Armstrong Ecology Ltd

Mortimer Road, Midhopestones

Ecological Appraisal

July 2022

Client:	Andrew Harrison
Site:	Mortimer Road, Midhopestones
Report title:	Ecological Appraisal Report
Surveyor and report author:	Brian Armstrong
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The content of this report does not constitute legal opinion, where observations are made relating to structures and trees these relate solely to ecology and do not constitute structural or arboricultural advice.

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1. Introduction

Site location and context

1.1 The site consists of land at Mortimer Road, Midhopestones as shown in Appendix 1, Figure 1 and Photographs 1 and 2. The OS grid reference for the centre of the site is SK 2363 9988.

1.2 Mortimer Road lies to the east of the site with grassed fields beyond. A farm access road lies to the north and west of the site with broadleaved woodland beyond. A former railway embankment (now a right of way) with associated broadleaved tree cover lies to the south with residential properties beyond. In the wider landscape Underbank Reservoir lies approximately 200m south east of the site.

Description of project

1.3 It is understood (Pers. Comm. Andrew Harrison, 06/07/22) that that proposals for the site will be subject to a planning application to Barnsley Metropolitan Borough Council and include:

- The construction of a café within the site as illustrated in the indicative plans in Appendix 2.
- The retention of the boundary stone wall as far as possible.
- If possible, the retention of the tree at the west end of the site (shown in Figure 1).

Role of Armstrong Ecology Ltd

1.4 Armstrong Ecology Ltd was commissioned in June 2022 to undertake an ecological appraisal of the site including:

- A desk study.
- A Phase 1 habitat survey.
- An assessment of the potential impacts on protected and notable species in respect of the proposed development.
- Formulation of reasonable and proportionate measures in the context of the proposals to contribute to the retention and enhancement of ecological interest.

1.5 The methods, results and recommendations of the ecology appraisal are set out in this report.

2. Methods

Desk study

2.1 Barnsley Biological Records Centre (BBRC) was contacted to provide records of non-statutory sites of nature conservation interest and protected and notable species for a 2km radius from the centre of the site. These records were received on the 29th of June 2022.

2.2 The Multi Agency Geographic Information for the Countryside (MAGIC)[1] website (accessed 05/07/22) was reviewed to search for:

- Statutory sites of nature conservation interest within a 2km radius of the site and to review relevant impact risk zones for Sites of Special Scientific Interest (SSSI).
- Records of European Protected Species Licences, for bats and great crested newt *Triturus cristatus* within a 2km radius from the site.
- Records of great crested newt associated with great crested newt class licence returns and eDNA pond surveys for district level licencing within a 2km radius from the site.

2.3 Online aerial photographs and mapping (Bing Maps accessed 05/07/22) were also reviewed to inform the appraisal of the site, its context and to determine the presence of off-site ponds within 250m.

Field survey

2.4 The field survey was undertaken on the 06th of July 2022 between 10:00 and 11:15 hrs by ecological consultant Brian Armstrong MCIEEM, who holds Natural England scientific survey licences for bats (Level 2 Class Licence No. 2015-11298-CLS-CLS) and great crested newt (Level 1 Class Licence No. 2015-17522-CLS-CLS). A summary of Brian's experience can be found at: www.linkedin.com/in/brian-armstrong-05562226/?originalSubdomain=uk. The weather during the survey was clear and dry.

2.5 The habitats within the site were mapped and described using the Phase 1 Habitat Survey methodology (JNCC, 2010), and searched for the presence of invasive non-native plants, such as Japanese knotweed *Fallopia japonica* and Himalayan balsam *Impatiens glandulifera.*

2.6 A metal shed within the site was inspected from ground level externally and internally for evidence of bat roosting and bird nesting, and to identify potential bat access points and features with bat roosting potential with reference to Bat Conservation Trust guidance (Collins, 2016).

2.7 A ground level assessment was undertaken of the tree within the site with reference to the Bat Conservation Trust guidance (Collins. 2016), for its potential to support roosting bats. A high powered torch and binoculars were used to assist with the inspection of the tree.

2.8 Evidence of badger *Meles meles* (such as setts, feeding remains, dung pits, hairs and tracks) was searched for and habitats within the site were assessed for their potential to support great crested newt, reptiles and nesting birds.

