significant barrier to dispersal eliminating connectivity to the site for great crested newts.</p> <p>The shallow watercourse along with the piles of sandstone will likely provide habitat for common amphibians. A toad was noted between some of the stones on the site.</p>  <p>The unmanaged vegetation may also provide some limited habitat for reptiles due to the presence of a mosaic of habitats suitable for basking. No reptiles were noted on the site at the time of the survey.</p>
Terrestrial mammals	<p>No evidence of terrestrial mammals was noted at the time of the survey. [REDACTED]</p> <p>The site is surrounded by a mix of drystone walls, fencing and the watercourse along the south eastern boundary which may exclude larger terrestrial mammals from the site such as [REDACTED] however smaller mammals such as hedgehog may utilise gaps in the fencing to access the site.</p> <p>The lies of trees and unmanaged vegetation will likely provide suitable foraging habitat for mammals such as hedgehogs.</p> <p>No areas suitable for hibernating hedgehogs were noted on the site.</p>
Bats	<p>No EPSL's were returned within 2km of the site.</p> <p>No buildings were noted on the site. The trees, predominantly Lawson's cypress, are considered to be unsuitable for roosting bats due to the dense nature of the branches obscuring access to the main trunk of the tree. The broadleaved trees present on the site did not appear to contain suitable roosting features such as cracks or holes, likely due to their semi mature nature.</p> <p>The line of trees along with the small watercourse will likely provide ample feeding opportunities for bats along with some commuting habitat.</p>
Riparian mammals	<p>A small watercourse runs along the south eastern boundary of the site.</p> <p>The banks are extremely steep rendering them unsuitable for burrow or holt excavation. No vegetation suitable for water vole was noted along the banks and the water level was too low to support sufficient feeding opportunities for otter.</p>

	<p>No evidence of either species was noted at the time of the survey.</p>
<p>Birds</p>	<p>The lines of trees along the site boundaries will likely provide nesting habitat for common birds. No nests were recorded during the site visit. The site is considered to be unsuitable for notable overwintering or breeding bird populations due to the habitats present, the sites location and the small size of the site. The watercourse is considered unlikely to support kingfisher due to a lack of peaches along the bank along with its shallow nature. No suitable habitat for other schedule 1 birds such as barn owl was noted on the site however due to the sites location they are likely to be present within the wider landscape.</p>
<p>Invertebrates</p>	<p>Due to the habitats present on site large and notable populations of invertebrates are considered unlikely. Cabbage white butterflies were noted on the site and tree stumps may provide habitat for common invertebrates. The watercourse may provide some habitat for more notable species however it is unlikely to support large and prolonged numbers due to its shallow nature and lack of notable vegetation along its banks.</p> 

4.0 Conclusions, Impacts and Recommendations

Taking the desk study and field survey results into account, Table 6 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise of the development of the existing empty plot of land to include the re building of the drystone wall present on the site.

Table 6: Evaluation of the site and any ecological constraints

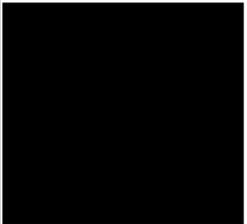
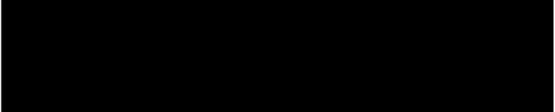
Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	<p>There are three statutory sites within 2km of the site, the closest being Till Riverbanks SSSI located 866m from the site.</p> <p>The site lies within the impact risk zone for the same SSSI however the development is not listed as a possible high risk for this designation.</p> <p>The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre.</p>	<p>No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to Till Riverbanks SSSI and the watercourse along the north eastern boundary providing a direct link to the SSSI along with the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution could occur during construction.</p>	<p>The Local Planning Authority (LPA) may be required to undertake a Habitat Regulations Assessment (HRA) to determine whether there could be any effect on nearby European sites as a result of the proposed development.</p> <p>A Construction Environmental Management Plan (CEMP) will be required, outlining best practice measures to minimise the possibility of pollution and tree damage during construction.</p>	None.
Habitats and flora	<p>There are no notable habitats within the site but deciduous</p>	<p>No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to</p>	<p>Best practice measures to minimise the possibility of pollution must be implemented during construction.</p>	<p>The following habitat creation and enhancement opportunities could</p>

¹ The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021).

