



Preliminary Ecological Appraisal Report

**Mount Vernon Road,
Barnsley**



Report Reference: R-3716-01

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Report Title: Preliminary Ecological Appraisal Report
Mount Vernon Road, Barnsley

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Written by: Kate Wright BSc (Hons), MSc, GradCIEEM
Assistant Ecologist

Technical Review: Rob Weston BSc MSc MCIIEEM
Technical Director

QA Review: Daniel Ross BSc (Hons) Grad CIEEM
Ecologist

Approved for issue: Rob Weston BSc MSc MCIIEEM
Technical Director

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



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Non-technical Summary

This report is produced to inform Orion Homes Limited 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 carried out in October 2018.

Findings Key-Points

The majority of the Site is of low ecological value suitable for the proposed development. Woodland to the south-west of the Site offers higher value habitat and should be retained, as shown in the proposed design.

Summary Recommendations		
Recommendation	Rationale/notes	Stage
Actions		
Surveys needed	Bat roost suitability assessment of any mature trees to be removed.	Pre-planning
Output		
Landscape Ecological Management Plan	Sets out how the design can deliver gains for wildlife. This will document will inform a Landscape Masterplan.	Can be conditioned
CEMP (Biodiversity)	Sets out mitigation measures during construction including protection of woodland, nesting bird strategy etc.	Can be conditioned

Introduction

1. Brooks Ecological was commissioned by Orion Homes Limited to carry out a Preliminary Ecological Appraisal (PEA) of land at Mount Vernon Road, Worsborough, Barnsley S70 4DP (grid reference SE 350 047).
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 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 proposed development site 'the Site' occupies the footprint of the former Mount Vernon Hospital. It is defined in Figure 1 below.

Figure 1 The Site



- 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.

