SITE OFF DINTING ROAD, GLOSSOP, DERBYSHIRE

EXTENDED PHASE 1 HABITAT SURVEY

2015



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March 2015 CES:1167/03-15/ML Copyright ã 2015 Cheshire Ecological Services Ltd.

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EXECUTIVE SUMMARY

- Cheshire Ecological Services Ltd. (CES), the consultancy arm of Cheshire Wildlife Trust, to which all profits are covenanted, was commissioned to conduct an Extended Phase 1 Habitat Survey of a site off Dinting Road, Glossop, in connection with an outline planning application for a residential development.
- The purpose of the survey was to gain baseline ecological information of the site in order to assess its current status, and to identify any ecological constraints to development that may currently be associated with the development area and/or the surrounding land.
- The proposed development site totals approximately 2.3Ha and is located on the north-western outskirts of Glossop. It is bounded by Dinting Road to the north and a railway line to the south, and predominantly comprises unmanaged grassland with areas of dense scrub, scattered trees and an unmanaged boundary hedgerow.
- As part of the desk-based study, the local biodiversity recording centre provided records of protected and/or BAP Priority species occurring within 1km of the proposed development site, within the past twenty-five years. Information returned included records of grass snake, badger and numerous farmland bird species.
- A 'Potential' Local Wildlife Site (LWS) is situated adjacent to the proposed development site, and a further five LWS are located within 1km of the site. It is concluded that the propose development will not adversely affect the status of any LWS or statutorily designated nature conservation sites.
 - Grassland habitat at the site was considered to be of low/moderate species diversity and in poor/unfavourable condition. The area of greatest species diversity was on the steepening gradient towards Dinting Road. It is recommended that this area is retained and managed in the long term for its (albeit moderate) botanical interest.
- The habitat composition of the site was considered to have potential to support legally protected/BAP wildlife species including reptiles, bats, badger and nesting birds. A number of recommendations were made in respect of the protection of nesting birds and badgers. Bat activity surveys are likely to be required if it is proposed to remove any section of the boundary hedgerow.
 - It was considered appropriate to recommend further survey in respect reptiles. The results of a reptile presence/likely absence survey should serve to establish the status of reptiles at the site and determine whether a mitigation strategy for their protection will be required to be implemented prior to the commencement of any potentially disturbing works.
 - This Extended Phase 1 Habitat survey was conducted at a sub-optimal time of year for undertaking botanical assessments. It is considered that an accurate assessment of habitat type was made, however, as a precautionary measure, it is recommended that an additional site visit between the months of April and September is made to confirm this. This assessment could be combined with a reptile survey visit.

1.0 INTRODUCTION

- 1.1 Cheshire Ecological Services Ltd. (CES), the consultancy arm of Cheshire Wildlife Trust, to which all profits are covenanted, was commissioned to conduct an Extended Phase 1 Habitat Survey of a site off Dinting Road, Glossop, in connection with an outline planning application for a residential development.
- 1.2 The purpose of the survey was to gain baseline ecological information of the site in order to assess its current status, and to identify any ecological constraints to development that may currently be associated with the development area and/or the surrounding land.
- 1.3 The survey was conducted on by Matthew Lawton BSc (Hons) ACIEEM on 24th February 2015.
- 1.4 Weather conditions at the time of survey were windy with occasional showers.

2.0 SITE DESCRIPTION

- 2.1 The survey was centred on OS grid reference SK 02730 94521.
- 2.2 The proposed development site totals approximately 2.3Ha and is located on the north-western outskirts of Glossop, within a mixed residential and industrial area. It is dissected by a footpath and is situated on a south-facing slope.
- 2.3 At the time of survey the site predominantly comprised unmanaged grassland with areas of dense scrub, scattered trees and a tall, unmanaged boundary hedgerow. The site was bounded by a railway line to the south, residential properties to the east and west, and Dinting Road to the north.
- 2.4 Land use in the wider area comprised industrial premises, housing, roads and pastural farmland (refer to Appendix A Site Location Plan).

3.0 SURVEY METHODS

Desk-based study

- 3.1 The desk-based study comprised consultation with the following consultees:
 - Natural England Magic Map
 - Derbyshire Wildlife Trust the Biodiversity Information Service for Derbyshire
 - Ordnance Survey O.S. mapping of the local and wider area
- 3.2 The desk-based study comprised consultation with Natural England's online facility 'Magic Map' to search for statutorily designated nature conservation sites within the local and wider area.

3.3 Derbyshire Wildlife Trust (DWT) was asked to provide information on statutory and non-statutory nature conservation sites and protected/Biodiversity Action Plan (BAP) Priority species and habitats within, and surrounding, the proposed development site (within approximately a 1km radius), within the past 25 years.

Extended Phase 1 Habitat Survey

- 3.4 This survey involved the mapping of various habitat types on the site in addition to any habitat features and botanical species of conservation importance. A thorough walk-over survey was undertaken of the site. The methodology for this survey followed that described by the Joint Nature Conservation Committee (JNCC, 2010).
- 3.5 Preliminary searches were also carried out for protected/BAP species such as badgers, bats, reptiles and great crested newts (GCN) that may potentially use the site. Scientific names and the national status of vegetative species recorded follow Stace (1997). Scientific and common names stated in the text are also presented in Appendix C.
- 3.6 The observations made during this survey have been used to assess the presence, or potential presence, of protected and/or BAP species within the proposed area of works and to recommend further actions where required. It should however, be noted that this survey serves as a single visit representing a 'snap-shot in time' whereby only the species present at the time of survey were recorded.
- 3.7 Positive evidence of species that use this site periodically or are in growth at different times of the year may not have been recorded. It is important to consider that the absence of a species from a particular survey does not necessarily indicate the absence (or continued absence) of that species from the area.
- 3.8 The abundance of all recorded botanical species was assessed using the DAFOR scale, as described by Sutherland (1996). The DAFOR scale is a broad interpretive assessment whereby the surveyor assigns one of the following categories to the abundance of the species; Dominant, Abundant, Frequent, Occasional or Rare.
- 3.9 All trees with features such as holes, cracks and crevices were assessed for their suitability to support roosting bats, and were categorised in accordance with the Bat Conservation Trust's (BCT) Bat Survey: Good Practice Guidelines, (2012). The guidelines outline the initial survey requirements of all trees, and where necessary, detail the required further actions and likely mitigation.

