SF 3282 | CLIFF HILL, DENBY DALE

INITIAL ECOLOGICAL REVIEW

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SMEEDEN FOREMAN

Landscape Architecture • Ecology • Arboriculture

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1.0 INTRODUCTION

1.1.1 Smeeden Foreman Limited has been commissioned by Urban Group Limited to undertake an initial ecological review of their site at Cliff Hill, Denby Dale (central grid reference SE 22869 08707), hereafter referred to as the 'site'.

1.1.2 This report includes information gathered by an initial site walkover and summarised habitat survey. A review of this information will be made to identify any features or sites of ecological interest which may be affected by the development proposals. Where potential impacts or protected species are identified the need for mitigation measures and requirements for further surveys will be discussed.

1.1.3 The report has been commissioned to inform a planning application for the construction of a residential housing development. A full Ecological Impact Assessment (EcIA) and further surveys have been commissioned with report to follow upon completion. This information will be used to determine the habitat baseline and post-development calculation with respect to Biodiversity Net Gain in reference to the Kirklees Council Technical Advice Note, June 2021.

1.1.4 The methodologies used to survey and assess the ecological value and potential impacts on the site are based upon guidelines produced by the Chartered Institute of Ecology and Environmental Management (CIEEM) (Guidelines for Preliminary Ecological Appraisal, 2017).

2.0 SITE DESCRIPTION

2.1.1 The proposals site is located to the northern edge of the village of Denby Dale, approximately 5.3km north of Penistone, refer to *Figure 01* below.

2.1.2 The site consists of a field of rank grassland with areas of scattered and dense scrub, remnant outgrown hedgerows and occasional trees. The site is bound by stone walling and fencing to the west and east, with existing residential housing forming part of the north-eastern, eastern and southern boundaries. Development for new housing is under construction immediately adjacent to the south-eastern boundary. Fields are located adjacent to the site to the north and south and a public right of way runs parallel with the western site boundary.

2.1.3 The River Dearne flows approximately 170m south of site, separated from the site by residential housing and road infrastructure. Open countryside comprising agricultural land, woodland, small watercourses, ponds and hedgerow networks surrounds the site. Arable and pasture farmland dominate the landscape surrounding the village of Denby Dale.

Figure 01: Aerial view of site location

3.0 PRINCIPLE LEGISLATION AND POLICIES

3.1.1 The national nature conservation legislation and policies that may be relevant to the proposed development are listed below. A brief explanation of the principle legislation and policies relating to nature conservation, biodiversity and ecology is provided in *Appendix 01.*

Principle Legislation and Policies

- Wildlife and Countryside Act 1981 (*as amended*)
- EC Habitats Directive (92/43/EEC)
- EC Birds Directive (79/409/EEC)
- Conservation of Habitats and Species Regulations 2017
- Countryside and Rights of Way Act 2000
- Protection of Badgers Act 1992
- United Kingdom Biodiversity Action Plan (UKBAP)
- Natural Environment and Rural Communities Act (NERC), 2006 – Biodiversity Duty
- Hedgerow Regulations 1997
- National Planning Policy Framework (NPPF)

4.0 BASELINE INFORMATION

4.1 METHODOLOGY

4.1.1 The ecological interest of the site and its surroundings has been investigated by a combination of the following:

- Initial walkover of the site and immediate surroundings including an extended phase 1 habitat survey to the UK Habitat Classification System
- Bat transect surveys are programmed to take place during the 2022 active season;
- Consultation with relevant bodies to obtain existing protected species records and statutory / non-statutory designated sites information within 2km of the development site: West Yorkshire Ecological Service and West Yorkshire Bat Group;
- The UK Biodiversity Action Plan (UKBAP);
- The Kirklees Biodiversity Action plan (LBAP);
- Magic map, a government website for nature conservation information; and,
- Aerial photographs.

