

**PRELIMINARY ECOLOGICAL
APPRAISAL REPORT**

at
**Land at The Quarry
The Old Brickworks
Thurstonland
West Yorkshire
HD4 6UY**

**Client:
L'Arche Developments Ltd.**

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**Date of Report:
17/03/2026**



Quality Assurance

Version	Desktop Survey Completed:		Site Surveyed:		Report Completed:		Checked:	
	Date	Name	Date	Name	Date	Name	Date	Name
1	03/02/26	James Foster	03/02/26	James Foster	26/02/26	James Foster	27/02/26	Grace Bramley
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This report has been prepared and provided in accordance with the *British Standard 42020: Biodiversity – Code of practice for planning and development 2018* and the *CIEEM’s Code of Professional Conduct*.

This Assessment is only valid for the named client and the project described. JCA Limited. accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purpose for which it was commissioned. If the scope of works or timing of the project are altered the advice given in this report may not be valid. Information and data provided within this report is considered accurate at the time of writing.

Provided no significant changes are made to the proposals or on the site (e.g. significant changes to management practices or habitats present) subsequent to the report’s issue; this report can be considered valid for 18 months from the date of issue.

As part of membership to our professional body (CIEEM) and EPS licence reporting we are required to provide our biological results to applicable biological record centres. As such, it is our intention to supply biological data collected as part of this assessment, where recorded, to the relevant BRC. If the project is sensitive in nature, we may be able to delay submitting the records until the project enters the public domain, however, this must be discussed with JCA Limited and agreed in writing.



Summary

A report is required for **Land at The Quarry, The Old Brickworks** to assess the ecological value of the site by documenting the habitat types present and the site's potential for supporting rare and protected species. The development proposed on this site is for the demolition of the existing building on site and the construction of a single residential dwelling.

A desktop study was undertaken in order to obtain any relevant ecological records that may be present within a 2km radius of the site, including protected and notable species records and nature conservation designations.

The site was surveyed on the 03/02/2026 by James Foster, Assistant Ecologist, JCA Ltd. A thorough site assessment was undertaken following the guidelines set out in the UK Habitat Classification System (v2.01, 2023).

The site is currently used as a stable and grazing land for horses and for storage.

The important ecological features, or those brought forward due to legal protection, considered in detail within this assessment are: Designated sites, the assemblage of birds, the assemblage of bats both foraging and commuting and amphibians/reptiles.

Actions have been given for nesting birds, amphibians and reptiles, invertebrates, badger, small mammals and invasive non-native species.



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1. Introduction and Terms of Reference

1.1 Background

1.1.1 JCA Limited was instructed by **L'Arche Developments Ltd** to visit the site and conduct a Preliminary Ecological Appraisal (PEA) of the site located at **Land at The Quarry, The Old Brickworks, Thurstonland, West Yorkshire, HD4 6UY** hereafter referred to as 'the site' in January 2026. The purpose of the survey is to establish a baseline of ecological information and assess whether the proposed works, hereafter referred to as 'the scheme', have the potential to adversely affect any protected or notable habitats or species.

1.2 Site Description

1.2.1 The site is situated approximately 1.3km northeast of Thongsbridge, at grid reference: SE 16263 10169.

1.2.2 The site is used as a stable and grazing land for horses and for storage. The site is bordered to the north by residential properties, to the east by agricultural pastureland, to the west by residential properties with woodland further afield and to the south by agricultural pastureland.

1.2.3 The development proposed on this site is for the demolition of the existing building on site and the construction of a single residential dwelling.

1.3 Scope of the Report

1.3.1 The purpose of the Preliminary Ecology Appraisal (PEA) is to identify habitats currently present within and around the site in order to obtain baseline ecological information for the site. The PEA also assessed the potential of the site to support species which receive legal protection (at a UK Level) and species that are otherwise notable including Species of Principal Importance and Birds of Conservation Concern (BoCC).

1.3.2 The PEA comprises two main elements a) a desktop review of the ecology and policy context and b) a field survey of the proposed development site, and where possible, other areas to be affected.

1.3.3 Where relevant, legislative and policy considerations are highlighted including:

- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Countryside and Rights of Way (CROW) Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- The Protection of Badgers Act 1992;
- Hedgerow Regulations 1997;
- Wild Mammals (Protection) Act 1996;
- The National Planning Policy Framework (NPPF) (2024); and
- Kirklees Local Plan (2017)



1.3.4 In addition to the above, biodiversity objectives detailed in the following documents have been considered:

- Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services;
- Biodiversity and Geodiversity Supplementary Planning Document (2019); and
- Kirklees Biodiversity Action Plan (KBAP)



2. Methodology

2.1 Zone of Influence

2.1.1 The study area encompassed the Zone of Influence of the Project. The Zone of Influence is defined as "... the area over which ecological features may be impacted by biophysical changes as a result of the proposed project and associated activities" (CIEEM, 2018). Further information regarding classification for the Zone of Influence is provided in Appendix 4.

2.1.2 The Zone of Influence and the study area is broadly considered to extend across the site, or just beyond the site boundary in most cases, with the potential for up to or exceeding 5 kilometres with regards to designated sites. A summary of predicted changes is provided in Table 1.

Table 1: Summary of predicted changes and Zone of Influence.

Predicted Change	Zone of Influence
Vegetation/habitat clearance	Site
Generation of dust during site clearance and construction	Site and immediate surrounds (200m)
Acoustic disturbance and vibration from construction activities	Site and immediate surrounds (Typically up to 300m)
Increased traffic related air pollution and potential to impact upon sensitive habitats during both construction and operational phase	Habitats within approximately 200m of affected roads
Lighting (during construction and in long term)	Site and immediate surrounds
Changes to local hydrology; including surface water runoff and groundwater	Likely to include watercourses that receive surface water discharges, and downstream habitats
Landscape planting and habitat creation / green infrastructure creation	Site

2.2 Desktop Study Methodology

2.2.1 A desktop study was undertaken in order to obtain any relevant ecological records that may be present within a 2km radius of the site. This includes protected and notable species records, as well as nature conservation designations. For this information, the local ecological records centre and bat group was contacted: West Yorkshire Ecology Service (WYES) and West Yorkshire Bat Group (WYBG).

2.2.2 The search buffer of 2km from the central site grid reference is considered to be sufficient in order to cover the potential zone of influence of the proposed development.

2.2.3 The Multi-Agency Geographic Information for the Countryside (MAGIC) website was used to locate any designated sites, both statutory and non-statutory, such as Local Nature Reserves (LNRs), Ramsar Sites, Special Areas of Conservation (SACs),



Special Protection Areas (SPAs) or Sites of Special Scientific Interest (SSSIs) that may be present within 2km of the survey site.

2.3 Site Assessment Methodology

A thorough site assessment was undertaken on 03/02/2026 by James Foster, Assistant Ecologist, JCA Ltd.

Habitats

The survey employed techniques based on the UK Habitat Classification System (v2.01, 2023). Botanical information was collected focussing on the dominant and/or key indicator species for each habitat to enable allocation of habitats to hierarchy levels 3 and/or 4, and where relevant to identify any priority habitats which are present on site. The conditions of the habitats on the site were assessed in line with the technical sheets supplied alongside Defra Metric 4.0. This is to inform future Biodiversity Metric Calculations if required. A map of the baseline habitats is provided in Appendix 1.

In the context of this report, rare, protected or notable species are those listed under the following: UK or European legislation, UK Biodiversity Framework Priority Species (including, but not limited to LBAP species), nationally rare or scarce flora/fauna/habitats, Species of Conservation Concern (JNCC Red List, RSPB/BTO Amber Lists).

Non-native, invasive species, as listed under Schedule 9 of the Wildlife and Countryside Act (1981) as amended have been noted and mapped, where present as under the Wildlife and Countryside Act (1981) as amended it is an offence to release or allow to escape into the wild any flora/fauna not ordinarily a resident of the UK, which has been categorised as potential harmful to the UK flora and/or fauna.

Protected Species

Whilst conducting the site walk-over, any features that may be of value to or have the potential to support protected species were noted and photographic evidence taken (please refer to **Appendix 3**). Such protected species include, but are not limited to the following:

2.3.1 Amphibians

Consideration was given to the presence of habitat potentially suitable for supporting amphibians including water bodies (ponds, ditches), woodland, scrub, rough grassland and features such as log piles that might provide hibernation areas. Where appropriate, effort to gather direct evidence of amphibians was undertaken using a preliminary search for eggs by examining vegetation within reach of the margins of water bodies, and for resting animals on land by looking under potential refuges such as stones, wood and rubbish near to water bodies.

Great crested newts are known to forage up to at least 500m from their breeding water bodies and suitable habitats that fall within 250m must be considered even in situations



where the breeding site itself will not be affected.

2.3.3 Bats

The site was surveyed by for foraging, commuting and roosting potential. A detailed search of the buildings/trees on site was conducted during daylight hours in order to identify potential bat roosting sites and look for evidence of bat activity and photographic evidence was taken (please refer to **Appendix 3**).

The survey was conducted by an experienced surveyor using the following equipment to ensure an accurate assessment; a printed site map, camera, a 1 million candlelight torch, binoculars, and ladders.