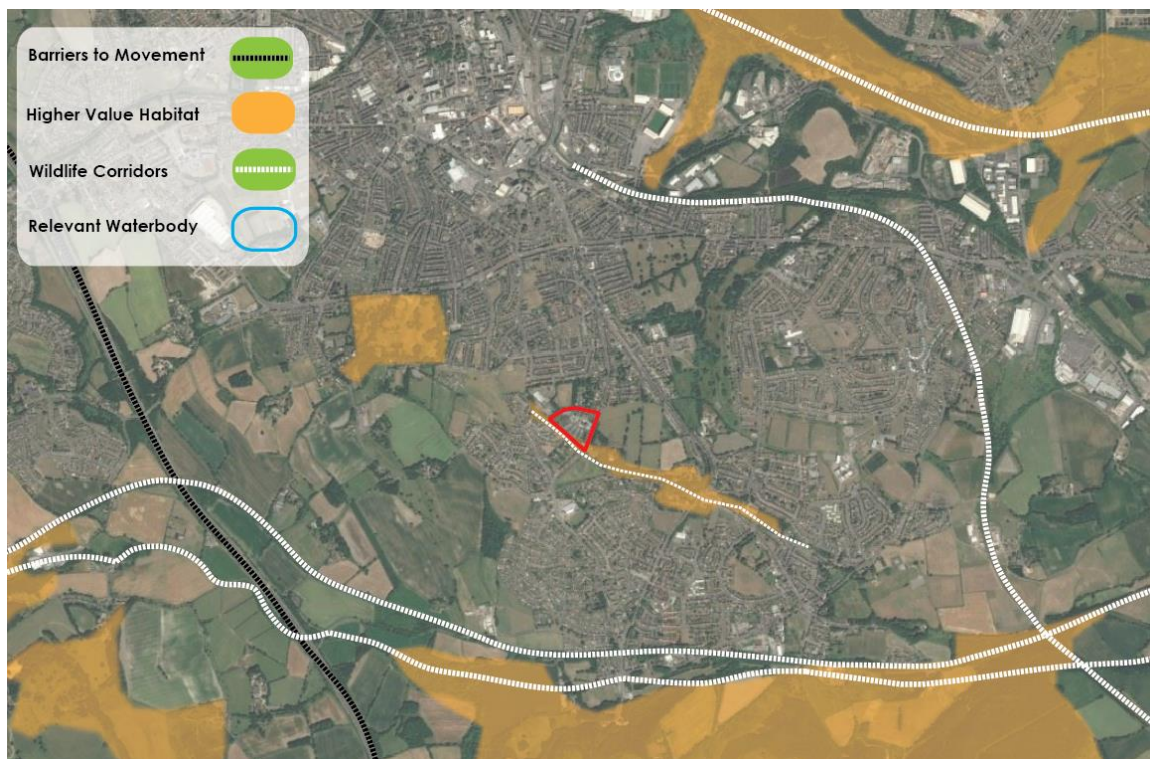
Site Context

- The Site is located to the south of the town of Barnsley. The underlying geology comprises sandstone overlain with freely draining slightly acid loamy soils.
- Residential housing lies to the immediate north, south and west of the Site. A local primary school and associated grounds/playing fields are to the north-west, whilst to the other side of Mount Vernon Road to the east is farmland currently used for grazing.
- The wider landscape is predominantly urban, with agricultural land extending from 500m to the west.

Wildlife Corridors

- The strip of woodland to the west of the Site extends beyond the Site's boundaries to the north-west and south-east. Though this offers an area of higher ecological value, it presents only a weak corridor that is disconnected from the wider landscape.

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



11. More extensive wildlife corridors are found c.1km south of the Site, these being a dismantled railway and the River Dove which run through an extensive area of open habitat comprising the TransPennine Trail, and Worsborough Reservoir and Country Park. The Dearne Valley to the north-east of Barnsley offers another strong wildlife corridor, however both of these are separated from the Site by areas of built development.
12. The M1 to the west of the Site will pose a barrier to the movement of many species.

Water Bodies

13. There are no water bodies on the Site, and none are visible on mapping or aerial photographs within 500m of the Site.

Designated Sites

Statutory Designations

14. 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 from Site	Designation	Summary Interest
Worsborough Country Park	1.1km S	Local Nature Reserve (LNR)	A 62 Ha country park on the urban fringe. Habitats include a reservoir, willow carr, managed grassland/ meadow, reed bed and woodland. The site is good for water fowl.

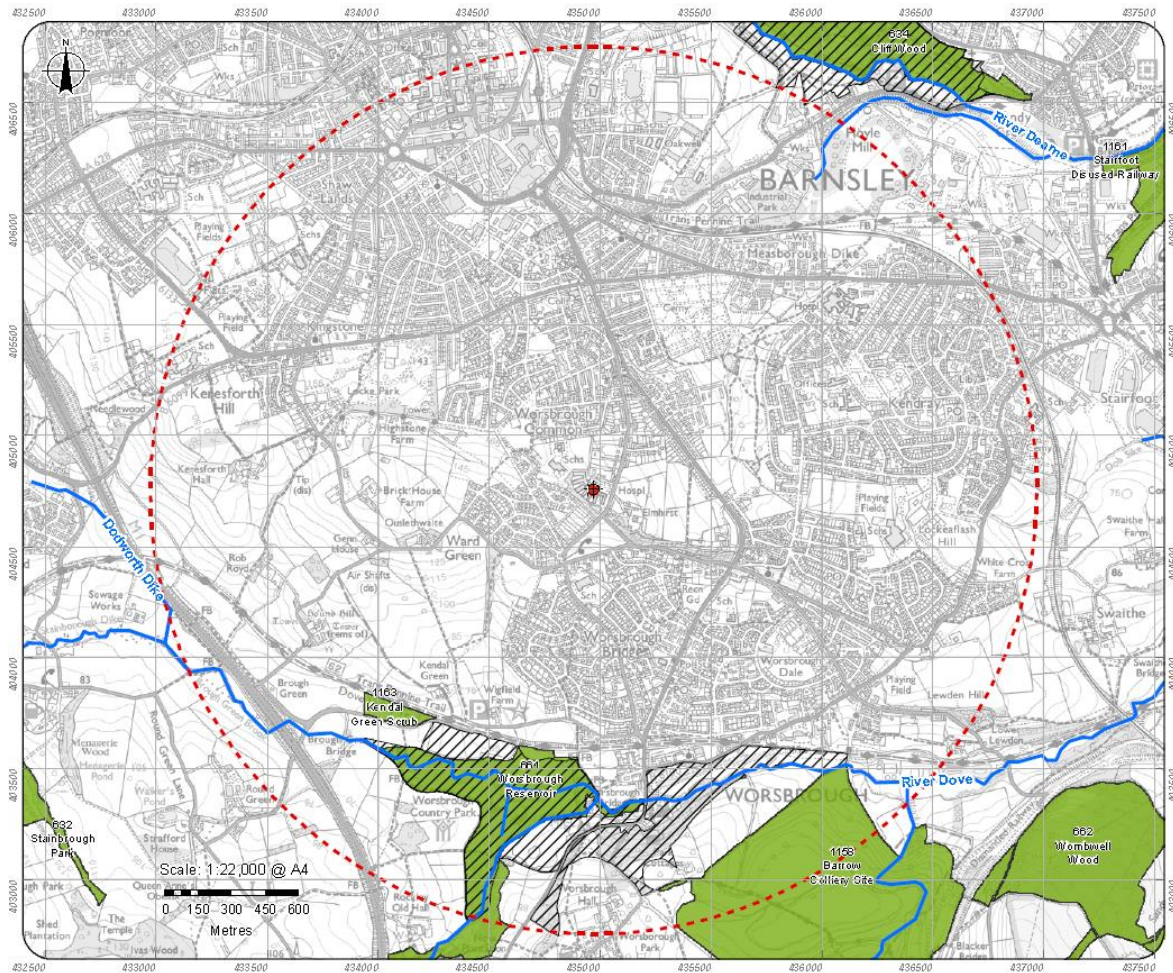
SSSI Impact Risk Zones (IRZs)

