Land off Oak Road
Thurnscoe
South Yorkshire

Preliminary Ecological Appraisal

Issue Date: April 2023

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NON-TECHNICAL EXECUTIVE SUMMARY

A Preliminary Ecological Appraisal including desk study was undertaken on land subject to proposals for a small residential development to the south of Oak Road, Thurnscoe, South Yorkshire. The site had been cleared of the majority of vegetation prior to the site visit.

The assessment of the site involved a Phase 1 habitat survey and a search for evidence of protected species. Habitats which could potentially support protected/notable species were also identified. This was done using aerial photos, the remaining vegetation around the edges and evidence of cut vegetation left on site.

The site measured approximately 0.3ha and appeared to have been colonised by tall ruderal vegetation and scattered scrub prior to site clearance. Small areas of amenity grassland and continuous scrub were present in the northern part of the site along the existing access road. All boundaries were marked by wooden garden fencing. A line of non-native conifer trees was planted along part of the southern boundary with other trees limited to young silver birch in the northern section and the stump of a sycamore in the south west corner which showed signs of regrowth.

The habitats within the site were thought to have offered little floristic interest as the species present were neither notable nor particularly rare even prior to site clearance.

Given the vegetation clearance it was not possible to rule out the presence of non-native invasive species prior to site activity.

The site was considered sub-optimal for protected species including great crested newts and reptiles given the lack of suitable habitat and isolation from more favourable habitat beyond the site. However, it may offer limited foraging/shelter for nesting birds and hedgehogs although no sign of the these were noted during the survey.

Enhancement, mitigation and protection measures are recommended to minimise the impacts of the development upon wildlife and improve the biodiversity on site post development. These include:

- Any lighting scheme should utilise low level lighting wherever possible, and light should be directed away from retained trees and adjacent offsite garden habitats to avoid disruption to commuting bats and roosting birds.
- If required, the further clearance/cutting of any remaining trees or scrub should take place outside of the bird breeding season (considered to be March – September inclusive) or checked by an Ecologist prior to clearance.
- Any excavations should be covered overnight, or a ramp provided to allow mammals including badgers and hedgehogs to escape. Chemicals should be stored securely.

- Planting of hedgerows is recommended in preference to new hard barriers to movement such as fences. If the latter are used, then hedgehog highways (gaps within fences) should be created to allow movement of this species onto and within the site.

Several habitat enhancements are recommended as part of the proposals including:

- Creation of grassland verges/areas within the proposed development and reseeding with a more diverse wildflower mix rather than usual amenity grassland is preferable.
- Planting of shrub/scrub/trees and hedgerows with native species would improve habitat diversity within the site.
- New planting within the proposed development should aim to use native species of local provenance with species that produce flowers and fruit and will provide a food resource for insects and birds.
- The provision of bird, bat and insect boxes on the new built structures.

These recommendations would be in accordance with National Planning Policy helping to achieve biodiversity net gain within the site post development.

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1.0 INTRODUCTION

1.1 This report has been prepared on behalf of the client by Jenny Wheeldon MSc, an Ecologist who is a full member of CIEEM with over 20 years' experience in the field of Ecological Consultancy. The author holds protected species licenses for bats (2015-12340-CLS-CLS) and great crested newts (2015-18025-CLS-CLS) as well as being a competent all-round Ecologist and habitat surveyor.

1.2 Field surveys and reporting work have been conducted in accordance with the Chartered Institute of Ecology and Environmental Management's: Code of Professional Conduct and Report Writing Guidance. The relevant best practice guidelines for surveys and mitigation have also been adhered to wherever relevant and any deviations from these have been explained and/or justified by the author.

1.3 The survey and report were completed on behalf of the client, in respect of proposals for a small-scale housing development on land off Oak Road, Thurnscoe, South Yorkshire (Central OS grid Ref: SE45750589, hereafter referred to as 'the site'.