Signs that bats have previously or are currently using a potential roost site include:

- Droppings, carcasses and/or food remains found around the site.
- Bats observed within the building or tree.

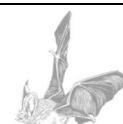
The absence of signs of a potential bat roost cannot be treated as conclusive evidence that bats are not using the buildings/trees.

Buildings

During the bat scoping survey, the building on site was subject to an external and internal survey to establish the suitability of the structure to support roosting bats in accordance with Collins (2023). The criteria for assigning a roost suitability category are presented in Table 2 below:

Table 2: Guidelines used for assessing the bat roosting suitability of buildings (*taken from Collins, 2023*).

Roosting Suitability	Potential Roosting Features (PRFs) Present
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible	No obvious features on the site likely to be used by roosting bats, however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.



Low	A structure with one or more potential roosting opportunities that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough shelter, protection, surrounding habitats, or the appropriate conditions to be used on a regular basis by larger numbers of bats e.g. unlikely to support hibernation or maternity roosts.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to the size of the potential roosting feature which is sufficient to provide: shelter, protection, optimal conditions and surrounding habitats. The feature(s) are unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that could be used by bats due to the size of the potential roosting feature which is sufficient to provide: shelter, protection, optimal conditions and high-quality surrounding habitats. The features have the potential to support large colonies of bats (e.g. maternity or hibernation) for long periods of time.
Confirmed roost	Evidence of bat occupation found during initial survey.

Trees

Bats often roost in trees. Features such as old woodpecker holes, splits, cavities and rot holes, loose or flaking bark and ivy creepers can be exploited by bats to roost. Any trees present on site were therefore assessed for their potential to support roosting bats by searching for suitable features. The presence of roosting bats can be spotted through signs such as accumulations of moth or butterfly wings, staining, bat droppings, or bats themselves.

The absence of these cannot, however, be treated as conclusive evidence that bats are not present, and therefore an assessment was made of the potential of the trees to support bats based on the scale presented in Table 3 below, in accordance with Collins (2023).

Table 3: Guidelines used for assessing the bat roosting suitability of trees (*taken from Collins, 2023*).

Roosting Suitability	Potential Roosting Features (PRFs) Present
None	Either no Potential Roosting Features (PRFs) in the tree, or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree.
PRF	A tree with at least one PRF present.

The category of roosting suitability assigned to a building/tree is used to determine what further survey effort is required to ascertain the presence/likely absence of bats within that feature, as shown in Table 4 below:

Table 4: Recommended minimum number of survey visits for presence/likely absence surveys (*taken from Collins, 2023*).

Negligible roost suitability	Low roost suitability	Moderate roost suitability	High roost suitability
No further survey required	One survey visit. One dusk emergence survey,	Two separate dusk emergence survey visits.	Three separate dusk emergence survey visits.



	May to August (structures). No further surveys required (trees).	May to September, with at least one survey between May and August.	May to September, with at least two surveys between May and August
<p>September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. September surveys are likely to miss maternity roosts due to dispersal before this time but may pick up mating roosts.</p> <p>Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced out at least three weeks apart, preferably more. Survey timings should consider the prevailing conditions in the year of survey, which will vary geographically. In years with a cold spring, the surveys should not be started in early May, or all completed in May. The surveys should maximise the possibility of detecting maternity roosts, which can switch roosts between pregnancy and lactation, and the optimum coverage includes the pre-parturition, post-parturition, and mating periods.</p> <p>Structures that have been categorised as low potential can be problematic, and the number of surveys required should be judged on a case-by-case basis. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.</p>			

Habitats

A preliminary evaluation was also undertaken of the habitat on the site for the quality of potential commuting and foraging habitat for the local bat populations. Bats navigate using linear features in the landscape such as hedgerows and these can be important features for local roosts. The site itself may also provide important foraging habitat and support local bat roosts.

An assessment was therefore made of the potential of the habitat to offer suitable flight paths and foraging habitats based on the scale presented in Table 5 below, adapted from the Survey Guidelines (Collins, 2023):

Table 5: Site suitability for foraging and commuting bats (*taken from Collins, 2023*).

Site Suitability	Habitat features present
High	Continuous, high quality habitat that is well connected to the wider landscape and likely to be regularly used by bats for flight-paths, such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connect to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses and grazed parkland. Site is connected to a known roost.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub, or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	Habitat that could be used by small numbers of bats as flight-paths, such as a gappy hedgerow or unvegetated stream, but isolated i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.



Negligible	No obvious habitat features on site likely to be used as flight paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of year) i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).

2.3.4 Birds

Any birds seen whilst carrying out the survey were recorded and the type and quality of habitats available for birds was considered, including vegetation suitable for nesting and habitat with the potential to support valued species including breeding and wintering birds.

2.3.5 Dormouse

The habitat on the site was assessed for the potential to support dormice which are found in habitats such as woodlands, scrub and hedgerows with good connectivity and suitable food plants. Satellite images were used to assess the connectivity of any suitable habitat present on the site to other areas of woodland and hedgerow networks.

2.3.6 Reptiles

Habitat considered potentially suitable for supporting reptiles was recorded. This includes areas providing basking and foraging areas, hibernation and breeding sites such as rough grassland and scrub, banks, burrows, rubble piles, compost heaps, hedge banks and water bodies.

2.4 Limitations

2.4.1 The optimum time of year for completing the survey is between April and September, as many plant species have a seasonal expression in spring and summer only. The survey was undertaken in February. This is outside of the optimum time for conducting surveys as the flora species were not in flower/leaf and many faunal species are less active, meaning field signs are more likely to be scarcer. However, some flora species were still in flower/leaf and the habitat types can still be accurately identified and there potential to support notable and protected species correctly determined.



3. Results

3.1 Designated sites

Statutory Nature Conservation Sites

3.1.1 Internationally important sites

There are no statutory internationally important conservation sites within the search area.

The South Pennine Moors Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) is approximately 6.15km south west of the site. The Core Habitat Regulation Assessment (HRA) strategy document places the proposed development site within Zone C of the South Pennine Moors SAC/SPA impact zone.

As such the developer will need to secure mitigation for recreation impacts, and agreed with the local council.

3.1.2 Nationally important sites

There are no nationally important Sites within the search area.

The site is included within the Sites of Special Scientific Interest (SSSI) Impact Risk Zone of Dark Peak SSSI. The site is exempt due to the nature of the development not meeting the relevant description.

- Infrastructure: Airports, helipads and other aviation proposals.
- Minerals, Oil and Gas: Oil & gas exploration/extraction.
- Air Pollution: Livestock & poultry units with a floorspace > 500m², slurry lagoons > 4000m².
- Combustion: General combustion processes >50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

Therefore, consultation with Natural England on the potential impacts of development on terrestrial SSSIs is not required.

3.1.3 County important sites

There are seven locally important Local Wildlife Sites (LWS) and two Local Geological Sites (LGS) within the search area.

- Round Wood, Brockholes (LWS) located 0.4km from the site. The site is designated for its ancient, semi-natural woodland and species rich acid woodland.



- Hagg Wood (LWS) located 1.1km from the site. The site is designated for its species rich acid woodland.
- Brockholes and Round Wood (LGS) located 1.4km from the site. The site is designated for its geological features.
- Brown's Knoll Meadows (LWS) located 1.4km from the site. The site is designated for its species rich neutral grassland, ancient woodland and ponds.
- Cliff Wood (LWS) located 1.5km from the site. The site is designated for its acid woodland.
- Clough Wood (LWS) located 1.6km from the site. The site is designated for its ancient, semi-natural woodland.
- Upper and Lower Stone Woods (LWS & LGS) located 1.5km from the site. The site is designated for its ancient, semi-natural woodland and species rich acid woodland.
- Lumb House (LWS) located 1.6km from the site. The site is designated for its species rich grasslands.

The Local Wildlife Habitat Network (LWHN) is located approximately 150m northwest from the site

The majority of the LWS & LGS are considered to be of a sufficient distance from the site that no impacts are likely to occur as a result of the development proposals and are therefore considered to be outside of the zone of influence.

The LWHN and Round Wood, Brockholes LWS is considered to be within the zone of influence of the proposed development. Without mitigation the proposed development has the potential to cause adverse impacts to the LWHN and LWS. Further recommendations are provided in Section 4.

3.2 Habitats

Descriptions of the habitats recorded on site are given below, a map of the habitats is given as Appendix 1, with site photographs in Appendix 3. There is deciduous woodland priority habitat shown on MAGIC located within 150m of the site.

UKHab Habitats

The following habitat types were recorded on site:

- 3.2.1 g3c – Other neutral grassland: 14 – Scattered rushes, 32 – Scattered trees, 81 – Ruderal or ephemeral, 103 – Horse grazed.

