



Preliminary Ecological Appraisal Report

Former Calvert Carpets, Hutton Bank, Ripon

Report reference: R-3628-01.1

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Report Title:	Preliminary Ecological Appraisal Report Former Calvert Carpets, Hutton Bank, Ripon
Report Reference:	R-3628-01.1
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Non-technical Summary

This report is produced to inform the client of potential ecological constraints associated with the Proposed Development Site.

Methodology

The report is based on a Desk Study of designated wildlife sites and records of protected or notable species, and an extended Phase 1 Habitat Survey and Bat Roost Suitability Assessment carried out in August 2018. The report also makes reference to previous survey data collected by Brooks Ecological in November 2017 (see report R-3130-01).

Findings Key-Points

The Site supports a small range of man-made habitats, typical of brownfield land; none of which would present a significant constraint to the Sites re-development. If feasible, the line of mature trees along the eastern boundary should be retained.

Two buildings are assessed as providing bat roost suitability and further survey will be required to confirm the presence or absence of roosts.

A sensitive lighting scheme should also be produced to demonstrate that significant impacts on North Bridge and the River Ure can be avoided.

Summary Recommendations		
Recommendation	Rationale/notes	Stage
Actions		
Surveys needed to fix a design	Bat Emergence Survey of two buildings	Before submission

Introduction

1. Brooks Ecological Ltd was commissioned by Primetalent Ltd. to carry out an updating Preliminary Ecological Appraisal (PEA) of the former Calvert Carpets site off Hutton Bank in Ripon, North Yorkshire, HG4 5DT, Grid Ref. SE 3185 7225.
2. This report is produced with reference to British Standard BS42020 'Biodiversity Code of Practice for Planning and Development' and the CIEEM (2017) Guidelines for Preliminary Ecological Appraisal.

Purpose of a PEA

3. A PEA is an *initial assessment* of the baseline for a proposed development site and establishes whether the Site is likely to be constrained by ecology, and whether more information is needed to identify the ecological baseline.
4. The subsequent Preliminary Ecological Appraisal Report (PEAR) is intended to give early guidance to a developer and assist with the early stages of project planning and design. Where a site is not complex or constrained, and no additional ecological input is necessary the PEAR may be sufficient and suitable to support a planning application.

Scope

5. The application site 'the Site' encompasses a small parcel of brownfield land, to the northeast of Ripon. It is defined in figure 1 below.
6. The assessment uses a 2km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

Figure 1 The Site

Site Context

7. The Site is located along the north-eastern edge of Ripon, in close proximity of the River Ure. Immediate boundaries include commercial development to the northeast, housing to the northwest and roads to the south.
8. In the wider landscape, development becomes denser to the southwest, as the centre of Ripon is approached, whilst to the northeast and northwest, the landscape soon shifts to predominantly agricultural. Notable habitats within the locality include the River Ure to the south and its associated floodplain/ riparian vegetation, along with Ripon City Golf Course to the northwest, and the many small woodland copses and wooded streams scattered throughout the local area.

Wildlife corridors

9. The River Ure represents the most significant potential wildlife corridor locally and is the closest connective feature to the Site. This passes within 70m of the southern boundary, separated by only a single road (Ure Bank) and arable field. This connects the Site to a wide range of high value semi-natural habitats to the north and Site, including the golf course and a large area of riparian woodland/scrub land to the northeast.
10. Other green corridors include a well vegetated section of dismantled railway line c.250m north, and a tree lined stream c. 260m northwest. Both are separated from the Site by a mix of residential and commercial development.

Figure 2 Analysis of wildlife corridors and higher value habitat in relation to the Site.



Water bodies

11. No ponds are present on Site, but mapping does highlight the presence of six standing waterbodies within a 500m radius; these are positioned c.280m northwest, 240m south, 310m west, 440m west, 460m west and 500m southeast. This can be seen indicatively on the figure below.



Figure 3

Pond plan

Designated Sites

Statutory Designations

12. A search has been made to identify any nationally designated sites within a 2km radius of the Site, and for internationally designated sites within a 10km radius. The results are shown in the below table.

Table 1 Statutory Designated Sites

Site name	Distance	Designation	Summary Interest
Ripon Parks	740m NW	SSSI	Running water, riverbanks, scrub woodland, marsh / ponds, permanent pasture & calcareous grassland

SSSI Impact Risk Zones (IRZs)

13. The Site lies within the IRZ for Ripon Parks SSSI, but does not fall into one of the highlighted categories which requires consultation between the Local Planning Authority (LPA) and Natural England (NE). The development is of a scale and nature which is unlikely to impact on this SSSI.