1.4 The objective of the walkover survey was to:

- Obtain detailed baseline information on the habitats and ecological features of the site;
- Identify the presence of any habitat or species of principal importance for biodiversity under Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006;
- Identify the presence, or the potential for the presence, of any protected species whose disturbance may require consent under the Wildlife and Countryside Act, 1981 (as amended) or the Conservation of Habitats and Species Regulations 2017 (as amended);
- Identify any further, specialist surveys that may be required to support a planning application.

1.5 A preliminary ecological assessment of the site was undertaken on 18th April 2023. This report contains the results of this site appraisal including the potential of the habitats to support any protected species and habitats of nature conservation value.

Site Description and Context

1.6 The site measured approximately 0.3ha and is located to the south of Oak Road behind a row of houses with an access road located between existing property number 4 and number 6. The site is located in the north of the village of Thurnscoe in the borough of Barnsley, South Yorkshire.

1.7 Located within an extensive residential area it is surrounded by existing houses and bordered by wooden fences separating it from the gardens of adjacent properties which back onto the site.

1.8 Areas of green space in the local area are limited to playing fields, a public park 500m to the west and the habitats associated with a railway line which runs approximately 190m to the east of the site. A new housing development is being constructed to the north of the site and beyond this is a large arable field.

Development Proposals

1.9 The site is subject to a planning application for small-scale residential development comprising nine residential units with car parking and associated access route onto the site from Oak Road.

2.0 METHODOLOGY

Desk Study

2.1 In order to compile existing baseline information, relevant ecological information was sought from the Local Environmental Records Centre (Barnsley Biological Records courtesy of Sheffield Biological Records Centre SBRC), the Multi Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk and other open access ecological data sources.

2.2 The search area for biodiversity information was related to the significance of the site, species and potential zones of influence, as follows;

- 5km around the application area for sites of International Importance (e.g., Special Area of Conservation, Special Protection Area, RAMSAR site);
- 2km around the survey site for sites of National or Regional importance (e.g., Sites of Special Scientific Interest (SSSI));
- 1km around the survey site for sites of Local statutory Importance (e.g., Local Nature Reserves (LNR));
- 1km for non-statutory designated sites (e.g., Local Wildlife Sites LWS); and
- 1km for protected and notable species records with records considered from the last 20 years.

Field Survey – Flora/Habitats

2.3 The survey was initially undertaken following guidance from Joint Nature Conservation Committee (JNCC) (2016) which comprised a systematic walkover of the survey area mapping habitats present using the JNCC standard habitat codes, broadly describing and classifying the principal habitat types as well as other features of interest. UK Habs Classification codes have also been provided.

2.4 Plant species were recorded and have been included in Appendix A. The frequencies at which plant species occurred were noted using the DAFOR method. This was not necessarily a full list of the botanical species within the site but has been used to categorise the habitats within the survey area. A plan has been included to show approximate extent of the habitats on site (Figure 1: Habitat Plan).

Field Survey – Protected Species

2.5 During the survey of the site, signs of and/or suitable habitat for any species protected under part 1 of the Wildlife and Countryside Act 1981 (as amended), The Conservation of Habitats and Species Regulations 2017 (as amended) and the Protection of Badgers Act 1992 were recorded.

2.6 Consideration was also given to the existence and use of the site by other notable fauna such as LBAP or RDB species. Specific survey methodologies have been included below:

Badgers

2.7 The presence of badgers on the site involved a search for the following evidence (Methodology after Harris, Cresswell & Jefferies, 1991):

- Latrines often located close to setts, at territory boundaries or adjacent to favoured feeding areas;
- Tracks and pathways;
- Hairs caught on rough wood or fencing;
- Setts including earth mounds, evidence of bedding and runways between setts;
- Other evidence (not necessarily conclusive in isolation) including feeding scrapes, and scratching posts.

Bats

2.8 Ground Level Tree Assessment: a small number of trees were present within the site generally along the boundaries. These were assessed for potential to provide suitable roosting in accordance with the Bat Surveys: Good Practice Guidelines (BCT, 2016). The survey was undertaken by an ecologist with a Natural England level 2 class licence to survey for bats (reference number: 2015-12340-CLS-CLS). See Table 1 below for details of this assessment.