4.2 NATURE CONSERVATION DESIGNATED SITES

Statutory Designations

4.2.1 No statutorily designated nature conservation sites lie within 2km of the proposals site boundary such as Ramsar Sites, Special Protection Areas (SPA), Special Areas of

Conservation (SAC), Local Nature Reserves (LNR), National Nature Reserves (NNR), Areas of Outstanding Natural Beauty (AONB) and National Parks.

4.2.2 The site does, however, lie within an outer Impact Risk Zone for Denby Grange Colliery Ponds Site of Special Scientific Interest (SSSI) and Special Conservation Area (SAC), located approx. 7.2km north-east of site.

4.2.3 Sites designated as SSSIs are of national importance for their wildlife and natural heritage value. They are designated by Natural England, following evaluation against published guidelines, under the Wildlife and Countryside Act 1981.

4.2.4 Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds).

4.2.5 The relevant Natural England (NE) Geographic Information System (GIS) dataset indicates that the nature and scale of the proposed works (residential development) are unlikely to impact upon this site.

Non-statutory Designations

4.2.6 Consultation with West Yorkshire Ecology Service has been undertaken with respect to locally designated site information – *awaiting results.*

4.2.7 Kirklees Council have identified biodiversity areas within the Kirklees region with priorities, objectives and opportunities to ensure effective targeting of conservation efforts. The proposals site lies within the Kirklees Wildlife Habitat Network and the Biodiversity Opportunity Zone – Pennine Foothills. The site also falls within the Strategic Green Infrastructure Area – River Dearne Corridor.

4.3 EXISTING SPECIES RECORDS

4.3.1 Consultation with West Yorkshire Ecology Service and West Yorkshire Bat Group has been undertaken for protected and notable species within the local area – *awaiting results.*

4.4 PRIORITY HABITATS

4.4.1 The UK Biodiversity Action Plan (UK BAP) identifies priority species and habitats which are those considered to be the most threatened and therefore most in need of conservation action. The lists were updated in 2007 to include 1150 species and 65 habitats.

4.4.2 The UK Post-2010 Biodiversity Framework (July 2012) has succeeded the UKBAP, however priority species and habitats listed under the UKBAP remain a valuable reference source and have been used to inform statutory lists at a national level including Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England).

4.4.3 Priority habitat known to occur within 2km of the site includes deciduous woodland, lowland dry acid grassland, lowland heathland, lowland meadows, purple moor and rush grass pasture and hedgerows.

4.4.4 During the walkover survey three S41 (formerly UK BAP) bird species were recorded: house sparrow, dunnock and starling.

4.4.5 Kirklees Biodiversity Action Plan has assigned Habitats of Principal Importance as follows (with key geographical areas in brackets):

- Arable field margins (Pennine foothills)
- Blanket bog (Uplands)
- Hedgerows
- Inland rock outcrop and scree habitats (valley slopes and quarries)
- Lowland dry acid grassland (valley slopes)
- Lowland heathland (valley slopes)
- Upland and lowland meadows (Pennine foothills and mid-altitudinal grasslands)
- Lowland mixed deciduous woodland (valley slopes and Pennine foothills)
- Open mosaic habitats on previously developed land (urban areas)
- Ponds
- Reedbeds (floodplain, Riverine Corridors Local Action Plan)
- Rivers (floodplain, Riverine Corridors Local Action Plan)
- Traditional orchards (Pennine foothills)
- Upland flushes, fens and swamps (uplands)
- Upland oak woodland and mixed ashwoods (uplands and valley slopes)
- Wet woodland (floodplain)
- Wood-pasture & parkland (Pennine foothills and valley slopes)
- Scrub (local BAP habitat – primarily valley slopes and Pennine foothills)
- Other semi-natural grassland (wet/rush pasture and rough grassland)