Non-Statutory Designations

14. There are nine locally designated sites and a single Yorkshire Wildlife Trust (YWT) Nature Reserve within a 2km radius of the Site. These are summarised in the table overleaf.
15. Local sites are known as Sites of Importance for Nature Conservation (SINC) in North Yorkshire, and a small number of Deleted SINCs have been picked up within the search area. SINCs that have been deleted by the North Yorkshire SINC panel have been surveyed and assessed against the SINC selection guidelines and found not to qualify as a SINC, but are still likely to be of higher ecological quality than other land in the area.

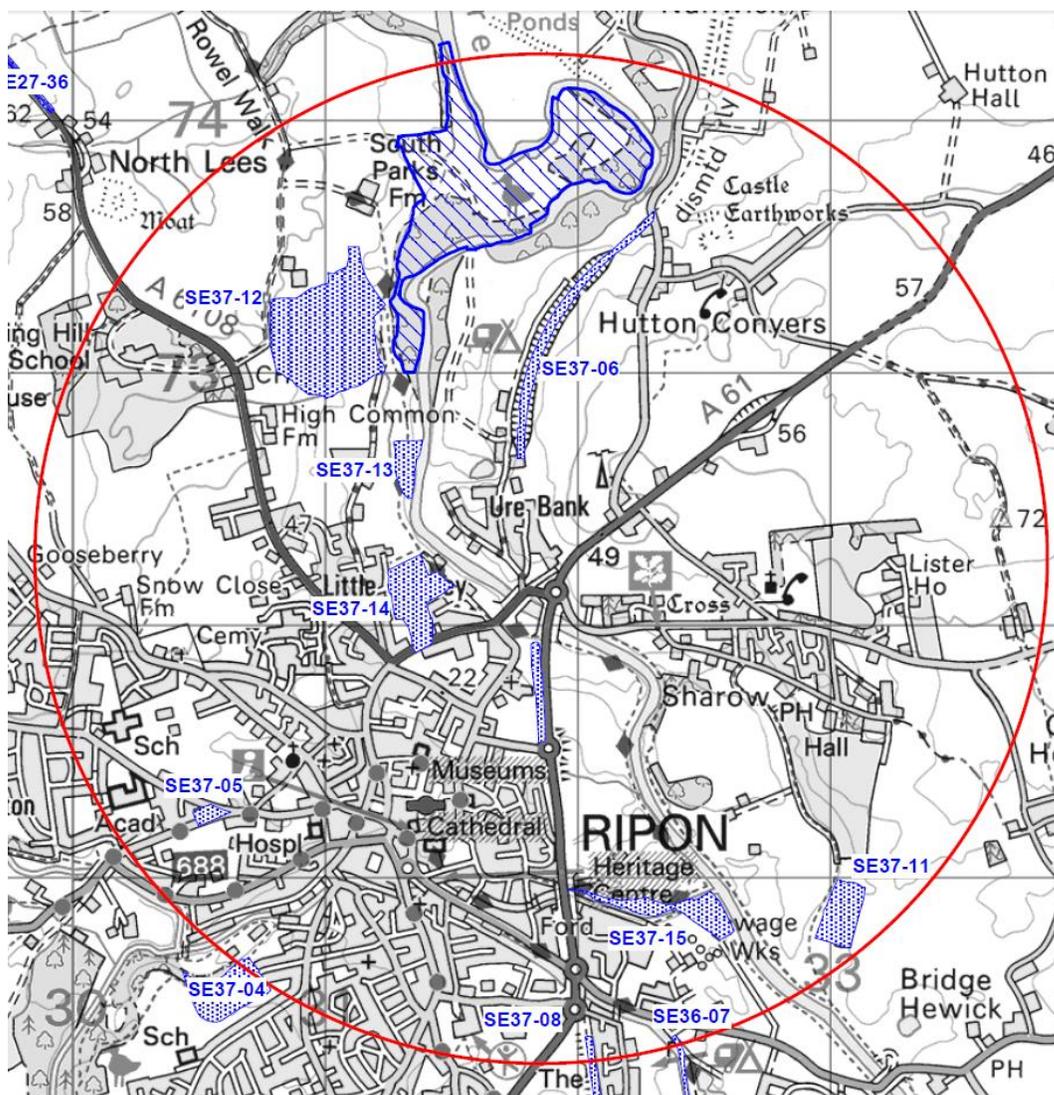
Table 2 Non-Statutory Designated Sites

Site name	Code	Designation	Distance
Ripon Disused Railway Embankment	SE37-06	SINC	240m N
Little Studley Meadows	SE37-14	SINC	290m W
River Ure Side nr Low Common	SE37-13	Deleted SINC	510m NW
Ripon Loop	NA	YWT Reserve	820m NW
Fisher Green	SE37-15	SINC	1.3km S