[1] www.magic.defra.gov.uk

Limitations

2.9 There are not considered to be any limitations to the survey work carried out.

3. Results and Interpretation

3.1 Habitats within the site are shown in Figure 1 in Section 6. Photographs can be found in Section 7.

Statutory sites of nature conservation interest

3.2 Three SSSI are present within 2km of the site. These are:

- Spring Meadows, Alderman's Head & Cow Croft Meadows located 690m north west of the site at its nearest point.
- Dark Peak 1370m south of the site at its nearest point.
- Little Don Stream Section 1400m north west of the site at its nearest point.

3.3 A review of the SSSI impact risk zone relevant to the site did not identify the proposed development as being of a type likely to give rise to an impact on SSSI.

3.4 On this basis the proposed development, which is confined to the site, is not anticipated to pose a risk to statutory sites of nature conservation interest due to their distance from the site and the character/scale of development proposed. Statutory sites of nature conservation interest are therefore not considered further in this report.

Non-statutory sites of nature conservation interest

3.5 Eight Local Wildlife Sites (LWS) are present within 2km of the centre of the site. The closest of these is Upper Little Don LWS which lies approximately 130m south of the site on the opposite side of the A616 at its nearest point. The remainder of the non-statutory sites of nature conservation interest are 200m or more from the site.

3.6 The proposed development, which is confined to the site, is not anticipated to pose a risk to non-statutory sites of nature conservation interest due to their distance from the site and the character/scale of development proposed. Non-statutory sites of nature conservation interest are therefore not considered further in this report.

Habitats

3.7 The site (Photographs 1 and 2) includes improved grassland, and tall ruderal habitats as shown in Figure 1. The site is bounded by a stone wall on its east and part of its north sides. The remainder of the boundary is fenced. A pile of cut woody material is present at Target Note 1 (Photograph 3). A shed of corrugated metal construction is present at Target Note 2 (Photograph 4). A single sessile oak tree *Quercus petraea* is present at the west end of the site (Photograph 5).

3.8 Species associated with the improved grassland include Yorkshire fog *Holcus lanatus,* white clover *Trifolium repens,* ragwort *Senecio jacobaea,* broad-leaved dock *Rumex obtusifolius,* bramble *Rubus fructicosus* agg., cleavers *Galium aparine*, common nettle *Urtica dioica,* herb Robert *Geranium robertianum,* hogweed *Heracleum sphondylium*, cow parsley *Anthriscus sylvestris* and rosebay willowherb *Chamerion angustifolium.* Ivy *Hedera helix,* ash *Fraxinus excelsior* and willow *Salix* sp. seedlings were also recorded in the grassland.

3.9 Species associated with the tall ruderal habitat include Yorkshire fog, false oat grass *Arrhenatherum elatius,* cleavers, herb Robert, common nettle, rosebay willowherb

creeping buttercup *Ranunculus repens,* broad-leaved willowherb *Epilobium montanum* and garlic mustard *Alliaria petiolata*.

3.10 No Japanese knotweed or Himalayan balsam were recorded during the survey.

Protected species

Bats

3.11 One European Protected Species Licence for bats is recorded within 2km of the site on the MAGIC website. This is for destruction of a resting/non-breeding site for brown long-eared *Plecotus auritus,* common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus* and whiskered *Myotis mystacinus* approximately 1890m east of the site between 2016 and 2017.

3.12 BBRC returned 10 records for bats within 2km of the centre of the site dating between 2014 and 2018. These were for brown long-eared (1), common pipistrelle (3), soprano pipistrelle (1), natterer's *Myotis nattereri* (1), myotis *Myotis* sp. (2) and noctule *Nyctalus noctula* (2). None of the records relates to the site.

3.13 The shed at Target Note 2 is of corrugated metal construction with a roof pitched to the west. It is open fronted on its east elevation. The shed is considered to have negligible bat roosting potential and is not considered further with respect to bats in this report.

3.14 No features with bat roosting potential were seen in the sessile oak tree at the west end of the site. It is however assessed to be a tree of a size and age that may contain potential bat roosting features if it were subject to further inspection such as by aerial inspection/tree climbing.

Great crested newt

3.15 No European Protected Species Licences for great crested newt are recorded within 2km of the site on the MAGIC.gov website.

3.16 No great crested newt records associated with class licence returns or eDNA pond surveys for district level licencing are recorded within 2km of the site on the MAGIC website.

