



Preliminary Ecological Appraisal Report

Report Ref. ER-7645-01A

25/06/2024

Naylor Concrete Products

Report reference	ER-7645-01A - Preliminary Ecological Appraisal Report
Author	David Lovett MBiolSci (Hons) ACIEEM Ecologist
Technical Review	Rob Weston BSc(Hons) MSc MCIEEM Technical Director
QA	Ruth Highley BSc (Hons) MBiol Assistant Ecologist
Authorised	Rob Weston BSc(Hons) MSc MCIEEM Technical Director
Date	25/06/2024
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.

Amendment	Date	Author	QA	Summary of changes
ER-7645-01A	25/11/2024	DL	CF	Updated to reflect red line boundary changes.



Brooks Ecological Ltd has prepared this report for the sole use of Naylor Concrete Products The information which we have prepared and provided is in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice. The report is in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party except the person, company, agent or any third-party for whom the report is intended without the prior written permission of Brooks Ecological Ltd. This report presents a snapshot of the site at the date it was surveyed; the conditions and the species recorded present, or likely absent, can change rapidly. Resurvey is recommended to any third-party seeking reliance on this report. The content of this report may, in part, be based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third-party has not been independently verified by Brooks unless otherwise stated in the report. This report is the copyright of Brooks Ecological Ltd. Unauthorised reproduction or usage by any person is prohibited.

Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX
Phone: 01943 884451
01943 879129
www.brooks-ecological.co.uk
Registered in England Number 5351418

Contents

Introduction..... 1

Desk Study 2

Designations..... 3

Survey..... 5

Habitat Appraisal..... 5

Faunal Appraisal..... 13

Ecological Opportunities..... 17

Conclusions and Recommendations 18

References..... 19

Appendix 1 Habitats and Ecological Features..... 21

Appendix 2 List of species recorded 22

Appendix 3 Explanatory Notes and Resources Used 23

Appendix 4 Bat Activity Survey Rationale..... 26

Appendix 5 Wildlife Legislation, Policy and Guidance 27

Summary

This report is produced to inform Naylor Concrete Products of potential ecological constraints associated with their proposed development site and the need for further reporting or output to support a planning application.

This 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 carried out in May 2024.

Key Findings

The Site is a small section of a larger concrete processing plant, currently containing temporary warehousing structures, surrounded by loose ground for storing of materials, and a narrow section of storage area and access road. It is of very low ecological value.

Biodiversity Net Gain

Details on measurement of the Site's biodiversity and the implications of complying with the requirement to provide a net gain for biodiversity are provided in our separate report ER-7645-03B.

Further surveys

Further surveys have not been recommended.

Introduction

1. Brooks Ecological Ltd was commissioned by Naylor Concrete Products to carry out a Preliminary Ecological Appraisal (PEA) of land at Whaley Road, Barnsley, grid ref. SE 32244 08110. The survey includes land within the red line boundary shown in Figure 1, opposite, with a total area of 0.46ha.
2. This report is produced with reference to British Standard BS:42020 '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 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.
5. Biodiversity Accounting metrics are used separately to quantify the value of a Site in Biodiversity Units, which helps in the later stage of assessing the ecological impacts of the proposed development. This process is set out separately in the Biodiversity Gain Report which accompanies this PEAR.

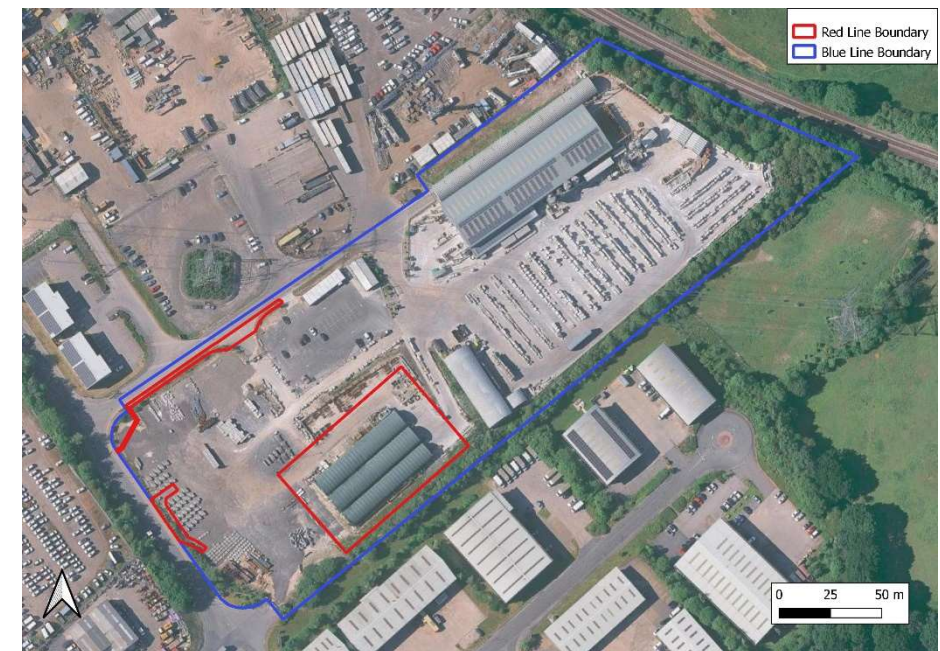
Proposals/Reason for PEA

6. The PEA has been commissioned to inform proposals to remove the current warehouses and replace them with a new storage structure, as well as installation of a new access path to the north.

The Site

7. The application site 'the Site' comprises a small section of the wider concrete works, which currently contains three temporary warehouses over a concrete floor. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 0.46ha.
8. Also included in the assessment, was the wider concrete works Site (blue line land), which is under the same ownership as the red-line land. These areas are shown below.

Figure 1 The Site (red line boundary).



Desk Study

Landscape

9. The Site is located within Barugh Green, on the north-west edge of Barnsley. The Site itself is contained within the concrete production area, with other industrial areas to the north, west and south. To the east, beyond a railway line, are more natural areas of farmland, grassland and woodland.
10. The Site overlies slowly permeable seasonally wet acid loamy and clayey soils. However, the industrial use of the Site is likely to have modified the soil characteristics present.

Wildlife Corridors

11. The Site has loose links to the wider landscape, with a railway line to the east providing the most notable feature for species to move between habitats.