Site name	Code	Designation	Distance
New House Field	SE37-05	SINC	1.5km SW
Ripon Golf Course	SE37-12	SINC	880m NW
Sharow Mires, Ripon	SE37-11	SINC	1.7km SE
Atkinson's Quarry	SE37-04	Deleted SINC	2km SW
Ripon Canal	SE36-07	SINC	2km S

16. Due to the Site's small size and isolation by built development, together with a lack of any shared habitats, it is considered very unlikely that the Site's re-development would lead to any significant adverse impacts on any of these SINCs, or YWT reverses.

Figure 4 Locally designated sites provided by NEYEDC



Habitats

Method

17. The Site was initially surveyed in November 2017 (report R-3130-01) and then re-surveyed in August 2018¹, with both visits following Phase 1 habitat survey methodology (JNCC, 2010).

Limitations

18. Sufficient time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.

Results

19. The Site has changed very little since it was first surveyed in November 2017 and continues to represent a typical plot of brownfield land. Parts of the Site have historically received high levels of disturbance, followed by an absence of management, giving rise to a typical mix of secondary vegetation. Several buildings remain on Site, surrounded by small bitmac parking bays and service yards.
20. The following habitats were identified within the Site and on its immediate boundaries:
 - Secondary vegetation
 - Buildings & hard-standing
 - Scattered trees

Secondary vegetation

21. Much of the Site is now occupied by this habitat; lining the edges of buildings and hardstanding and occupying large areas of disused land. These areas, especially to the south and east, have very clearly been subject to high levels of ground disturbance in previous years, with soil and aggregate having been evenly spread and compacted. These areas have then been left unmanaged, allowing a typical array of secondary vegetation to colonise the bare soil.

¹ This Report has been prepared during September 2018 following visits to the site in November 2017 and August 2018 and our findings are based on the conditions of the site that were reasonably visible and accessible at that date. We accept no liability for any areas that were not reasonably visible or accessible, nor for any subsequent alteration, variation or deviation from the site conditions which affect the conclusions set out in this report.

22. For the most part, these areas of disturbed ground have now succeeded to a rank grassland community, with young invading scrub scattered throughout, and occasional patches of more ephemeral vegetation holding on in the most heavily compacted soils. As would be expected, this area habitat supports a relatively diverse array of common plants, including mosses grasses, forbs, tall herbs and scrub. The local abundance of certain species, notably kidney vetch (*Anthyllis vulneraria*) and field scabious (*Knautia arvensis*), within land to the south suggests that these areas have been spread with a lime-based aggregate. This habitat will eventually succeed to a dense scrub community, leading to a steep decline in diversity.

Buildings & Hard-standing

23. Four buildings remain on Site, each of varying age and style of construction. Each is described in greater detail later in the report, when assessing the Site's bat roost suitability.
24. A bitmac access road passes through the centre of the Site, connecting to a series of bitmac parking bays and service areas flanking each of these buildings. For the most part, these areas of hard-standing are found to be in a reasonable condition and are largely devoid of vegetation. Where the hard-standing is found to be in a poor condition, such as to the centre-west, areas of damage are populated with a mix of secondary vegetation.

Scattered trees

25. A line of early mature sycamore (*Acer psuedoplatanus*), sessile oak (*Quercus petraea*) and ash (*Fraxinus excelsior*) are present along the northern end of the eastern boundary, growing along a small steep west-facing embankment. Beneath the canopy is a sparse understorey of holly (*Ilex aquifolium*), dog rose (*Rosa* sp.), hawthorn (*Crataegus monogyna*) and silver birch (*Betula pendula*), with a ground layer of ivy (*Hedera helix*), wood avens (*Geum urbanum*), nettle (*Urtica dioica*), male fern (*Dryopteris filix-mas*), forget-me-not (*Myosotis* sp.), cow parsley (*Anthriscus sylvestris*) and various tree saplings.
26. Elsewhere, trees are scattered amongst the secondary vegetation, and limited to semi-mature specimens of silver birch (*Betula pendula*) and goat willow (*Salix caprea*).

