



LIZARD

Landscape Design and Ecology

ECOLOGICAL IMPACT ASSESSMENT

**Land at New Barn Nursery, Broadford Bridge
Road, West Chiltington, Sussex.**

On Behalf of: Mr. P a'Barrow

Planning Issue

Prepared by	LB
Checked by	CO
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SUMMARY

Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of land proposed for development Land at New Barn Nursery, Broadford Bridge Road, West Chiltington, Sussex (*Grid Reference: TQ 097 211 – hereafter referred to as ‘the site’*).

A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of the site was undertaken on 21st February 2019, to appraise the existing ecological resource within the land and the surrounding area. A full Ecological Impact Assessment was then undertaken using this baseline data.

The proposed site is formed of improved grassland, intact species poor hedgerow and scrub. The site itself is of **low ecological value** with no habitats of interest noted.

The scrub areas contain optimal terrestrial habitat suitable for amphibians and reptiles therefore, a series of mitigation / avoidance measures have been devised to ensure the development does not contravene any UK or European legislation.

Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed ecological enhancements resulting in a **net gain** and a **long-term positive increase** in biodiversity in line with national planning policy guidance.

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of land proposed for development Land at New Barn Nursery, Broadford Bridge Road, West Chiltington, Sussex (*Grid Reference: TQ 097 211 – hereafter referred to as ‘the site’*).
- 1.2 A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of the site was undertaken on 21st February 2019, to appraise the existing ecological resource within the land and the surrounding area. A full Ecological Impact Assessment was then undertaken using this baseline data.
- 1.3 A summary of the results of these surveys, potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. This report has been prepared by Louise Barker (MSc BSc, Project Ecologist; Lizard Landscape Design and Ecology) and reviewed by Catherine O'Reilly (MCIEEM, Senior Ecologist; Lizard Landscape Design and Ecology).

Site Information

- 1.4 The site is in a rural position, 2.5km to the north of the village of West Chiltington in West Sussex. The proposed site is square in shape, mainly level and comprises farm land dominated by agricultural grassland measuring approx. 0.2 hectares (ha). The site is bounded to the north and east by similar agricultural land parcels; to the west by Broadford Bridge Road and to the south, New Barn Nursery consisting of agricultural buildings and poultry pens.

Surrounding Landscape

- 1.5 The surrounding landscape is largely rural with farmland dominating the landscape in all directions with a network of hedgerows throughout. The soils on site are formed of *Slowly Permeable Seasonally Wet Slightly Acid but Base-Rich Loamy and Clayey Soils*.

Development Proposals

1.6 The scheme proposals include the development of 1 no. agricultural building in keeping with the same buildings existing to the south of the proposed site.

Survey Aims

1.7 The aim of this ecological appraisal survey has been:

- *To identify habitats and protected species present, and any other features of ecological value;*
- *Identify any potential ecological constraints;*
- *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
- *To detail enhancements which will be incorporated into the scheme.*

2.0 PLANNING POLICY AND LEGISLATION***Legislation***

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this EclA includes:

- *The Conservation of Habitats and Species Regulations 2017;*
- *The Wildlife and Countryside Act 1981 (as amended);*
- *The Natural Environment and Rural Communities (NERC) Act 2006.*

2.2 This above legislation has been addressed, as appropriate, in the production of this report.

National Planning Policy

2.3 The National Planning Policy Framework (NPPF) 2019 sets out the government planning policies for England and how they should be applied. 'Chapter 15: *Conserving and Enhancing the Natural Environment*' states that development should be '*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*'

2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

Horsham District Planning Framework Nov 2018;

Policy 31 Green Infrastructure and Biodiversity

2.5 Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss and ensures that the ecosystem services of the area are retained.

2.6 Development proposals will be required to contribute to the enhancement of existing biodiversity and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.

2.7 Where felling of protected trees is necessary, replacement planting with a suitable species will be required.

2.8 Particular consideration will be given to the hierarchy of sites and habitats in the district as follows: i. Special Protection Area (SPA) and Special Areas of Conservation (SAC) ii. Sites of Special Scientific Interest (SSS/Is) and National Nature Reserves (NNRs) iii. Sites of Nature Conservation Importance (SNC/Is), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.