4.0 SURVEY LIMITATIONS

Desk-based Study

4.1 The survey was conducted at a sub-optimal time of year for undertaking botanical assessment as the typical growing season for many native plant species is mid-March to September. However, it is considered that an accurate assessment of habitat type was made.

5.0 RESULTS

- 5.1 Natural England's online facility 'Magic Map' indicates that the closest statutorily designated nature conservation site is Peak District Moors Special Protection Area (SPA), which, at its closest point to the proposed development site, is also designated as South Pennine Moors Special Area of Conservation (SAC) and Dark Peak Site of Special Scientific Interest (SSSI). Collectively these sites are located approximately 2.6km to the east of the proposed development site, beyond the town of Glossop.
- 5.2 Derbyshire Wildlife Trust highlighted the presence of the following protected/BAP and/or Locally Scarce species occurring within approximately a 1km of the proposed development site since 1990:

Coloratific recents	
Scientific name	Common name
Alauda arvensis	Skylark
Arvicola terrestris	Water vole
Bufo bufo	Common toad
Carduelis cannabina	Linnet
Embriza schoeniclus	Reed bunting
Meles meles	Badger
Menyanthes trifoliata	Bogbean
Muscicapa striata	Spotted flycatcher
Natrix natrix	Grass snake
Parus palustris	Marsh tit
Passer domesticus	House sparrow
Passer montanus	Tree sparrow
Perdix perdix	Grey partridge
Pipistrellus pipistrellus	Common pipistrelle
Pipistrellus sp.	Pipistrelle sp.
Pyrrhula pyrrhula	Bullfinch
Sturnus vulgaris	Starling
Turdus philomelos	Song thrush
Vanellus vanellus	Lapwing

- 5.3 Derbyshire Wildlife Trust provided details of five Local Wildlife Sites (LWS) located within 1km of the proposed development site. They include: Dinting Vale Reservoirs and Brook LWS, Dinting Nature Reserve LWS, North Road Ponds LWS, Dinting Junction Ponds LWS, and Gamesley Sidings LWS. Additionally, two Potential Local Wildlife Sites, namely North Road Meadow and Ashes Farm Meadows, are located within 1km of the proposed development site.
- 5.4 The closest LWS is Dinting Vale Reservoirs and Brook, which is located approximately 250m to the south of the proposed development site. Ashes Farm Meadows Potential LWS is located adjacent to the site's northern boundary.

Fieldwork

5.5 Features of interest recorded on site during this survey are described in the Target Notes (TN) below. All numbered Target Notes correspond with the Phase 1 Habitat Map (refer to Appendix B). Species lists and abundance values for each area are presented in Appendix C. Photographic plates are presented within Appendix D.

Target Notes

- TN1 Rough unmanaged grassland with potential to support reptiles (Plates 1 3)
- TN2 Dry stone wall potential to support sheltering/hibernating reptiles (Plate 4)
- TN3 Variegated yellow archangel invasive species listed on Schedule 9 of the Wildlife & Countryside Act, 1981 (Plate 5)
- TN4 Railway line Potential to support reptiles (Plate 6)
- TN5 Ashes Farm Meadows Potential Local Wildlife Site located adjacent to the proposed development site

6.0 **DISCUSSION**

Designated Sites

- 6.1 The closest statutorily designated nature conservation site is Peak District Moors SPA, which, at its closest point to the proposed development site is also designated as South Pennine Moors SAC and Dark Peak SSSI. Collectively these sites are located approximately 2.6km to the east of the proposed development site, beyond the town of Glossop. It is considered highly unlikely that the proposed development would adversely affect these important sites or adversely impact on their features of interest on the grounds of distance, restricted habitat connectivity and due to the nature of the proposed development.
- 6.2 It is also considered highly unlikely that the proposed development would adversely affect any of the five Local Wildlife Sites or North Road Meadow Potential Local Wildlife Site located within 1km of the site on the grounds of distance/separation.
- 6.3 It should be noted that the closest LWS/Potential LWS is Ashes Farm Meadows, which is located adjacent to the proposed development site's northern boundary; to the north of Dinting Road (Refer to Appendix A). Ashes Farm Meadows has been identified by DWT as a Potential LWS for its unimproved neutral grassland habitat. As part of this survey the potential impacts of the proposed development on this site were assessed and were considered to be low: Ashes Farm Meadows is situated beyond a retaining wall on a hillside above the proposed development site and is separated by Dinting Road. Ashes Farm Meadows is therefore highly unlikely to become adversely affected by the proposed development (e.g. tracking of machinery or flow of soiled surface water run-off).

Habitats

6.4 <u>Semi-improved neutral grassland (Plates 1 - 3)</u>

The site predominantly comprised unmanaged grassland dominated by tussock forming grasses such as tufted hair grass and cock's-foot. Crested dog's-tail, Yorkshire-fog and creeping soft-grass were abundant. Ribwort plantain and common sorrel was abundant throughout with localised stands of black knapweed on the

steeper slopes towards Dinting Road. A distinct 'thatch' layer of dead vegetation was present at ground layer; beneath new growth.

Extensive stands of tall ruderal vegetation were present to the periphery of the site, and included creeping thistle, rosebay willowherb, broad-leaveddock and broad-leaved willowherb. A wet flush on the steepening gradient towards Dinting Road was dominated by soft rush. No standing water was recorded. Grassland habitat at the site may be described as being of low/moderate species diversity in poor/unfavourable condition.

It is accepted that the survey was undertaken at a sub-optimal time of year for undertaking botanical assessment. An additional site visit between the months of April and September to check that an accurate assessment has been made is therefore recommended.