Invasive Non-Native Species

27. No species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were found at the Site during the survey².

Horsetails

28. Horsetails (*Equisetum* spp.) are not listed on Schedule 9 of the Wildlife and Countryside Act (1981) but can cause damage to roads and paving post development. At least one species of horsetail was found growing on Site, within the areas of disturbed ground to the southeast and close to the Site entrance. These are marked indicatively on drawing D-3130-01 found in Appendix 1, however horsetails are cryptic species and they are likely to be found at low densities in other parts of the site.

Fauna

Bats

Records

29. Common pipistrelle, soprano pipistrelle and brown long-eared bats have all been recorded in the local area, mainly between 2010 and 2015. Records are focussed buildings associated with Ripon town centre to the south and west, and none relate to the Site. No details of record type (i.e. roost, bat in flight) have been included.
30. Following consultation with the LPA Ecologist, Dan McAndrew, we have been informed that a significant Daubenton's bat roost, together with potential common and soprano pipistrelle roosts, are present at North Bridge, within 100m of the Site.

Foraging/ commuting Activity

31. Other than the mature tree line along the northwest boundary, the Site presents habitats of very low value to local bat populations. The north-western tree-line is likely to attract slightly greater levels of activity, but this is still likely to be limited to only low-level irregular foraging by common urban species, namely pipistrelles.

² Note while our ecologists are trained in the identification of invasive species this report is not a dedicated invasive species survey. Detectability of invasive plant species is seasonally variable so, whilst every effort is made, conclusive determination of presence or absence is not always possible through preliminary survey. As the presence of invasive species can generate significant costs to development the client may wish to instruct a dedicated invasive species survey prior to entering into contracts.

32. Looking at the local landscape, it is fair to assume that the local bat population will gravitate to areas of high value habitat, such as the River Ure and associated riparian habitats, and would not be expected to have any dependence on the Site.

Bat Roost Suitability Assessment

33. Four buildings are present on Site; labelled 1-4 on the figure below. Each has been surveyed to assess its suitability for supporting roosting bats.

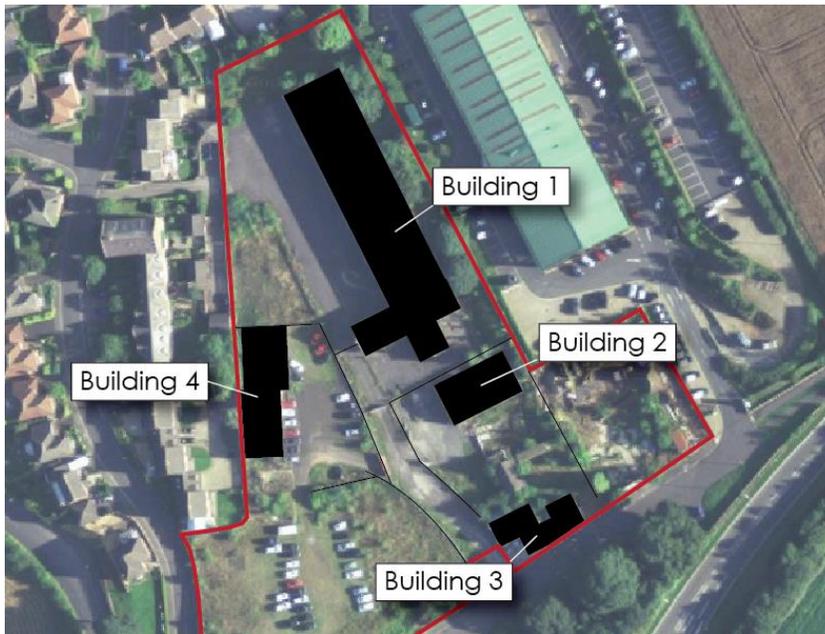


Figure 5

Building plan

Building 1

34. This is a large, double height, solid red-brick warehouse building, with a hipped slate roof, fitted with large skylights. A small single-storey solid red-brick extension adjoins the southern elevation, whilst a larger more modern, perpendicular, two-storey extension adjoins the southern end of the western elevation. This can be seen in Figure 9 overleaf.

Figure 6 Building 1, as seen from the southwest



35. The main building is found to be in a good condition, with the masonry being largely intact. Occasional superficial gaps are noted throughout, where pointing has naturally degraded, and tight gaps appear to be present intermittently along the eaves. The latter has the potential to provide bats access to the wall tops and roof structure, and thus is highlighted as a potential roost feature (PRF).
36. Masonry on the two extensions is found to be in a similar good condition, but without gaps leading to the eaves. Black wooden soffit boxes run along the verges and eaves of the more modern two-storey extension, and this boxing is found to be in good condition, providing an effective seal to the wall. Likewise, the verges of the smaller southern extension are well sealed, this time by metal verge guards.
37. All three roofs are found to be in a good state of repair, with all slates, concrete tiles and corrugated metal sheets sitting in place.

