

Preliminary Ecological Appraisal Report

Land off Billingley View, Bolton-on-Dearne

NPS

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Summary

This report is produced to inform NPS of potential ecological constraints associated with their proposed development site.

Methodology

The report is based on a desk study of designated wildlife sites and records of protected or notable species, and an extended Phase 1 Habitat Survey and Bat Roost Suitability Assessment carried out in July 2019.

Findings - Key Points

The Site is assessed as being of limited ecological value and unlikely to be of importance to any protected or notable species.

Mitigation and enhancement commensurate with the scale of development has been designed into the proposed layout.

Introduction

1. Brooks Ecological Ltd was commissioned by NPS to carry out a Preliminary Ecological Appraisal (PEA) of land off Billingley View, Bolton-on-Dearne, Rotherham (grid reference: SE 4463 0300).
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.

Scope

3. 'The Site' comprises a single area of unmanaged land on the eastern edge of the village, as defined in Figure 1 below.
4. The assessment uses a 2km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

Figure 1 The Site (red line boundary).



Purpose of a PEA

5. 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.
6. 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.

Desk Study

7. The Site is located to the west of Bolton-on-Dearne. Primary schools are located to the north and south of the Site, an area of amenity grassland is found beyond Billingley View to the east after which existing residential development is reached. Agricultural land is found to the west, though this area is subject development allocation in the Local Plan.
8. Further afield, housing associated with Bolton-on-Dearne continues up to 1.5km to the east of the site before giving way to agricultural land. Agricultural land also makes up the landscape to the west and dominates the wider area to the north, east and west. To the north and south there are industrial estates, the largest being found to the south. The Dearne Valley urban conurbation dominates the landscape to the south of the Site roughly following the River Dearne, linking Doncaster to the south east with Barnsley to the west.

Water Bodies

9. There are no ponds shown on mapping within 500m of the Site.

Wildlife Corridors

10. The River Dearne provides a strong corridor through the area, approximately 760m south of the application Site. This links areas of higher value habitat including RSPB Old Moor 600m to the south west of the Site, RSPB Adwick Washland c.1.9km south east and various restored collieries. Further afield there are two golf courses and a park over 2km from the site that could provide an area of higher value habitat. Phoenix Park is linked to the RSPB reserve via the railway which could act as a wildlife corridor.

11. Despite this strong network of corridors and areas of higher value, the Site shares no functional links other than its proximity and does not provide habitat which would support the function of corridors or higher value habitat.

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



Designated Sites

Statutory Designations

12. A search has been made to identify any nationally designated sites within a 2km radius of the Site, and for internationally designated sites within a 10km radius. No such sites meet these criteria.

SSSI Impact Risk Zones (IRZs)

13. The Site lies within the 7km IRZ for Denaby Ings SSSI. At this distance the only criteria which would require the LPA to consult Natural England relate to the development of airports, or where a development will discharge more than 20m³ or water or liquid waste per day to ground or surface water. The proposed development is unlikely to meet these criteria.