15. The Site does not fall within any IRZ.

Non-Statutory Designations

16. There are three locally designated sites within 2km of the Site. These are all Local Wildlife Sites (LWS).
 - 1163 Kendal Green Scrub LWS – 1.3km SW
 - 661 Worsborough Reservoir LWS – 1.1km S
 - 1158 Barrow Colliery Site LWS – 1.6km SW

Figure 3 Locally designated sites (provided by Sheffield Biological Records Centre).



- 17. The Site is sufficiently distant from nearby sites, and separated from them by built environment, that it is very unlikely the development will cause any adverse impacts upon them.

Habitats

Method

18. The survey was carried out during October 2018¹ and followed Phase 1 habitat survey methodology (JNCC, 2010).

Limitations

19. The vast majority of the Site was accessible with exceptions being the woodland to the west of the Site which was difficult to access due to steep slopes, uneven ground and dense brash. This accounts for no more than 10% of the Site by area and was observed from the woodland edges.
20. Sufficient time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.

Results

21. Formerly an NHS hospital, the Site has been closed for approximately 9 months. Buildings remain in situ, surrounded by hardstanding pavements and car parking, and ornamental shrubs and borders. A strip of semi-natural woodland is found along the Site's western boundary.



Figure 4

Main entrance to the Site highlighting areas of lawn, shrubs and trees on Site.

¹ This Report has been prepared during October 2018 following a visit to the site in October 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. The following habitats were identified within the Site and on its immediate boundaries:

- Buildings
- Hardstanding
- Amenity Grassland
- Semi-natural deciduous woodland
- Hedgerow
- Landscape Shrubs and Trees

Buildings

23. The Site was subject to a bat roost suitability assessment carried out by Brooks Ecological Ltd in October 2017 (report reference R-3064-01). This earlier report should be referred to for a description of the buildings on site.

Hardstanding

24. Surrounding the buildings are areas of driveway, hardstanding, pavements and car parking, predominantly tarmac with some areas of concrete.

25. Ephemeral vegetation is beginning to establish within cracks and gaps. Species noted include common grasses such as perennial rye grass (*Lolium perenne*) (*Poa* sp.), fescues (*Festuca* spp.) and bents (*Agrostis* spp.), willowherbs (*Epilobium* sp.), alongside other forbs including red clover (*Trifolium pratense*), dandelion (*Taraxacum officinalis* agg.), common plantain (*Plantago major*), bittercress (*Cardamine* sp.), knotgrass (*Polygonum aviculare*), sun spurge (*Euphorbia helioscopia*), feverfew (*Tanacetum parthenium*), purple toadflax (*Linaria purpurea*) and creeping thistle (*Cirsium arvense*).