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2.9 Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that: i. The reason for the development clearly outweighs the need to protect the value of the site; and, ii. That appropriate mitigation and compensation measures are provided.

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 The Multi-Agency Geographic Information for the Countryside (*MAGIC*) was consulted for all designated sites, priority habitats and protected species licence records within 2.0km of the site. The desk search was conducted on 20th February 2019. Due to the small size of the site, and its low ecological value, a full records search from SxBRC was not considered proportionate.

3.2 Field Survey

3.2.1 A preliminary ecological appraisal was undertaken on 21st February 2019, and the site subjected to an ecology survey using guidelines set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit* (JNCC, 2003).

3.2.2 Habitats within the site were classified and the presence, or potential presence, of certain protected and / or notable species of flora and fauna were identified. A summary description of the habitat within the site following the *Phase 1 Habitat Survey Methodology* is presented in Section 4.0. This involved identifying features that may be used by protected species, potential foraging areas and other signs of use. Water bodies were recorded wherever possible, within 500 metres of the proposed development site.

3.2.3 The results are summarised and accompanied in large part by photographic evidence contained in *Appendix A – Site Photographs*. Recommendations for further investigation and survey are made in the following report.

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3.3 Preliminary Bat Roost Assessment

3.3.1 A Preliminary Bat Roost Assessment of trees on site was undertaken on 21st February 2019 by an experienced bat surveyor who undertook an examination of the existing trees.

3.3.3 Trees were visually identified from the ground, using binoculars where necessary, for features that could be used by bats such as:

- *Woodpecker Holes;*
- *Knot Holes;*
- *Tear-outs;*
- *Flush Cuts;*
- *Double Leaders.*

3.3.4 Once features had been assessed the trees were then categorised in accordance with *Table 4.1 of the Bat Conservation Trust's Good Survey Guidelines (2016)* (shown below):

Table No. 01 – Bat Roost Suitability Guidelines (BCT, 2016)

Category	Trees
‘ Negligible ’	<i>No suitable features identified.</i>
‘ Low ’	<i>Tree of sufficient size / age to support bat roost features; but with none identified from the ground.</i>
‘ Moderate ’	<i>Tree with features which, may support a bat roost of low conservation status.</i>
‘ High ’	<i>A tree with several potential bat roost sites that are suitable for use by a large number of bats.</i>

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3.4 Ecological Impact Assessment

3.4.1 The methodology for Ecological Impact Assessment (*EcIA*) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (*CIEEM*): 'Guidelines for Ecological Impact Assessment' (*CIEEM*, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (*or change*). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

3.4.2 Each ecological feature within the site has been considered within a defined Geographic context such as:

- *International and European;*
- *National;*
- *Regional;*
- *County;*
- *District;*
- *Local;*
- *Site Level;*
- *Negligible.*

3.4.3 Based upon CIEEM guidance, value was determined with reference to the following factors:

- *Its inclusion as a Designated Site or other protected area;*
- *The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);*
- *The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);*
- *The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;*
- *The sites social and economic value.*

3.4.4 The ecological impacts resulting from the proposals were then described according to a defined set of characteristics as defined within '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' (CIEEM, 2018). This assessment considers residual impacts (once all mitigation has been taken into account), with any significant effects highlighted. A significant effect is defined as "*an effect which either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general*".

3.4.5 The confidence that a certain activity will result in a significant adverse effect has been ranked as follows:

- *Highly probable*;
- *Probable*;
- *Unlikely*;
- *Highly unlikely*.

3.4.6 Where initial impacts have been identified as significant, avoidance, mitigation and compensation measures have been proposed to avoid, prevent or offset such effects. Enhancement has been proposed to ensure that the development represents a net gain in biodiversity in accordance with National Policy.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Designated Sites

Statutory Protected Sites

4.1.1 There are no statutory protected sites within 2.0km of the site, the nearest site is shown in *Table No. 02* below:

Table No. 02 – Statutory Protected Sites

Site	Reason for Designation	Location
Coneyhurst Cutting SSSI	<i>At this site the western embankment of the A272 road cutting exposes the Paludina Limestone (BGS Bed 4) of the Lower Weald Clay Formation (Wealden).</i>	3.2km N.