The majority of the site is composed of other neutral grassland. (**Appendix 1 & 3 photo 1 - 3**). Abundant occurring species found here include common bent *Agrostis capillaris*, false oat-grass *Arrhenatherum elatius*, cock's-foot *Dactylus glomerata* and



perennial ryegrass *Lolium perenne*. Frequent occurring species found here include creeping thistle *Cirsium arvense*, creeping buttercup *Ranunculus repens*, broad-leaved dock *Rumex obtusifolius*, dandelion *Taraxacum officinale* and stinging nettle *Urtica dioica*. Occasional occurring species found here include cow parsley *Anthriscus sylvestris*, broom *Cytisus scoparius*, hairy willowherb *Epilobium hirsutum*, cleavers *Galium aparine*, herb Robert *Geranium robertianum*, rush species *Juncaceae* sp., sorrel *Rumex acetosa*, ragwort *Senecio jacobaea* and clover species *Trifolium* sp. Rare occurring species found here include drooping sedge *Carex pendula*, red valerian *Centranthus ruber*, mouse-eared chickweed *Cerastium fontanum*, foxglove *Digitalis purpurea*, shining cranesbill *Geranium lucidum*, wood avens *Geum urbanum*, ribwort plantain *Plantago lanceolata*, bracken *Pteridium aquilinum*, oak *Quercus robur*, bramble *Rubus fruticosus*, goat willow *Salix caprea*, prickly sowthistle *Sonchus asper*, common whitebeam *Sorbus aria*, woodland germander *Teucrium scorodonia* and vetch species *Vicia* sp.

3.2.2 h3h – Mixed scrub: 32 – Scattered trees, 81 – Ruderal or ephemeral, 202 – Young trees – self-set, 524 – Invasive non-native species, 532 – Scattered grass.

There are several areas of mixed scrub scattered throughout the site (**Appendix 1 target note 1 & Appendix 3 photo 4 - 6**). Dominant occurring species found here include bramble *Rubus fruticosus*. Abundant occurring species found here include feather moss species *Hypnales* sp., stinging nettle *Urtica dioica* and hairy willowherb *Epilobium hirsutum*. Frequent occurring species found here include cleavers *Galium aparine*, hawthorn *Crataegus monogyna* and goat willow *Salix caprea*. Occasional occurring species found here include cow parsley *Anthriscus sylvestris*, cock's-foot *Dactylus glomerata* and sorrel *Rumex acetosa*. Rare occurring species found here include sycamore *Acer pseudoplatanus*, alder *Alnus glutinosa*, burdock species *Arctium* sp., **wall cotoneaster *Cotoneaster horizontalis***, ribwort plantain *Plantago lanceolata* whitebeam *Sorbus aria* and vetch species *Vicia* sp.

3.2.3 u1 – Urban: 81 – Ruderal or ephemeral.

There is an area dominated by moss and ruderal species on the north of the site (**Appendix 1 & 3 photo 7 - 8**). Dominant occurring species found here include hairy willowherb *Epilobium hirsutum* and feather moss species *Hypnales* sp. Abundant occurring species found here include hairy bittercress *Cardamine hirsuta* and stinging nettle *Urtica dioica*. Frequent occurring species found here include creeping thistle *Cirsium arvense*. Occasional occurring species found here include wood avens *Geum urbanum*. Rare occurring species found here include bramble *Rubus fruticosus*, ash *Fraxinus excelsior*, shining cranesbill *Geranium lucidum*, cleavers *Galium aparine* and creeping buttercup *Ranunculus repens*.

3.2.4 u1b5 – Buildings.

There is a single building on site. The building is two stories with a single pitched roof which is currently used as a stable and for storage (**Appendix 1 & 3 photo 9 - 13**).

3.2.5 u1c – Artificial unvegetated, unsealed surface.

There is a small gravel track for access and parking on the south of the site (**Appendix**



1).

3.2.6 h2b – Non-native ornamental hedgerow.

There is a single hedgerow on the northwest boundary of the site. The hedgerow is composed of Lawsons cypress *Chamaecyparis lawsoniana* (**Appendix 1 & 3 photo 14**).

3.3 Protected Species

3.3.1 Plants

There are species records for bluebell, common centaury and cornflower within the search area.

No protected or notable plant species were recorded on site. The species found on site are widespread, common and typical of the habitat type. Protected and notable flora will not be mentioned further in this report.

There are species records for giant hogweed, Himalayan balsam, Japanese knotweed, variegated yellow archangel and Pontic rhododendron within the search area.

Wall cotoneaster *Cotoneaster horizontalis* was recorded on the south of the site in the mixed scrub habitat (**Appendix 1 target note 1 & Appendix 3 photo 15**). Further recommendations are provided in Section 4.

3.3.2 Invertebrates

There are species records for wall butterfly (S41 NERC species) within the search area.

The brash piles, grassland, deadwood, scrub and trees habitats on the site have the potential to support common and notable invertebrate species. Further recommendations are provided in Section 4.

3.3.3 Amphibians

There are no Natural England mitigation licences, class licences or eDNA pond results for great crested newt which appear to be present within the vicinity shown on MAGIC.

There were no species records for great crested newt or other amphibians within the search area.

The site was assessed for its suitability to support great crested newt and other amphibians – in its current state the site is considered to hold low suitability for great crested newt. There are several brash piles on site (**Appendix 1 target note 2 & Appendix 3 photos 16 - 18**), which offer sheltering/hibernating opportunities. There are two ponds within a 500m radius of the site located at grid reference . Pond 1 is located approximately 60m northwest of the site at the closest point (**Appendix 1 & Appendix 3 photo 19 - 20**). Pond 1 was subjected to a Habitat suitability Index HSI



for Great crested newt (GCN) (**Appendix 4**). The pond resulted in a score of 0.54 which means the pond has below average suitability for GCN and the predicted presence in this suitability category is 0.2. Pond 2 is located 275m northeast of the site. The pond was not subjected to HSI due to access limitations. Further recommendations are provided in Section 4.

3.3.4 Reptiles

There were no records for reptiles within the search area.

The site was assessed for its suitability to support reptiles – in its current state the site is considered to hold medium suitability for reptiles due to the presence of brash piles (**Appendix 1 target note 2 & Appendix 3 photos 16 - 18**), which offers sheltering/hibernating opportunities, medium value grassland habitats on site which offers foraging opportunities, and areas suitable for basking and good habitat connectivity to other potentially suitable habitats further afield. Further recommendations are provided in Section 4.

3.3.5 Birds

There were records for dunnock, lapwing, song thrush (S41 NERC species), fieldfare (Schedule 1 WCA (as amended) species) and swallow (Local Biodiversity Plan species) within the search area.

The site was assessed for its suitability to provide potential nesting and foraging opportunities for common species of bird in the habitats present on site.

The building, scrub, scattered trees and hedgerow on site offers good habitat suitable for nesting birds. Further recommendations are given in Section 4.

3.3.7 Bats

There is one Natural England mitigation licences which appear to be present within the vicinity of the site shown on MAGIC.

There were roost records for unidentified bats, pipistrelle bats, myotis bats, common pipistrelle and soprano pipistrelle, including several maternity, hibernacula and transitional roosts within the search area.

There were field records for unidentified bats, brown long-eared bat, common pipistrelle, Leiser's bat, myotis bats and noctule within the search area.



Buildings

Building One

The building is two stories with a single pitched roof with a catslide on one aspect. The building is constructed of a breeze block base with wooden frames and cladding. The roof is a mixture of metal and concrete corrugation supported by metal trusses with wooden rafters and battens. There is sarking on the western aspect.

PRFs PRESENT: Gaps are present in multiple locations around the building. There are gaps in the eaves on the northern and southern aspects and a gap under the ridge tile on the northern aspect (**Appendix 3 photo 10 – 13 & Appendix 5**) The wooden sarking present also creates a crevice which offers suitability for crevice dwelling species, and the gap between the wooden cladding and the boarding offers roosting opportunities.

BAT ROOST POTENTIAL: HIGH

Trees

No trees on site contained any PRF due to the lack of cavities suitable for roosting bats.

Foraging and Commuting Habitat

The site contains scattered trees, scrub, grassland and a non-native hedgerow habitats which are suitable for foraging and commuting bats.

The site contains a linear feature on the western aspect which connects the site to the woodland further afield. Therefore, the habitat present on site is assessed as moderate quality.

However, the site is relatively small and therefore the bat assemblage is assessed of low importance for nature conservation. Further recommendations for further survey and lighting impacts are given in Section 4.

3.3.8 Dormice

There were no records for dormice within the search area.

The site was assessed for its suitability to support dormice – in its current state the site is considered to hold negligible suitability for dormice due to the lack of vegetative complexity, protective cover, foraging opportunities and connectivity in wider landscape. Dormouse will not be mentioned further in this report.

3.3.9 Otter

There were records for otter within the search area.

The site was assessed for its suitability to support otter – in its current state the site is considered to hold negligible suitability for otter due to the lack of potentially suitable



habitat on-site, adjacent to site and in the zone of influence of the site. Otter will not be mentioned further in this report.

3.3.10 Water vole

There were no records for water vole within the search area.

The site was assessed for its suitability to support water vole – in its current state the site is considered to hold negligible suitability for water vole due to the lack of potentially suitable habitat on-site, adjacent to site and in the zone of influence of the site. Water vole will not be mentioned further in this report.

3.3.11 Other mammals

There were records for hedgehog and brown hare within the search area. The scrub habitat is potentially suitable for hibernating/sheltering and nesting hedgehogs and the grassland is potentially suitable for commuting and foraging brown hare. Both are species of Principal Importance under Section 41 of the NERC Act. Further recommendations have been provided in Section 4.