	<p>woodland, upland heathland and ancient woodland habitats are present within 2km of the site, the closest being deciduous woodland located 30m from the site.</p> <p>The watercourse along the site boundary is considered to provide some ecological value however this is likely limited due to its shallow nature however it does provide connectivity between the site and designated sites previously mentioned in this report.</p> <p>Other habitats within the site are common and widespread and have low ecological value.</p> <p>No protected or notable plant species were recorded during the survey.</p>	<p>deciduous woodland, indirect effects such as pollution or tree damage could occur during construction.</p> <p>The proposed development will result in the loss of areas of bare ground along with areas of unmanaged successional vegetation. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.</p>	<p>Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).</p>	<p>be incorporated into the proposed development: Planting of native tree and hedgerows</p> <p>Species-specific enhancement opportunities are detailed later in this table.</p>
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<p>Herpetofauna</p>	<p>GCN are considered likely absent from the site due to a lack of suitable habitat on the site along with a lack of connectivity between the site and any ponds within 500m of the site.</p> <p>Common amphibians are likely present on the site, specifically within the piles of stone on the site as indicated by the presence of a toad during the site visit.</p> <p>Common reptiles may utilise the site for basking however large numbers are unlikely due to the habitats isolated nature.</p>	<p>No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site.</p> <p>Areas of unmanaged successional vegetation will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.</p>	<p>Owing to the nature of the proposed development and the low potential for impacts to great crested newts and reptiles further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures:</p> <p>Site clearance will be undertaken outside of the amphibian hibernation season (November to February) insofar as is possible.</p> <p>A toolbox talk will be given to contractors regarding the possible presence of reptiles and common amphibians at the site.</p> <p>A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area.</p> <p>Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas.</p> <p>Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</p> <p>Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use.</p> <p>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p> <p>If any common amphibians are found in the working area these should be allowed to</p>	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for amphibians:</p> <ul style="list-style-type: none"> Planting of native hedgerows and scrub Installation of hibernacula Retention of some stone piles insofar as possible

			<p>disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.</p> <p>In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist.</p> <p>In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist.</p>	
Roosting bats	The trees on the site have negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting on the site and as such, there are not anticipated to be any impacts on roosting bats.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	The installation of 2 bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on any new building developed on the site or within the line of trees along the northern boundary. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice dwelling species such as improved crevice bat box or a similar alternative brand.
Foraging and commuting bats	The lines of trees could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	<p>It is assumed that the proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats.</p> <p>The proposed development may include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.</p>	<p>A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures:</p> <ul style="list-style-type: none"> Light spill on to the lines of trees to the north and the watercourse should be avoided. Use narrow spectrum light sources to lower the range of species affected by lighting. Use light sources that emit minimal ultra-violet light. Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and 	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: <ul style="list-style-type: none"> Planting of native trees and hedgerows Planting of night time pollinating plants such as honeysuckle or evening primrose

			<p>where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin.</p> <p>Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal.</p> <p>Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.</p> <p>External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.</p> <p>Wall lights and security lights will be 'dimnable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.</p>	
<p>Terrestrial mammals</p>	 <p>Smaller mammals such as hedgehogs may utilise the unmanaged vegetation and the</p>	 <p>Areas of unmanaged vegetation will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.</p>	<p>A precautionary working method will be implemented during construction, including the following measures: Site clearance will be undertaken outside of the hedgehog hibernation season (November to March) insofar as is possible.</p> <p>A toolbox talk will be given to contractors regarding the possible presence of hedgehogs at the site.</p> <p>A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 30cm and left overnight to allow any hedgehogs to disperse. The</p>	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for terrestrial mammals:</p> <ul style="list-style-type: none"> Planting of native trees and hedgerows Creation of gaps suitable for hedgehogs in boundary walls and fencing to allow better connectivity between the