6.5 <u>Dense/continuous scrub (Plate 7)</u> Dense stands of bramble scrub were present to the periphery of the site, becoming

almost impenetrable to the far west of the site where it was interspersed with scattered hawthorns.

6.6 Scattered trees (Plates 8)

A small number of mature and semi-mature scattered trees were located on the southern boundary of the site, including oak and sycamore. A number of scattered mature hawthorns to the centre of the site and within a dense stand of bramble scrub were considered to be remnants of an old, now defunct hedgerow.

6.7 <u>Wall – Dry-stone wall (Plate 4)</u> The south-eastern quarter of the site was dissected by a dilapidated dry-stone wall.

6.8 <u>Hedgerow (Plate 9 & 10)</u>

A leggy and unmanaged intact species-poor hedgerow was located on the boundary of the site, adjacent to Dinting Road. It was dominated by hawthorn, with infrequent dog rose, cherry sp., ash, elder, oak and holly. It is not known if this hedgerow is considered ecologically 'important' in accordance with the *Hedgerow Regulations* 1997. If it is proposed to damage or remove this hedgerow or any section of it, further survey effort will be required to establish whether it receives protection under the *Hedgerow Regulations*, 1997 prior to any potentially damaging works taking place. It is however recommended that this hedgerow is retained.

Features of Ecological Interest

- 6.9 The following feature of 'significant ecological interest' were identified during the survey:
 - Semi-improved neutral grassland
- 6.10 At the time of survey the semi-improved neutral grassland was not considered to qualify as BAP Priority habitat (i.e. lowland meadows BAP Priority habitat), but may have potential to be restored to such. It should be noted that the area of greatest species diversity was on the steepening gradient towards Dinting Road. It is

recommended that this area be retained and incorporated into the new development and be managed in the long-term for its (albeit moderate) botanical interest. Ideally, the adjacent tall, leggy hedgerow would be pruned or laid to create a shorter, thicker and sturdier hedge allowing increased levels of sunlight to the area of retained grassland. The existing stands of bramble scrub should be removed by repeated cutting and/or careful application of herbicide. Grassy vegetation should be mown or strimmed annually between August and February with all the cuttings raked and removed.

- 6.11 The habitat composition of the site has potential to support legally protected/BAP wildlife species. It was not within the scope of this survey to carry out detailed searches for protected species, although the potential for the study site to support the following species is discussed below:
 - Barn owl
 - · Badger
 - Bats
 - Birds
 - · Great crested newt/other amphibians
 - · Reptiles

Legislation relating to the species discussed in this section is presented in Appendix E – Legislation. No other legally protected species are considered likely to be associated with the proposed development site due to a lack of suitable habitat on, and surrounding the site (e.g. water vole or bogbean).

6.12 <u>Barn owl</u>

Barn owls receive special protection under Schedule 1 of the *Wildlife & Countryside Act,* 1981 (as amended). In addition to the protection afforded to all wild birds under Section 1 of the Act, species listed on Schedule 1 receive special legal protection when breeding; making it an offence to intentionally or recklessly disturb any wild barn owl whilst it is at or near a nest containing eggs or young, or disturb the dependent young of such a bird. Barn owls nest and roost in buildings and within deep cavities in trees, and will readily utilise nest boxes where available.

DWT did not provide any records of barn owl occurring within the search area.

No buildings or trees with features suitable for barn owl nesting or roosting were recorded on or immediately adjacent to the site during the survey. Barn owls are therefore not currently considered to pose a constraint to the proposed development, although it should be noted that the site does offer this species with optimal foraging habitat (i.e. Type 1, Shawyer, 2011). Barn owl foraging habitat is not afforded legal protection, however consultation with the local barn owl group is advised to ascertain whether this species does occur in the local area, and if so, whether it would be appropriate to provide a nominal sum to contribute towards barn owl conservation works to mitigate for the loss of potential foraging habitat. No further survey effort in respect of barn owls is currently considered.

6.13 Badger

Badgers and their setts are protected under British law, therefore surveys are required to check for the presence of badgers or their setts if they are likely to be disturbed for any reason.

DWT provided details of a badger sett, recorded in 1990, located approximately 1km from the proposed development site. No field signs that could be definitively attributed to badgers such as footprints, hair or dung pits, were observed during the survey. A search of the areas covered in dense bramble scrub did not suggest badger activity. Evidence of rabbits was however recorded (Plate 10).

The site was considered to offer badgers with suitable foraging and commuting habitat, and may be used on occasion by badgers for such. Given that the proposed development works will involve earthworks and excavations, it is recommended that any security fencing surrounding the site be suitably low (<10cm) to the ground to deter badgers from entering the site. If this is not practicable, all excavations in excess 0.5m deep should be covered overnight or a wooden ramp placed in any open excavations so as to provide a means of escape to any animals that may inadvertently stray onto the site.

No further survey effort in respect of this species is currently considered necessary. In the event that badgers are subsequently found to be using the proposed development site, CES should be contacted immediately for advice.

6.14 Bats

All British species of bat are protected under both European and British law, therefore surveys area required to check for their presence in areas where bats or their roosts are likely to be disturbed or adversely affected for any reason. DWT provided records of common pipistrelle and other unidentified bat species occurring within 1km of the proposed development site.

Bats are known to roost in buildings and mature trees, where they rest, give birth, raise young and hibernate. Buildings provide a choice of safe, dry places and can present a whole range of potential roost sites such as within wall cavities, eaves or roofs. Some bat species rely exclusively on trees for roost sites; others use them for only part of the year. The importance of trees to bats depends on species, season and foraging behaviour. Even in winter, deep cavities can provide protection against bad weather and fluctuations in temperature. Furthermore, trees and hedgerows, especially native ones, can host many species of insects, which are food for bats, and can also aid bat navigation.