Table 1: Assessment of Roosting Potential in Buildings & Trees

Potential Suitability for Roosting Bats	Roosting Habitat
Negligible	No habitat features (such as crevices, suitable roosting surfaces, access points) present within the structure or tree; where minimal features exist, they may be assessed to be very unlikely to be used by bats due to other factors such as lighting, isolation, poor surrounding habitat etc.
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, the potential roost sites do not provide enough space/shelter/protection/appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be used for maternity or hibernation).
Moderate	A structure or tree with one or more potential roost sites that could be used by roosting bats but is unlikely to support a roost with high conservation status (e.g., maternity / hibernation roost).
High	A structure or tree that with one or more potential roost sites that are obviously suitable for 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.

2.9 Buildings: No permanent buildings were present only a temporary static caravan (B1).

2.10 Habitats: all remaining habitats within the site were assessed for value provided to foraging and commuting bats within the local area.

Breeding Birds

2.11 During the survey evidence of current and/or historical use by birds was recorded. Such evidence included the presence of active or redundant nests within remaining vegetation on the site. All habitats within the site were assessed for their potential to support nesting birds prior to site clearance.

Great Crested Newts

2.12 OS mapping and online aerial imagery were analysed for the presence of on and off-site water bodies within 500m of the application site in accordance with Natural England, (2015).

2.13 An assessment of the suitability of the terrestrial habitats to support great crested newts was completed within the site. Suitable terrestrial habitat includes shelter habitat such as scrub and grassland vegetation and habitat that could provide suitable hibernation sites such as rubble piles or tussock grassland.

Reptiles

2.14 An assessment of the suitability of the habitats present to support common reptile species was completed. This involved a review of habitats and habitat structure suitable for the shelter of reptiles such as areas of scrub and woodpiles, grassland with well developed, varied structure; and also, the appropriate juxtaposition of areas suitable for basking shelter and forage/hunting. This assessment was based on industry accepted guidance (Gent and Gibson, 1998) and (Froglife, 1999).

2.15 Any sightings, evidence of or suitable habitats for other protected fauna, local Biodiversity Action Plan (BAP) species or otherwise notable species was recorded during the survey.

Survey Constraints

2.16 The site had been largely cleared of vegetation prior to the survey resulting in the majority of the site being bare earth and hardstanding with remnants of vegetation at the edges. An assessment of the habitats has been made based on aerial photos of the vegetation present prior to site clearance, the remnants

of vegetation around the edges of the site and a pile of rubble/cut vegetation which was left on site. The remaining habitats have also been assessed for their suitability to support protected/notable species.

2.17 Given the extent of site clearance it was not possible to rule out the presence of non-native invasive species on site prior to site activity.

Report & Survey Validity

2.18 This report and the survey data within it are considered to be valid for 12 months from the date of the survey. After this time surveys may need to be repeated completely or updated.

2.19 It should be noted that any changes, man-made or natural, to the habitats on site within this time period are out of the authors control but may impact the validity of the survey results included within this report.

3.0 RESULTS

Statutory Designated Sites

3.1 No internationally designated site occurs within 5km of the site. No local designated sites including Local Nature Reserves were located within 1km of the site boundary.

3.2 The Multi-Agency Geographic Information for the Countryside (MAGIC) website indicates that there are no national designated sites for nature conservation within 2km of the site boundary. The closest one is Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) located approximately 2.9Km to the south of the site.

3.3 The application site does fall within an Impact Risk Zone (IRZ) for this SSSI. These zones have been developed by Natural England to identify areas within which certain categories of proposed development have the potential to impact the integrity of statutory sites. However, the plans for a small residential development at this location do not fall within any of the IRZ categories stated and therefore consultation with Natural England will not be required.

Non-statutory Designated Sites

3.4 Information regarding non-statutory nature conservation sites within 1km of the site was requested from SBRC. The information returned suggests there are no local wildlife sites or other non-statutory sites for nature conservation located within 1km of the site boundary.