Figure 2 Analysis of wildlife corridors and structured habitat visible on mapping in relation to the Site.



Designations

12. 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.

Statutory Designations

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

Table 1 Statutory Designated Sites.

Site Name	Distance from Site	Designation	Summary Interest
Denby Grange Colliery Ponds	8.5km north-west	Special Area of Conservation (SAC)	Designated for supporting a large population of great crested newts

14. The Site is separated by large areas of land. Direct and indirect impacts on this site as a result of this development are unlikely.

SSSI Impact Risk Zones (IRZs)

15. The Site lies within the IRZ for the Dearne Valley Wetlands SSSI but does not fall into any of the highlighted categories which require the LPA to consult with Natural England in relation to potential impacts.

Non-Statutory Designations

16. There are four Local Wildlife Sites in the search area.
17. The closest of these to the Site is Barnsley Canal at Wilthorpe, approximately 580m to the east. It is separated from the Site by a railway line and open fields and woodlands.
18. The three remaining sites are also separated by urban areas and roads.
19. Direct and indirect impacts on all remaining sites as a result of this development are unlikely due to the Site's separation and distance.

Nature Improvement Area

20. The Site is not within any Nature Improvement Area.

Wildlife Habitat Network

21. The Site is not within any mapped Wildlife Habitat Network.

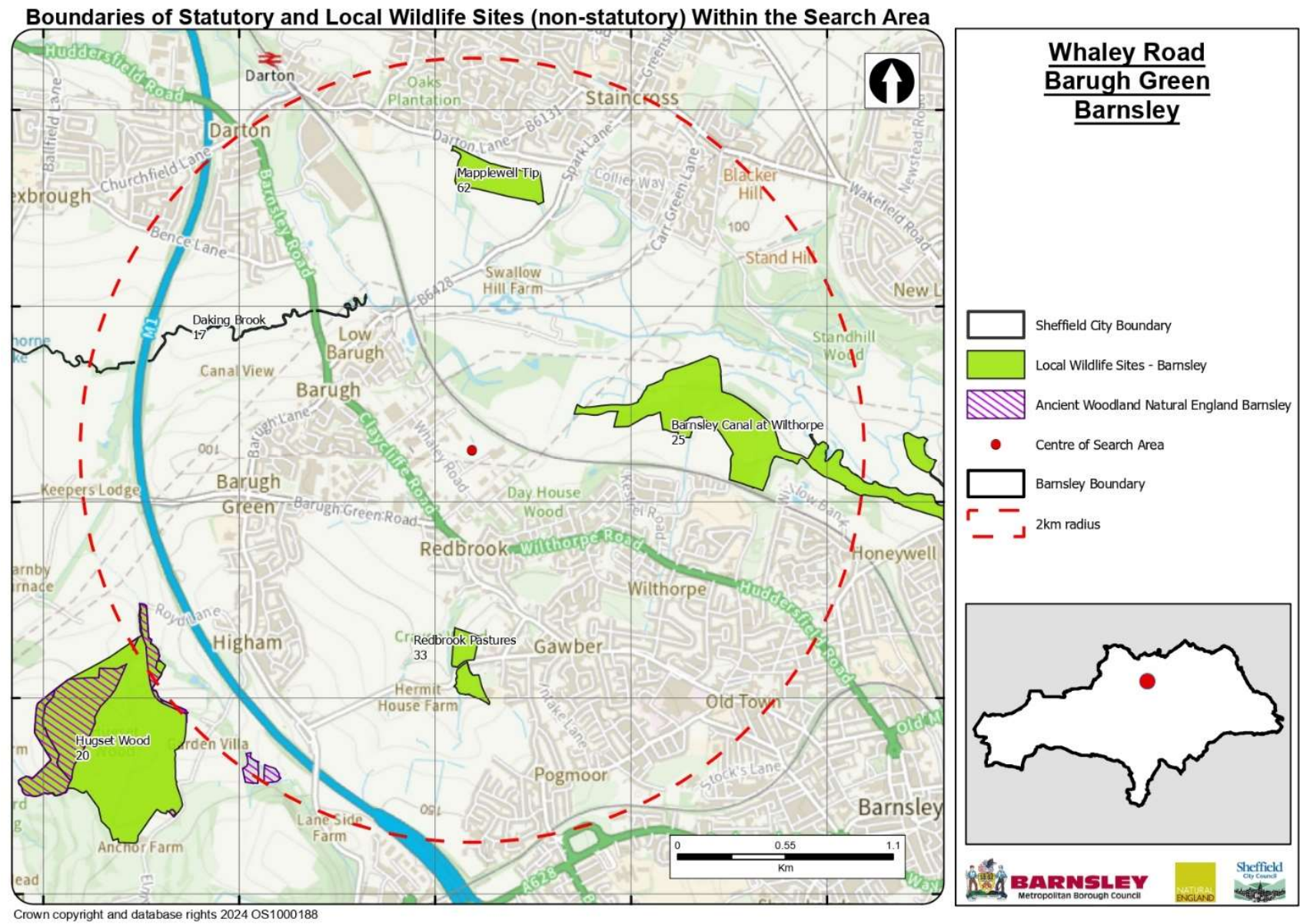
Granted EPSM Licences

22. There is one granted European Protected Species Mitigation (EPSM) licences shown within 1km of the Site.
23. A licence dating from 2016 allowed the damage and destruction of a resting place for great crested newts, approximately 780m north-west of the Site.

Mapped Ancient Woodland

24. No ancient woodland is shown on mapping, within the Site boundary or within 15m of the Site.

Figure 3 Records of designated sites and notable species within 2km of the Site; Sheffield Biological Records Centre.



Survey

25. The survey was carried out during May 2024¹ and followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010).
26. The timing of the survey meant that it was possible to confidently classify the type and condition of habitats present on this Site.
27. Enough time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.
28. Whilst the majority of the Site was accessible, around 5% of the blue-line land was inaccessible due to very dense vegetation and steep slopes, which could not be closely inspected. This could have concealed invasive species or protected species evidence.