4.1.2 The site is within the Impact Risk Zone (IRZ) of *Hurston Warren SSSI*. Proposals are considered unlikely to have a negative impact upon these protected areas due to the differences in habitats effected by the proposals and the intervening distances.

Non-Statutory Protected Areas

4.1.3 *Sites of Nature Conservation Importance (SNCI's) or Local Wildlife Sites* are non-statutory designations given to areas of high, local conservation value. Despite being non-statutory, *SNCIs* are still recognised by local planning authorities in their policies and plans. The *SNCI's* located within 2.0km of the site are detailed in *Table No. 03* below.

Table No. 03 – Non-Statutory Protected Sites

<i>Name</i>	<i>Distance</i>
<i>Cattlestone Farm SNCI</i>	1km SE.

4.1.4 The site is neither located within nor adjacent to any *Non-Statutory Designated Site*. The intervening distance and discrepancy between habitats suggest that the development proposals would not have an adverse effect upon the above site.

4.2 Habitats

4.2.1 Within 2.0km of the site there are *Priority Habitats of Ancient & Semi-Natural Woodland and Deciduous Woodland*.

4.2.2 Habitats within and adjacent to the site include:

- *Hard / Bare Ground*;
- *Improved Grassland*;
- *Scrub*;
- *Intact Species-Poor Hedgerow*;
- *Standing Water*.

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Hard / Bare Ground

4.2.3 An access pathway track formed of bare ground runs from the south of the site, leading from the existing access driveway from Broadford Bridge Road and past the existing buildings outside of the proposed site area at New Nursery Farm. This area is of **negligible value**.

Improved Grassland

4.2.4 The sward was approximately 10cm at the time of survey and appears to be maintained year-round. Perennial ryegrass (*Lolium perenne*) dominates with frequent creeping buttercup (*Ranunculus repens*) and common-field speedwell (*Veronica persica*) present alongside occasional common daisy (*Bellis perennis*) and lesser stitchwort (*Stellaria graminea*). This common, widespread habitat is of **site value** only.

Scrub

4.2.5 An area just south of the proposed site footprint formed of previous bare ground has become over grown with bramble (*Rubus fruticosus agg.*). This area is approx. 3.0m wide and 20m in length. This common, widespread habitat is of **site value** only.

Intact Species-Poor Hedgerow

4.2.6 The boundaries of the field that the proposed site is located within are formed almost entirely of hedgerows. This is dominated by hawthorn (*Crataegus monogyna*), willow sp. (*Salix sp.*) and mature oak trees (*Quercus robur*). The hedges are approximately 2m in width and a ranging in height from 2.5m – 4.5m. Other frequent species recorded growing within the hedgerows included bramble, holly (*Ilex aquifolium*) and nettles (*Urtica dioica*).

Standing Water - Pond

4.2.7 A small pond located along the south east corner of the proposed site. At the time of the survey water was present however the water is formed from the grey water outlet from the nearby agricultural buildings making the likelihood of runoff pollutants higher and resulting in poor water quality.

4.3 Protected Species

4.3.1 The following species assessment is based upon protected species records returned from desk study and the field study of the site. Those species for which no suitable habitat exists on site have been screened out of the assessment.

Amphibians

Desk Study

4.3.2 There are no records of Great Crested Newt within 2.0km of the site. The closest and most relevant record is from 2016 located approximately 3km north of the survey site.

Site Assessment

4.3.3 A seasonal ditch running parallel with the northern and eastern field hedgerow boundaries, located approx. 30m to the north and east from the development footprint and may provide some suitable habitat for amphibians however it is unlikely to hold water for any extended period during the optimal breeding season for newts. The suitability of this waterbody is further negated by its poor water quality and lack of macrophyte coverage.