Habitats of Principal Importance

3.5 Several small areas of deciduous woodland were identified on the priority habitat inventory mapped on www.magic.gov.uk. These were mainly to the south of the site with the closest area approximately 670m to the south with more small woodland compartments further to the south west near Thurnscoe Dike.

Protected and Notable Species

3.6 No records of protected species were returned from within or immediately adjacent to the site boundary. However, a small number of records were highlighted within 1km of the site. A summary of the closest and most relevant records from the past 20 years can be seen in the table below.

Table 2: Relevant protected and priority species records within 1km

Species	Date of Record	Closest Record to Site	Total No. of Records within 1Km
Amphibians			
Common toad *Bufo bufo*	2018	807m SE	2
Birds			
Bullfinch *Pyrrhula pyrrhula*	2021	795m SE	4
Dunnock *Prunella modularis*	2021	310m SE	18
Fieldfare *Turdus pilaris*	2009	Within 1km	2
Greenfinch *Carduelis chloris*	2021	489m SW	8
House martin *Delichon urbica*	2009	Within 1Km	4
House sparrow *Passer domesticus*	2021	439m NW	14
Kestrel *Falco tinnunculus*	2009	Within 1Km	5
Linnet *Linaria cannabina*	2021	420m NE	14
Skylark *Alauda arvensis*	2021	307m SE	9
Song thrush *Turdus philomelos*	2021	305m SE	15
Starling *Sturnus vulgaris*	2021	300m SE	10
Swallow *Hirundo rustica*	2014	662m SE	5
Swift *Apus apus*	2012	860m SE	6
Wren *Troglodytes troglodytes*	2021	455m S	11
Insects			
Dingy skipper *Erynnis tages*	2019	819m SE	1
Mammals			
Common pipistrelle *Pipistrellus pipistrellus*	2021	286m SW	2
Western European Hedgehog *Erinaceus europaeus*	2018	329m S	3
Plants			
Bee orchid *Ophrys apifera*	2019	932m NW	2
Common spotted orchid *Dactylorhiza fuchsii*	2018	932m NW	1

3.7 According to MAGIC no EPS licences for the disturbance of European Protected Species including bats and great crested newts have been granted within 2km of the site boundary.

Field Study - Habitats/Flora

3.8 The site almost entirely consisted of bare earth with an access road entering the site from the north with thin strips of grassland verge and scrub along the northern section of this hardstanding. A line of conifers and two young trees were present, and boundaries were marked with fences.

3.9 The habitats are described below and are illustrated with photographs. Figure 1 provides a plan showing the habitats and a botanical species list has been provided at Appendix A.

Hardstanding and Bare Earth

(Suburban/Mosaic of developed/Natural surface u1d)

3.10 Given that the site had recently been cleared of vegetation by machinery the main body of the survey area had been left as bare earth with tracked vehicle marks and a pile of accumulated rubble/waste and cut vegetation in the south west corner.

3.11 A tarmac road was present leading from Oak Road onto the site along the existing access driveway and this continued as a paved track into the main body of the site. Off the access road was a small area of hardstanding used as car parking located in front of an offsite garage.

Photos: Bare earth remained across the majority of the site and a hardstanding access road in the north.

Amenity Grassland (Modified Grassland g4 66)

3.12 Thin amenity grassland verges were present along the access road in the north of the site.

3.13 This grassland was species poor being dominated by perennial rye grass Lolium perenne with Poa pratensis recorded frequently and false oatgrass *Arrhenatherum elatius* rarely. Herbaceous species were limited but included frequent ribwort plantain *Plantago lanceolata*, cow parsley *Anthriscus sylvestris* and dandelion *Taraxacum officinale*. Common mouse ear *Cerastium fontanum*, daisy *Bellis perenne* and Germander speedwell *Veronica chamaedrys* were also noted rarely.