Figure 5

Ephemeral vegetation growing over car parking area to east of Site.

Amenity Grassland

- 26. Lawned areas of amenity grassland occur around the Site, particularly along the north and west boundaries and in between the wards. This has been left uncut for several months, and a lack of management has led this to develop into rank grassland. Common grasses noted in sward include perennial rye (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), cock's-foot (*Dactylis glomerata*), meadow grasses (*Poa* sp.), bent (*Agrostis* sp.) and fescue (*Festuca* sp.).
- 27. A number of forbs are becoming established within the grassland, these including: common mouse-ear (*Cerastium fontanum*), daisy (*Bellis perennis*), willowherbs, self-heal (*Prunella vulgaris*), ragwort (*Senecio jacobaea*), white clover (*Trifolium repens*), groundsel (*Senecio vulgaris*), creeping thistle (*Cirsium arvense*), yarrow (*Achillea millefolium*), broad-leaved dock (*Rumex obtusifolius*), fox and cubs (*Pilosella aurantiaca*), black medick (*Medicago lupulina*), creeping buttercup (*Ranunculus repens*), cleavers (*Galium aparine*), dove's foot crane's-bill (*Geranium molle*), marjoram (*Origanum vulgare*), common chickweed (*Stellaria media*), shepherd's purse (*Capsella bursa-pastoris*) and creeping cinquefoil (*Potentilla reptans*).



Figure 6

Typical area of grassland, occurring in between the hospital ward buildings.

Semi-natural Deciduous Woodland

- 28. A strip of semi-natural woodland occurs along the Site's western boundary. This slopes steeply down from the landscaped grounds of the hospital and borders the adjacent housing. Known as Highstone Plantation, this woodland has been present on the Site since at least the 1850s. This is not designated as ancient woodland but is included on the Priority Habitat Inventory (Deciduous Woodland) for England.

- 29. The woodland is dominated by mature sycamore (*Acer pseudo-platanus*) and ash (*Fraxinus excelsior*) but also incorporates other species including oak (*Quercus* sp.), beech (*Fagus sylvatica*), alder (*Alnus glutinosa*), birch (*Betula* sp.) and yew (*Taxus baccata*). The understorey includes elder (*Sambucus nigra*) and hawthorn (*Crataegus monogyna*).
- 30. The ground layer is sparse with ivy and bramble locally dominant. Garden waste and cut branches have been deposited near the edge of the woodland, making the woodland difficult to access.



Figure 7

Looking south across the woodland from the top of the slope adjacent to the hospital building.



Figure 8

Looking north-west through the woodland from the bottom of the slope.

Hedgerow

31. An intact boundary hedgerow is found along the northern boundary with Coach House Lane. This is well maintained to a uniform height of c. 5 feet and comprises mainly garden privet (*Ligustrum ovalifolium*) and hawthorn (*Crataegus monogyna*).
32. A narrow strip of grassland, as described above, occurs at its base. This includes some additional ruderal species such as fat hen (*Chenopodium album*), rosebay willowherb (*Chamaenerion angustifolium*), spear thistle (*Cirsium vulgare*) and stinging nettle (*Urtica dioica*).



Figure 9

Hedgerow along northern boundary.

Landscaping - Shrubs and Trees

33. Trees and shrubs are found around the Site, both as standards and within borders/hedgerows.
34. A varied selection of ornamental shrub species include but are not limited to holly (*Ilex aquifolium*), Oregon grape (*Mahonia aquifolium*), dogwood (*Cornus sanguinea*), hydrangea, fuchsia, rose, fir (*Cupressus* sp.), brachyglottis (*Brachyglottis* sp.), box-leaved honeysuckle (*Lonicera pileata*), Mexican Orange Blossom (*Choisya ternata*), cotton lavender (*Santolina*), buddleja (*Buddleia davidii*), and shrubby cinquefoil (*Potentilla fruticosa*).
35. At least one bush of *Cotoneaster horizontalis* was present within the landscaping, this occurring on the upper driveway close to the main entrance to the hospital building.
36. Ferns, heathers and ornamental grasses are also found within some sections of the landscaping.



Figure 10

Area of landscaping near hospital entrance showing a range of trees and shrubs present.