4.3.4 The main development footprint itself contains 1 no. pond within close proximity, a HSI assessment was undertaken for the pond. All other ponds identified are located over 250m from the proposed development site. The HSI assessment of the ponds is summarised in *table no. 04* below:

Table No. 04 – Summary of HSI Results

HSI Criteria	Pond P1
Location	1
Pond Area	0.45
Permanence	1
Water Quality	0.33
Shade	1
Waterfowl	1
Fish	0.67
Pond Count	0.67
Terrestrial Habitat	0.33
Macrophytes	0.7
HSI Score	0.66
Suitability	Average

4.3.5 Although the pond is classified as offering ‘average’ habitat suitability, its value is reduced by the vertical blockwork banks which act as a major barrier to newts entering or exiting the pond.

4.3.6 The potential for GCN to be present on site is further negated by the sub-optimal terrestrial habitat present within the development footprint. The improved grassland which dominates the site is regularly managed with a short sward maintained year-round. Areas of hedgerow and scrub vegetation provide some limited terrestrial habitat for great crested newts and other amphibians however there is very limited connectivity and commuting corridors between these habitats and the wider area.

4.3.7 The site is isolated by Broadford Bridge Road to the west and Harbolets Road (270m) to the east which pose a significant barrier to the wider landscape. The habitat within the site footprint and the lack of a network of ponds in the immediate landscape further reduces the potential for great crested newts to be using any habitat on the site. Provided the grassland on site remains short, the site is of **negligible** value to amphibians.

Reptiles

Desk Study

4.3.8 There are no recent records of reptiles within 2.0km of the site.

4.3.9 The site predominantly consists of short grassland, at the time of the survey the vegetation is maintained to a height of <10cm. Habitat such as this is sub-optimal for use by reptiles. An isolated area of scrub formed on top of spoil may provide some limited suitable habitat however this is located beyond the development footprint. Provided the grassland on site remains short, the site is of **negligible** value to reptiles.

Bats

Desk Study

4.3.9 Bat species have been recorded within 2.0km of the site including bats such as; Brown Long-eared (*Plecotus auratus*); Noctule (*Nyctalus noctula*); Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Common Pipistrelle (*Pipistrellus pipistrellus*).

Site Assessment

4.3.10 The surrounding hedgerow and trees provide suitable foraging and commuting habitats for bats, however the improved grassland which forms the main body of the site offers sub-optimal foraging habitat. The site in general offers low habitat suitability, however the linear boundary vegetation is likely to be of **local value** as a commuting corridor to foraging and commuting bats.

Breeding Birds

Desk Study

4.3.11 Red listed Birds of Conservation Concern1 (BoCC) were recorded within 5.0km of the site, including barn owl; (*Tyto alba*); lesser spotted woodpecker (*Dendrocopos minor*) and skylark (*Alauda arvensis*).

Site Assessment

4.3.12 The surrounding hedgerow and scattered trees offer suitable nesting habitat for small passerines. Areas of improved grassland that dominate the site provide some limited habitat for farmland bird species; due to the regular management of the field, the potential for nesting is reduced although individuals may utilise the field for occasional foraging. Due to the abundance of other similar habitat in the local area, the habitat is of **site value** only to nesting birds.

Others

4.3.8 No suitable habitat for any other protected species was recorded within or adjacent to the site area.

5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES**5.1 Designated Sites***Potential Impacts*

5.1.1 The site is located within the *Hurston Warren SSSI Impact Risk Zones*. No other statutory protected sites exist within 2.0km of the site area. Given the small scale of the site and the intervening distances, no impacts upon surrounding designated sites are predicted.

Mitigation and Compensation

5.1.2 None required.

Residual Impacts

5.1.3 **No likely significant effect** upon surrounding designated sites will arise from the proposed development.

5.2 Habitats

Potential Impacts

5.2.1 Development will cause the loss of areas of improved grassland. In the absence of mitigation, impacts upon the surrounding area could include increased disturbance through noise, vibration and lighting and degradation of habitat through dust smothering. Given the small scale of the site and low ecological value of the habitat, impacts would be of minor impact magnitude.