Building 2

38. A cylindrical corrugated metal shed located to the south of Building 1. The building simple structure, and the range of material used, preclude its use by roosting bats.



Figure 7

Building 2, as seen from the southwest

Building 3

39. This is a large, irregular shaped, solid red-brick building, with a series of double pitch roofs, covered in a mix of corrugated metal sheets and slates (see below figure).

Figure 8 Building 3, as seen from the southwest



40. The masonry here is found to be similar condition to that of building 1, with only the occasional superficial gap being noted, where mortar has naturally degraded and fallen away. A typical example is shown in the figure below.



Figure 9

Masonry gaps

41. All of the roofs support a significant overhang, with exposed wooden timbers projecting through the wall tops. A small gap is present around each of these exposed timbers, potentially providing access to the wall top and roof structures, or at least leading into a small blind cavity suitable for solitary day roosting.

Figure 10



Gaps along the eaves above exposed roof timbers.

- 42. The roofs are found to be in a good condition, with all slates and metal sheets sitting in place.

Building 4

- 43. This building can be sub-divided down into two connected structures, with the southern half being of single skin, prefabricated concrete panel construction, with a single pitch, corrugated metal roof, whilst the northern half is two double pitch, concrete panel buildings, each covered with corrugate concrete/ white asbestos panel roofs. The building is no-longer occupied, and all windows and doors are boarded up. The former entrance along the eastern elevation is of brick construction, with short parapet walls.

Figure 11 Building 4, as seen from the east



- 44. The buildings simple structure, and the range of material used, presents negligible opportunities for roosting bats.

Trees

45. All of the trees were inspected from ground level and found not to contain features with bat roost suitability.

Summary

46. A summary of the Site's bat roost suitability is provided in the table below.

Table 3 Summary of Bat Roost Suitability Assessment (BRSA).

Reference	BRSA	Notes	Further survey required?
Building 1	Low	Occasional gaps along the eaves	Yes – single emergence
Building 2	Negligible	-	No
Building 3	Low	Occasional gaps along the eaves	Yes – single emergence
Building 4	Negligible	-	No
Trees	Negligible	-	No

Amphibians

47. A pre-app response has been received from HBC, which requested that a desk study be undertaken for great crested newts, as this species is known to breed in the wider area. Records have been returned for common frog, common toad, smooth newt, and great crested newt (GCN), all within the search area, but not the Site. The GCN records detail at least 10 separate sites, all located to the north of Ripon, with all but one being positioned on the opposite side of the River Ure. The river represents a major barrier to amphibian movement and any populations present on the other side of the river can be considered isolated from the Site.
48. The only record not separated by the river is located over a kilometre north of the Site, within Hutton Conyers. This is well over the distance GCN would be expected to regularly disperse from a Site and is separated by large featureless arable fields. Individuals from this population would therefore not be expected to be active on Site.
49. No ponds are present on Site, and the closest off-site pond is over 280m northwest and separated by built development (housing and light industrial).
50. Based on the above, the risk of GCN being present on Site is considered to be very low, and no further survey or specific mitigation is considered necessary.

Birds

51. Given its small size and proximity to housing, the Site is considered unlikely to be of any significant value to any local bird populations. As such, no further detailed study into this group is recommended.
52. The scattered scrub and mature tree line may and buildings attract low-level nesting from a typical assemblage of garden birds and as such, standard precaution regarding the timing of vegetation clearance and site preparation is recommended.

Badger

53. No evidence of badger activity was found on Site, and as such, the current likely absence of this species can be reasonably concluded.

Reptiles

54. The Site supports only marginal habitat for this group and has only very recently established. The Site is not adjacent to, or well connected with any larger areas of more suitable reptile habitat, and no species of this group have been recorded locally. On this basis, the risk of this group being present on Site is considered to be very low and no further survey is considered necessary.

Key Findings

55. The Site supports a small range of man-made habitats, typical of brownfield land, none of which would present a significant constraint to the Sites re-development. Although fairly diverse at present, the secondary vegetation growing over disturbed ground is an ephemeral habitat and through natural succession will soon be replaced by scrub.
56. Mature trees growing along the northern end of the eastern boundary are assessed as being of greater ecological value, due to the time taken for trees to reach this stature. Where feasible, these should be retained and protected from development. This protection is detailed within the accompanying Arboricultural report (R-3628-02).