37. Mature trees around the Site include poplar (*Populus* sp.), rowan (*Sorbus aucuparia*), cherry (*Prunus* sp.), lime (*Tilia* sp.), sycamore (*Acer pseudoplatanus*), Norway maple (*Acer platanoides*), weeping willow (*Salix babylonica*), crab apple (*Malus sylvestris*), yew (*Taxus baccata*), elder (*Sambucus nigra*), red oak (*Quercus rubra*) and birch (*Betula* sp.), with young specimens of Scot's pine (*Pinus sylvestris*).
38. A mature sycamore at the hospital entrance on Mount Vernon Road has previously been classed as having low bat roost suitability.



Figure 11

Ivy clad sycamore near Site entrance – low bat roost suitability.

39. Many of the trees have been tagged, indicating they have previously been subject to a tree survey.
40. Some young saplings are starting to establish within the shrub borders including ash (*Fraxinus excelsior*), elder and oak.

Ancient/Veteran Trees

41. The Site is not believed to support trees with characteristics used to define 'ancient' or 'veteran' trees, however trees within the woodland area could not be closely inspected or measured due to the dense overgrowth and steep slope.
42. Loss of such trees is now precluded in the NPPF. Under the current layout proposals, trees within the woodland are to be retained. If the situation changes and either their removal or major works are required to the trees, further investigation will be required into their potential to fall into either of these categories.

Fauna

Bats

43. The local records provider (South Yorkshire Bat Group) were asked to provide all records from within a 2km radius of the site. A total of 446 records were returned. The majority of bat records relate to the green space associated with Worsborough Country Park which is > 1km south of the Site. Whilst most of the records are for common pipistrelle bats, other species recorded in the area include soprano pipistrelle, noctule, Leisler, whiskered, brown long eared and *Myotis* species.
44. No records have been returned from the Site itself.
45. A bat roost suitability assessment and subsequent emergence survey was carried out for buildings on the Site by Brooks Ecological in May 2018. This recorded very low levels of activity across the Site, with only common pipistrelle bats registered. No bats were seen or suspected to emerge from any of the buildings.
46. Survey by Brooks Ecological on an adjacent site has recorded common pipistrelle bats commuting and foraging along Mount Vernon Road.

Amphibians

47. There are 47 records of amphibian within the search area, the majority relating to common frog, with occasional records of common toad; smooth, palmate and great-crested newt.
48. Only a low-resolution grid reference is given for the three great-crested newt records, but these originate from the area around Worsborough Reservoir and Rockley Dyke at least 1km to the south-west.
49. There are no water bodies on the Site and none can be found on mapping within 500m.
50. Whilst the woodland area and hedge bottoms would provide suitable terrestrial habitat for amphibians, given the lack of ponds in the local area their presence on this Site is highly unlikely.

Birds

51. The Site provides foraging and nesting habitat for a range of birds within the shrubs, trees, hedgerow and woodland around the Site.
52. Records have been returned for a range of common birds within the search area, most of which originate from the nearby Country Park and Reservoir. Some Red and Amber listed birds are recorded in the area, including yellow hammer, curlew, lapwing, reed bunting, grasshopper warbler and spotted flycatcher.
53. This Site is most likely to be used by common species of garden and woodland birds, with nesting activity likely to be focused on the woodland area to the west of the Site which would have seen little human disturbance during the Site's previous use as a hospital, and is connected to other areas of hedgerow and woodland.

Hedgehogs

54. There are numerous records of hedgehog within the search area. Listed under Section 41 of the NERC Act, suitable precautions should be put in place to ensure this species is not significantly impacted during the development.

Invasive Non-Native Species

- 55. *Cotoneaster horizontalis* is listed on Schedule 9 of the Wildlife and Countryside Act (1981), making it an offence to cause or allow it to grow in the wild.
- 56. This is found in the location marked indicatively on plan D-3716-01.1 Whilst listed on Schedule 9 of the Wildlife and Countryside Act (1981) (as amended), this species is often planted in landscape scheme and does not need any specific controls in this setting.

Key Findings

- 57. The majority of the Site comprises previously developed land of low ecological value, which is considered suitable for the proposed housing development.
- 58. The woodland to the south-west of the Site offers habitat of higher ecological value that is connected to further areas of woodland across the local landscape.