No buildings were present on site and all on-site trees were considered to lack features such as cracks and crevices to support roosting bats. They were classified as Category 3 (i.e. trees with no potential to support bats) BCT, 2012. Bats are not currently considered to pose a constraint to any potential arboricultural works affecting scattered trees at the site. The hedgerow to the north of the site and adjacent to Dinting Road offers bats with suitable foraging and navigation opportunities. If it is proposed to remove this hedgerow, or any section of it, a bat activity survey may be required. It should be noted that the implementation of the recommendations made in

section 6.10 (i.e. hedgerow management) are not considered to adversely impact on bats.

6.15 Birds

All species of wild bird, their nest and eggs are protected under Section 1 of the Wildlife and Countryside Act, 1981 (as amended). Therefore surveys are required to check for their presence where they are likely to be disturbed for any reason. In addition to the protection afforded to all wild birds under Section 1 of the Act, species listed on Schedule 1 receive special legal protection when breeding, making it an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 whilst it is at or near a nest containing eggs or young, or disturb the dependent young of such a bird.

DWT provided records of protected and BAP Priority bird species occurring within 1km of the proposed development site; many of which are 'farmland birds', including grey partridge, lapwing, skylark, reed bunting, linnet and tree sparrow. It should be noted that skylark, grey partridge and lapwing are ground nesting birds, whilst the remainder generally nest in trees and scrub vegetation. The site was considered highly unlikely to support nesting lapwing or skylark due its close proximity to built environs and the regular use of a footpath running through the site; these species are sensitive to disturbance. It is however possible that grey partridge may utilise the areas of dense bramble scrub for nesting.

The scattered trees and dense scrub will undoubtedly be utilised by common bird species and potentially BAP/Priority species such as spotted flycatcher, marsh tit, song thrush and bullfinch. Song thrush and bullfinch may use the site for breeding, however spotted flycatcher and marsh tit nesting is thought unlikely due to a lack of suitable nesting opportunities (i.e. no mature trees with features such as cracks and crevices).

The dense bramble scrub in particular provides suitable nesting/breeding habitat for many species of passerine, common and rare. It is therefore recommended that the removal of all woody vegetation (including bramble) be conducted outside of the bird nesting season, which usually encompasses March to September. If this I not possible and removal works are required to take place during the nesting season, nesting bird survey/s will be required, however it may not be possible to robustly establish 'likely absence' of nesting birds given the dense nature and extent of the scrub at the site. Removal of woody vegetation outside of the nesting season is therefore strongly recommended.

It is recommended that the development includes the planting of native, species-rich hedgerows wherever possible to compensate for the loss suitable nesting bird habitat currently at the site. Garden hedges comprising a mixture of native shrub species provide a valuable feeding and nesting resource to many species of bird. Additionally or alternatively, liaison with Derbyshire Wildlife Trust would establish whether a nominal level of commuted sum to deliver off-site habitat enhancement works on DWT reserves and/or adjacent LWS to 'offset' the development impact and compensate for the loss of bird breeding habitat would be an appropriate and deliverable form of mitigation.

6.16 Great crested newt

GCN are protected under both European and British law (refer to Appendix E). Adult GCN predominantly live terrestrially, but utilise ponds for breeding purposes during the spring and summer months. Natural England indicates that a survey may be necessary to check for the presence of GCN if background information on distribution suggests that they may be present. Detailed indicators include:

- Any historical records for GCN on the site, or in the general area
- A pond on or near the site (within around 500m), even if it holds water only seasonally. Note that muddy, cattle-poached, heavily vegetated or shady ponds, ditches and temporary flooded hollows can be used by GCN
- Sites with refuges (such as piles of logs or rubble), grassland, scrub, woodland, or hedgerows within 500m of a pond

DWT did not provide any records of GCN occurring with the search area and no ponds or other water-bodies are present on site. Records of common toad were provided. As part of the desk-based study, a review of OS mapping (Refer to Appendix A) indicates the presence of five water-bodies within 500m of the proposed development site; four (Water-bodies 1 - 4) are ponds/reservoirs located to the north of Dinting Road at distances in excess of 250m from the proposed development site, and the fifth waterbody (Water-body 5) is Glossop Brook. Flowing water-bodies such as brooks are generally not used by UK amphibians for breeding. It is considered highly unlikely that any breeding populations of GCN/other amphibians potentially associated with waterbodies 1 - 4 would be in any way associated with the proposed development site on the grounds of distance and restricted habitat connectivity; water-bodies 1 - 4 are located in excess of 250m metres from the proposed development site and are effectively isolated from it by distance, built environs and Dinting Road, all of which are considered to act as barriers to amphibian dispersal. GCN are therefore not considered to pose a constraint to the proposed development and no further survey effort in respect of GCN is currently considered necessary. In the unlikely event that GCN are found to be associated with the development site, CES should be contacted for advice.

6.17 Reptiles

All six species of reptile native to the UK are protected against intentional and reckless killing, injury or sale under Schedule 5 of the *Wildlife and Countryside Act*, 1981, as amended. The sand lizard and smooth snake are afforded a higher degree of protection under European law, however, the distribution of these species is very limited and it is reasonable to dismiss the potential presence of these species at the proposed development site on the grounds of range and habitat requirements. The distribution of the remaining reptile species (i.e. adder, grass snake, slow worm and common lizard) is widespread; these species are referred to as the 'widespread' reptiles.

With some variation between species, reptiles prefer undisturbed habitats with open areas for basking, and more vegetated areas for shelter and foraging. Reptiles shelter and hibernate in crevices underground, such as within old mammal burrows, cracks within concrete bases or within spoil/rubble mounds.

Grass snakes are the UK's only widespread egg-laying reptile; typically they lay their eggs within mounds of decaying vegetation which provides both protection and warmth for the developing eggs. They also differ from the other species of native reptile as they are semi-aquatic, utilising water bodies for dispersal and feeding. The home range of an individual grass snake can be large, however, they show a high fidelity to aquatic habitats such as ponds and slow-flowing water courses, and their home range is usually centred on such features.