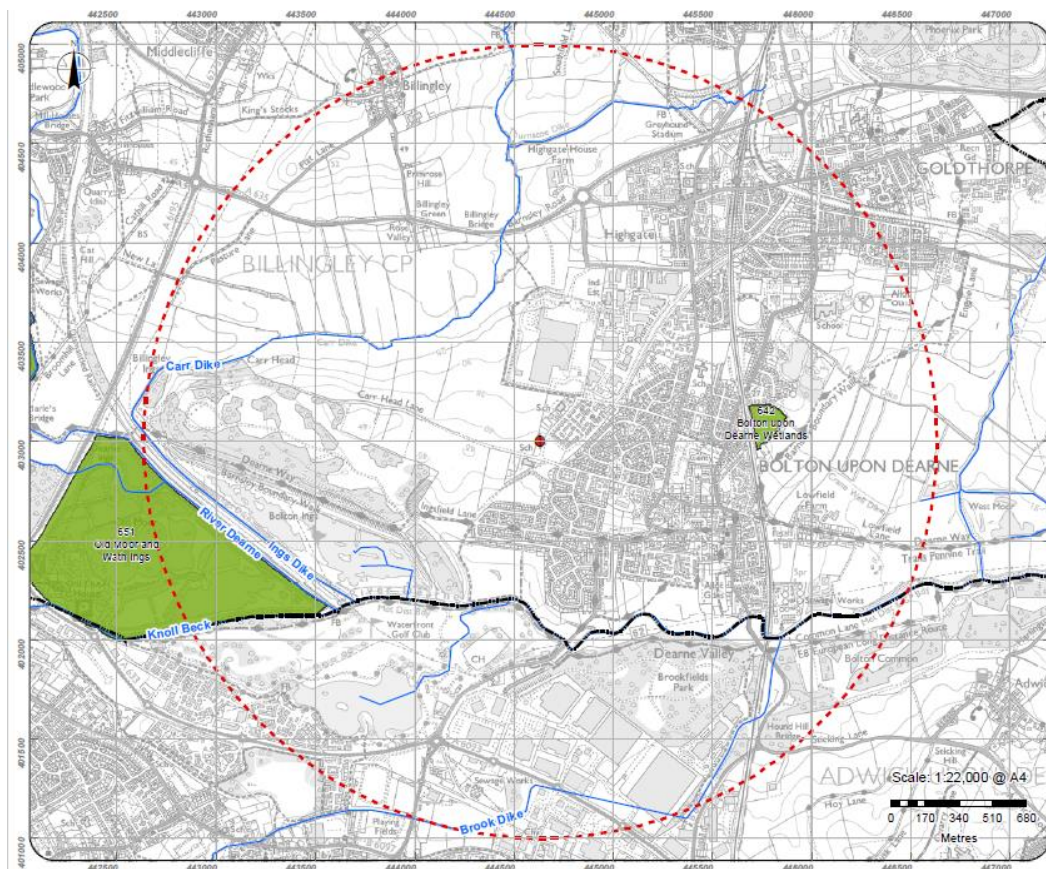
Non-Statutory Designations

14. There are two locally designated sites within 2km of the Site.
 - Local Wildlife Site (LWS) Bolton-upon-Dearne Wetlands c. 1km to the east
 - LWS Old Moor and Wath Ings is c. 1.3km west of the Site
15. The Site has no functional link to either locally designated Site; impacts are not envisaged.

Adjacent land

16. As part of the associated planning proposals, land to the west of the Site has been subject to ecological appraisal undertaken by the LPA. This report highlights the value of Carr Dike and to a lesser extent the existing woodland and hedgerows. None of these features are found within the Ecological Zone of Influence of the Billingley View application Site. the report does not identify any features of significant ecological value within close proximity to the application Site.

Figure 3 Locally designated sites provided by Barnsley Council.



Survey

Method

17. The survey was carried out during July 2019¹ and followed Phase 1 habitat survey methodology (JNCC, 2010).

Limitations

18. Whilst the majority of the site was accessible, at least 10% was occupied by dense impenetrable vegetation which could not be closely inspected.

Results

19. Parts of the site appear to have been subject to relatively recent disturbance, giving rise to varying, albeit common habitat types around the Site.



Figure 4

Characteristic view of the Site.

20. The following habitats were identified within the Site and on its immediate boundaries:

- Species poor semi-improved grassland
- Tall ruderal vegetation
- Short perennial and ephemeral vegetation
- Hard standing
- Scattered trees

¹ This Report has been prepared during August 2019 following a visit to the site in July 2019 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.

Species poor semi-improved grassland

21. Approximately half the Site is occupied by this habitat type. Common grasses dominate the sward, these including perennial rye grass (*Lolium perenne*), common and creeping bent (*Agrostis* spp.), and red fescue (*Festuca rubra* agg.) alongside common coarser grasses such as cock's-foot (*Dactylis glomerata*), false oat grass (*Arrhenatherum elatius*) and common couch (*Elymus repens*).
22. White clover (*Trifolium repens*) and dandelion (*Taraxacum vulgare* agg.) were the most abundant forbs, with hop trefoil (*Trifolium campestre*), common vetch (*Vicia sativa*), yarrow (*Achillea millefolium*) and creeping buttercup (*Ranunculus repens*) abundant in patches. Daisy (*Bellis perennis*) and autumn hawkbit (*Leontodon autumnalis*) were also noted sporadically over this habitat area.



Figure 5

Typical composition of semi-improved grassland on Site.

Tall ruderal vegetation

23. The northern half of the Site is principally occupied by this habitat type, dominated by a typical array of common competitive forbs. Broad-leaved dock (*Rumex obtusifolius*), mugwort (*Artemisia vulgaris*), nettle (*Urtica dioica*), cleavers (*Galium aparine*) and ragwort (*Senecio jacobaea*) were all noted in abundance alongside false oat grass, cock's-foot and barren brome (*Bromus sterilis*).
24. Creeping thistle (*Cirsium arvense*), garlic mustard (*Alliaria petiolata*), teasel (*Dipsacus fullonum*), weld (*Reseda luteola*), scented mayweed (*Matricaria recutita*) and wheat spreading from adjacent arable land were present in lower cover. Young elder (*Sambucus nigra*) was also noted within this habitat type.
25. The Site's western boundary is marked by a deep trench and adjacent earth bund. Much of this remains as bare earth with sparse tall ruderal vegetation developing on

the bund. Many of the species listed above are present but in lower cover with the addition of fat hen (*Chenopodium album*), fumitory (*Fumaria officinalis*), white dead nettle (*Lamium album*), greater willowherb (*Epilobium hirsutum*), prickly sow thistle (*Sonchus asper*) and knotgrass (*Polygonum aviculare*).