	<p>lines of trees for foraging and commuting.</p>		<p>vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter hedgehogs from the working area. Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance..</p>	<p>site and the wider landscape Inclusion of natural hibernacula within the site boundaries or a purpose made hedgehog house</p>
<p>Riparian mammals</p>	<p>The site is considered to be unsuitable for both otter and water vole due to a lack of suitable foraging and or burrowing habitat. However, the watercourse on site provides a direct link to larger watercourses which may support riparian mammals.</p>	<p>The proposed development will not result in the loss of any riparian habitats. However, due to the presence of the watercourse within close proximity of the site, indirect effects such as pollution could occur during construction.</p>	<p>Owing to the nature of the proposed development and the low potential for impacts to riparian mammals, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: Heras fencing will be erected around the working area to prevent encroachment towards any watercourses Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to the watercourse and any retained habitats which otters could use. Best practice pollution prevention measures will be implemented to minimise impacts to the watercourse and any retained habitats that otters could use.</p>	<p>None.</p>

			<p>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p> <p>In the unlikely event that an otter holt or den is identified, works must cease and advice must be sought from a suitably qualified ecologist.</p>	
Birds	<p>The lines of trees on the site will provide nesting habitat for common birds and some foraging habitat.</p> <p>The site is considered unsuitable for notable overwintering or breeding bird populations.</p> <p>Schedule 1 birds are likely absent from the site due to a lack of suitable habitat.</p>	<p>It is assumed that no habitats suitable for nesting birds will be removed as a part of the proposed development.</p>	<p>If any works including pruning are to be undertaken to the trees along the site boundaries then works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the trees/vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.</p>	<p>The installation of 4 bird boxes at the site will provide additional nesting habitat for birds.</p> <p>General purpose bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight.</p> <p>Species-specific bird boxes should be installed in line with manufacturers specifications.</p>
Invertebrates	<p>The site is considered unlikely to support large or notable populations of invertebrates.</p> <p>The tree stumps on site and the watercourse may provide suitable habitat for small assemblage of invertebrates.</p>	<p>The tree stumps along with unmanaged vegetation will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.</p>	<p>Retention of the tree stumps insofar as possible.</p>	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates:</p> <ul style="list-style-type: none"> Planting of pollinating native shrubs Installation of an insect house/bee brick on the site