DWT provided a record of a grass snake occurring towards Glossop Brook, within approximately 250m of the proposed development site. The proposed development site is considered to offer reptiles with suitable terrestrial habitat as it is situated on a south-facing slope, comprises a mosaic of rough vegetation and offers suitable refuge/sheltering opportunities (TN2). Furthermore it is located immediately adjacent to a railway line/embankment (TN4) which provides suitable habitat for reptile species such as slow worm, and within 250m of Glossop Brook, which is likely to offer grass snakes with suitable aquatic habitat.

Given the nature of the proposed development and the level of legal protection afforded to the 'widespread' reptile species, it is recommended that a reptile presence/likely absence survey be undertaken in respect of the proposed development to establish the status of reptiles at the site. The reptile survey should involve the deployment of artificial cover objects (ACO) at the site followed by a minimum of seven survey visits to check the ACO for basking/sheltering reptiles. The optimal survey window for surveying for reptiles is April, May and September. In the event that reptiles are found to be associated with the site, further survey effort may be required and a suitable mitigation strategy will need to be formulated and implemented.

7.0 SUMMARY RECOMMENDATIONS TABLE

	Species potentially associated with the site/s?	Further survey effort required?	Survey timing	Recommendations
Badger	Yes	No	-	Working areas should be enclosed by security fencing, and be sufficiently low as to deter badgers from entering the sites
Barn owl	Yes	No	NA	Consultation with the local barn owl group
Bats	Yes	Potentially: Bat activity survey may be required if it is proposed to remove any section of the hedgerow adjacent to Dinting Road.	April - September	Retain hedgerow and scattered trees.
Birds	Yes	Potentially: Nesting bird surveys will be required <u>if</u> vegetation removal works are to take place between March & September, however they may prove to be inconclusive	March - September	Removal of woody vegetation (including bramble) should take place outside of the bird nesting season (i.e. during October – February). A survey will not be required if potentially disturbing works are undertaken during this period.
Great crested newt	No	No	NA	NA
Reptiles	Yes	Yes: Reptile presence/likely absence survey is required	Optimum period: April-May or September	No potentially damaging/disturbing works should take place until the results of the survey are known
Hedgerows	Yes	No	NA	Ideally the hedgerow would be retained and be pruned or laid to create a shorter, thicker and sturdier hedge allowing increased levels of sunlight to the area of retained grassland (if retaine)

8.0 REFERENCES

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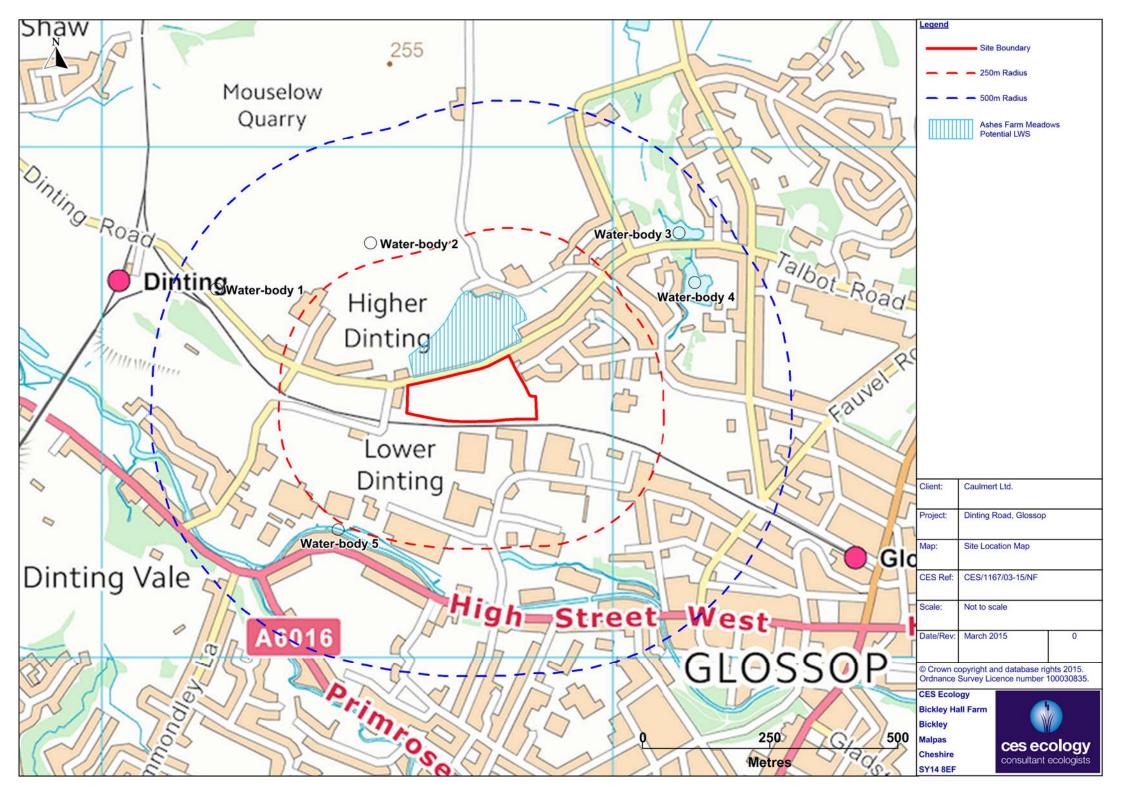
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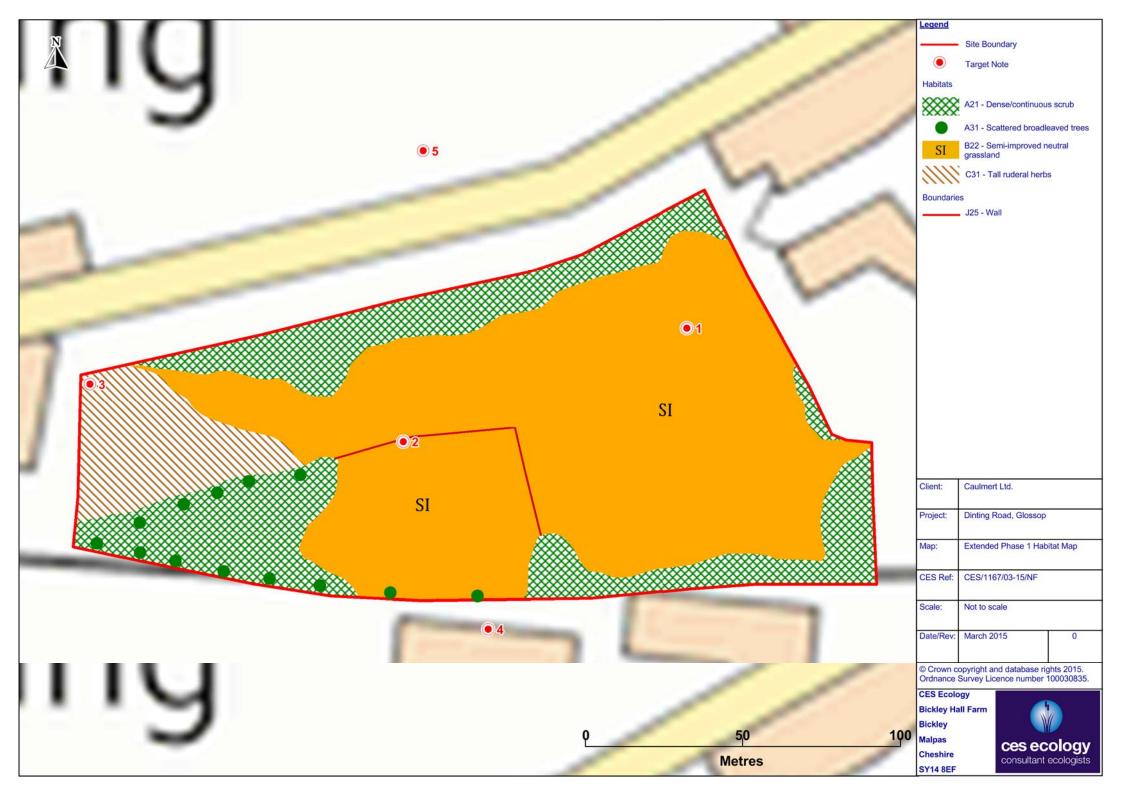
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Appendices