4.4.6 Of the above list, rough grassland, remnant hedgerows, bramble and mixed scrub habitats occur on site.

4.4.7 Kirklees Biodiversity Action Plan has assigned Species of Principal Importance as follows:
Birds: bullfinch, cuckoo, grasshopper warbler, linnet, starling, Eurasian curlew, Eurasian tree sparrow, grey partridge, dunnock, house sparrow, lesser redpoll, northern lapwing, red grouse, reed bunting, ring ouzel, skylark, song thrush, spotted flycatcher, tree pipit, twite, willow tit, wood warbler, yellow wagtail, yellowhammer.
Invertebrates: northern wood ant, small heath, wall brown, white-letter hairstreak.
Fish: Atlantic salmon and European eel;
Reptiles/amphibians: common lizard, common toad and great crested newt;
Terrestrial mammals: brown hare, brown long-eared bat, mountain hare, noctule bat, otter, soprano pipistrelle, water vole and West European hedgehog.

4.4.8 Of the above species, house sparrow, starling and dunnock were recorded during the walkover survey, with vegetation (trees and scrub) on site likely to be used by these species. The site provides foraging and commuting habitat for bat species and is likely

to be accessed by hedgehog. A single tree has been identified to provide low bat roost potential.

4.5 SITE SURVEY – HABITAT SUMMARY

4.5.1 The site is predominantly comprised of neutral grassland of varying condition. The northern corner of site is dominated by dense bramble scrub *Rubus fruticosus* with dense patches also associated with grassland habitat and field boundaries. Areas of mixed scrub and hedgerow sections are present in association with remnant field boundaries, particularly to the east of site, comprising a range of native species including hawthorn *Crataegus monogyna,* broom *Cytisus scoparius,* ash *Fraxinus excelsior,* elder *Sambucus nigra*, holly *Ilex aquifolium*, bird cherry *Prunus padus*, oak *Quercus robur* and sycamore *Acer psudeoplatanus.*

4.5.2 Grassland habitats are dominated by tall grasses, including Yorkshire-fog *Holcus lanatus*, cock's foot *Dactylis glomerata*, meadow foxtail *Alopecurus pratensis*, perennial ryegrass *Lolium perenne* and rough meadow-grass *Poa trivialis*. Ruderal species were also identified including common nettle *Urtica dioica,* broad-leaved dock *Rumex obtusifolius,* rosebay willowherb *Chamaenerion angustifolium* and creeping thistle *Cirsium arvense.* Forbs occurring within the sward include meadow buttercup *Ranunculus acris*, creeping buttercup *R. repens*, common sorrel *R. acetosa*, cleavers *Galium aparine*, ribwort plantain *Plantago lanceolata*, ragwort *Senecio jacobaea,* common vetch *Vicia sativa*, bush vetch *V. sepum* and bird's foot trefoil *Lotus corniculata.* An area of grassland comprises species indicative of neutral grassland including abundant common bird's foot trefoil, meadow vetchling *Lathyrus pratensis,* red clover *Trifolium pratense*, common vetch, sheep sorrel *R. acetosella*, ribwort plantain and creeping cinquefoil *Potentilla reptans*.

4.5.3 Grassland on site to the north, south and east has been subjected to groundwork disturbance resulting in soil build-up and storage of materials including stone piles and pipework. Small sections of hedgerow have been removed to the north and central to site.

4.5.4 A section of the northern site boundary adjacent to residential gardens is marked by a dry ditch with associated ruderal and grassland vegetation recorded to include rosebay willowherb, yellow flag iris *Iris pseudacorus,* wood avens *geum urbanum*, dandelion *Taraxacum officinale* agg*.,* and garden escapes such as daffodil *Narcissus sp.*, columbine *Aquilegia sp* and Spanish bluebell hybrid *Hyacinthoides x massartiana.*

4.5.5 Boundaries are marked by a mix of stone walling and fencing with part of the eastern boundary unmarked adjacent to new development currently under construction. An access gate is present to the western boundary.