Mitigation and Compensation

5.2.2 All construction activities will be undertaken in accordance with best practice guidance with regards dust, vibrations and noise control. Construction lighting (if required) will be angled down and away from surrounding hedgerows and trees. All light spill on the surrounding hedgerows and trees will be avoided during the operational phase. The storage of materials / fuel will be located a minimum of 15m from the pond, treelines and hedgerows.

Residual Impacts

5.2.3 Residual impacts after mitigation will be negligible and **non-significant**.

5.3 Amphibians

Potential Impacts

5.3.1 Should vegetation on site be allowed to develop, impacts could include killing or injuring of individual newts, removal of suitable habitat and habitat fragmentation. Given the current habitat on site, impacts are highly unlikely to occur.

Mitigation and Compensation

5.3.2 Vegetation on site is to be kept short (<5cm) prior to construction works beginning to prevent any colonisation by amphibians. If necessary, any removal of spoil piles should be carried out outside of the hibernation period, between Mid-March to October.

Residual Impacts

5.3.3 Residual impacts after mitigation will be negligible and **non-significant**.

5.4 Reptiles

Potential Impacts

5.4.1 Should vegetation on site be allowed to develop, impacts could include killing or injuring of individual reptiles, removal of suitable habitat and habitat fragmentation. Given the current habitat on site, impacts are highly unlikely to occur.

Mitigation and Compensation

5.4.2 Vegetation on site to be kept short (<5cm) prior to construction works beginning to prevent any colonisation by reptiles from surrounding habitat.

Significance of Residual Impacts

5.4.3 Impacts will be negligible and **non-significant**.

5.5 Bats

Potential Impacts

5.5.1 In the absence of mitigation impacts could include the disruption of commuting corridors and foraging habitat through inappropriate lighting. Given the abundance of good foraging habitat in the local environment, impacts would be of very minor impact magnitude.

Mitigation and Compensation

5.5.2 All light spill upon surrounding hedgerows and scattered trees will be avoided. All valuable foraging habitat will be retained within the scheme.

Residual Impacts

5.5.3 Residual impacts after mitigation will be negligible and **non-significant**.

5.6 Breeding Birds

Potential Impacts

5.6.1 In the absence of avoidance / mitigation, the development could result in the damage / destruction of a bird nest. The current proposals do not include the removal of any trees, hedging or scrub therefore impacts are highly unlikely to occur.

Mitigation and Compensation

5.6.2 No hedge / tree removal is currently proposed. If required in the future, any trees, hedgerow or dense scrub should be removed outside the nesting season (season: *March-August, although pigeons may nest all year*) or should be checked prior to removal by a suitably qualified person.

Residual Impacts

5.6.3 The overall impact of the scheme will be **negligible, non-significant**.

6.0 ECOLOGICAL ENHANCEMENTS

6.1 The design of the proposed development includes ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Ecological enhancements which will be included as part of development proposals include;

- *Retention and enhancement of hedgerows and trees within the site, with additional planting where appropriate;*
- *Planting of wildflower meadow areas to provide habitat for reptiles, mammals, birds and invertebrates along the field margins;*
- *The provision of nesting boxes for a variety of bird species within mature trees;*
- *The provisions of bat boxes to the southern aspect of mature trees to suit a variety of species.*

7.0 CONCLUSIONS

- 7.1 The site is formed of improved grassland, species-poor hedgerows and scrub, these areas are of site level importance only. The site itself is of **low ecological value** with no habitats of interest noted.
- 7.2 Mitigation measures including keeping vegetation on site short (<5cm) prior to works commencing will be employed to minimise the potential negative effects arising from the construction and operational phases. The avoidance and mitigation measures proposed will ensure that works do not contravene any UK or European legislation which affords protection to any species present on site.
- 7.3 Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed ecological enhancements resulting in a significant **net gain** and a **long-term positive increase** in biodiversity in line with national planning policy guidance.