Figure 6

Tall ruderal vegetation at northern end of the Site.



Figure 7

Bund on western boundary.

Short perennial and ephemeral vegetation

26. A narrow band of this habitat type runs through the Site and is likely to have developed where machinery has disturbed ground. Species noted include pineapple weed (*Matricaria discoidea*), scented mayweed (*Matricaria recutita*), poppy (*Papaver* sp.), eyebright (*Euphrasia* sp.), white clover (*Trifolium repens*), greater plantain (*Plantago major*), dandelion (*Taraxacum officinale* agg.), common birds foot trefoil (*Lotus corniculatus*), ribwort plantain (*Plantago lanceolata*), broad leaved dock and mugwort alongside occasional common grasses.



Figure 8

Band of short perennial/ephemeral through tall ruderal vegetation.

Hardstanding

27. Small concrete pads are present in the Site's north western corner, likely remnants from now demolished buildings. These are in sound repair and support no vegetation.

Scattered trees

28. A number of trees are present around the Site's boundaries including apple (*Malus* sp.), mature hawthorn (*Crataegus monogyna*), silver birch (*Betula pendula*) and a mature turkey oak (*Quercus* sp.). The northern most point of the western boundary is marked by a short row of outgrown hawthorn and elder.

Semi-natural Habitats Summary Evaluation

29. The Site is occupied by common species poor habitat types with some areas much affected by recent intervention.

Fauna

Amphibians

30. Nine records of amphibians have been returned, including one of great crested newt 1.75km east of the site. Other species recorded include common frog, common toad and smooth newt.
31. While the Site provides suitable potential terrestrial habitat, it supports no breeding habitat. A pond has been identified within Lacewood Primary School, the pond being c.190m south west separated by the school grounds, from the closest point of the Site. This pond has been subject to eDNA analysis, returning a negative result indicating the likely absence of the protected great crested newt. Based on the absence of suitable breeding habitat on Site, and the likely absence of GCN within the closest pond, likely absence of this species on Site can be reasonably concluded. While common amphibians may occasionally occur within the Site, they would not be anticipated to have any dependence on it.

Bats

Records

32. A small number of bat records have been returned from the 2km radius of the site. Species include common pipistrelle, Daubentons and noctule. No records have been returned from the application Site.

Roost Suitability Assessment

33. Trees on Site were assessed from the ground. No features suitable for use by roosting bats were seen. No buildings are found on site.

Activity

34. Considering its scale and the habitats it supports, the Site is likely to be used at a low level by common species for foraging, though they would have no dependence on it. It does not contribute to any important corridors.
35. The Site's development is unlikely to lead to any significant impact on local bat populations.

Birds

36. The records of birds returned shows a wide variety of species in the 2km area including many waders and wildfowl. The records include species on the local biodiversity plan

such as lapwing, twite, grey partridge and bittern. The number and variety of records is not surprising given the presence of a number of RSPB reserves in the area.

37. Habitats on site will support a typical assemblage of common garden birds during the main nesting season. Given the Site's small size, current land use and simple habitats present, full Breeding Bird Surveys are not considered necessary. Instead, standard precaution should be undertaken in relation to any vegetation clearance works.

Badger

38. There are no records of badgers in the 2km area. No evidence of badger could be seen on Site at the time of survey.

Riparian mammals

39. Seventy-two records of water vole and ten records of otter have been returned from the 2km area. These are all from the wetland areas around the River Dearne which lies 1km south of the Site. There are no hydrological corridors linking this area to the Site. The likely absence of impacts on these species is concluded.

Reptiles

40. No records of reptiles were returned. Although the Site provides elements of habitat required by reptiles it lacks structure and is not well linked to any areas of higher value to species of this group. Likely absence is concluded.

Hedgehogs

41. Four records of hedgehogs have been returned, the closest being 800m south of the Site.
42. Hedgehogs are listed under Section 41 of the NERC Act and are declining in our countryside. The Site provides suitable habitat for this species and as such, likely presence is assumed. Suitable precautions should be put in place to ensure this species is not impacted by the proposals.