3.17 BBRC returned no records for great crested newt within 2km of the centre of the site.

3.18 No ponds are present within the site.

3.19 A review of online aerial photographs and mapping did not identify any ponds within 250m of the site.

3.20 On the above basis great crested newt is not considered reasonably likely to be present within the site/affected by development. This species is therefore not considered further in this report.

Birds

3.21 BBRC returned 3957 bird records within 2km of the centre of the site dated between 1972 and 2022. None of the records relates to the site.

3.22 The records returned by BBRC included those for house sparrow *Passer domesticus* (41), starling *Sturnus vulgaris* (55) and swift *Apus apus* (13). Nesting by these species is closely associated with buildings, therefore while these species are not considered relevant to consideration of existing bird nesting within the existing site, they are considered relevant to enhancements set out in the next section of this report.

3.23 Evidence of previous bird nesting was recorded in the shed at Target Note 2 (Photograph 6).

3.24 Other opportunities for nesting birds within the site are primarily associated with the tree, stone wall and pile of cut woody material.

Reptiles

3.25 BBRC returned no records for reptiles within 2km of the centre of the site.

3.26 The habitats within the site are considered to have limited suitability for reptiles due to the degree of shading from surrounding trees and lack of structural diversity.

Badger

3.27 BBRC returned 48 records for badger within 2km of the centre of the site dating between 1990 and 2021. None of the records relate to the site.

3.28 No signs of badger were recorded during the field survey. The habitats within the site provide suitable foraging habitat for badger.

Hedgehog

3.29 BBRC returned 10 records for hedgehog *Erinaceus europaeus* within 2km of the centre of the site dating between 1982 and 2006. None of the records relate to the site.

3.30 The pile of cut woody material within the site is considered to be suitable for hedgehog to shelter.

4. Analysis and Recommendations

Habitats

4.1 It is anticipated that the proposed development will result in the disturbance and loss of the improved grassland and tall ruderal habitats within the site. These habitats types do not conform to a definition of habitats of principal importance/priority habitat type (Brigg 2011). They are assessed to be of relatively low ecological value and are considered to be widespread and common habitat types. No mitigation is considered necessary in respect of potential disturbance/damage or loss of these habitats. The potential value of these habitats for protected species is considered separately below.

4.2 The sessile oak tree within the site is recommended to be retained and protected during construction. If this is not possible it is recommended that replacement planting is undertaken using a specimen of the same species.

Protected species and planning: context for analysis and recommendations

4.3 Paragraph 98 of Government Circular 06/2005 advises that:

"The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat..."

4.4 Paragraph 99 of Government Circular 06/2005 advises that:

"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.

The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted.

However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development..."

Bats

4.5 Bats are protected species under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). In summary, this legislation means that bats are protected against disturbance, killing or injury and their roosts are protected against obstruction, damage or destruction. Seven UK bat species are also listed as priority species under the Natural Environment and Rural Communities (NERC) Act (2006).

4.6 The sessile oak tree at the west end of the site is assessed to be a tree of a size and age that may contain potential bat roosting features if it were subject to further inspection. It is recommended, if possible, that this tree is retained and protected during development. If retention is not possible or works are required to this tree, then further assessment for bats is recommended. It is recommended that, where safe to do so, this involves an aerial inspection survey by a suitably qualified and licenced ecologist. Where any evidence of bat roosting is located or where results are inconclusive, further

additional survey may be recommended to increase confidence in results/characterise any bat roost which is present.

Birds

4.7 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs.

4.8 As a guide, the bird nesting season is generally between March and August inclusive, however dates can vary depending on species and prevailing weather conditions.

4.9 Opportunities for nesting birds within the site are primarily associated with the tree, shed, stone wall and pile of cut woody material. It is therefore recommended that any work to these should take place outside of the bird nesting season to avoid an impact on active nests and any eggs, chicks or adult birds. Should any nesting birds be discovered during works undertaken outside of the bird nesting season, work should stop, and advice should be sought from a suitably qualified ecologist with respect to how to proceed.

4.10 If work to the tree, shed, stone wall and pile of cut woody material has to take place during the bird nesting season it is recommended that the relevant features should be surveyed for the presence of active bird nests by a suitably qualified ecologist before work is carried out[2]. Should active bird nests be present, work in the area of the nests would need to be delayed until nesting activity has ceased.