4. Conclusions

This section identifies and characterises potential impacts of the proposed development on each Important Ecological Feature identified in the preceding section. Measures to avoid, mitigate and compensate for these impacts are described, and any further surveys required are outlined below.

4.1.1 Local Wildlife Site (LWS) & Local Wildlife Habitat Network (LWHN).

Impacts

The LWHN and Round Wood, Brockholes LWS is considered to be within the zone of influence of the proposed development. Without mitigation the proposed development has the potential to cause adverse impacts to the LWHN and LWS.

Mitigation measures

Construction and Environment Management Plan (CEMP) is recommended relating to the LWHN and Round Wood, Brockholes LWS within the zone of influence of the proposed development. To ensure that these habitats and any protected or notable species potentially utilising them is not adversely impacted during the works.

Protected species

4.1.2 Invertebrates

During site clearance a watching brief will be maintained for the removal of any dead trees/dead wood. If possible, deadwood should be re-buried in an undisturbed shady place. This will provide a food source, breeding site and safe refuge for a variety of different invertebrate species.

4.1.3 Amphibians

Impacts

The removal of scrub and brash piles on site has the potential to disturb, injure or kill amphibians, resulting in a breach of legislation.

Mitigation

A HSI survey is recommended on pond 2 within 500m of the site and further eDNA surveys may be required following the HSI. Mitigation may also be required depending on the results of the eDNA survey.

No clearance will be undertaken during the winter hibernation period to avoid disturbing hibernating amphibians and staged clearance would allow animals to move safely out of the works area.

A precautionary approach should be adopted to include an **Ecological Clerk of Works (ECoW)** being present. Scrub and brash piles to be removed should be hand searched



by a suitably qualified and experienced ecologist prior to removal, to ensure no amphibians are currently resting in vegetation.

If a great crested newt is found at any stage of the development all work must cease immediately and the advice of a suitable qualified and licensed ecologist must be sought.

4.1.4 Reptiles

Impacts

Site clearance and the removal of scrub and brash piles on site has the potential to disturb, injure or kill reptiles, resulting in a breach of legislation.

Mitigation

A precautionary approach should be adopted to include an **Ecological Clerk of Works (ECoW)** being present. Scrub, deadwood and brash piles to be removed should be hand searched by a suitably qualified and experienced ecologist prior to removal, to ensure no reptiles are currently resting in vegetation.

Any rubble, rock and wood piles should be carefully dismantled by hand to capture any reptiles potentially using them as refuges. Should a reptile be found during site clearance, the advising ecologist would move it to a place of safety.

No site clearance will be undertaken during the winter hibernation period to avoid disturbing hibernating reptiles and staged clearance of the site would allow animals to move safely out of the works area. A two-phase approach of firstly strimming the vegetation, using hand tools, down to 15cm should be adopted. The site should be left for 2-7 days to allow animals to move out of unsuitable areas. Site clearance should be undertaken between April and June, to avoid disturbance during the mating, hatching and hibernation periods and be carried out during warm weather. The gradual removal of suitable habitat will allow time for any reptiles to move to an undisturbed location before the vegetation is removed entirely.

4.1.5 Nesting birds

Impacts

The clearance of the building, scrub and trees and works in close proximity to the existing hedgerow has the potential to cause killing, injury or disturbance to nesting birds. A significant permanent negative effect at the site level is possible.

Mitigation

Vegetation clearance and building demolition should be conducted outside of the nesting bird season to avoid disturbing the birds (the nesting season is considered to run between 1st March and 31st August).

Where this is not possible a suitably qualified ecologist should check potential nesting habitat immediately prior to clearance. Where nesting birds are encountered works



must be postponed until the nestlings have fledged.

No residual negative impacts are anticipated from loss of nesting habitat on the bird assemblage at a site level given the proposed mitigation.

4.1.7 Bat assemblage

Should any bats be found during any stage of the development, all work must stop immediately and a suitable qualified and licensed ecologist must be contacted. The ecologist will provide advice on the best course of action. It must be stated that this is a legal requirement, and that bats may only be handled and their roost disturbed by an experienced ecologist holding an appropriate licence.

Further survey

As the site has been considered to have a **high potential** of supporting bat roosting sites, we recommend that three bat emergence surveys should be carried out to establish the absence/presence of roosting bats at **Land at The Quarry, The Old Brickworks**.

Emergence bat surveys are conducted between May until September and are used to determine whether bats are currently roosting at a site. It can also give you an indication of the level of bat activity at a survey site and any specific foraging patterns. Emergence surveys are started around 30 minutes before sunset and up to 2 hours after and look for the emergence of bats from their roost sites. If bats are then confirmed to be roosting on the site, a **Bat Mitigation Licence** may be applied for from Natural England, and a mitigation plan devised so development causes as little impact on local bat populations as possible. It is recommended at **Land at The Quarry, The Old Brickworks Centre** that **1** survey is required. This survey must take place during the optimal bat activity period (May – August) in suitable weather conditions.

Impacts



Construction activity, noise and lighting would have the potential to disturb commuting and foraging bats and may result in abandonment of roosts or core foraging areas adjacent to the Site.

The significant negative effect of disturbance during the construction phase are likely to be short-term in localised areas, and the bulk of any disturbance from construction work could be expected to take place mainly during daylight hours even in the absence of controls, when bats would not be foraging or commuting.

Therefore, disturbance from operational lighting from the new houses are a possible significant permanent negative effect at the site level.

Mitigation

The production and implementation of a CEMP will be put into place prior to the beginning of the construction phase.

The CEMP being implemented will prevent any disturbance impacts to bats during the construction period.

Lighting

All lighting installed as part of the development will be in line with Guidance Note 08/23 Bats and Artificial Lighting at night. The following will be required:

- LED lighting will be used and light levels will be kept as low as possible. Metal halide, fluorescent sources will not be used.
- Lighting will be directed to where it is required.
- Only luminaires with no light output above 90 degrees and/or an upward light ratio of 0% and with good optical control will be used, luminaires will always be mounted on the horizontal, i.e. no upward tilt.
- Any external security lighting will be set on motion-sensors and short (1min) timers.
- Internal lighting within the new rooms will be recessed where installed in proximity to windows to reduce glare and light spill.
- Light sources will emit minimal ultra-violet light, peak higher than 550nm and be of a warm white spectrum (ideally <2700 Kelvin).
- The use of bollard or low-level downward directional luminaires is strongly discouraged.

Providing the Lighting Strategy is adhered to, there will be an insignificant effect on the bat assemblage from lighting during the operational phase.

4.1.8 Hedgehog & Brown Hare



Impacts

The clearance of vegetation has the potential to cause the loss of some of the existing foraging opportunities, as well as killing or injury to individuals present. A significant permanent negative effect at the site level is possible.

Mitigation

The mitigation proposed below for vegetation clearance should prevent impacts to hedgehogs and brown hare. No clearance will be undertaken during the winter hibernation period to avoid disturbing hibernating hedgehogs and staged clearance would allow animals to move safely out of the works area.

Any excavations created during the development stage must be covered at night or appropriate escape routes implemented. Planks are to be placed at a 45-degree angle for animals to escape safely. Any open pipes must be capped.

No residual impacts on hedgehog or brown hare from killing or injury are anticipated following implementation of this mitigation.

4.1.9 Schedule 9 plants

Species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded on site, Schedule 9 makes it illegal to allow or cause these plants to grow 'in the wild' and they should be removed from site to prevent their spread.

Control of the wall cotoneaster on site should be dealt with prior to or during the construction process. The plants should be completely removed as part of the re-development to prevent their further spread throughout the site and into surrounding areas. Details of the measures required to control invasive plant species on site must be detailed in the CEMP report prior to commencing works on site.



5. Enhancements

5.1.1 In line with both local and national planning policy, the opportunity has been taken to design habitat enhancements into the proposed development. These enhancements, described below, will also be of benefit to the Section 41 species (and local BAP species) known to be present within the Zol. A **Biodiversity Enhancement Plan (BEP)** should be designed pre-construction to be implemented post construction during the landscaping phase of the development. This plan will aim to ensure there is no net loss of habitats on site and to increase biodiversity and opportunities for wildlife on site, due to the result of the proposed development. The biodiversity enhancement plan will aim to provide opportunities for local wildlife to ensure the development does not have a significant detrimental impact on local or national wildlife populations. Measures which may be included within the Biodiversity Enhancement Plan are outlined below.

- The provision of a nest box for bird species house sparrow on the walls of the new building will provide permanent nesting for species in decline.
- Both swift and house sparrows are colonial species and therefore the boxes will be fitted in groups with a minimum of three within proximity to each other to form colonies. The provision of groups of swift bricks/ boxes on site will enhance the habitat for the local bird population. Swift bricks will be fixed no less than two storeys (4.5-5m) above ground level and nest boxes can be sited on any aspect of a building except the southern side (unless shaded by the eaves) to prevent the young becoming heat stressed.
- The design will include one group of three swift integrated boxes which can be rendered or brick faced per unit.
- Provision of one integrated bat boxes within the new building to provide new roosting opportunities for the local bat populations. The box will be fitted on south, east or west facing walls, as close to the eaves as possible. Bat boxes should not be fitted above or immediately adjacent to windows. These bat boxes are self-contained with only a small entrance slot visible on the external wall and can be rendered over or stone/brick faced.
- Small holes (13 x 13 cm) will be left in any fences separating the garden from adjacent properties to allow hedgehogs to move freely throughout the site.