Habitat Appraisal

29. The Site's habitats are described in order on the following pages. In line with the requirement to provide information on Biodiversity Net Gain (BNG), habitats are named in accordance with the UK Habitats classification system. We have used the UK Habitats v2.01 guidance in identifying habitats. Habitat descriptions are divided into the 'distinctiveness' categories used in the calculations presented in the Biodiversity Gain Assessment, with more weight being afforded the more distinctive/important habitats.
30. Generally, the following apply to each tier of distinctiveness, although some authorities might highlight some lower distinctiveness habitats as having a higher importance locally. Where relevant we have highlighted these.

Very Low Distinctiveness Habitats

31. Habitats of little or no habitat value, i.e., lacking any significant native vegetation, but could still provide supporting habitat for protected or notable fauna such as birds or bats. In the context of BNG, their areas are included in calculations, but mitigation or compensation is not required.

Low Distinctiveness Habitats

32. Habitats which are ubiquitous, often which have been created or modified intentionally. They tend to lack diversity of species and structure. They are unlikely to support notable flora but could still provide supporting habitat for protected or notable fauna. In the context of BNG, they are included in

calculations, but compensation/mitigation needs only to provide habitat of similar or higher distinctiveness.

Medium Distinctiveness Habitats

33. Habitats which are common but provide a higher level of structural and species diversity. Though unlikely to support more notable assemblages, species of interest could be present here and they are more likely to be important supporting habitat to fauna. In the context of BNG, mitigation needs to provide habitat of the same broad habitat type, or that of higher distinctiveness.

High Distinctiveness Habitats

34. Habitats which are more natural and contain more important assemblages of plants and potentially species which are rare in their own right. They will provide good habitat for fauna. These habitats are likely to be targeted as conservation priorities and will be the subject of additional policy guidance or legislation. In the context of BNG, whilst mitigation or compensation for loss or damage is possible, provision of more of the same type of habitat would be required, which (with a few exceptions) is likely to be difficult.

Very High Distinctiveness Habitats

35. These are the UK's rarest/best habitats. They will be present in very particular locations and a range of rare or important plant and animal species will depend on the particular conditions they provide. These habitats will be the subject of restrictive policy guidance or legislation. Whilst the BNG metric does not preclude mitigation or compensation in respect of these habitats, creation of the same habitat type would be required, and this would range between very difficult/expensive and impossible.

Irreplaceable Habitats

36. These are habitats of high biodiversity value, which are so difficult to recreate that it would be impossible to achieve the requirement to increase biodiversity on top of no net loss. These habitats have significant protection in the NPPF; any impacts from development require a strong justification and will flag as unacceptable in the Biodiversity Metric. Bespoke compensation for any loss of these habitats must be agreed with the LPA.
37. Each habitat is mapped and an area for each type is provided in the format of the Statutory Biodiversity Metric Calculation Tool. The areas can be used to quantify the impacts of development in an Ecological Impact Assessment if this is required by the Local Planning Authority.

¹ This Report has been prepared during June 2024 following a visit to the Site in May 2024, 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.

Condition Assessment

38. Our condition assessment for each habitat described references where available the criteria set out in DEFRA (2024) Statutory Biodiversity Metric Condition Assessments. A completed version of this spreadsheet is provided digitally with the Biodiversity Gain Report which accompanies this report.

Red-Line Land - Habitats of Low/Very Low Distinctiveness

Figure 4 Approximate location and extent of these habitats.

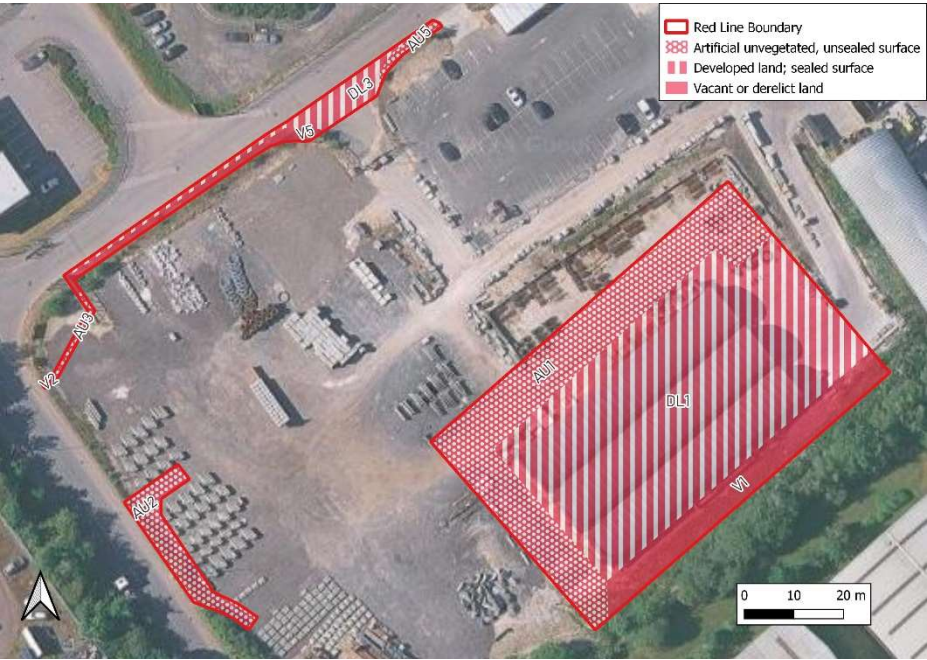


Table 2 Summary – Habitats of Low/Very Low Distinctiveness.

UK Habitats	Label Ref	Summary Description
Developed land; sealed surface	DL1	The current warehousing on-site is over concrete slabs, with no associated vegetation.
Developed land; sealed surface	DL3	A small section of tarmacadam access road.
Artificial unvegetated, unsealed surface	AU1	The areas of land to the north and west of the existing warehouses is well used for storage of materials and accessed by vehicles. The loose gravel ground surface is clear of vegetation, although the soil surface is not sealed with materials.
Artificial unvegetated, unsealed surface	AU2 and AU3	Similar to AU1, these areas are used for storage of formed concrete pieces and kept clear of vegetation by frequent use.
Artificial unvegetated, unsealed surface	AU5	A small area of gravel covered land with a picnic bench, in association with the Site offices.
Vacant or derelict land	V1	The area to the south of the existing warehousing is covered by loose gravel but is not utilised in the same way as the land to the north. The land has been disturbed previously by construction/industrial activities but is not currently in use to the same level as the rest of the Site. The lower level of use has allowed some species to establish over the soil surface, including creeping buttercup, rosebay willowherb, soft rush, creeping bent, ribwort plantain, Yorkshire fog, yarrow and black medick. Adjacent to the rear of the warehouse, 9 small goat willow specimens have established.
Vacant or derelict land	V2 and V5	Similar to V1, the edges of the concrete facility or not as well used and this allows some species to colonise the area. Species found along these strips of land include narrow-leaved ragwort, gorse, dog rose, goat willow and buddleia, as well as rosebay willowherb, broad-leaved dock and grasses.