Constraints

- 59. The main constraint on the Site is Highstone Plantation woodland. This is the subject of a Tree Preservation Order (TPO) through Barnsley MBC and should be retained and protected.



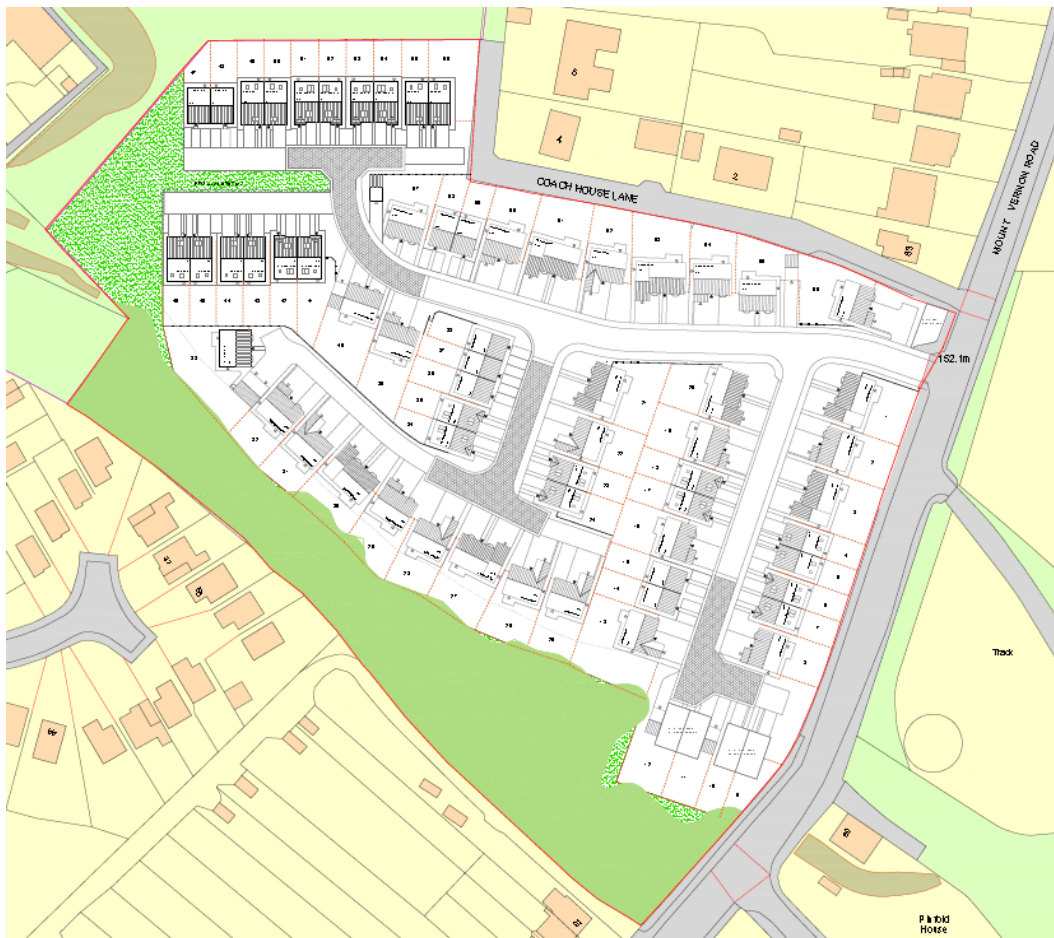
Figure 12

Constraints Plan.

Early Design Considerations

60. 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.
61. The initial indicative layout provided by the client is shown below.

Figure 13 Proposed development taken from Orion Homes drawing number SK001 Revision E dated 29.03.18.



Further Surveys

62. The following additional surveys are considered necessary to support the planning application.

Table 2 Additional survey required **pre-planning**

Survey	Rationale	Timing
Bat Roost Survey	This will identify any conflicts between bat roosts and the proposals. Disturbance or destruction of roosts is a criminal offence*. Bat roost suitability assessment (BRSA) of mature tree(s) within the site footprint.	BRSA during winter for trees. If features are found, emergence surveys during summer; a climbed inspection or precautionary felling measures may be required.