6. References

Bat Conservation Trust and Institution of Lighting Professionals (2023) *Guidance Note 08/23 Bats and Artificial Lighting at night*.

Bright, P., Morris, P. and Mitchell-Jones, A. (1996) *The dormouse conservation handbook*. Peterborough: English Nature.

British Standards Institute (BSI), (2013) *BS 42020:2013, Biodiversity - Code of practice for planning and development*. London.

CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J (ed) (2023), *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd Edition). The Bat Conservation Trust, London.

Department for Levelling Up, Housing and Communities (2023), *National Planning Policy Framework*.

Edgar, P., Foster, J. and Baker, J. (2010) *Reptile Habitat Management Handbook*. 1st ed. Bournemouth: Amphibian and Reptile Conservation

Joint Nature Conservation Committee (JNCC), (2010) *Handbook for Phase 1 habitat survey: A technique for environmental audit*.

Langton, T., Beckett, C. and Foster, J. (2001) *Great Crested Newt Conservation Handbook*. Halesworth: Froglife.

Multi-Agency Geographical Information for the Countryside (MAGIC) Website.

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

Strachan, R., Moorehouse, T. and Gelling, M. (2011), *Water Vole Conservation Handbook*, 3rd Edn, WILDCRU



Appendices

Appendix 1: UKHab Habitat Map



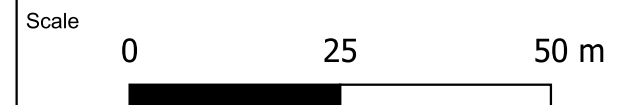


Site name & address

**Land at The Quarry, The Old
Brickworks, Thurstonland, West
Yorkshire HD4 6UY**

Key

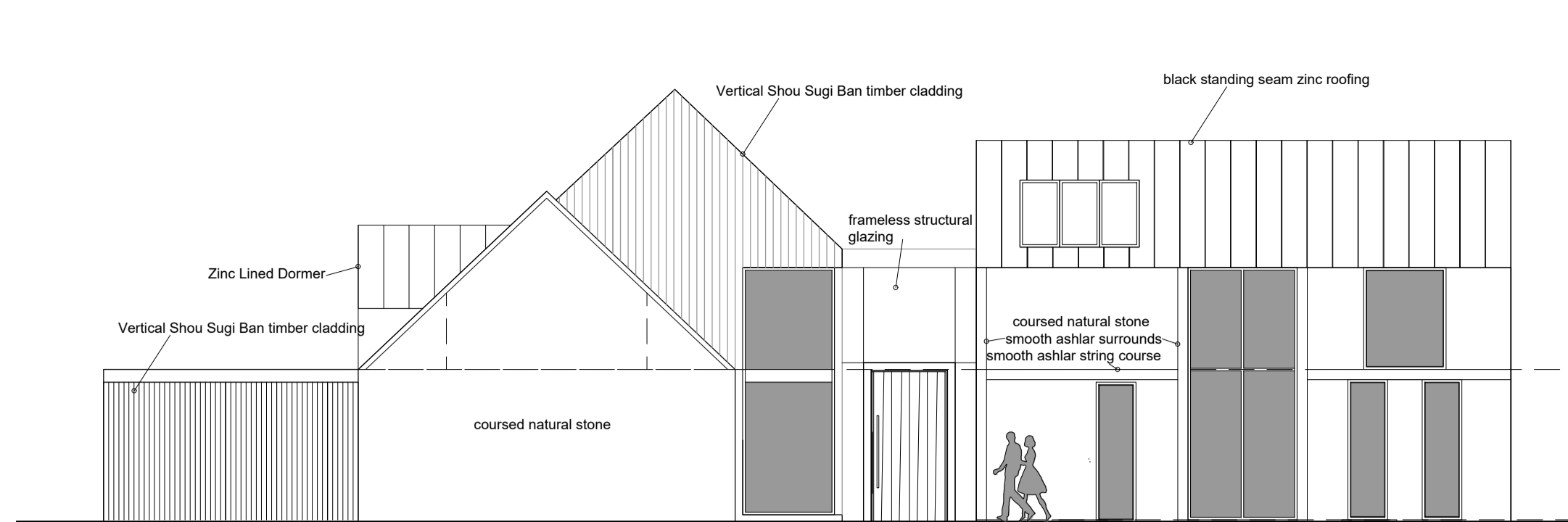
- Red Line Boundary
- West Yorkshire Wildlife Habitat Network
- Pond 1
- Target Note:
1 - Wall cotoneaster
2 - Brash pile
- Existing Small Urban Tree
- Non-native and ornamental hedgerow
- g3c – Other neutral grassland
14 – Scattered rushes
32 – Scattered trees
81 – Ruderal or ephemeral
103 – Horse grazed
- h3h – Mixed scrub
32 – Scattered trees
81 – Ruderal or ephemeral
202 – Young trees – self-set
524 – Invasive non-native species
532 – Scattered grass
- u1 – Urban
81 – Ruderal or ephemeral
- u1b5 – Buildings
- u1c – Artificial unvegetated, unsealed surface