4.11 The inclusion of bird nesting features as part of the development, as described below, will contribute to the retention and enhancement of the nesting resource available for birds including those whose nesting requirements are more closely associated with buildings such as house sparrow, starling and swift.

Reptiles

4.12 All native reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) against intentional killing or injury and against sale. In addition, all native reptiles are Species of Principal Importance under the provisions of the NERC Act 2006.

4.13 The site is small in size (approx. 0.062ha), no reptile records were returned by BBRC and the habitats within it are considered to have limited suitability for reptiles due to shading and a lack structural diversity.

4.14 Given the above, precautionary working practices are considered to be a reasonable and proportionate approach to the low risk of reptiles being present. The following approach is recommended:

- Any cutting of vegetation taking place either in weather below 5 ^{O}C (when reptiles are unlikely to be present within this type of habitat) or otherwise for vegetation to be gradually reduced in height.

- The removal of the pile of cut material, or work to stone walls in weather above 10 ^{O}C (when reptiles in general are likely to be active).

[2] The duration before which a resurvey is required, typically between 24 and 48 hours, will be defined by the suitably qualified ecologist depending on the time of year, prevailing weather conditions and bird activity recorded.

- Should any reptiles be encountered during the course of the works, work should stop and advice should be sought from a suitably qualified ecologist with respect to how to proceed.

4.15 With the incorporation of precautionary working practices, it is considered unlikely that there will be an adverse impact on reptiles as a result of the proposed development.

Badgers

4.16 Badgers are protected under the Protection of Badgers Act 1992 (as amended). This makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A badger sett is defined in the legislation as “a structure or place, which displays signs indicating current use by a badger.”

4.17 No evidence of badgers was recorded during the survey, though the data received from BBRC suggests that badgers are present in the local area. Precautionary working practices are therefore recommended. These should include trenches not being left open over night or alternatively an earth ramp being incorporated at one end to allow badgers to escape from trenches. With the incorporation of precautionary working practices, it is considered unlikely that there will be an adverse impact on badger as a result of the proposed works.

Hedgehog

4.18 Hedgehog is listed as Species of Principal Importance under the provisions of the NERC Act 2006.

4.19 Suitable habitat for hedgehog is present within the site and the data received from BBRC suggests that hedgehog can be expected to occur in the local area.

4.20 It is recommended that precautionary measures for hedgehog should be followed during any work to the pile of cut material within the site. It is recommended that this is subject to gradual reduction in height or turning prior to removal.

4.21 Should any hedgehogs be encountered during the course of the implementation of the proposed development, work should stop in the immediate area and the animal allowed to relocate itself outside of the working area. If the animal fails to relocate itself, advice should be sought from a suitably qualified ecologist with respect to how to proceed.

Potential measures for the retention and enhancement of the ecological interest of the site

4.22 The measures set out in Table 1 are considered to be reasonable and proportionate measures, relevant to the proposed development, to retain and enhance ecological interest within the site in order to comply with Paragraph 174 of the National Planning Policy Framework (NPPF) (2021).

Table 1: Potential measures

Potential Measure[3]	Description
Oak tree	Retain and protect during construction. If retention is not possible undertake replacement planting using a specimen of the same species.
Bat boxes	Three improved cavity[4] type bat boxes, or equivalent, tree or building mounted at a height of approximately 4m facing in different directions. To be mounted in locations with clear flight lines to the boxes.
Bird boxes	Three swift nest boxes[5] incorporated or mounted onto building elevations as high as possible/minimum of eaves height. Based on the shading from the trees to the south this could include the rear/south elevation of the building. Ideally located at height of 5m or more not over doors or windows. These boxes are also suitable to be used by starling and house sparrow.

[3] Bird and bat boxes should be erected in safe locations that are suitable and accessible for future monitoring purposes. Please note in respect of the Construction Design and Management Regulations 2015, that while Armstrong Ecology Ltd can advise on suitable ecological locations for bird and bat boxes (for example via liaison with a site manager) we cannot instruct personnel in their fixing or erection.
[4] https://www.nhbs.com/improved-cavity-bat-box , or equivalent.
[5] Such as https://www.nhbs.com/woodstone-build-in-swift-nest-box-deep or https://www.nhbs.com/woodstone-swift-nest-box or equivalent.

5. References

Badgers Act (1992): https://www.legislation.gov.uk/ukpga/1992/51/contents

Bing Maps www.bing.com/maps (Accessed 05th July 2022).