Habitats of Very Low/Low Distinctiveness

Figure 5 Developed land; sealed surface area around and within current warehousing, DL1.



Figure 6 Artificial unvegetated, unsealed surface habitat to the west and north of warehousing, AU1.



Figure 7 Vacant/derelict land to the south of the existing warehousing, V1.



Figure 8 View of AU2 habitat.



Figure 9 Vacant land V2 along the northern edge.



Figure 10 View along to gravel ground of AU5.



Blue-Line Land - Habitats of Low/Very Low Distinctiveness

Figure 11 Approximate location and extent of these habitats.



Table 3 Summary - Habitats of Low/Very Low Distinctiveness.

UK Habitats	Label Ref	Summary Description
Developed land; sealed surface	DL2, DL4 and DL5	DL2 is a section of the main access road to the Site. DL4 is the main site car park and buildings. DL5 is a large building used in the concrete production process.
Artificial unvegetated, unsealed surface	AU4, AU6 and AU7	AU4 is a small part of the main concrete site, separated by the red-line boundary of the proposed new access path. AU6 is the main concrete site, with storage for equipment, plan and pieces of concrete. Whilst most of this area is unvegetated, the less disturbed edges have been colonised by a small number of species, including buddleja, gorse, dog rose, broad-leaved dock and common vetch. AU7 is an area of loose gravel at the north of the site offices.
Introduced Shrub	IS1	A small area around the site offices planted with non-native shrub species such as cherry laurel, Japanese barberry and red-tip photinia.
Vacant or derelict land	V3 and V4	Small areas of vacant land, outside of the proposed new path route, similar to area V2 above.

Habitats of Very Low/Low Distinctiveness

Figure 12 Developed land; sealed surface area DL2.

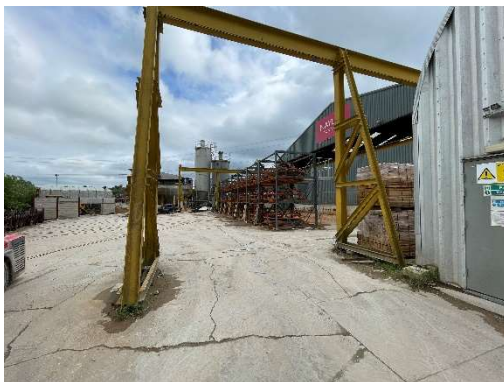


Figure 13 Developed land; sealed surface area DL3.



Figure 14 Artificial unvegetated; unsealed surface area AU2



Figure 15 Artificial unvegetated; unsealed surface area AU3



Figure 16 Introduced shrub area IS1



Figure 17 Vacant or derelict land V3



Blue-line Land - Habitats of Medium Distinctiveness

Figure 18 Approximate location and extent of these habitats.



Table 4 Summary of Medium Distinctiveness habitats.

UK Habitats	Label Ref	Summary Description
Mixed Scrub	MS1	Scrub borders the site to concrete site to the south and east. A mix of woody species are present, with no one species dominant, including hazel, silver birch, goat willow, rowan, alder, and smaller specimens of sycamore and oak. Bramble is present as part of the understorey, as well as dog rose, gorse, bindweed, horsetail and rosebay willowherb.
Mixed Scrub	MS2	A smaller area of mixed scrub, made up of similar species to MS1.
Other Neutral Grassland	ONG1	A strip of grassland is present with unused land at the northern edge of the Site. A mixture of species are present including grasses of Yorkshire fog, cock's foot, annual meadow grass and common bent. Forbs present include red campion, mouse ear chickweed, common St. John's wort, water figwort, bird's-foot trefoil, coltsfoot, black medick and creeping buttercup.
Other Neutral Grassland	ONG2	A small area of grassland, between two areas of warehousing. Grasses are typical of the Site, with Yorkshire fog, cock's foot and annual meadow grass present. Forbs are more limited here, with coltsfoot, wood avens, ox-eye daisy, herb robert and common horsetail recorded. Scrub is encroaching from the south, with hawthorn, gorse, willow and bramble beginning to cover the grassland.

Habitats of Medium Distinctiveness

Figure 19 View of mixed scrub MS1.



Figure 20 View of Mixed Scrub MS2.



Figure 21 View of Other Neutral Grassland ONG1.



Figure 22 View of Other Neutral Grassland ONG2.



Faunal Appraisal

39. The following pages discuss only the groups and species that could be reasonably expected to be found on the type of habitats present on, or adjacent to, the Site.

Amphibians

Desk evidence

40. There are 106 records of great crested newt (GCN) returned for the area, with many relating to ponds associated with Barnsley Canal, over 500m to the east of the Site. The most recent of these records is from September 2019.
41. Records were also returned for common frog, common toad and smooth newt.

Field Evidence

42. No ponds are present on the Site, and none are visible on mapping within 250m of the Site.
43. The Site provides very low suitability habitat for this species, with areas of hard-standing and loose gravel covering much of the Site, with little vegetation.

Summary Evaluation

44. The Site is not expected to be of significance to any local populations.

Further Surveys and Recommendations

45. No further surveys or precautions are considered necessary.

Bats

Desk evidence

46. A total of 70 records have been returned for bat species, with records held for common and soprano pipistrelle, Daubenton's, Leisler's and noctule, as well as indeterminate bat species.
47. Seven of these records appear to relate to roosts, with the most recent dating to 2019 and located over 1.7km west of the Site.