Photos: amenity grassland verges along access road

Trees and Scrub (Line of Trees w1g6/ Bramble Scrub h3d)

3.14 Trees within the site were limited to a line of non-native Leylandii conifers planted as screening along part of the southern boundary. The cut stump of a mature sycamore *Acer pseudoplatanus* remained in the south west corner with signs of regrowth. The only other trees present within the site were two young silver birch *Betula pendula* trees planted along the access road in the north.

3.15 A thin strip of bramble *Rubus fruticosus agg*. scrub had developed adjacent to the site entrance and the amenity grassland verge. Dominated by bramble this area of continuous scrub also included one bush of grey willow *Salix cinerea* recorded as rare.

Photo: Two young silver birch trees on site and thin strip of bramble scrub along access

3.16 A second small area of scrub was present at the rear of the static caravan again in the north of the site (TN1). Bramble and butterfly bush *Buddleia sp*. were recorded here.

3.17 The remnants of scattered scrub were recorded along the edges of the site adjacent to the wooden boundary fence. Species were limited to bramble, holly *Ilex aquilinum* and broom *Cytisus scoparius* all recorded occasionally.

Tall Ruderal Vegetation

3.18 There was evidence of the tall ruderal species whcih had been present onsite prior to site clearance. This included cut vegetation remaining in the pile of rubble in the south west corner (TN2) and also remnant vegetation left growing at the edge of the site along the boundary fencing. Recorded species included common nettle *Urtica dioica*, cow parsley, red nettle *Lamium purpureum* and cleavers *Galium aparine*.

Field Study - Fauna

Badgers

3.19 No evidence of badger presence such as setts, snuffle holes or latrines was observed at the time of survey. Habitats within the site are considered to represent a negligible resource for foraging badger and no suitable area for sett creation was identified.

Bats

3.20 Buildings: No buildings were present within the site with the exception of a static caravan which offered no potential for use by roosting bats.

3.21 Trees: Only a small number of individual trees were present within the site. No features suitable for use by roosting bats were noted within these trees.

3.22 Habitats: Given the small size of the site and the homogenous habitats within, it was considered to be of extremely limited value for foraging bat species. Remaining trees along the southern boundary may offer cover for commuting bats across the south of the site. The habitats within the site were considered to be of 'negligible' value for use by foraging bats.

Breeding Birds

3.23 Prior to site clearance the site was predicted to have been colonised by tall ruderal vegetation and scattered scrub with Leylandii conifers along parts of the boundary. Given the size of the site and nature of the habitats within, the site is not now considered to be of particular value for nesting birds. However, the trees along the boundary of the site and the remaining scrub may provide some limited foraging/nesting opportunities for the local bird population.

Great Crested Newts

3.24 No records of GCN were returned during the data search. Two ponds were present within 500m of the site located approximately 440m to the south east and 480m to the south west of the site boundary. However, the site was

surrounded by built environment including several roads which provide barriers to amphibian movement in the local area.

3.25 Suitable terrestrial habitat would have been present onsite prior to vegetation clearance. However, given the distance from the site to the nearest potential breeding ponds and the presence of significant barriers to movement between the site and such ponds, the habitat within the site would not have supported great crested newts.

Reptiles

3.26 No records of reptiles within 1km of the site were returned by SBRC. The site is surrounded by barriers to movement and built environment without links to any suitable habitats elsewhere in the local area. This makes the site very isolated and unsuitable for use by reptiles regardless of vegetation clearance.

Western European Hedgehog

3.27 No records of hedgehogs within 1km of the site were returned by SBRC and no evidence of use by hedgehogs was noted during the survey.

3.28 However, habitats within the site prior to site clearance would have offered suitable foraging opportunities and shelter for hedgehogs. The site is now dominated by bare earth with small patches of scrub and amenity grassland which will offer more limited foraging resources for this species.

4.0 DISCUSSION & RECOMMENDATIONS

Statutory & Non-statutory Designated Sites

4.1 No statutory or non-statutory designated sites are present in the local area and the proposals will not impact such sites in the wider area.