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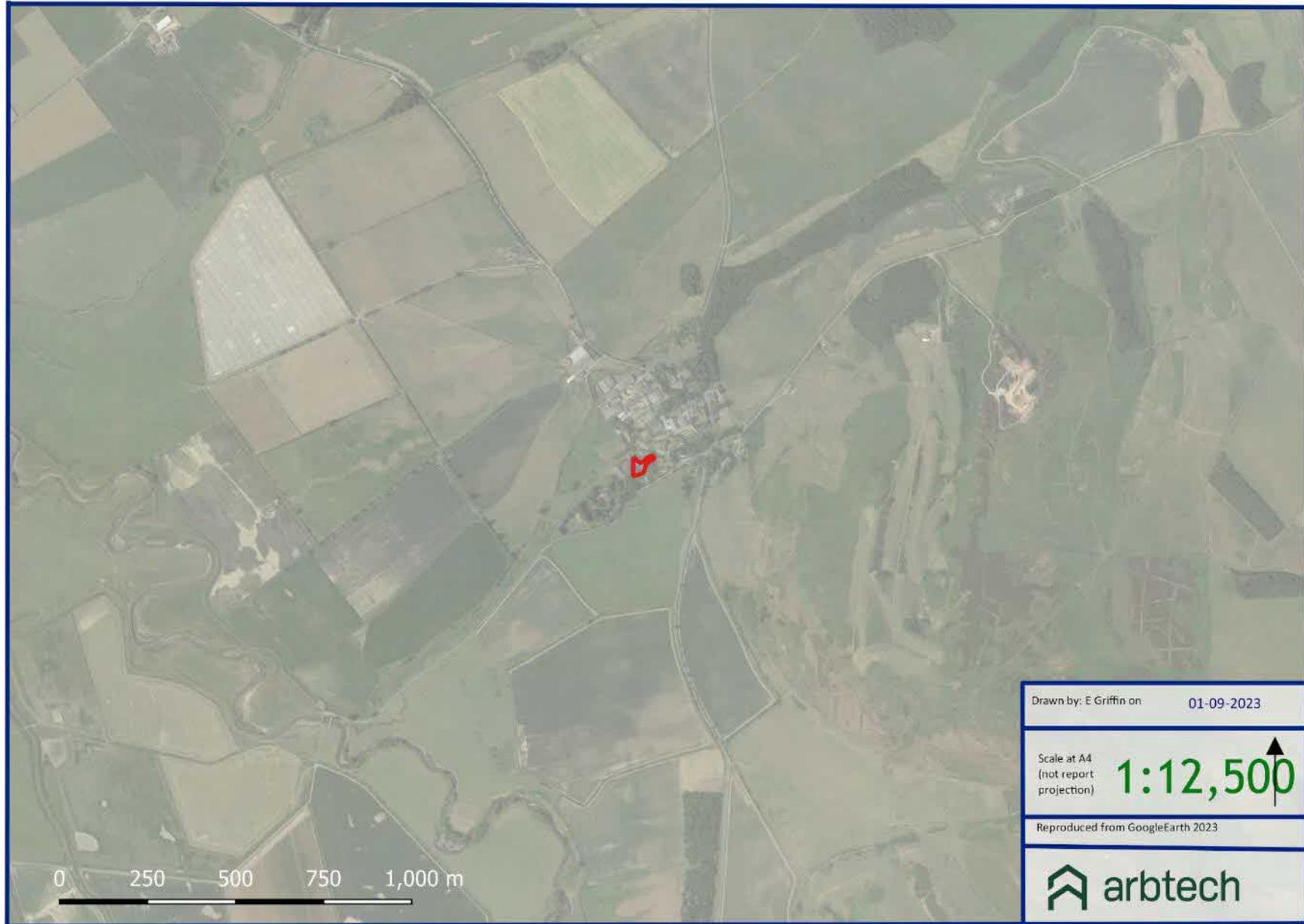
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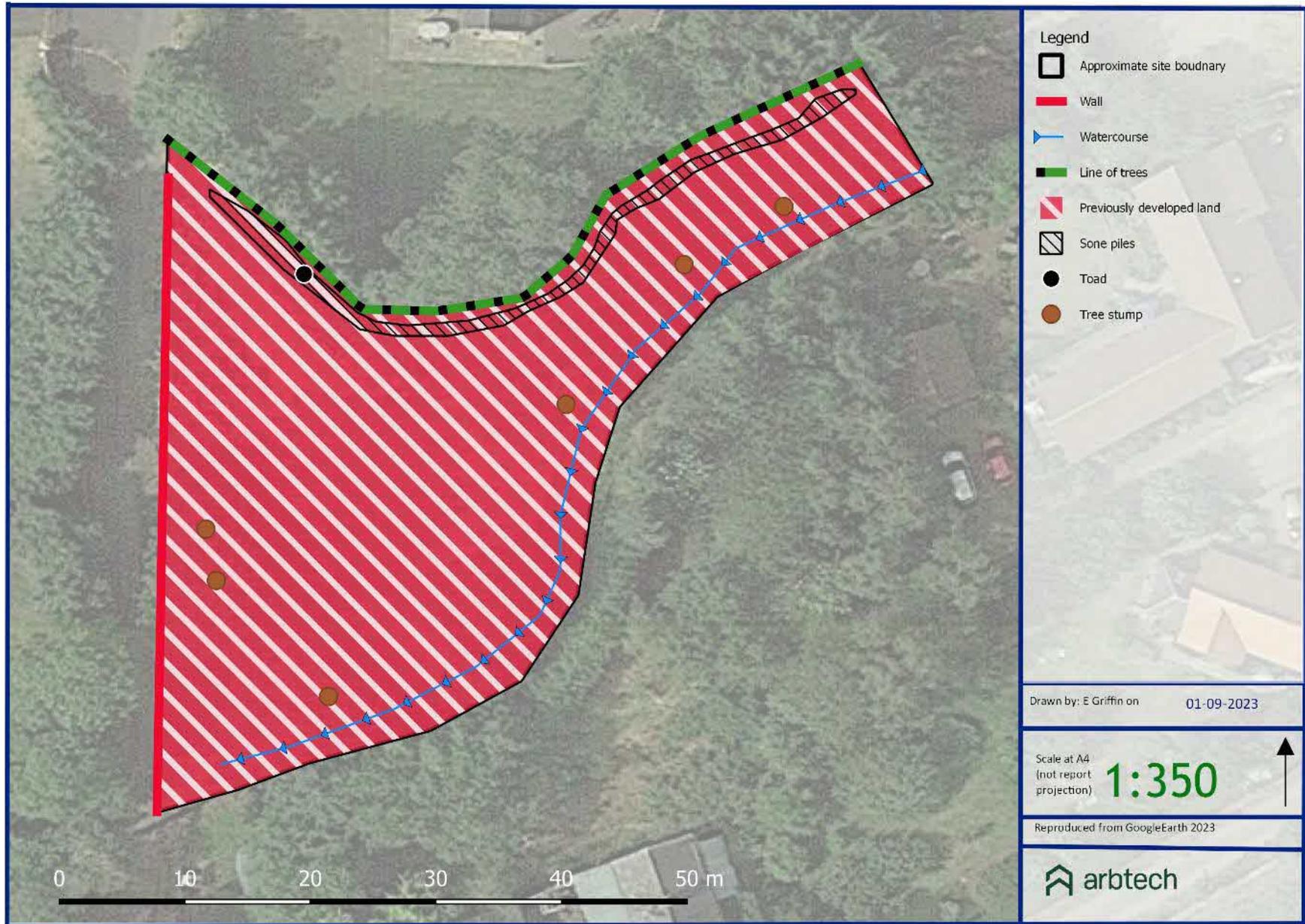
Appendix 1: Proposed Development Plan