Appendix A: Site Location Maps (OS)



Appendix B: Extended Phase 1 Habitat Survey Map & Key



Appendix C: Species Lists

Species present in the area of semi-improved neutral grassland

Scientific name	Common name	Abundance Score*
Agrostis sp.	Bent sp.	Frequent
Alopecurus pratensis	Meadow foxtail	Occasional
Arrhenathe rumelatius	False oat-grass	Occasional
Centaurea nigra	Common knapweed	Locally abundant
Cynosurus cristatus	Crested dog's-tail	Locally abundant
Dactylis glomerata	Cock's-foot	Locally dominant
Deschampsia caespitosa	Tufted hair-grass	Locally abundant
Epilobium montanum	Broad-leaved willowherb	Locally abundant
Fraxinus excelsior	Ash (saplings)	Locally abundant
Heracleum sphondylium	Hogweed	Occasional
Holcus mollis	Creeping soft-grass	Locally dominant
Juncus effusus	Soft rush	Locally dominant
Mosses	Mosses	Abundant
Plantago lanceolata	Ribwort plantain	Abundant
Ranunculus repens	Creeping buttercup	Abundant
Rumex acetosa	Common sorrel	Frequent
Rumex obtusifolius	Broad-leaved dock	Occasional
Senecio jacobaea	Common ragwort	Occasional
Cirsium arvense	Creeping thistle	Occasional

Species present in the stands of scrub and tall ruderal/herb vegetation

Scientific name	Common name
Chamerion angustifolium	Rosebay willowherb
Cirsium arvense	Creeping thistle
Crataegus monogyna	Common hawthorn
Heracleum sphondylium	Hogweed
Quercus sp.	Oak sp.
Rubus fruticosa	Bramble
Rumex obtusifolius	Broad-leaved dock
Sambucus nigra	Elder

Species of scattered trees/shrubs

Scientific name	Common name
Crataegus monogyna	Common hawthorn
Fraxinus excelsior	Ash
Prunus spinosa	Blackthorn
Quercus sp.	Oak sp.
Rosa canina	Dog rose
Sambucus nigra	Elder

Species present in the boundary hedgerow adjacent to Dinting Road

Scientific name	Common name	Abundance Score*
Acer pseudoplatanus	Sycamore	Occasional
Crataegus monogyna	Common hawthorn	Dominant
Fraxinus excelsior	Ash	Frequent
llex aquifolium	Holly	Occasional
Quercus sp.	Oak sp.	Occasional
Rosa canina	Dog rose	Frequent
Sambucus nigra	Elder	Occasional
Sorbus aucuparia	Rowan	Occasional

* The abundance of all recorded botanical species was assessed using the DAFOR scale. The DAFOR scale is a broad interpretive assessment whereby the surveyor assigns one of the following categories to the abundance of the species; Dominant, Abundant, Frequent, Occasional or Rare.

N.B. These species lists represent those species identified during the survey. Those species which were not in growth or could not be identified due to the growth stage are not included. Exotic species (such as garden escapes) may also have been omitted from the above lists. However, it is considered that the information gathered during the survey was sufficient to provide an accurate assessment of the site.