4.2 A number of HPI's are also present within 1km of the site. The closest (deciduous woodland) lies over 600m to the south. All HPI areas are located a sufficient distance from the site with barriers in between such as residential housing and urban infrastructure which act as a barrier and thus no impacts are considered likely to arise upon the HPI's from physical damage, pollution etc. No HPI's are directly linked to the site and do not appear to have any formal public footpaths. Therefore, there are not expected to be any significant impacts from recreational use arising from this development upon them.

Habitats & Flora

4.3 The majority of lost habitat as part of the proposals would comprise improved, amenity grassland of low species diversity, tall ruderal vegetation and small, localised areas of continuous/scattered scrub. These areas of habitat are not considered to be of nature conservation value given the size of the habitat areas present even prior to site clearance and given that the plants present were common, widespread species. The trees within the site will be retained with exception of the sycamore stump in the south west corner of the site.

4.4 The loss of these areas including the tall ruderal and scrub habitats that existed prior to site clearance could be mitigated by the creation of grassland verges/areas and planted shrubs/scrub/trees within the proposed development. This includes reseeding grassland with a more diverse wildflower mix rather than usual amenity grassland seed/turf and planting with native shrub and trees. The planting of species rich native hedgerows along the boundaries would also compensate for the loss of scrub from the site.

Fauna

Badgers

4.1 No records of badger in the local area and no evidence of use by this species was found within or adjacent to the site boundary. There were no suitable areas for sett creation within the site and as a foraging resource the site was extremely limited. No further surveys relating to this species are considered necessary prior to the start of construction.

Bats

4.2 The site lacked habitats and features which could be used by foraging/commuting bats. As such the site was considered to be of 'negligible' value to bats.

4.3 However, the development proposals should include a lighting scheme sympathetically designed and managed during and post development to prevent negative effects on the local bat population. Unnecessary lighting of boundaries and offsite habitats such as adjacent gardens should be avoided with low level lighting used wherever possible particularly where boundary trees and scrub will be retained along the southern boundary.

Breeding Birds

4.4 Given the small scale of the development leading to loss of mainly tall ruderal vegetation and scattered scrub it is not anticipated that the proposals will have a negative impact on the local bird population.

4.5 All birds are protected whilst on the nest under the Wildlife and Countryside Act 1981 (as amended). Any further vegetation clearance should take place outside of the bird breeding season (considered to be March – September inclusive). If this is not possible the affected areas need to be checked by an Ecologist prior to removal. Active bird's nests are nests which are in the process of being built, or contain eggs, chicks or fledglings. If any active bird's nests are found, they should be left in place with an appropriate buffer (minimum 5m) until fledglings have left the nest.

Great Crested Newts

4.6 Given a lack of suitable and accessible aquatic habitat within the area and the presence of major barriers to movement, the site is considered to be unsuitable for amphibians including GCN. As such GCN are not considered to be a statutory constraint to the proposed development and no further surveys are considered necessary.

Western European Hedgehog

4.7 The impact of the habitat loss on this species is likely to be minor particularly given the creation of garden habitats as part of the development which can continue to support foraging hedgehogs.

4.8 However, to prevent additional barriers to movement hedgerows are recommended in preference to fencing when creating new boundaries within the site. Hedgerows can be easily negotiated by foraging hedgehogs and may themselves provide foraging opportunities around the base. However, if additional fences are required then hedgehog highways should be provided. This can be achieved by leaving holes approximately 13cm x 13cm (British Hedgehog Preservation Society & PTES, 2019) at the base of fences every 20m

or so to allow free movement of hedgehogs and other wildlife through the site and into habitats beyond.

4.9 Precautionary working methods should also be utilised during site clearance and the construction phase to prevent harm to individuals of this as well as other species. During construction activities any excavations should be fitted with an access ramp overnight to allow trapped animals an escape route. Chemicals should be stored in secure compounds away from access by animals. Any open pipes should be temporarily capped at the end of each working day to prevent any animals gaining access.