Field Evidence (Roosting)

48. There are three temporary warehouses present on-site. These were inspected for their suitability to support roosting bats.
49. The buildings walls are a mix of corrugated metal and plastic sheeting, which extend to approximately 7 ft in height. Above this, plastic sheeting is used as a roof, which is supported by metal scaffold-type poles.
50. The design of the buildings means that there few to no gaps between the construction materials, and where gaps do exist, they are exposed to rain and wind, as well as being subject to large temperature fluctuations, due to the materials used. For these reasons, all three warehouses present on-site are assessed as having negligible roosting suitability for bats.
51. To trees are present within the red-line boundary.

Field Evidence (foraging and commuting)

52. The Site presents a relatively isolated and small parcel of land, with little to no vegetation and it is unlikely to contribute much to local foraging resources.
53. The Site does not form part of any apparent network of habitat which could provide key commuting habitat locally.

Summary Evaluation

54. The Site's size and location suggest that it will not be important to this group.

Further Surveys and Recommendations

55. Further surveys are not recommended. There would be opportunities to provide new roost sites in buildings at the Site.

Birds

Desk Evidence

56. A large number of bird records were returned for the search area, likely as a result of the Dearne Valley being found within 1km of the Site.

Field Evidence

57. No birds were encountered during the Site survey, likely due to the high levels of disturbance and lack of suitable habitat.

Summary Evaluation

58. Based on its size and habitats the Site will not be important to local bird populations

Further Surveys and Recommendations

59. No further surveys are considered necessary to demonstrate current baseline in respect of birds.
60. Standard precautions apply in respect of restrictions on clearing vegetation during the nesting season.

Badgers

Desk evidence

61. A single record of a badger was returned for the search area.

Field Evidence

62. The Site provides no potential habitat for badgers, with modified land present throughout.
63. No evidence of badger was found.

Summary Evaluation

64. Badger setts are unlikely to be present at the Site as affected by the proposals.

Further Surveys and Recommendations

65. No further surveys are considered necessary to demonstrate current baseline in respect of badgers.

Hedgehogs (NERC Act 2006/Local BAP)

Desk evidence

66. Hedgehogs are recorded within the search area.

Field Evidence

67. No evidence of hedgehogs was found on site.

Summary Evaluation

68. The Site provides unsuitable habitat for this species and it is not expected to be present on-site, but may be found in the wider area.

Further Surveys and Recommendations

69. Presence assumed; no further surveys are considered necessary.

Invasive Non-Native Species (INNS)

70. INNS are species listed on Schedule 9 of the Wildlife and Countryside Act (1981), for which it is an offence to cause or allow it to grow in the wild.

71. No INNS were noted during survey².

Survey constraints

72. This survey is constrained by the presence of areas that were inaccessible due to the density of vegetation.

73. Although no INNS have been identified in this preliminary survey, it is not always possible to conclude absence from preliminary survey alone due to factors such as season, accessibility, third-party attempts to hide evidence, or undisclosed treatment programmes. For this reason, this report should not be relied upon as definitive evidence of absence of INNS.

74. This site presents a small risk of supporting undetected INNS based on the following factors:

- Areas of site inaccessible to survey
- Proximity to nearby potential sources of infection

75. Should further assurances be needed in relations to INNS, a dedicated Invasive Weed Survey should be commissioned.

² Whilst our ecologists are trained in the identification of invasive species, this report is not a dedicated invasive species survey. Detectability of invasive plant species can be affected by several factors, and conclusive determination status, or extent, is not

possible through preliminary survey alone. 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.

Ecological Constraints

Habitat Value

76. The usual approach to development is to minimise any net loss of biodiversity towards a gain in biodiversity value where this is possible on-Site. Our separate report on Biodiversity Gain sets out the position of the Site in terms of measured biodiversity.
77. Irrespective of the Biodiversity Gain process, development should still seek to retain what is best about the Site.
78. The plan opposite shows the Site in the context of mapped habitat distinctiveness (as assessed at the time of the survey) with the aim of informing the design of any layout. It shows that there are no targets of higher distinctiveness or irreplaceable habitat within the red-line boundary which would need to be avoided by the proposals and that the Site is relatively uniform in terms of potential impact.
79. Habitats do not impose any particular design constraints. Loss of habitat of this nature are not of the order which (outside of Biodiversity Net Gain) would require specific mitigation or compensation as they are common locally.
80. In terms of structure and connectivity, habitat present off-site to the south will contribute to the connectivity of the wider landscape and should be protected from damage during construction.

Faunal constraints

81. Faunal constraints have not been identified.

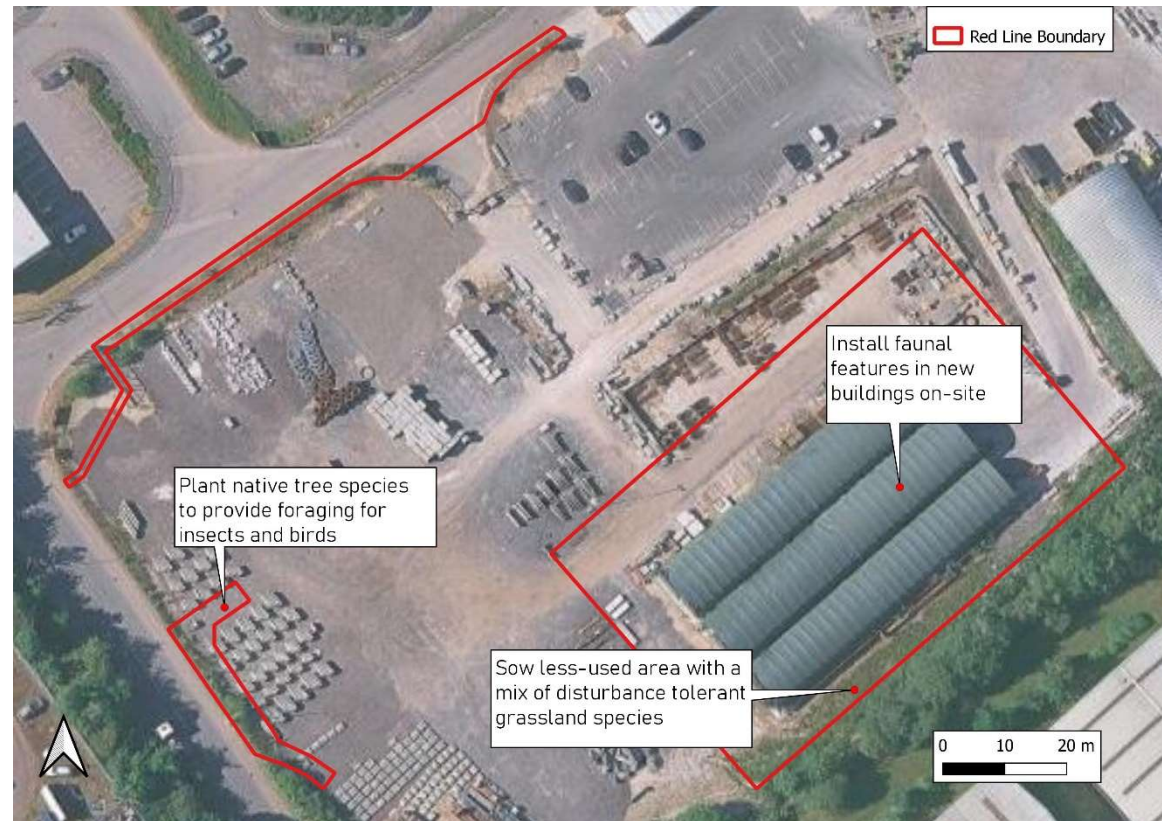
Figure 23 Distinctiveness of habitat.