Bats

57. The Pre-App consultation from HBC's Principal Ecologist (Dan McAndrew), raised concerns with regards to potential indirect impacts on bats roosting within North Bridge and the River Ure's function as a nocturnal wildlife corridor. A Sensitive Lighting Plan will therefore need to be produced for the scheme to demonstrate that light spill will not significantly impact on these features. An area of POS has also been positioned within the southwest corner (nearest the bridge), which will be landscaped using native vegetation.

Nesting Birds

58. The destruction of active nests is prohibited by law and as such any vegetation clearance should be completed outside of the main nesting bird period, which is March - August. Any vegetation clearance required within this period should be preceded by a Nesting Bird Check, which would allow any active nests to be identified and protected.

Design Considerations

59. The NPPF makes it imperative that sites are designed according to the 'mitigation hierarchy'; Avoid - Mitigate - Compensate. Avoidance is the key first stage and designs must show that they have avoided important receptors if possible. Mitigation, and as a last resort, Compensation will only be appropriate where there are clearly no alternatives and a strong planning argument will be needed in these cases.
60. The initial indicative layout provided by the client is shown below.



Figure 12

Proposals taken from
Niemen Architects
Schematic Site Layout
drawing 3081-0-001 A
(24.08.18)

- 61. The layout presented in figure 12 appears suitable from an ecological standpoint and no design considerations or changes are considered necessary. Mature trees lining the northern end of the eastern boundary will be retained and additional tree planting will be incorporated into gardens and areas of public open space.

Further Surveys

- 62. Additional surveys considered necessary to support planning, or to help produce a layout are set out in the table below. The results of these surveys may have an implication on layout and should be carried out as early in the project as possible.

Table 4 Additional survey recommended

Guidance provided by Clause 8 BS:42020 and ODPM circular 06/05 (2005) makes it clear that proposals and planning decisions should be informed by sufficient information - this is particularly the case in respect of European Protected Species (EPS).		
Survey	Rationale	Timing
Bat Emergence	A single evening emergence survey will be required on buildings 1 & 3 (see figure 5) to confirm the status of roosting bats.	August/ Sept 2018

* Information on relevant legislation is provided in Appendix 3 of the report

BS42020 Further Ecological Output

- 64. The Site is of very low value with no design constrains. We have made no substantive recommendations and other than the Bat Emergence survey, no other reports are considered necessary.

Appendices

1. Extended Phase 1 Habitat Plan
2. Explanatory Notes and Resources
3. Information on legislation / protection

References

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Appendix 1 – Extended Phase 1 Habitat Plan



-  Secondary vegetation on disturbed ground
-  Hard-standing
-  Buildings
-  Trees

Target notes:

-  Horsetail
-  Building with Bat Roost Suitability



Appendix 2 – Explanatory Notes and Resources Used

Site Context

Aerial photographs published on commonly used websites were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This approach can be very useful in determining if a site is potentially a key part of a wider wildlife corridor or an important node of habitat in an otherwise ecologically poor landscape. It can also identify potentially important faunal habitat (in particular ponds) which could have a bearing on the ecology of the application site. Ponds may sometimes not be apparent on aerial photographs so we also refer to close detailed maps that identify all ponds issues and drains. We use Promap Street + scale maps for this purpose.

Designated Sites

A search of the MAGIC (Multi-Agency Geographic Information for the Countryside) website was undertaken. The MAGIC site is a Geographical Information System that contains all statutory (e.g. Sites of Special Scientific Interest [SSSI's]) as well as many non-statutory listed habitats (e.g. ancient woodlands and grassland inventory sites). It is a valuable tool when considering the relationship of a potential development site with nearby important habitats. In addition, information from the local record holders was referred to on locally designated sites.

Functional linkage with off-Site habitats

When assessing these we consider whether the Site could be functionally linked to them, considering links such as;

- Hydrological links - is the Site upstream downstream, or could ground water issues affect it?
- Physical links - is the site in close proximity and could it be directly or indirectly affected by construction and operational effects? Conversely it may be that despite proximity major barriers separate the two.
- Recreational links - Do footpaths and roads make it likely that increased recreational pressure could be felt?
- Habitat links - Is the site part of a network of similar habitat types in the wider area? These could be joined by linear corridors or could simply be 'stepping stones of habitat of similar form or function.