Invasive Non-Native Species (INNS)

43. 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.
44. No species listed on schedule 9 were identified during the survey², however, this site presents a medium risk of supporting undetected INNS based on the following factors:
 - Areas of site inaccessible to survey
 - Potential for recent earthworks or management which may have obscured viable material
 - Potential for tipping of material
45. Should further assurances be needed in relations to INNS you should commission a dedicated Invasive Weed Survey.

Ecological Constraints & Opportunities

46. Proposals for are for the development of 16 two and three bedroomed semi-detached houses which are to be provided as social units for rent. The proposed layout is shown on the following page.

Constraints

47. No significant ecological constraints have been identified through this initial appraisal.

Opportunities

48. The plan shows the inclusion of a proportionate number of boxes that will appeal to bats and birds, providing new nest/roost opportunities for these species groups.
49. Gaps measuring 13cm x 13cm are to be made in fencing between the gardens, and these should also be included to the rear of the properties. This will allow hedgehogs to pass through the area unimpeded by the new fencing.

² Whilst our ecologists are trained in the identification of INNS, this report is not a dedicated invasive species survey. Detectability of invasive plant species is seasonally variable and can be affected by several other factors which may not be apparent to the surveyor, so whilst every effort is made, a conclusive determination of status or extent is not possible through preliminary survey. As the presence of invasive species can generate significant costs to development the client may wish to instruct a dedicated invasive species survey prior to entering into contracts.







Figure 9

Proposed layout (taken from NPS Group drawing number 19-1-1080 PL-A-02).

Key



-  Integrated Bat box location and aspect (2No)
-  Schwegler 1B nest box 26mm (2No)
-  Schwegler 1B nest box 32mm (2No)
-  Indicative location of hedgehog gap (130mm x 130mm)

Conclusions and Recommendations

- 50. This Site appears largely unconstrained by ecology and biodiversity issues. Further surveys are not considered necessary to support a planning application.
- 51. Although not high value examples, trees provide intrinsic ecological value. Effort should be made to retain these specimens. Where this is not feasible their loss should be compensated for through new native tree planting elsewhere on Site.
- 52. Some ecological mitigation and enhancements commensurate to the scale of the development have already been designed into the layout. This includes the installation of a total of two integrated bat boxes and four wall mounted bird boxes. Additionally, hedgehog holes are shown between each garden fence line to prevent fragmentation of foraging habitat.

Table 1 Other recommendations.

Issue	Why	When calculated on the date of this report.
Nesting bird management	As with most sites the standard precaution in relation to birds would apply: 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.	Pre- and during - clearance

Appendices

1. Extended Phase 1 Habitat Plan
2. Explanatory Notes and Resources
3. Bat Activity Survey Rationale
4. Information on Legislation/Protection

References

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Appendix 1 Extended Phase 1 Habitat Plan

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.

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 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 are used to inform this appraisal.

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

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

Bat Roosting Suitability of Buildings and Trees

Suitability	Criteria
<i>Negligible</i>	Negligible habitat features on site likely to be used by roosting bats.
<i>Low</i>	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/or suitable surrounding habitat to be used on a regular basis or by a larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
<i>Moderate</i>	A structure or tree with one or more potential roost sites that could be used due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only - the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
<i>High</i>	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protections, conditions and surrounding habitats.

Evaluation

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

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

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

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

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

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

Species/Group	Habitat
Hedgehog	Mixed deciduous woodland
Bats	Upland oakwood
Water Vole	Wet woodland
Otter	Parkland and veteran trees
Grey Partridge	Traditional orchard
Bittern	Scrub
Kestrel	Coniferous woodland
Little Ringed Plover	Hedgerows
Lapwing	Arable field margins
Barn Owl	Acid grassland
Skylark	Neutral grassland
Tree Sparrow	Floodplain grazing marsh
Twite	Amenity grassland
Great Crested Newt	Upland heathland
Salmon	Lowland heath
Bullhead	Reedbeds
White-clawed Crayfish	Lowland fen
Glow Worm	Upland flushes, fens and swamps
Dingy Skipper	Rush pasture
Bluebell	Blanket bog
	Standing water and ponds
	Running water, rivers & streams
	Open Mosaic Habitats on Previously Developed Land
	Built environment and gardens

Appendix 3 – Bat Activity Survey Rationale

The Bat Conservation Trust Guidelines (BCTG) (Collins 2016) 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.

This Site is considered to be of sufficiently low value that the proposed development would not significantly impact on local bat populations. As such, further survey is not required.

This assessment has been made by Sam Kitching who has 7 experience of scoping and delivering bat surveys and has carried out innumerable activity surveys in very similar sites to this one. He is registered to use the Bat Survey Class Licence (level 2)

Appendix 4 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 from 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.