Appendix D: Photographic Plates



Plate 1: Overview of the site, looking south-eastwards



Plate 2: View looking south of the rough grassland habitat at the site



Plate 3: View looking north-eastwards of the unmanaged tussocky semi-improved neutral grassland at the site. Note the steepening gradient to the top of the site



Plate 4: View of the dilapidated dry-stone wall, offering reptiles with suitable shelter opportunities



Plate 5: Variegated yellow archangel in the north-eastern corner of the site



Plate 6: View of the railway line adjacent to the site's southern boundary



Plate 7: View looking westwards of the dense stand of bramble scrub and tall ruderal vegetation to the west of the site



Plate 8: View of mature/semi-mature scattered trees to the periphery of the site with



Plate 9: View of the hawthorn dominated hedgerow to the north of the site adjacent to Dinting Road



Plate 10: View from the proposed development site of the hawthorn dominated hedgerow on the site's northern boundary



Plate 10: Evidence of rabbit activity on site. No badger field signs were recorded

Appendix E: Legislation

Species/Habitat	Protected by:	UK BAP
Badger	Protection of Badgers Act, 1992	No
Barn owl	Schedule 1, Part 1 of the Wildlife and Countryside Act, 1981	No
Bats	Regulation 41 of The Conservation of Habitats and Species Regulations, 2010	Dependent on species
	Section 9 of the <i>Wildlife and Countryside Act</i> , 1981 (as amended)	
	Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006	
Great crested newt	Regulation 41 of The Conservation of Habitats and Species (Amendment) Regulations, 2012	Yes
	Section 9 of the <i>Wildlife and Countryside Act</i> , 1981 (as amended)	
	Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006	
Hedgerows	The Hedgerows Regulations, 1997	Yes
Variegated yellow archangel	Section 9 of the <i>Wildlife and Countryside Act</i> , 1981 (as amended)	No
Nesting birds	Section 1 of the Wildlife and Countryside Act, 1981	Dependent on species
Reptiles	Section 5 of the Wildlife and Countryside Act, 1981	Yes
	Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006	

The Conservation of Habitats and Species Regulations, 2010

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European protected species are listed on Schedule 2 of the *Conservation of Habitats and Species Regulations* 2010. Those species listed on Schedule 2 are protected under Regulation 41, which refers to the protection of wild animals of a European Protected Species. The following is a summary of the offences listed under Regulation 41, however, the *Conservation Regulations* should always be referred to for the exact and current wording:

Under Regulation 41 of the Conservation of Habitats and Species Regulations, 2010 it is an offence to –

- · deliberately capture or kill a wild animal of a European protected species;
 - deliberately disturb wild animals, in particular any disturbance which is likely:
 - to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or
 - to impair their ability, in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 - to affect significantly the local distribution or abundance of the species to which they belong

- · deliberately take or destroy the eggs of such an animal; or
- damage or destroy a breeding site or resting place of such an animal.
- keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European protected species, or any part of, or anything derived from, such an animal.

Wildlife and Countryside Act, 1981 (as amended)

British protected species of animal are listed on Schedule 5 of the *Wildlife and Countryside Act*, 1981 (as amended). Those species listed on Schedule 5 are protected under Part 1, Section 9, which refers to the protection of certain wild animals. The following is a summary of the offences listed under Section 9; however the Act should always be referred to for the exact and current wording:

Under Section 9 of the Wildlife and Countryside Act, 1981 (as amended) if any person -

- intentionally kills, injures or takes any wild animal included in Schedule 5;
- has in his possession or control any live or dead wild animal included in Schedule 5 or any part of, or anything derived from such an animal;
- intentionally or recklessly damages or destroys, or obstructs access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection;
- disturbs any such animal included in Schedule 5 while it is occupying a structure or place which it uses for that purpose;
- sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal; or,
- publishes or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things, he shall be guilty of an offence.

This legislation applies to all life stages of GCN. Heavy fines (up to £5,000 per incident) can be imposed for **each** offence, and a prison sentence of up to 6 months for each offence can be given to any person found guilty of an offence. In certain circumstances, any machine, tool or implement involved in an illegal act can also be seized.

Natural England (NE) issue licences for the disturbance of European Protected Species including GCN, certain criteria must be met before a licence can be issued to enable otherwise prohibited works to proceed. Such criteria may be subject to change without notice. For further information please visit <u>www.naturalengland.org.uk</u>

Wildlife and Countryside Act, 1981 (as amended) - Birds

All species of wild bird, their nests and eggs are protected under Section 1 of the *Wildlife and Countryside Act*, 1981 (as amended); therefore surveys are required to check for their presence where they are likely to be disturbed for any reason.

The following is a summary of the offences listed under Section 1; however the Act should always be referred to for the exact and current wording:

Under Section 1 of the Wildlife and Countryside Act, 1981 (as amended), if any person:

- Intentionally kills, injures or takes any wild bird;
- Intentionally takes, damages or destroys the nest of any wild bird while that nest is in use or being built;
- Intentionally takes or destroys an egg or any wild bird, he shall be guilty of an offence;
- Has in his possession or control any live or dead wild bird or any part of, or anything derived from, such a bird; or
- Has in his possession or control an egg of any wild bird or any part of such an egg, he shall be guilty of an offence.

Schedule 1 (Part 1 and Part 2) of the *Wildlife and Countryside Act,* 1981 (as amended) lists bird species that receive special attention under Section 1. Any person convicted of an offence listed above, in respect of a bird included in Schedule 1 or any part of, or anything derived from, such a bird; the nest of such a bird; or an egg of such a bird or any part of such an egg, shall be liable to a special penalty.

Also, if any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturbs dependent young of such a bird, he shall be guilty of an offence and liable to a special penalty.

Schedules 1, 2, 3 and 4 of the *Wildlife and Countryside Act*, 1981 (as amended) list different species of bird and different Parts of Section 1 of the Act refer to different offences which may be committed in relation to the varying Schedules. The following is a summary of the type of protection offered to species of wild bird listed on each of the Schedules, however the Act itself should always be referred to for the exact and current wording and full species lists:

Schedule 1: Birds which are protected by special penalties:

- Part 1: At all times.
- Part 2: During the close season.

Schedule 2: Birds which may be killed or taken:

- Part 1: Outside the close season.
- Part 2: By authorised persons at all times.
- Schedule 3: Birds which may be sold:
 - Part 1: Alive at all times if ringed and bred in captivity.
 - Part 2: Dead at all times.
 - Part 3: Dead from 1st September to 28th February.
- Schedule 4: Birds which must be registered and ringed if kept in captivity.