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

Standard Precautions

63. To prevent the proposed works impacting on nesting birds, any clearance of vegetation will need to be undertaken outside of the breeding bird season which is 1st March – 31st August inclusive. Any clearance that is required during the breeding bird season should be preceded by a nesting bird survey to ensure that the Wildlife and Countryside Act (1981) is not contravened through the destruction of nests and that any active nests are identified and adequately protected during the construction phase of the development.

BS:42020 Further Ecological Output

64. The Site is of low ecological value. Other than our recommendation to retain the woodland, we have made no substantive recommendations and as such no other reports are considered necessary.
65. Any loss of trees and hedges from the Site should be compensated for by additional planting as detailed in the LEMP.

Ecological Enhancement (LEMP)

66. The requirement for development to make a positive contribution to biodiversity is clearly set out guidance such as the NPPF and BS:42020 - beyond mitigating or compensating any potential impacts.

67. A BS:42020 Landscape Ecological Management Plan should be produced which in this case will detail:
- the creation of wildflower habitats in areas of public open space,
 - the protection and enhancement of retained woodland,
 - the management and improvement of hedgerows along the northern boundary,
 - the provision of hedgehog access routes through boundary fencing,
 - the provision of bird and bat boxes to provide new nest/roost opportunities,
 - the compensatory replacement of any trees/hedgerows lost as a result of the development.
68. A LEMP should be produced *before* the Landscape Masterplan to prevent conflicts.

Construction Environment Management Plan (CEMP Biodiversity)

69. A BS:42020 Construction Environment Management Plan (biodiversity) should be produced to outline how the development can be built out sensitively and complying with environmental legislation. The CEMP should include:
- nesting bird management
 - protection of tree root zones and retained habitats

Appendices

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

References

Andrews H. L. (2011) *A habitat key for the assessment of potential bat roost features in trees.*

Bat Conservation Trust (2016) *Bat Surveys For Professional Ecologists – Good Practice Guidelines*

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

CIEEM. (2013). *Guidelines for Preliminary Ecological Appraisal.* CIEEM

English Nature (2004) *Bat Mitigation Guidelines.* English Nature, Peterborough.

English Nature (2001) *Great Crested Newt Mitigation Guidelines.*
http://www.naturalengland.org.uk/Images/GreatCrestedNewts_tcm6-21705.pdf

Fay N. (2007) *Defining and Surveying Veteran and Ancient Trees*
<https://www.treeworks.co.uk/about-treework/publications>

Gent T and Gibson S, 2003, *Herpetofauna Workers' Manual*, JNCC

IEA. (1995). *Guidelines for Baseline Ecological Assessment.* Chapman and Hall

Hill et al. 2005, *Handbook of Biodiversity Methods.* Cambridge

JNCC (2004) *The Bat Workers Manual.* 3rd Edition.

JNCC (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit.*

Ministry of Housing, Communities and Local Government (July 2018) *National Planning Policy Framework*

Ratcliffe, D.A. (1977) *A Nature Conservation Review*, Cambridge University Press

Appendix 1 Extended Phase 1 Habitat Plan



-  Semi-natural Woodland
-  Amenity Grassland
-  Buildings & Hardstanding
-  Landscape Planting
-  Hedgerow
-  Target Notes:
1. Cotoneaster horizontalis



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 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.

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 '**Barnsley Biodiversity Action Plan**'.

Species/Group	Habitat
Hedgehog	Upland Oakwood
Bats	Lowland Mixed Deciduous Woodland
Water Vole	Wet Woodland
Otter	Wood Pasture and Parkland
Grey Partridge	Hedgerows
Bittern	Arable Field Margins
Kestrel	Floodplain Grazing Marsh
Little Ringed Plover	Lowland Meadows
Lapwing	Lowland Dry Acidic Grassland
Barn Owl	Lowland Heathland
Skylark	Upland Heathland
Tree Sparrow	Blanket Bog
Twite	Purple Moor Grass and Rush Pasture
Great Crested Newt	Reedbeds
Salmon	Ponds
Bullhead	Rivers
White-clawed Crayfish	Open Mosaic Habitats on Previously Developed Land
Glow Worm	
Dingy Skipper	
Bluebell	

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.