Not available at the time of writing this report.

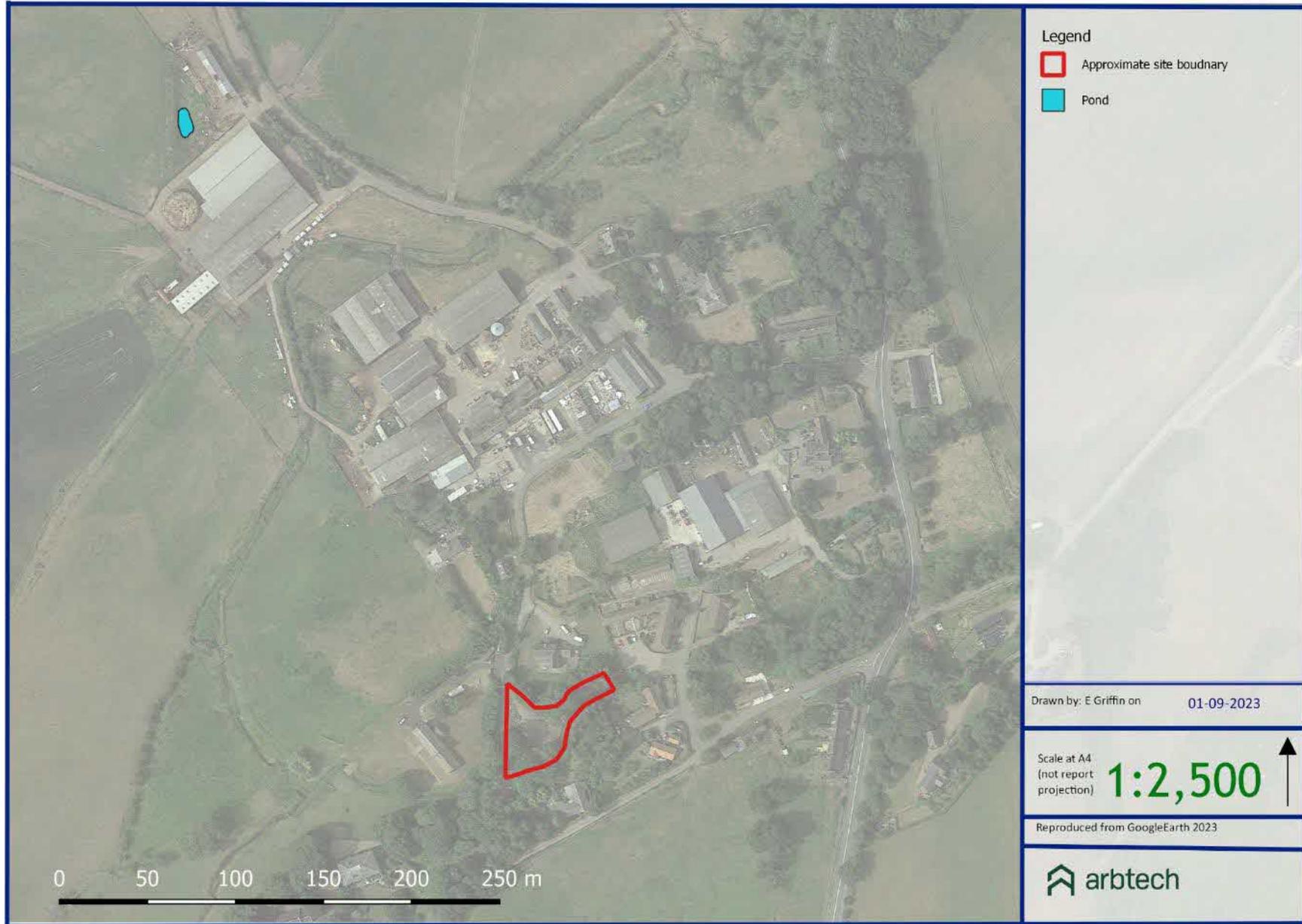
Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