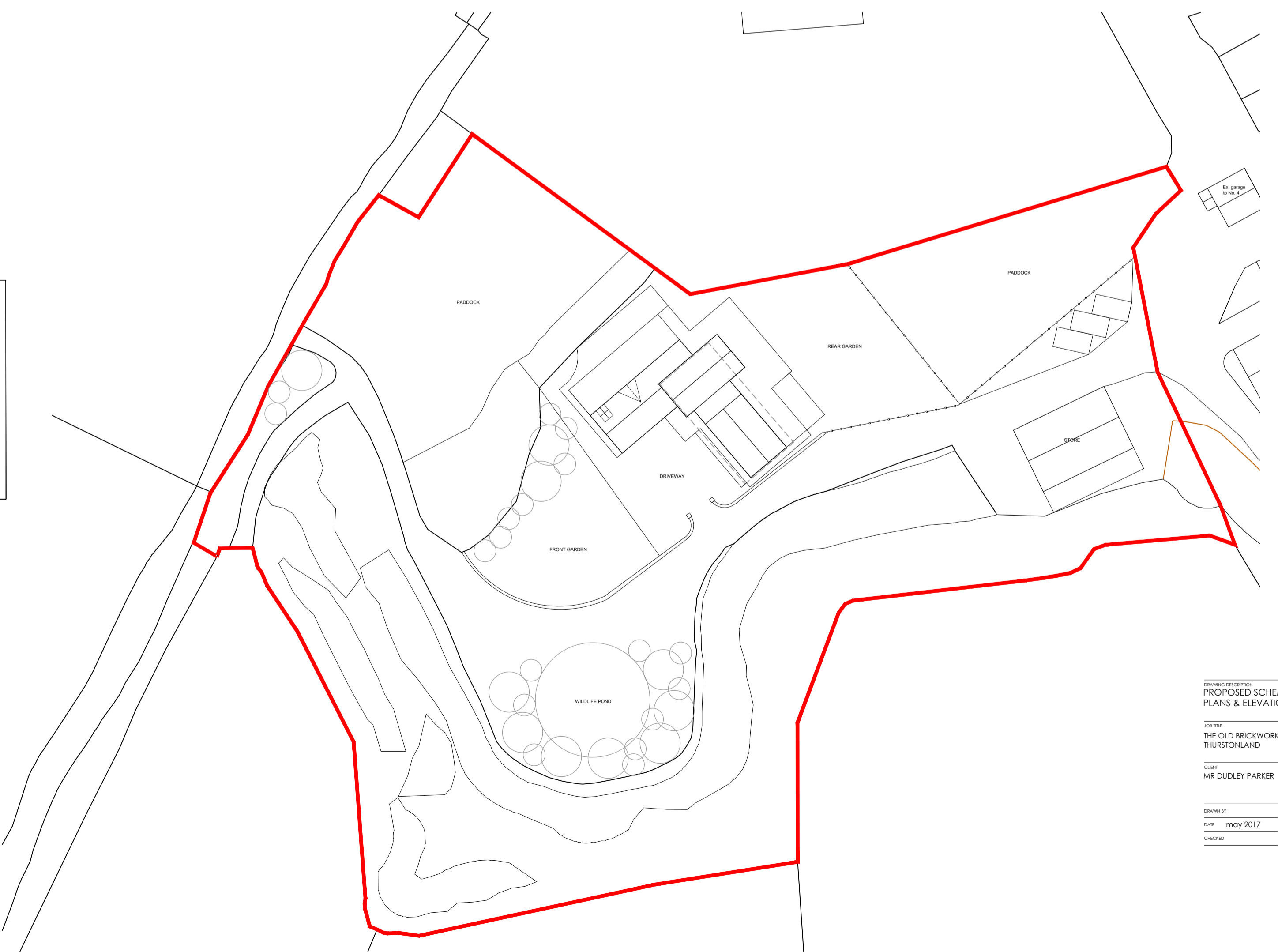
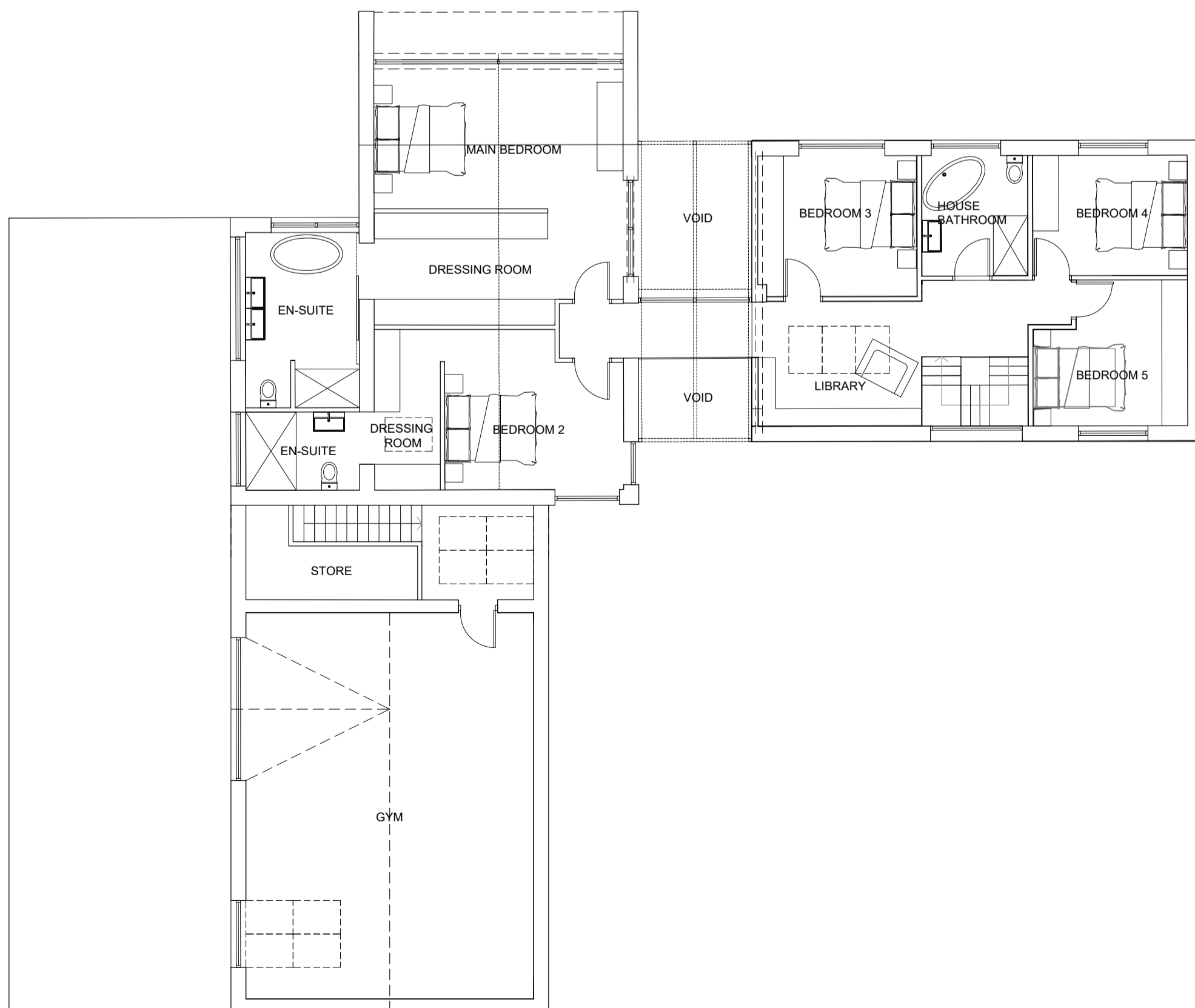
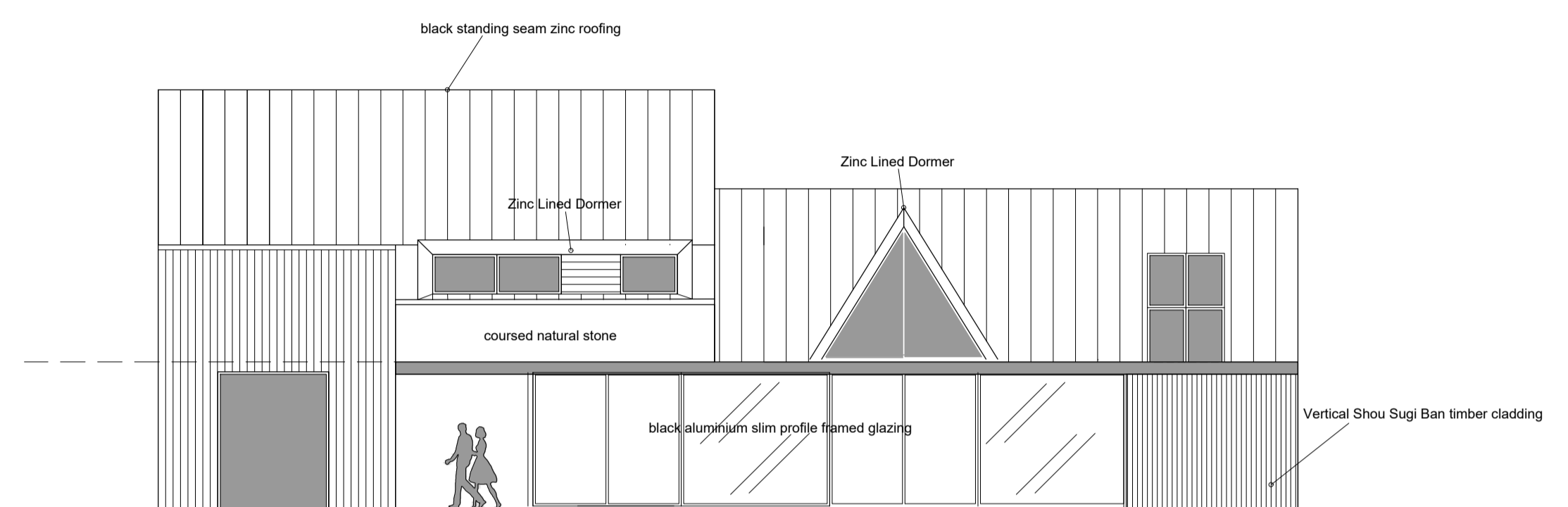
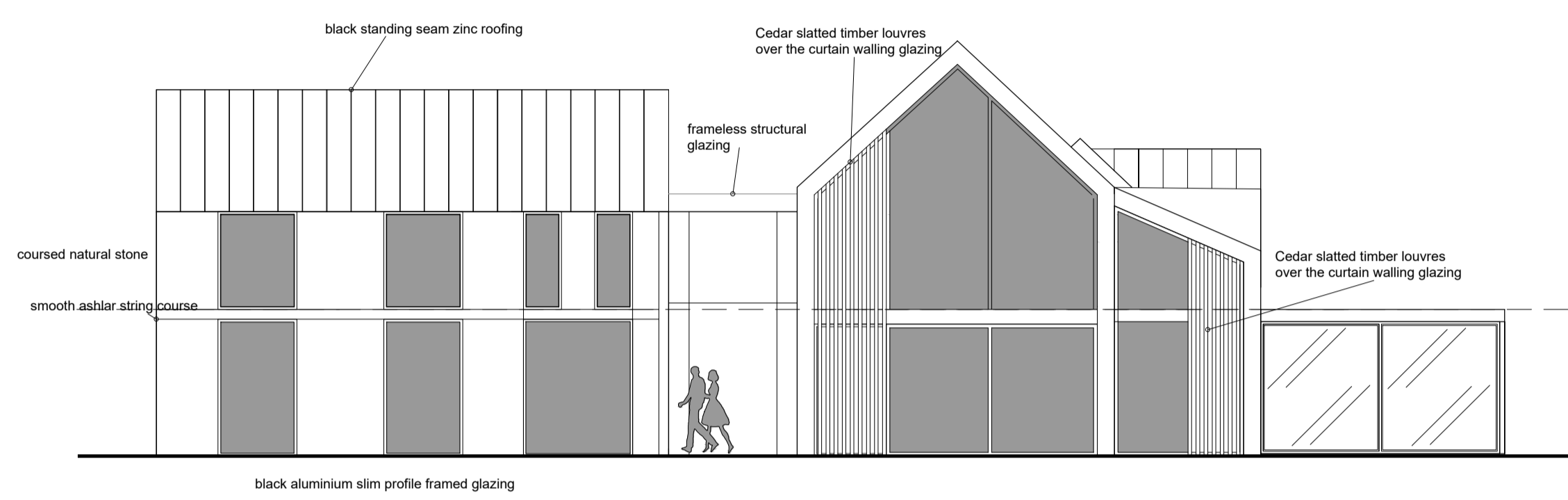
Site Land at The Quarry	Client L'Arche Developments Ltd.
Project Preliminary Ecological Appraisal	Author JF
Plan ref 23642a/JF	Revision 0

Appendix 2: Proposed Development Plan





NOTE: ALL DIMENSIONS SHOWN ARE PROVISIONAL DIMENSIONS ONLY & SHOULD NOT BE READ AS EXACT MEASUREMENTS. THESE MAY NEED TO BE ALTERED DUE TO SITE CONSTRAINTS/INSPECTION. THE DRAWINGS AND DESIGN ARE THE COPYRIGHT OF LDL LTD. & SHOULD NOT BE RE-PRODUCED WITHOUT PRIOR PERMISSION



DRAWING NO: 1242/002
 PROPOSED SCHEME
 PLANS & ELEVATIONS
 CLIENT:
 THE OLD BRICKWORKS
 THURSTONLAND
 ARCHITECT:
 MR DUDLEY PARKER
 DATE: MAY 2017
 SCALE: 1:100 @ A1
 DRAWING NO: 1242/002
 REVISION: D

Appendix 3: Photographic Evidence



Photo 1: Other neutral grassland on the east of the site, viewed from the north.