Ecological Opportunities

82. Ecological opportunities at the Site are limited due to the urban nature of the development:
- Installing roosting or nesting features on new buildings.
 - Planting new native shrub and trees along the proposed access path.
 - Sow species that are tolerant to disturbance along the southern edge of the Site, with the aim of attracting insects and birds.
83. A Biodiversity Management Plan would be useful in defining these enhancements and can be secured by standard condition.

Figure 24 Ecological Opportunities.



Conclusions and Recommendations

Planning considerations		
Recommendation	Rationale	When
R1 Additional Surveys		
R1.1 Vegetation	Not required	
R1.2 Fauna	Not required	
R2 Produce a layout which minimises loss of biodiversity	Engage with the Constraints and Opportunities set out above, involve your ecologist in designs at an early stage. The proposals will need to consider the NPPF hierarchy of Avoid–Mitigate–Compensate in minimising any loss of biodiversity. Biodiversity Net Gain (BNG) policy mandates a minimum 10% Net Gain in Biodiversity Units, and the LPA may request additional gains. Your layout may need to change to accommodate your findings from R1 surveys.	During the design process
R3 Design	Make sure your design team follows ecological advice to and make sure there are no design conflicts. <u>Produce a habitat retention plan at an early stage</u> - which can be used to inform BNG and maximise scores. A habitat retention plan should identify areas which can be excluded from any impacts of clearance and construction. In producing a plan you should consider the need to provide (amongst other things) Site compounds, to store and move materials, to install drainage, flood storage, access and services - all with suitable easements.	During the design process
R4 Biodiversity Net Gain (BNG)	Carry out a BNG Assessment using the Statutory Biodiversity Metric Calculation Tool and accompanying Condition sheets produced by Defra. It is important that the baseline survey is undertaken during the appropriate season for the habitat type being assessed, so as to ensure the accuracy of habitat mapping and calculating condition scores. Where an initial survey is undertaken at a sub-optimal time of year, it is recommended that updating surveys be carried out during the optimal season for that habitat, prior to the BNG assessment being finalised. Failure to do this could mean that the final Biodiversity score calculated for a project is incorrect, which could then impact on any financial contribution that has been budgeted for to address Biodiversity Offsetting.	During the design process. Baseline survey to be completed during the appropriate season.
R5 Produce a Biodiversity Management Plan	To specify in detail how the development will cater for biodiversity on-Site and to show how habitats incorporated will be managed.	Delivery report Suitable for planning condition
R6 Produce a CEMP (Biodiversity)	To show how the site will be built without affecting surrounding habitats and minimising risk of affecting protected or notable fauna. The CEMP will detail the following protection measures: <ul style="list-style-type: none"> • Location of Biodiversity Protection zones or fences • Dealing with known or discovered invasive species • Pre- or during- clearance ecology checks for protected species. • Protected/notable species method statements where licensing is not needed. • Nesting bird management 	Delivery report Suitable for planning condition

References

Guidelines and Best Practice

British Standards Institution (BSI). 2013. *BS42020 Biodiversity – Code of practise for planning and development*. London: BSI Standards Limited.

Chartered Institute of Ecology and Environmental Management (CIEEM). 2019. *Advice note: on the lifespan of ecological reports and surveys*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/advice-note-on-the-lifespan-of-ecological-reports-and-surveys/>

Chartered Institute of Ecology and Environmental Management (CIEEM). 2017. *Guidelines for Preliminary Ecological Appraisal (2nd edition)*. Winchester: Chartered Institute of Ecology and Environmental Management. [Online]. Available from: <https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/>

Hill, D. et al. 2005. *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring*. Cambridge: Cambridge University Press.

Institute of Environmental Assessment. 1995. *Guidelines for baseline ecological assessment*. London: E & FN Spon.

Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey – A technique for environmental audit (revised)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/9578d07b-e018-4c66-9c1b-47110f14df2a>

Ratcliffe, D.A. 1977. *A Nature Conservation Review*. Cambridge: Cambridge University Press on behalf of the Nature Conservancy Council and the Natural Environment Research Council.

UK Hab Ltd. 2023. *The UK Habitat Classification Version 2.0*. Stockport : UKHab Ltd. [Online]. Available from: <https://ukhab.org/ukhab-documentation/>

Desk Study

Bat Tree Habitat Key (BTHK). 2018. *Bat Roosts in Trees – A Guide too Identification and Assessment for Tree-Care and Ecology Professionals*. Exeter: Pelagic Publishing.

Collins, J. 2023. *Bat Surveys for Professional Ecologists: Good Practise Guidelines (4th edition)*. London: The bat Conservation Trust.