BRIG (ed. Ant Maddock) (2008), (Updated Dec 2011), *UK Biodiversity Action Plan; Priority Habitat Descriptions* http://jncc.defra.gov.uk/PDF/UKBAP_PriorityHabitatDesc-Rev2011.pdf

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London: www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-3rd-edition

Conservation of Habitats and Species Regulations (2017): http://www.legislation.gov.uk/uksi/2017/1012/made

Government circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impacts within the Planning System: www.gov.uk/government/publications/biodiversity-and-geological-conservation-circular-06-2005

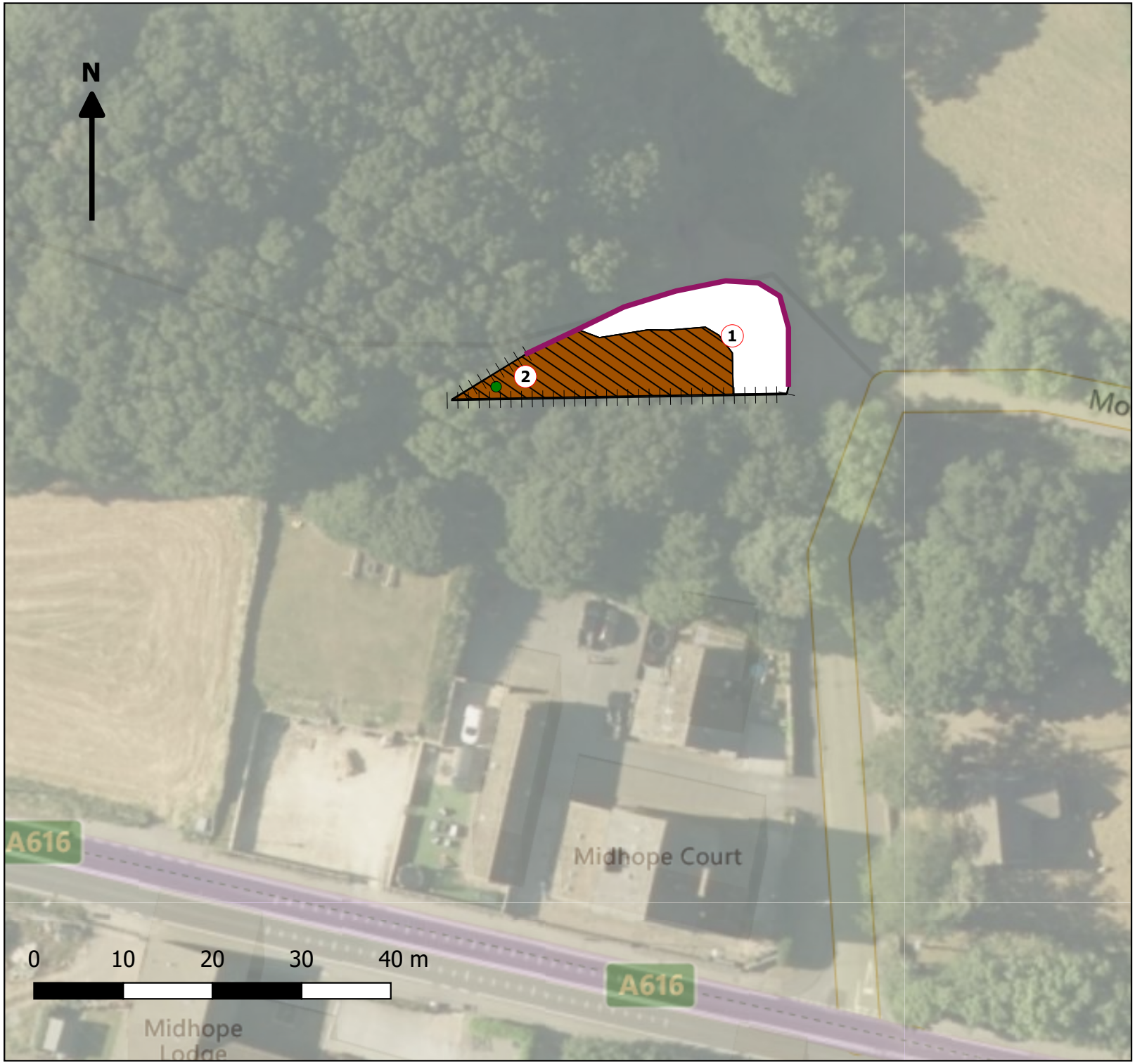
MAGIC www.MAGIC.defra.gov.uk (Accessed 05th July 2022).