Method

Phase 1 habitat survey methodology (JNCC, 2010). This involves walking the site, mapping and describing different habitats (for example: woodland, grassland, scrub). The survey method was "Extended" in that evidence of fauna and faunal habitat was also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). This modified approach to the Phase 1 survey is in accordance with the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995) and Guidelines for Preliminary Ecological Appraisal (CIEEM 2012).

Faunal appraisal

This section first looks at the types of habitat found on Site or within the sphere of influence of potential development, then considers whether these could support protected, scarce or NERC Act 2006 Section 41 species (referred to collectively as 'notable species').

Records of notable species supplied from a 2km area of search by West Yorkshire Ecology (WYE) are used to inform this appraisal.

We discuss further only notable species or groups which could be a potential constraint due to the presence of suitable habitat and their presence (or potential presence) in the wider area. We screen out and do not present accounts of notable species or groups which do not meet these criteria – in some cases it may be necessary to explain this reasoning.

Bat roosting potential is classified according to the following criteria set out below, taken from the Bat Conservation Trust Good Practice Guidelines (2016).

Bat Roosting Suitability of Buildings and Trees

Suitability	Criteria
<i>Negligible</i>	Negligible habitat features on site likely to be used by roosting bats.
<i>Low</i>	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these 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 a larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
<i>Moderate</i>	A structure or tree with one or more potential roost sites that could be used due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only - the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
<i>High</i>	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protections, conditions and surrounding habitats.

Evaluation

In evaluating the Site, the ecologist will take into account a number of factors in combination, such as:

- the baseline presented above,
- the site's position in the local landscape,
- its current management and
- its size, rarity or threats to its integrity.

There are a number of tools available to aid this consideration, including established frameworks such as Ratcliffe Criteria or concepts such as Favourable Conservation Status. Also of help is reference to Biodiversity Action Plans in the form of the Local BAP and Section 41 of the NERC Act (2006) to determine if the site supports any Priority habitats or presents any opportunities in this respect.

The assessment of impacts considers the generic development proposals from which potential effects include:

- Vegetation and habitat removal
- Direct effects on significant faunal groups or protected species
- Effects on adjacent habitats or species such as disturbance, pollution and severance
- Operation effects on wildlife such as noise and light disturbance

Consideration is given to the Local Biodiversity Action Plan (LBAP), which for this site is the '**Harrogate Biodiversity Action Plan**'.

Species/group	Habitat
Otter	Blanket Bog
Water Vole	Upland Heathland
Hen Harrier	Moorland Edge
Great Crested Newt	Woodland
Thistle Broomrape	Wood Pasture and Parkland
Chestnut click beetle	Upland Calcareous Grassland & Calaminarian Grassland
Bats	Magnesian limestone Grassland
	Lowland Meadows and Floodplain Grassland
	Fens
	Reedbeds
	Standing Water
	Flowing Water
	Arable Farmland
	Hedgerows
	Gardens and Urban Wild Space

Appendix 3 Wildlife Legislation, Policy and Guidance

This is not an exhaustive list but sets out briefly the relevance of Legislation, Policy and Guidance in terms of planning applications and this assessment.

Legislation

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive).

Provides framework at an international (EU) level for the consideration / protection of European Protected Species (EPS), and habitats through the designation of sites.

Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive) and The Ramsar Convention on Wetlands of International Importance (1971)

Provides framework at an international (EU) level for the consideration / protection of important bird populations and the sites on which they are dependant.

The Conservation of Habitats and Species Regulations (2010)

This transposes 1) into UK law and provides the basis on which all EPS are protected and impacts on them can be licensed in the UK.

The Wildlife and Countryside Act (1981) as amended

This provides the basis on which UK species are legally protected or restricted and confers protection on Sites of Special Scientific Interest SSSIs. It contains annexes of plants and animals which are legally protected as well as those which are considered to be invasive or harmful. It provides the basis on which impacts on such species can be licensed in the UK and provides controls on work on or near SSSIs.

The Countryside and Rights of Way Act 2000 (CRoW)

Provides a statutory basis for nature conservation, strengthens the protection of SSSIs and UK protected species and requires the consideration of habitats and species listed on the UK and Local Biodiversity Action Plans (UKBAP / LBAP).

Natural Environment and Rural Communities Act 2006 (NERC)

Sets out the responsibilities of Local Authorities in conserving biodiversity. Section 41 of the Act requires the publishing of lists of habitats and species which are "of principal importance for the purpose of conserving biodiversity". At present these largely reflect those making up the UKBAP lists.

Hedgerows Regulations (1997)

Define and provide protection for Important Hedgerows.