English Nature. 2001. *Great Crested Newt Mitigation Guidelines*. Peterborough: English Nature. [Online]. Available from: https://mokrady.wbs.cz/literatura_ke_stazeni/great_crested_newt_mitigation_guidelines.pdf

Fay, N. 2007. *Defining and Surveying Veteran and Ancient Trees*. [Online]. Available from: https://www.treeworks.co.uk/downloads/publications/DEFINING_AGE_AND_SURVEYING_VETERAN_AND_ANCIENT%20TREESa.pdf

Gent, T. and Gibson, S. 2003. *Herpetofauna Workers' Manual (revised reprint)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/9d7da8c4-9d76-4b65-8263-6b925b3433a4>

Mitchell-Jones, A.J. 2004. *IN136 Bat Mitigation Guidelines*. Peterborough: English Nature. [Online]. Available from: <https://webarchive.nationalarchives.gov.uk/ukgwa/20140605171643/http://publications.naturalengland.org.uk/publication/69046?category=31008>

Mitchell-Jones, A.J. and McLeish, A.P. 2004. *Bat Workers Manual (3rd Edition)*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://hub.jncc.gov.uk/assets/e5888ae1-3306-4f17-9441-51a5f4dc416a>

Natural England. MAGiC. [Online]. [Accessed 16th January 2024]. Available from: <https://magic.Defra.gov.uk/MagicMap.aspx>

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), pp. 143-155. [Online]. Available from: <https://www.thebhs.org/publications/the-herpetological-journal/volume-10-number-4-october-2000/1617-03-evaluating-the-suitability-of-habitat-for-the-great-crested-newt-triturus-cristatus/file>

Sheffield Biological Records Centre. 2024. *Whaley Road, Barugh Green, Barnsley*. Sheffield Biological Records Centre, Ecology Service, Parks and Countryside Service, Sheffield, S8 9FL.

Legislation and Strategy

Department for Environment, Food and Rural Affairs (DEFRA). 2011. *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. London: Her Majesty's Government. [Online]. Available from: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services>

Department for Levelling Up, Housing and Communities. 2023. *National Planning and Policy Framework*. London: Her Majesty's Government. [Online]. Available from: https://assets.publishing.service.gov.uk/media/65819679fc07f3000d8d4495/NPPF_December_2023.pdf

Barnsley Biodiversity Trust. 2009. *Barnsley Biodiversity Action Plan*. Barnsley, UK: Barnsley Biodiversity Trust. [Online]. Available from: <https://barnsleymbc.moderngov.co.uk/Data/Cabinet/200912231000/Agenda/231237-12698d4710b--7ffe-bap08-12intro.pdf>

Joint Nature Conservation Committee (JNCC). *UK Biodiversity Indicators 2023*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from: <https://jncc.gov.uk/our-work/uk-biodiversity-indicators-2023/>

Government Circular 06/05: Office of the Deputy Prime Minister (ODPM) 2005. *Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System*. London: Her Majesty's Government. [Online]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

House of Commons, Environment, Food and Rural Affairs Committee. 2011. *Natural Environment White Paper*. London: Her Majesty's Government. [Online]. Available from: <https://www.parliament.uk/globalassets/documents/commons-committees/environment-food-rural-affairs/NEWPConsolidatedWrittenEvidenceNov11.pdf>

Natural Environment and Rural Communities Act 2006. (c.61, Part 3, Section 41). London: Her Majesty's Government. [Online]. Available from: [https://www.legislation.gov.uk/ukpga/2006/16/section/41#:~:text=41Biodiversity%20lists%20and%20action%20\(England\)&text=\(1\)The%20Secretary%20of%20State,%5BF1or%20enhancing%5D%20biodiversity](https://www.legislation.gov.uk/ukpga/2006/16/section/41#:~:text=41Biodiversity%20lists%20and%20action%20(England)&text=(1)The%20Secretary%20of%20State,%5BF1or%20enhancing%5D%20biodiversity)

The Conservation of Habitats and Species Regulations 2010. (No. 490). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/uksi/2010/490/contents/made>

The Statutory Biodiversity Metric User Guide. 2024. London: Department for Environment, Food and Rural Affairs (Defra). [Online]. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

UK Statutory Nature Conservation Bodies (SNCBs). 2018. *Favourable Conservation Status : UK Statutory Nature Conservation Bodies Common Statement*. Peterborough: Joint Nature Conservation Committee (JNCC). [Online]. Available from : <https://hub.jncc.gov.uk/assets/b9c7f55f-ed9d-4d3c-b484-c21758cec4fe>

Wildlife and Countryside Act 1981. (c.69, Schedule 9). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1981/69/schedule/9>

Appendix 5 Legislation (where not stated above)

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/eudr/1992/43/contents>

Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive). London: Her Majesty's Government. [Online]. Available from: https://www.legislation.gov.uk/eudr/1979/409/pdfs/eudr_19790409_1994-07-20_en.pdf

Hedgerows Regulations (1997). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>

Natural Environment and Rural Communities Act 2006 (NERC). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/2006/16/contents>

Protection of Badgers Act (1992). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1992/51/contents>

The Countryside and Rights of Way Act 2000 (CRoW). London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/2000/37/contents>

The Ramsar Convention on Wetlands of International Importance (1971). Switzerland: Convention on Wetlands Secretariat. [Online]. Available from: https://www.ramsar.org/sites/default/files/documents/library/original_1971_convention_e.pdf

The Wildlife and Countryside Act (1981) as amended. London: Her Majesty's Government. [Online]. Available from: <https://www.legislation.gov.uk/ukpga/1981/69/contents>

Appendix 1 Habitats and Ecological Features



Appendix 2 List of species recorded

Annual meadow grass	<i>Poa annua</i>
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Black medick	<i>Medicago lupulina</i>
Bramble	<i>Rubus fruticosus agg.</i>
Broad-leaved willowherb	<i>Epilobium montanum</i>
Buddleja	<i>Buddleja davidii</i>
Cherry laurel	<i>Prunus laurocerasus</i>
Chickweed	<i>Stellaria media</i>
Cock's foot	<i>Dactylis glomerata</i>
Coltsfoot	<i>Tussilago farfara</i>
Common bent	<i>Agrostis capillaris</i>
Common mouse ear	<i>Cerastium fontanum</i>
Common nettle	<i>Urtica dioica</i>
Common vetch	<i>Vicia sativa</i>
Cowslip	<i>Primula veris</i>
Creeping buttercup	<i>Ranunculus repens</i>
Creeping thistle	<i>Cirsium arvense</i>
Dog rose	<i>Rosa canina</i>
Elder	<i>Sambucus nigra</i>
Field bindweed	<i>Convolvulus arvensis</i>
Field horsetail	<i>Equisetum arvense</i>
Goat willow	<i>Salix caprea</i>
Gorse	<i>Ulex europaeus</i>
Hairy willowherb	<i>Epilobium hirsutum</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Herb robert	<i>Geranium robertianum</i>
Japanese barberry	<i>Berberis thunbergii</i>
Meadow buttercup	<i>Ranunculus acris</i>
Narrow-leaved ragwort	<i>Senecio inaequidens</i>
Oak	<i>Quercus robur</i>