Natural Environment and Rural Communities Act (2006): www.legislation.gov.uk/ukpga/2006/16

National Planning Policy Framework (2021): https://www.gov.uk/government/publications/national-planning-policy-framework--2

Wildlife and Countryside Act (1981): www.legislation.gov.uk/ukpga/1981/69

6. Figures



Legend

- Fence
- Wall
- Broadleaved tree
- 1 Target note
- Improved grassland
- Tall ruderal

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Site: Mortimer Road, Midhopestones

Figure 1: Phase 1 habitat survey results plan

Drawn by: Brian Armstrong

Scale: 1:1000 @ A4

Date: 11/07/22

Copyright: Armstrong Ecology Ltd

No dimensions are to be scaled from this drawing/measurements are included for indicative purposes only.

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7. Photographs

Photograph 1: The site viewed from the east

Photograph 2: The site viewed from the west

Photograph 3: Pile of cut woody material at Target Note 1

Photograph 4: Shed at Target Note 2

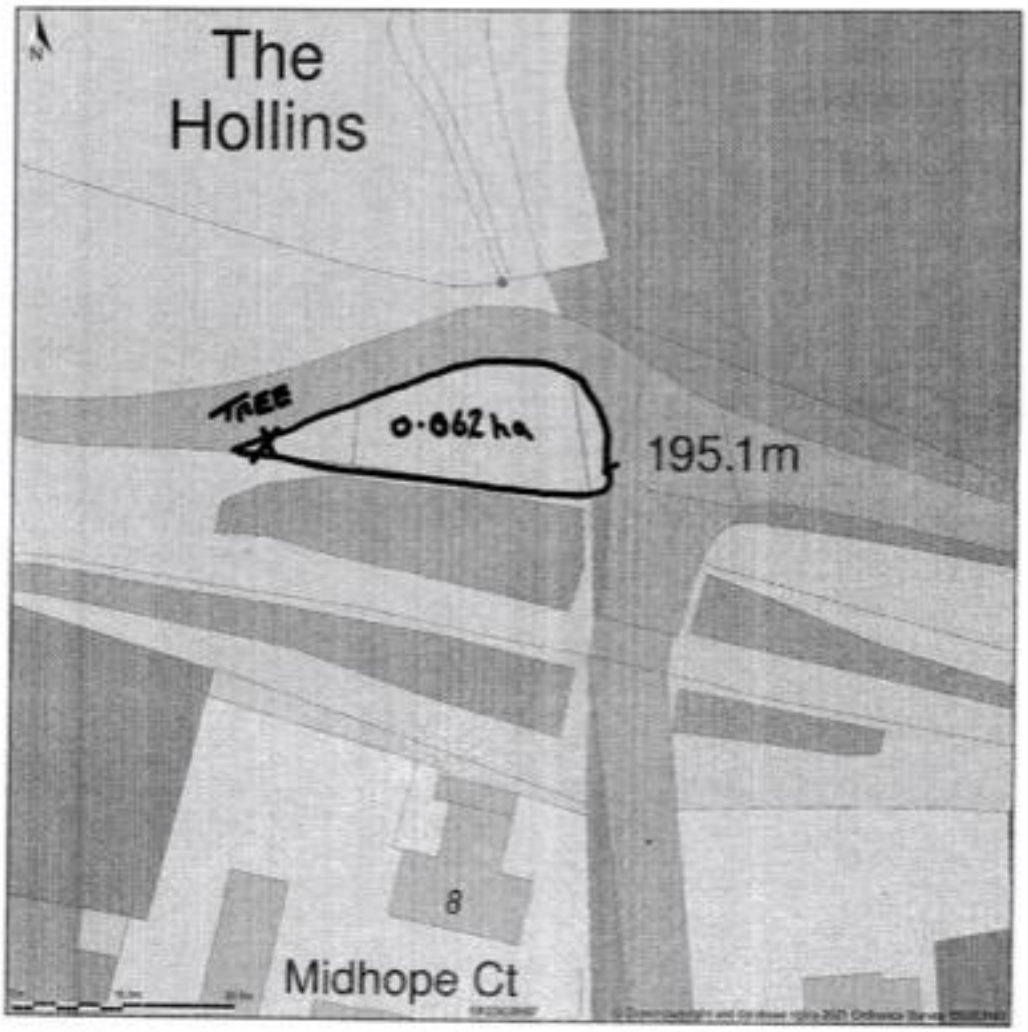
Photograph 5: Sessile oak tree at west end of site