Reptiles

4.10 The site is considered unsuitable for reptiles given the isolation created by barriers within the local built environment including several roads. It is considered that the site would not support a viable population of reptiles and no further surveys for reptiles are considered necessary.

Other Avoidance & Mitigation Measures

4.11 Any excavations should be fitted with an access ramp overnight to allow trapped animals an escape route. Chemicals should be stored in secure compounds away from access by animals. Any open pipes should be temporarily capped at the end of each working day to prevent any animals gaining access. This advice relates in particular to hedgehogs as well as other animals which may investigate the site if the boundary fences are removed or access to the site is opened up.

Biodiversity Enhancements

4.12 The majority of habitat lost during site clearance to facilitate the development proposals was likely to be tall ruderal and scrub. This should be replaced within the site by new planting/reseeding. New and additional planting within the development should include native species of local provenance that produce flowers and fruit to provide a potential food resource for insects, birds and small mammals. These could include holly, hazel *Corylus avellana* and hawthorn. Preferable tree species could include field maple *Acer campestre* and rowan *Sorbus aucuparia*.

4.13 Any formal lawn areas should be seeded with a species rich flowering lawn mix such as EL1 – Flowering Lawn Mix, Emorsgate Seeds.

4.14 The creation of boundary hedgerows along the other edges of the site would be preferable to open or fenced boundaries. Hedgerows would provide a wildlife corridor and provide foraging resources. They should include native species including hawthorn, holly *Ilex aquilinum*, hazel *Corylus avellana*, field

maple *Acer campestre* and also guelder rose *Viburnum opulus* which produce seeds and fruit offering a food source to insects, birds and small mammals as well as providing shelter.

4.15 Where feasible within the development design, consideration should also be given to the provision of bat, bird and insect features on the new built structures. This would increase the availability of nesting/roosting opportunities within the site and replace the loss of bird nesting opportunities within any trees, hedgerow and shrub removed during site clearance. Biodiversity enhancement features could include:

- Universal swift bricks on the new dwellings
- Integrated bat features on the new dwellings
- Bird boxes on new buildings and/or retained trees.
- Insect bricks

4.16 The provision of such features as detailed above would be in accordance with National Planning Policy helping to enhance biodiversity within the local area and would help achieve biodiversity net gain post development.

5.0 REFERENCES

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1

APPENDIX A

Botanical Species List

Latin Name	Common Name	DAFOR
Amenity Grassland & Tall Ruderal Vegetation		
Anthriscus sylvestris	Cow parsley	*O*
Bellis perenne	Daisy	*R*
Cerastium fontanum	Common mouse ear	*R*
Galium aparine	Cleavers	*O*
Lamium purpureum	Red nettle	*O*
Lolium perenne	Perennial ryegrass	*D*
Plantago lanceolata	Ribwort plantain	*F*
Poa pratensis	Smooth meadow grass	*LA*
Senecio jacobaea	Common ragwort	*F*
Taraxacum officinale agg.	Dandelion	*F*
Veronica chamaedrys	Germander speedwell	*R*
Urtica dioica	Common nettle	*O*
Trees & Scrub		
Acer pseudoplatanus	Sycamore	*R*
Betula pendula	Silver birch	*R*
Buddleia sp.	Butterfly bush	*R*
Cytisus scoparius	Broom	*R*
Ilex aquilinum	Holly	*R*
Cupressus sp.	Leylandii conifers	*LA*
Rubus fruticosus agg.	Bramble	*LD*
Salix cinerea	Grey willow	*R*
Sambucus nigra	Elder	*O*

D – dominant, A-abundant, F-frequent, O-occasional, R-rare, L-locally

Key

- site boundary
- bare earth
- amenity grassland
- hardstanding
- continuous scrub
- building
- tall ruderal
- broadleaved tree
- coniferous tree
- scattered scrub
- target note
- fence

FIGURE 1: Habitat Plan

Land off Oak Road
Thurnscoe
South Yorkshire

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22.04.2023