Oxeye daisy	<i>Leucanthemum vulgare</i>
Pendulous sedge	<i>Carex pendula</i>
Ragwort	<i>Jacobaea vulgaris</i>
Red campion	<i>Silene dioica</i>
Red tip photinia	<i>Photinia x fraseri</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Rosebay willowherb	<i>Chamaenerion angustifolium</i>
Rowan	<i>Sorbus aucuparia</i>
Silver birch	<i>Betula pendula</i>
Soft rush	<i>Juncus effusus</i>
St. John's wort	<i>Hypericum perforatum</i>
Sycamore	<i>Acer pseudoplatanus</i>
Teasel	<i>Dipsacus fullonum</i>
Water figwort	<i>Scrophularia auriculata</i>
Wood avens	<i>Geum urbanum</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire fog	<i>Holcus lanatus</i>

Appendix 3 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.

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 [SSSIs]) 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 2017).

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 Sheffield Biological Records Centre 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.

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

Species/group	Habitat
Hedgehog	Mixed deciduous woodland
Bats	Upland oakwood
Water vole	Wet woodland
Otter	Parkland and wood pasture
Grey partridge	Traditional orchard
Bittern	Scrub
Kestrel	Hedgerows
Little ringed plover	Arable field margins
Lapwing	Acid grassland
Barn owl	Neutral grassland
Skylark	Amenity grassland and verges
Tree sparrow	Floodplain grazing marsh
Twite	Reedbeds
Great crested newt	Lowland fen
Salmon	Upland flushes, fens and swamps
Bullhead	Rush pastures
White-clawed crayfish	Blanket bog
Glow worm	Standing water and ponds
Dingy skipper	Running water, rivers & streams
Bluebell	Upland heathland
	Lowland heath
	Open mosaic habitats on previously developed land
	Built environment and gardens

Bats

Bat roosting potential is classified according to the following criteria set out below, taken from the Bat Conservation Trust Good Practice Guidelines (2023).

Bat Roosting Suitability of Buildings

Suitability	Criteria
<i>None</i>	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
<i>Negligible</i>	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
<i>Low</i>	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. 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 larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
<i>Moderate</i>	A structure with one or more potential roost sites that could be used by bats 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, such as maternity and hibernation - the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
<i>High</i>	A structure 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, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

Bat Roosting Suitability of Trees

Suitability	Criteria
<i>None</i>	Either no PRFs in the tree, or highly unlikely to be any.
<i>FAR</i>	Further assessment required to establish if PRFs are present within the tree.
<i>PRF</i>	A tree with at least one PRF present.

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

Appendix 4 Bat Activity Survey Rationale

The Bat Conservation Trust Guidelines (BCTG) (Collins 2023) is now widely accepted as providing a basis and rationale for scoping and conducting bat surveys. It is acknowledged that the guidelines provide a wealth of background and are a very useful tool in standardising approaches to survey, it is also felt that an over reliance on some of the guidelines within this document can result in the provision of complicated surveys where they have significant consequences for the cost, or timescale of a large project, but could never deliver positives for bat conservation.

Taking the BCTG document as a whole, Chapter 2 helps the reader understand whether or not surveys are required, and that in the context of planning and development survey is required in relation to ensure;

- the avoidance of legal offences, and;
- the provision of a sufficient level of information - such that will allow the Local Planning Authority to make an informed decision on the proposals and their potential impacts on the Favourable Conservation Status (FCS) of bats.

Attendance at seminars presented by, and discussions with, those involved in production of the BCTG document has emphasised the point that it is within the remit of the consultant ecologist to make a decision on the necessity and scope of surveys - they will use the guidelines in doing so but are not in any way bound by them: this is reflected in Section 1.1 of the guidelines -

‘The Guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.’

Such decisions require a consideration of the potential of the project to impact on bat habitat, alongside analysis of the value of habitat on and around the site and of local records and the likelihood that bats might occur in significant numbers. Our reports aim to present information on how we have arrived at our decision on the Site, what assumptions we have based this on, and where further survey is recommended we indicate what the objective of this survey should be and how best this would be achieved.

The Site is small, not strategically located and does not contain any potential key habitat features for bats, its use by this group can be easily predicted making any requirement for additional survey disproportionate.

This assessment was made by David Lovett MBiolSci (Hons) ACIEEM who has 121 years’ experience of scoping and delivering bat surveys and has carried out many activity surveys.

Appendix 5 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 the EC Habitats Directive 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 SitesStatutory 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 SpeciesEuropean 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 from certain activities only. All

nesting bird species are protected from damage or destruction of their nests – whilst active.

Invasive speciesSchedule 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 (*Reynoutria japonica*), and giant hogweed (*Heracleum mantegazzianum*).

Planning Policy/GuidanceThe National Planning Policy Framework (NPPF)

The National Planning Policy Framework was updated in December 2023. 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 "protect and enhance our natural, built and historic environment", including "improving 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 many functions, such as for wildlife" (P124).

Section 15 details conserving and enhancing the natural environment; policies and decisions should be "protecting and enhancing valued landscape [and] 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 (P180). Allocations of land for development should, "allocate land with the least environmental or amenity value, where consistent with other policies in this Framework" and "take a strategic approach to maintaining and enhancing networks of habitats" (P181).

The Framework sets out ways to minimise the impacts on biodiversity through plans which "identify, map and safeguard 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 promote the "conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity" (P185).

It is made clear in P186 that local planning authorities should apply a set of principles when determining planning applications. Planning permission should be refused "if significant harm to biodiversity resulting from 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 improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity".

UK Biodiversity Indicators 2023: update to Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services

The UK Biodiversity Indicators 2023 provide updates to the indicators set out in Biodiversity 2020 including new species abundance targets as set out in the Environment Act 2021. Biodiversity 2020 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.