Photograph 6: Evidence of past bird nesting in shed at Target Note 2

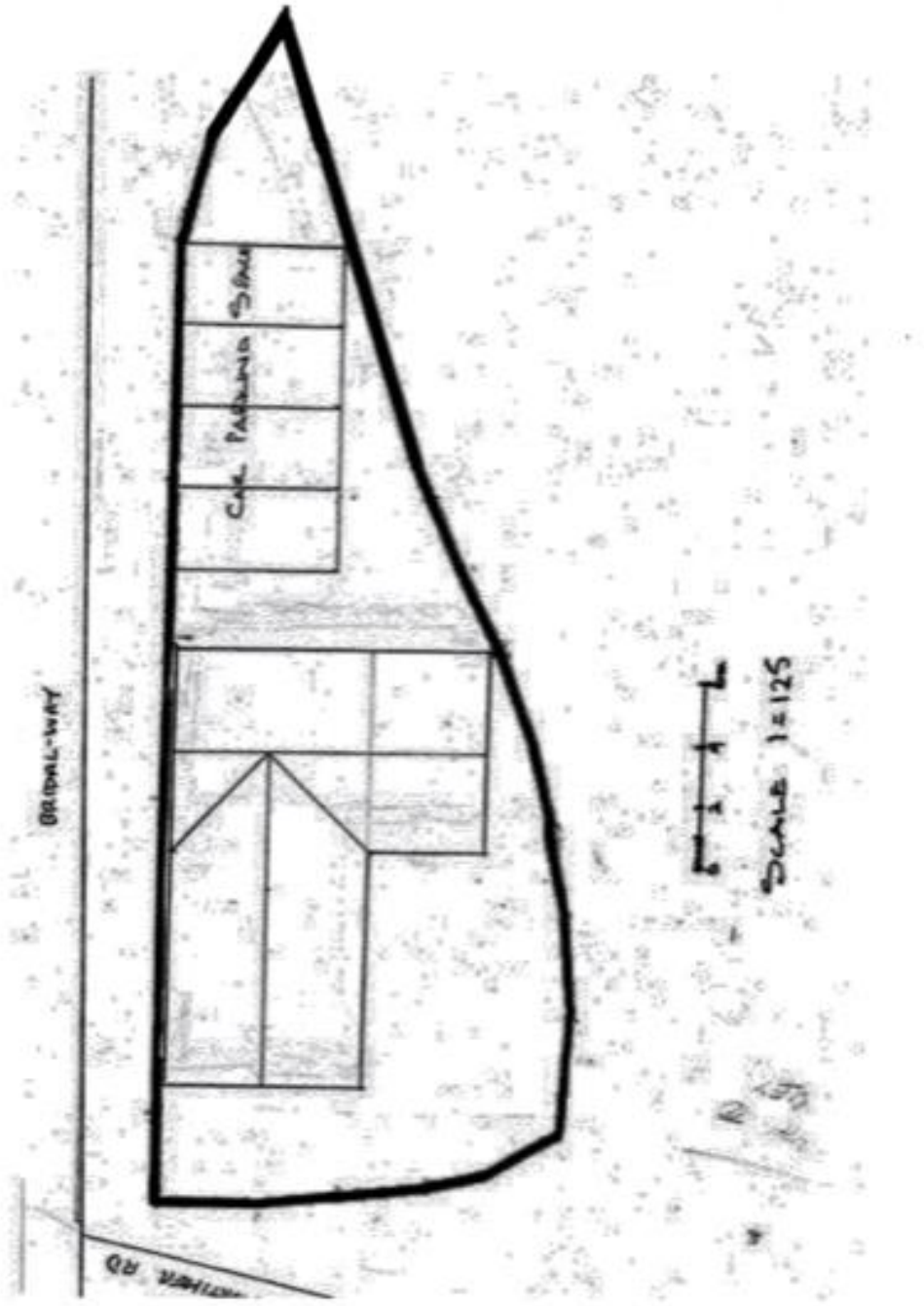
Appendix 1: Site Location Plan

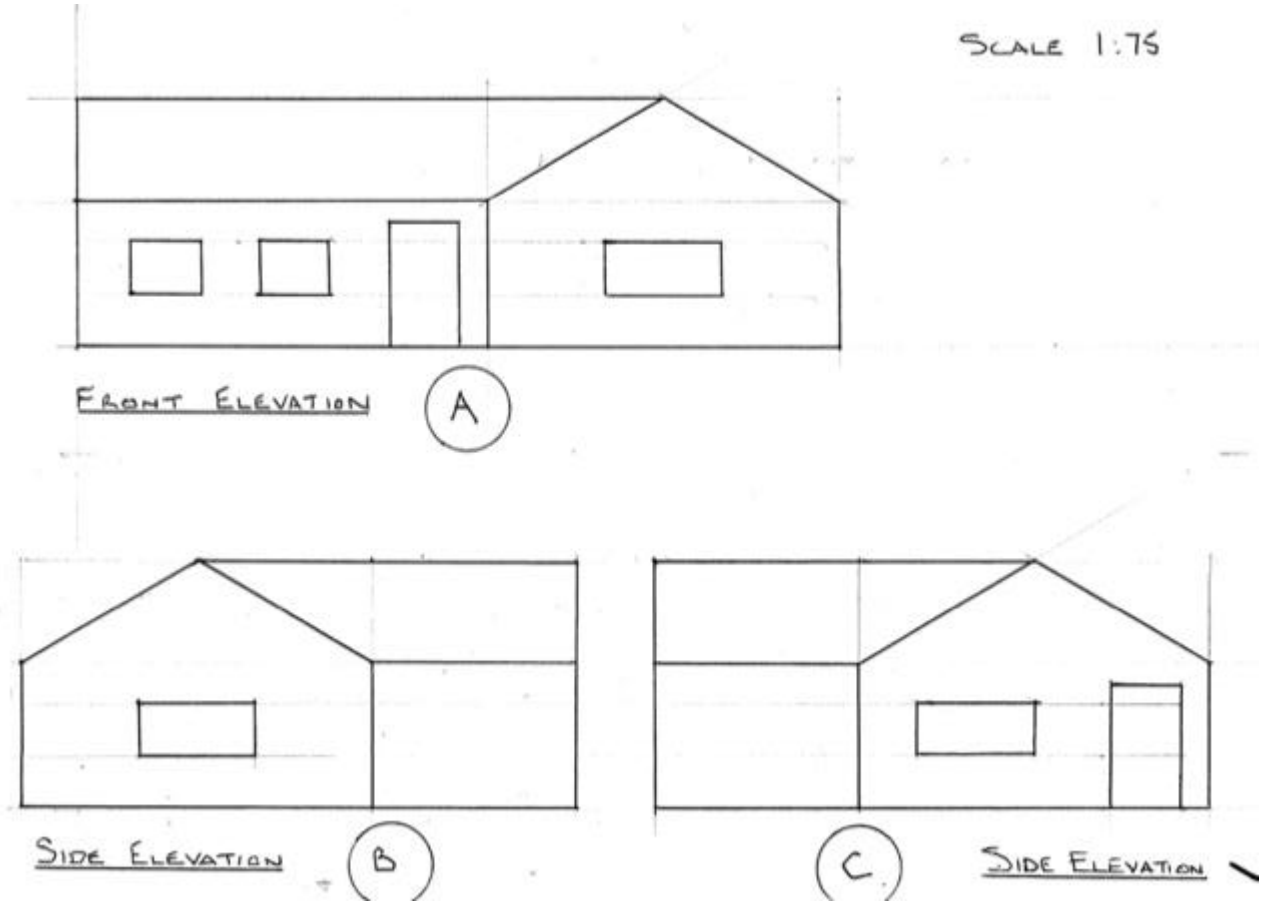
Buy A Plan
UK's Fastest and Easiest Planning Site

Proposed Cafe Site, Mortimer Road, S36 4GW



Appendix 2: Indicative Proposed Site Plans




SCALE 1:75
FRONT ELEVATION
A
SIDE ELEVATION
B
C
SIDE ELEVATION
SCALE 1:75
REAR ELEVATION
A
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PLAN
SCALE 1:100