Photo 2: Other neutral grassland on the north of the site, viewed from the south.



Photo 3: Other neutral grassland on the west of the site, viewed from the west.



Photo 4: Mixed scrub on the north of the site, viewed from the east.



Photo 5: Mixed scrub on the south of the site, viewed from the south.



Photo 6: Mixed scrub on the east of the site, viewed from the north.





Photo 7: Ruderal vegetation on the north of the site, viewed from the south.



Photo 8: Ruderal vegetation on the north of the site, viewed from the southwest.



Photo 9: Building 1, viewed from the southeast.

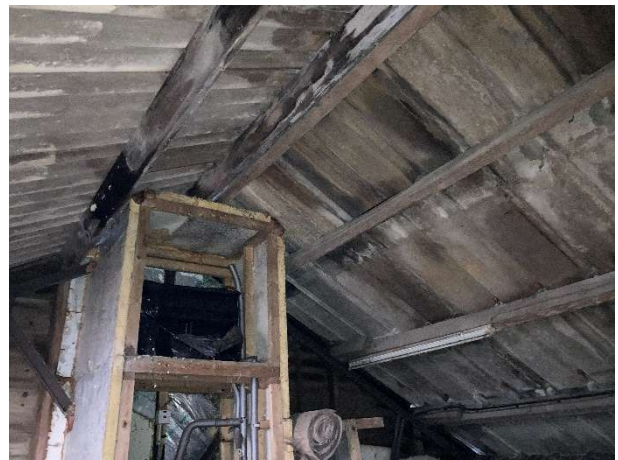


Photo 10: Building 1 interior roof.



Photo 11: Gap under ridge tile and cladding on the northern aspect of Building 1.



Photo 12: Gap in the Eave on the southern aspect of Building 1.





Photo 13: Gap in the eave on the northeastern aspect.



Photo 14: Non-native ornamental hedgerow on the northwestern boundary of the site.



Photo 15: wall cotoneaster on site.



Photo 16: Brush pile on site.



Photo 17: Brush pile on site.



Photo 18: Brush pile on site.





Photo 19: Pond 1.

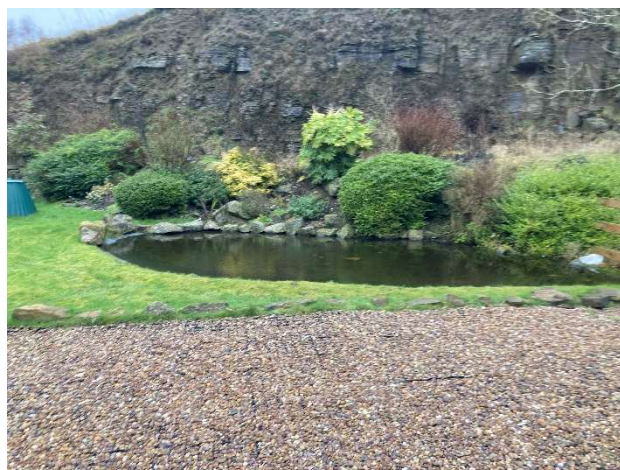


Photo 20: Pond 1.



Appendix 4: Great Crested Newt Habitat Suitability Index (HSI)

Great crested newts HSI results	
Pond reference number	Pond 1
Grid reference	SE 16265 10272
Factor 1: Location	0.5
Factor 2: Area	0.1
Factor 3: Pond permanence	0.5
Factor 4: Water quality	0.33
Factor 5: Shade	1
Factor 6: Waterfowl	1
Factor 7: Fish	1
Factor 8: Pond density	1
Factor 9: Terrestrial habitat quality	0.67
Factor 10: Macrophyte cover	0.4
HSI Score	0.54
Suitability for great crested newts	Below Average



Appendix 5: Bat Roost Potential Map





Site name & address

Land at The Quarry, The Old Brickworks, Thurstonland, West Yorkshire, HD4 6UY

Key

 Red Line Boundary

 Building 1: High Bat Roost Potential

Potential Roosting Feature

- 1 - Gap in eave
- 2 - Gap under ridge tile
- 3 - Gap in wooden cladding



Scale 0 7.5 15 m



Site Land at The Quarry, The Old Brickworks	Client L'Arche Developments
------------------------------------------------	--------------------------------

Project Preliminary Ecological Appraisal	Author JF
---------------------------------------------	--------------

Plan ref 23642a/JF	Revision 0
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Appendix 6: Relevant Nature Conservation Legislation and Policy

This Appendix is intended to provide an overview of the main features of legislation and policy relating to nature conservation in England and the implications for development.

KEY WILDLIFE LEGISLATION

Environment Act 2021

The Environment Act 2021 received royal assent in November 2021 and introduces new environmental protection regimes. This includes the creation of the Office for Environmental Protection who will oversee the framework. The Act includes several measures which impact on the planning application process to provide measures to ensure developments result in a net gain in biodiversity.

The Act provides a timeframe of 2 years from receiving royal assent for the production of the required regulations to implement the mandatory requirement of 10% Biodiversity Net Gain (BNG) for new developments. This applies from the 12th February for major applications and 2nd April for small sites. In England, BNG is becoming mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (known as the "Habitats Regulations") was recently amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

The Habitats Regulations provide for the designation of both Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) in the UK. The Regulations also prohibit certain actions relating to European Protected Species (EPS), which include Hazel Dormouse *Muscardinus avellanarius*, Great Crested Newt *Triturus cristatus*, European Otter *Lutra lutra* and all native species of bat.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 is the principal mechanism for the legislative protection of wildlife in Great Britain. Certain species of bird, animal and plant (including all of the European Protected Species listed above) are afforded protection under Schedules 1, 5 and 8 of the Act. The Act also contains measures for the protection of the countryside, National Parks, Sites of Special Scientific Interest (SSSIs) and public rights of way as well as preventing the establishment of invasive non-native species that may be detrimental to native wildlife in Schedule 9.

Countryside & Rights of Way Act 2000

Many of the provisions of the Countryside and Rights of Way (CRoW) Act 2000 have been incorporated as amendments into the Wildlife and Countryside Act (1981) and some provisions have now been superseded by later legislation such as The Natural Environment and Rural Communities Act (2006).

The most relevant changes provided by the CRoW Act include the added protection given to SSSIs and other important sites for nature conservation. Importantly, under the Act it became a criminal offence to "recklessly disturb" Schedule 1 nesting birds and species protected under Schedule 5 of the Wildlife and Countryside Act. It also enabled heavier penalties on conviction of wildlife offences.

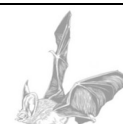
The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities (NERC) Act 2006 was intended to raise the profile of biodiversity amongst all public authorities and to make biodiversity an integral part of policy and decision-making processes. The NERC Act also improved wildlife protection by amending the Wildlife and Countryside Act 1981. Section 40 (S40) of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions. This includes giving consideration to the restoration and enhancement of species and habitats.

Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of Principal Importance for the conservation of biodiversity in England. This was published in 2007 and is commonly referred to as the "S41 list". Public authorities have a responsibility to give specific consideration to the S41 list when exercising their normal functions.

PLANNING POLICY & GUIDANCE

Listed below is the main planning policy and government guidance that relates to the conservation of nature and development at all levels of government.



National Level

National Planning Policy Framework (NPPF)

The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied in local-level policy and decision making. The National Planning Framework was re-issued in July 2018 and updated in February 2019, July 2021 and September 2023. Key points relevant to the Natural Environment are given below.

8. Re: Sustainable development. The NPPF recognizes "that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives).

These are the economic objective, the social objective, and the environmental objective; the full text of paragraph c) relating to this third objective reads as follows:

"to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

174. Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) Protecting and enhancing valued landscapes, sites of biodiversity ... (in a manner commensurate with the statutory status or identified quality in the development plan)
- b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services.
- d) minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks that are more resilient to current and future pressures.

175. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value.

176. Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

177. permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

180. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other



developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

181. The following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

182. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

Local Level

Kirklees Local Plan

BIODIVERSITY PLANS AND STRATEGIES

An overview of the key biodiversity plans and strategies in the UK, and their implications for development, are set out below.