8.0 REFERENCES

JNCC: *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*; (2003);

Collins J (ed): *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd ed.) The Bat Conservation Trust (2016);

Mitchell-Jones and McLeish: *Bat Workers Manual*; JNCC, 3rd Edition (2004);

Streeter, D.: *The Most Complete Guide to the Flowers of Britain and Ireland*; Harper Collins, London (2010);

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10 (4), 143-155

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Table No. 05 – Species List for Habitat Parcels**Improved Grassland**

Common Name	Scientific Name	DAFOR
Cleavers	<i>Galium aparine</i>	O
Common Daisy	<i>Bellis perennis</i>	F
Common Dandelion	<i>Taraxacum officinale</i>	F
Common Nettle	<i>Urtica dioica</i>	F
Common Sow Thistles	<i>Sonchus oleraceus</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	O
Cuckoo-pint	<i>Arum maculatum</i>	R
Curly Dock	<i>Rumex crispus</i>	R
Ground Ivy	<i>Glechoma hederacea</i>	O
Lesser Stitchwort	<i>Stellaria graminea</i>	O
Mosses	Mosses sp.	O
Pendulous Sedge	<i>Carex pendula</i>	O
Perennial Ryegrass	<i>Lolium perenne</i>	D
Ribwort Plantain	<i>Plantago lanceolata</i>	F
Soft Rush	<i>Juncus effusus</i>	O
Scarlet Pimpernel	<i>Anagallis arvensis</i>	R
White Clover	<i>Trifolium repens</i>	O
Yorkshire Fog	<i>Holcus lanatus</i>	LA

Species-poor hedgerow

Common Name	Scientific Name	DAFOR
Blackthorn	<i>Prunus spinosa</i>	F
Bramble	<i>Rubus fruticosus</i>	D
Common Hawthorn	<i>Crataegus monogyna</i>	D
Common Nettle	<i>Urtica dioica</i>	O
Dog Rose	<i>Canina Rosa</i>	R
Common Hazel	<i>Corylus avellana</i>	O
Holly	<i>Ilex aquifolium</i>	O
Goat Willow	<i>Salix caprea</i>	F
Oak	<i>Quercus robur</i>	F
Common Ivy	<i>Hedera helix</i>	O
Weeping Willow	<i>Salix babylonica</i>	F

Scrub

Common Name	Scientific Name	DAFOR
Bramble	<i>Rubus fruticosus</i>	D
Mosses	Mosses sp.	O
Yorkshire Fog	<i>Holcus lanatus</i>	F

DAFOR scale – Dominant, Abundant, Frequent, Occasional, Rare.

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Table No. 06 Target Notes (TN)

TN Ref.	Feature	Description
TN01	Wet ditch.	Due to the number of grass species within the ditch, it is noted as a seasonal wet ditch, unsuitable for GCN.
TN02	Mammal hole, rabbit droppings.	A number of small mammal burrows noted along the western boundary, likely to be rabbits due to high number of rabbit signs present.
TN03	Spoil / scrub.	Spoil pile enrobed in scrub vegetation outside of construction footprint provides a small area of suitable reptile habitat.
TN04	Spoil / bare ground.	Large spoil heap located in the south west corner of the site outside of the construction footprint.
TN05	Grey water overflow Pond.	Aquatic flora noted; Common Reed (<i>Phragmites australis</i>); Water Lilly (<i>Nymphaea</i>); Yellow Iris (<i>Iris pseudacorus</i>) and Curly Dock (<i>Rumex crispus</i>).

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APPENDICES:
Appendix A – Site Photographs



Image 1 The site is located within a field on farmland bordered by species poor hedgrows with trees.



Image 2 View across the site from the north east corner. The site is dominated by regularly mowed improved grassland, low in ecological value, further south of the site are existing agricultural buildings.



Image 3 View from the eastern border surrounding the site with drainage ditch and species-poor hedgerow enclosing the proposed site.



Image 4 Pond (P1) located on the southern edge of the site (outside of construction zone) adjacent to the hardstanding access route.