Appendix 3b: Pond Location Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

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

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

Deer Act 1991

Natural Environment & Rural Communities (NERC) Act 2006

Protection of Badgers Act 1992

Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

Wilfully kill, injure, take, or attempt to kill, injure or take a badger

Cruelly ill-treat a badger, including use of tongs and digging

Possess or control a dead badger or any part thereof

Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof

Intentionally or recklessly disturb a badger when it is occupying a badger sett

Intentionally or recklessly cause a dog to enter a badger sett

Sell or offers for sale, possesses or has under his control, a live badger

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural England) for any development works likely to affect an [REDACTED]

[REDACTED] Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. [REDACTED]

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

Intentionally kill, injure or take any wild bird

Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built

Intentionally take or destroy an egg of any wild bird

Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as "Schedule 1" birds.

This affords them protection against:

Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young

Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species

- Deliberate disturbance of species in such a way as:

 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;

 - To impair their ability to hibernate or migrate

 - To affect significantly the local distribution or abundance of the species

 - Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)

- Intentional or reckless obstruction of access to any place of shelter or protection

- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

Intentionally kill, injure or take (capture) water voles

Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection

Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

Deliberate killing, injuring or capturing of Schedule 2 species

Deliberate disturbance of species in such a way as:

To impair their ability to survive, breed, or reproduce, or to rear or nurture young;

To impair their ability to hibernate or migrate

To affect significantly the local distribution or abundance of the species

Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

Intentional or reckless disturbance (at any level)

Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)

- Deliberate disturbance of bat species in such a way as:

 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;

 - To impair their ability to hibernate or migrate

 - To affect significantly the local distribution or abundance of the species

 - Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)

- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species

- Deliberate disturbance of species in such a way as:

 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;

 - To impair their ability to hibernate or migrate

To affect significantly the local distribution or abundance of the species

Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

Intentional or reckless disturbance (at any level)

Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

Protected against intentional or reckless taking

Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural England) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species

- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof

In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:

- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species

- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife.

Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*

- Giant hogweed *Heracleum mantegazzianum*

- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

Spear thistle *Cirsium vulgare*

Creeping thistle *Cirsium arvense*

Curled dock *Rumex crispus*

Broad-leaved dock *Rumex obtusifolius*

Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY

Environment Act 2021

The Environment Act 2021 (EA 2021) received Royal Assent on 9 November 2021 and is expected to become fully mandated within the next couple of years. The Act principally creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England (subject to exemptions which is likely to include householder applications) to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;

Policy 2; provides greater flexibility in the location of compensatory habitat;

Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,

Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.