4.5.6 Occasional trees are present in association with remnant hedgerow, scrub and boundary habitats. Two mature oak trees present to the north of site were identified to support features of low bat roost potential.

4.5.7 During the walkover survey the following species were noted: greenfinch *Carduelis chloris*, house sparrow *Passer domesticus*, magpie *Pica pica*, woodpigeon *Columba palumbas*, starling *Sturnus vulgaris*, wren *troglodytes troglodytes*, dunnock *Prunella modularis*, swallow *Hirundo rustica*, blackbird *Turdus merula*, chiffchaff *Phylloscopus collybita*, blue tit *Cyanistes caeruleus*, swift *Apus apus* and kestrel *Falco tinnunculus*.

4.5.8 No water bodies were evident on site to provide potential breeding habitat for amphibians and no ponds were identified within a 500m radius of the site therefore the presence of great crested newt is reasonably discounted.

4.6 SITE SURVEY – BAT ACTIVITY SURVEY

4.6.1 Habitats on site have been assessed to be of moderate suitability for foraging and commuting bats with scrub and rough grassland present on site linking to residential garden and well connected to other favourable habitats in the area.

4.6.2 To date, a single transect survey has been undertaken in May, with further surveys scheduled to take place monthly until October 2022. Results to be provided in an updated version of this report.

5.0 RECOMMENDATIONS

5.1 POTENTIAL ENHANCEMENT MEASURES

5.1.1 The current layout will result in the loss of scrub and rough grassland habitats with retention of trees where possible. Public open space to the north-east of site provides scope for biodiversity enhancements with tree and hedgerow planting across the development in association with garden boundaries. Enhancement recommendations include, but are not limited to, the following:

- Retention of features of value where possible;
- Inclusion of areas of wildflower grassland, scrub planting and trees using appropriate native species within the landscape proposals;
- Inclusion of aquatic vegetation in association with the proposed SuDs drainage feature within public open space and appropriate design to be of benefit to wildlife;
- Consideration given to inclusion of SuDs drainage features within the development itself where scope of design allows, such as inclusion of rain gardens and permeable paving;
- Lighting to be designed to avoid illuminating site boundaries used by commuting and foraging bat populations;
- Inclusion of integral bat and bird roosting/nesting features within the proposals.
- Due to the location of the site and its connection to rural habitats to the north, precautionary working methods should be adopted to ensure species such as hedgehog, badger and other mammal species are not harmed or killed during the works. Such works would include the removal of any tree/shrub cuttings from site, once vegetation is cut to avoid the creation of brash piles; these may be attractive to hedgehogs, which could subsequently be harmed if the brash pile is burnt or removed with machinery. In addition, any trenches created on site will be covered or a means of escape shall be provided and any open pipe work will be capped at the end of each working day.

5.2 FURTHER SURVEYS AND ASSESSMENTS

5.2.1 This draft report summarises the species and habitats present at the proposals site. On site assessment (including condition assessments of individual habitats) is currently ongoing to support a Biodiversity Net Gain Assessment (DEFRA Metric version 3.1) which has been commissioned to calculate the existing value of the site in terms of biodiversity and to demonstrate potential gains and losses resulting from the proposed development. Reference to the existing arboricultural survey *SF3282 Arboricultural Survey Report* (Smeeden Foreman, January 2022) will be made to inform the assessment.

5.2.2 Bat transect surveys to assess the use of the site by foraging and commuting bats have been commissioned with a single bat transect survey completed to date, with remaining surveys to take place June – October.

5.3 IMPACT ASSESSMENT SUMMARY

5.3.1 Following completion of site surveys and ongoing assessments, a summary of the resulting impact assessment based upon CIEEM guidelines is to be completed for the scheme along with mitigation and enhancement measures to be incorporated within the proposals onsite or offsite if required. Subject to the surveys detailed above, and with the mitigation and enhancement measures detailed within this report incorporated within the site proposals, there are anticipated to be no significant residual ecological impacts.