The Natural Environment and Rural Communities (NERC) Act, 2006 (as amended)

The following is a summary of the *Natural Environment and Rural Communities (NERC),* Act, 2006 (as amended), the *NERC Act* itself should be referred to for the exact and current wording:

- Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity;
- In complying with the above, a Minister of the Crown, government department or the National Assembly for Wales must in particular have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992;
- Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

The Hedgerow Regulations, 1997

Hedgerows are distinctive features in the countryside and are the traditional type of field boundary in many areas of England and Wales. Many of these date back to the original enclosure of the land and so are of historic interest and importance.

Hedgerows (particularly older hedgerows) can contain a diverse mix of species and provide important links between other areas of habitat thus allowing wildlife to disperse. This role that hedgerows play in conserving and enhancing biodiversity is recognised by the UK BAP for this habitat type.

Hedgerows which meet certain criteria are protected by The Hedgerows Regulations, 1997. The aim of the Regulations is to protect important hedgerows in the countryside by controlling their removal through a system of notification. Under the Regulations it is against the law to remove or destroy certain hedgerows without permission from the Local Planning Authority (LPA). The criteria used to assess hedgerows relate to the value of a hedgerow from an archaeological, historical, landscape or wildlife perspective. They exclude hedgerows that are less than 30 years old. If a hedgerow is at least 30 years old and gualifies under any one of the criteria, then it is important and LPA approval is required before it can be lawfully removed or destroyed.

Removal of a hedgerow in contravention of the Regulations is a criminal offence, punishable in some cases in the Magistrates Court, by a fine of up to £5,000. For anyone convicted on indictment in the Crown Court, the fine is unlimited.

If a hedgerow is over 30 years old and meets the criteria in the Regulations it is classified as 'important'. A summary of the criteria is set out below, however, The Hedgerow Regulations, 1997 should be referred to for the exact and current wording:

- Marks a pre-1850 parish or township boundary; or
- Incorporates an archaeological; or .
- Is part of, or associated with, an archaeological site; or
- Marks the boundary of, or is associated with, a pre-1600 estate or manor; or .
- Forms an integral part of a pre-Parliamentary enclosure field system; or
- Contains certain categories of species of birds, animals or plants listed in the Wildlife . and Countryside Act or Joint Nature Conservation Committee (JNCC) publications. .
- Includes:
 - At least 7 woody species, on average, in a 30 metre length; or
 - At least 6 woody species, on average, in a 30 metre length and has at least 3 associated features; or
 - At least 6 woody species, on average, in a 30 metre length, including a blackpoplar tree, or large-leaved lime, or a small-leaved lime, or wild service-tree; or
 - At least 5 woody species, on average, in a 30 metre length and has at least 4 associated features.
 - Runs alongside a bridleway, footpath, road used as a public path, or byway open to all traffic and includes at least 4 woody species, on average, in a 30 metre length and has at least 2 of the associated features listed at (i) to (v) below.

(Note: The number of woody species is reduced by one in the North of England (which does not include Cheshire). The list of 56 woody species comprises mainly shrubs and trees. It generally excludes climbers (such as clematis, honeysuckle and bramble) but includes wild roses)

Associated features:

- (i) A bank or wall supporting the hedgerow;
- (ii) Less than 10% gaps;
- (iii) On average, at least one tree per 50 metres;
- (iv) At least 3 species from a list of 57 woodland plants;
- (v) A ditch;
- (vi) A number of connections with other hedgerows, ponds or woodland; and
- (vii) A parallel hedge within 15 metres.

The Protection of Badgers Act, 1992

The following is a summary of the offences contained in the Act; however the *Protection of Badgers Act,* 1992 itself should always be referred to for the exact and current wording.

Under the *Protection of Badgers Act*, 1992 a person is guilty of an offence if, except as permitted by or under this Act he:

- wilfully kills, injures or takes, or attempts to kill, injure or take, a badger;
- has in his possession or under his control any dead badger or any part of, or anything derived from, a dead badger;
- cruelly ill-treats a badger;
- uses badger tongs in the course of killing or taking, or attempting to kill or take, a badger;
- digs for a badger; or,
- sells a live badger or offers one for sale or has a live badger in his possession or control.

A person is also guilty of committing an offence under the *Protection of Badgers Act*, 1992 if he intentionally or recklessly interferes with a badger sett by doing any of the following things:

- damaging a badger sett or any part of it;
- · destroying a badger sett;
- obstructing access to, or any entrance of, a badger sett;
- · causing a dog to enter a badger sett; or,
- · disturbing a badger when it is occupying a badger sett,

The definition of a badger sett within the meaning of the 1992 Act is given as "any structure or place, which displays signs indicating current use by a badger". 'Current' is not defined in the Act, and may be open to interpretation. Natural England indicates that a sett is in 'current' use if it has been occupied at all over the previous 12 months. Whatever the interpretation of 'current use' however, it is important to note that a sett is protected whether or not there is a badger actually in residence at the time of inspection.

Natural England Guidelines state that work that disturbs badgers or their setts is illegal if not carried out under licence. Badgers could be disturbed by work near their sett even if there is no direct interference or damage to the sett itself, for example, using very heavy machinery within 30 metres of an active sett. Lighter machinery (particularly for any digging operation) within 20 metres, or light work such as hand digging or scrub clearance within 10 metres of an active sett, all require a licence. There are some activities which can cause disturbance at a far greater distance (such as using explosives or pile driving) and should therefore be given individual

consideration. Certain criteria must be met before a licence can be issued to enable otherwise prohibited works to proceed. Such criteria may be subject to change without notice.

Timing of operations should also be considered. If required, site-specific badger disturbance licences are normally only issued between the months of July and October so as to avoid the badger's breeding season. This aspect should be borne in mind when assessing any possible constraints upon the development timetable.

Wildlife and Countryside Act, 1981 (as amended) – Variegated yellow archangel

Under Section 14 of the Wildlife and Countryside Act, 1981 (as amended) if any person:

• Plants or otherwise causes to grow in the wild any plant which is included in Part 2 of Schedule 9, he shall be guilty of an offence.



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