Protection of Badgers Act (1992)

Protects badgers from persecution, this includes excavation / development in the proximity of setts.

Protected Sites

Statutory EU / International Protected Sites

Special Areas of Conservation (SACs); and Special Protection Areas (SPAs) and Ramsar Sites contain examples of some of the most important natural ecosystems in Europe. Work on or near these sites is strictly protected and Local Authorities will be expected to carry out 'Appropriate Assessment' of development in proximity of them. In this case there is often an increased burden on the developer in relation to provision of information and assessment.

Statutory UK Protected Sites

Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs) all receive strict protection under UK legislation. Work in or in proximity to these sites would be restricted with any needing to be agreed with Natural England. Natural England now provide guidance on the nature of development which could impact on SSSIs through Impact Risk Zones.

Locally Protected Sites

Local Authorities have a variety of protected wildlife sites designated at a local or regional level. These are gradually being brought under the banner of Local Wildlife Sites (LWS) but at present a plethora of different designations exist - all subject to local policy.

Protected Species

European Protected Species

A number of species (most relevantly bats, great crested newts [GCN], and otters) receive strict protection from killing, injury and disturbance under The Conservation of Habitats and Species Regulations (2010). Protection is also conferred on the habitats on which they rely such as roost space in the case of bats and ponds and fields etc. in the case of GCN.

UK Protected Species

A number of species (including bats, GCN, water vole and white clawed crayfish) are strictly protected under The Wildlife and Countryside Act (1981) as amended, from killing, injury, disturbance and damage or destruction of their resting places etc. Certain species (such as reptiles) and some birds (such as barn owl) receive partial protection e.g. at certain times of the year or form certain activities only. All nesting bird species are protected from damage or destruction of their nests - whilst active.

Invasive species

Schedule 9 of the Wildlife and Countryside Act (1981) as amended, lists these species and makes it an offence to cause or allow their spread in the wild. This often has impacts on development and planning in relation to the presence of invasive plant species such as: himalayan balsam (*Impatiens glandulifera*), japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*).

Planning Policy / Guidance

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework was updated in July 2018. The most relevant paragraphs from the NPPF are set out below.

The approach to assessing the natural environment is now embedded within the definition of what 'sustainable development' is and this falls under one of three objectives of the planning system – the 'environmental objective' applying in this case. Paragraph 8c (P8c) of the NPPF states that sustainable development should "*contribute to protecting and enhancing our natural environment*" and "*help to improve biodiversity*". P10 sets out the Framework's presumption in favour of sustainable development.

Section 11 of the NPPF details making effective use of land. The Framework states that planning policies and decisions should "*take opportunities to achieve net environmental gains – such as developments that would enable new habitat creation*" and should "*recognise that some undeveloped land can perform functions for wildlife*" (P118).

Section 15 details conserving and enhancing the natural environment; policies and decisions should be "*protecting and enhancing sites of biodiversity value*", "*recognise the intrinsic character and beauty of the countryside*" and contribute to conserving and enhancing the natural environment and reducing pollution (P170). Allocations of land for development should, "*prefer land of lesser environmental value, where consistent with other policies in this Framework and take a strategic approach to maintaining and enhancing networks of habitats*" (P171).

The Framework sets out ways to minimise the impacts on biodiversity through "*identifying, mapping and safeguarding components of local wildlife rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity*" and the "*conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and (the need to) identify and pursue opportunities for securing measurable net gains for biodiversity*" (P174).

It is made clear in P175 that local planning authorities should apply principles when determining planning applications. Planning permission should be refused "*if significant harm to biodiversity resulting in development cannot be avoided, adequately mitigated, or, as a last resort, compensated for*". Development should not normally be permitted where an adverse effect on a SSSI is likely and "*opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity*".

Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services.

This strategy builds on the Natural Environment White Paper (June 2011) - Setting out the current UK Government's approach to nature conservation. It promotes a more coherent and inclusive approach to conservation and the valuing in economic and social terms of economic resources.

The strategy promotes initiatives such as Biodiversity Offsetting, Nature Improvement Areas and a focus on well-connected natural networks and introduces the concept of securing a 'no net loss' situation with regard to UKBAP / Section 41 habitats and species.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System

Provides guidance to Local Authorities on their obligations to biodiversity – particularly in relation to assessing planning applications and ensuring the adequacy of information.

BSI (2013) British Standards Institute BS 42020:2013 Biodiversity — Code of Practice for Planning and Development.

Provides a standard for the biodiversity assessment and development industries and decision makers such as Local Planning Authorities to work to.