National level

The UK Biodiversity Action Plan 2007 (UK BAP) has been superseded by the *UK Post-2010 Biodiversity Framework* and individual national biodiversity strategies. The UK framework sets out the overarching vision, strategic goals and priority activities for the UK. The Framework's overall vision is that “by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.” In England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* is the national biodiversity strategy, which has the stated mission “(...)to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.”

Note some local plans and government guidance documents/circulars still refer to the UK BAP and ‘UK BAP priority habitats and species’. These habitats and species are listed under Section 41 of the NERC Act, and **remain a material consideration in the planning process**. They are now described as ‘Species/Habitats of Principal Importance’, though they are also commonly referred to as ‘Section 41 Species/Habitats’ or simply ‘Priority Species/Habitats’. Further guidance is given in the relevant sections below.

Local level

Despite the changes to national level biodiversity policy described above, county and district level BAPs still apply. **Kirklees Local Plan**
Delivering Biodiversity Opportunities



Where practicable, opportunities should also be sought to achieve a **net gain** (i.e. enhancement) of biodiversity. Support for biodiversity enhancement is provided in the Public Authority 'Biodiversity Duty' under the NERC Act 2006 and in the key principles of the NPPF, as described above.

SITES DESIGNATED FOR THE CONSERVATION OF NATURE

Statutory Sites

Internationally Important Sites

Ramsar Sites, Special Areas of Conservation (SAC) and Special Protection Areas (SPA)

The Conservation of Habitats and Species Regulations 2017 (as amended) provide the primary legal basis for the protection of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in Great Britain. Ramsar sites are, as a matter of national planning policy, subject to the same strict protection. Any plan or project considered likely to affect a SAC, SPA or Ramsar site must be subject to an assessment.

Ramsar sites are wetlands of international importance. The majority of terrestrial Ramsar sites in England are also notified as SPAs and/or Sites of Special Scientific Interest (SSSIs).

SACs are sites which support internationally important habitats and/or species listed as being of Community. SPAs are sites which support internationally important numbers of bird species. Together, SACs and SPAs make up the National Site Network.

Any plan or project considered likely to affect a SAC, SPA or Ramsar site must be subject to a Habitats Regulations Assessment (HRA), as set out under Regulation 63 of the Habitats Regulations 2017 (as amended).

The Local Authority (or other 'competent authority') carries out the HRA, but the onus is on the developer to provide the necessary information to inform this process.

Under the Habitats Regulation 2017 (as amended), the competent authority must determine in the first instance whether a proposed development is likely to have a significant effect on the National Site Network site either alone or in combination with other plans and projects. The stage of the HRA is known as 'screening'.

If a likely significant effect cannot be screened out, then an 'Appropriate Assessment' must be undertaken to assess the implications against the site's conservation objectives.

Nationally Important Sites

Sites of Special Scientific Interest (SSSI)

The Wildlife and Countryside Act 1981 (as amended) and the CRoW Act 2000 provide the primary legal basis for the protection of Sites of Special Scientific Interest (SSSI). These sites have been designated to capture the best examples of England's flora, fauna, geological or physiographical diversity.

National Nature Reserve (NNR)

NNRs are declared under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981, as amended by Environmental Protection Act 1990. They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them. NNRs represent the very best parts of England's SSSIs. The majority of NNRs also have European nature conservation designation.

Regionally & Locally Important Sites

Local Nature Reserves

Local Nature Reserves are declared by local authorities under the National Parks and Access to the Countryside Act 1949 as living green spaces in towns, cities, villages and countryside. They provide opportunities for research and education, or for simply enjoying and having contact with nature. LNRs are usually protected from development through local planning documents which may be supplemented by local by-laws.

Non-Statutory Sites

Local Wildlife Sites



Local authorities may designate non-statutory sites for their nature conservation value based on important, distinctive and threatened habitats and species within a national, regional and local context. These sites are not legally protected but are given some protection through the planning system. These sites may be declared as 'County Wildlife Sites', 'Sites of Importance for Nature Conservation' (SINCs), or 'Sites of Nature Conservation Importance' (SNCIs) in local and structure plans. Non-statutory sites are a material consideration when planning applications are being determined.

Nature Conservation in Areas Outside Designated Sites

Various other features exist outside designated sites that are important for the conservation of nature and which are a material consideration in the planning system.

Habitats of Principal Importance in England

Fifty-six habitat types have been identified as Habitats of Principal Importance in England for the conservation of biodiversity under Section 41 of the NERC Act 2006. The NPPF, Government Circular 06/05, good practice guidance and the NERC Act place a clear responsibility on planning authorities to further the conservation of these habitats. They can be a material consideration in planning decisions, and so developers are advised to take reasonable measures to avoid or mitigate impacts to prevent their net loss and to enhance them where possible. Additional guidance to developers is typically provided in local level planning policy.

SPECIES PROTECTION

Legally Protected Species

Mammals

All wild mammals are protected against cruelty under the Wild Mammals (Protection) Act 1996, which makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

The following species of mammal are protected further by law in England:

Bats

There are 18 species of bat in the UK, seven of which are Species of Principal Importance in England. All bats and bat roosts are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are also protected under the Habitat Regulations 2017 as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, where protection is retained under UK domestic legislation. It is an offence to:

- Intentionally or deliberately kill, injure or capture bats;
- Intentionally, deliberately or recklessly disturb bats in such a way as to be likely to significantly affect the ability of any significant group of bats to survive, breed, or rear or nurture their young or the local distribution of or abundance of a species of bat;
- Intentionally, or recklessly damage, destroy or obstruct any place used for shelter or protection (i.e. bat roosts) or intentionally or recklessly disturb a bat whilst it is occupying such a place;
- Damage or destroy a breeding site or resting place of a bat; and
- Possess, sell or transport a bat, or anything derived from it.

Development proposals affecting bats or their roosts require a Protected Species licence from Natural England. It should be noted that a licence is enacted under the Habitat Regulations 2017 and will continue to apply in UK Law through the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019 and the European Union Withdrawal Act 2018 following the implementation of Brexit.

Dormouse

The Dormouse *Muscardinus avellanarius* is a Species of Principal Importance in England. It is legally protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and is afforded significant



further protection as a European Protected Species under the Habitats Regulations 2017 (as amended). Collectively, this legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture Dormice;
- Intentionally, deliberately or recklessly disturb Dormice in such a way as to be likely to significantly affect the ability of any significant group of Dormice to survive, breed, or rear or nurture their young or the local distribution of or abundance of the species;
- Intentionally or recklessly damage, destroy or obstruct access to places used by Dormice for shelter or protection (whether occupied or not) or intentionally or recklessly disturb a Dormouse whilst it is occupying such a place;
- Damage or destroy a breeding site or resting place of a Dormouse;
- Possess or transport a Dormouse (or any part thereof) unless under licence; and
- Sell or exchange Dormice.

Development proposals affecting the Dormouse require a European Protected Species licence from Natural England.

Badger

The Protection of Badgers Act 1992 offers considerable protection to both badgers and badger setts. This legislation was enacted to protect the Badger *Meles meles* against baiting and not as a means of species recovery for it is common in England. It is an offence to cruelly treat, kill or take Badgers, but it is also illegal to intentionally or recklessly damage or disturb a badger sett whilst it indicates signs of current use by a Badger.

Natural England has issued guidance to help developers and their proponents avoid sett disturbance and to identify setts that are in current use¹. It is important to maintain adequate foraging territory in development proposals affecting badgers as the destruction or severance of large areas of foraging territory could also be taken to include habitat loss. Licences to disturb Badgers and their setts in respect of development may be issued by Natural England provided provisions are made to minimise disturbance.

Birds

49 species of bird are listed as Species of Principal Importance in England. All birds are protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence, with certain exceptions (e.g. game birds), to intentionally kill, injure or take any wild bird and to take, damage or destroy their nests or eggs.

Schedule 1 of the Wildlife and Countryside Act 1981 affords extra protection for a number of species and applies harsher penalties for offences. Any intentional or reckless disturbance of a Schedule 1 bird, whilst it is nesting or rearing dependant young, constitutes an offence.

Regulation 10 of the Habitat Regulations 2017 (as amended) required appropriate authorities and conservation bodies, in the exercise of their functions, to take steps to secure 'the preservation, maintenance and re-establishment of sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat.'

Reptiles

All four of the widespread British species of reptile, including the Common Lizard *Lacerta vivipara*, Slow-Worm *Anguis fragilis*, Grass Snake *Natrix natrix* and Adder *Vipera berus*, are Species of Principal Importance in England. They are protected under Schedule 5 (Sections 9.1, 9.5a, 9.5b) of the Wildlife & Countryside Act 1981 (as amended) from intentional killing, injury and trade. The habitat of the four widespread reptiles is not

¹Natural England (2009). Protection of Badgers Act 1992 (as amended) Interpretation of 'Disturbance' in relation to badgers occupying a sett. Available from:

http://www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf

Natural England (2009). Guidance on 'Current Use' in the definition of a Badger Sett. Available from:

http://www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf



legally protected; however the replacement of habitat lost through development may be required through the planning system. Mitigation for these species is not subject to licensing by Natural England but should nonetheless be planned to minimise disturbance.

The Smooth Snake *Coronella austriaca* and the Sand Lizard *Lacerta agilis* are the rarest reptile species in Britain. In addition to the protection that is afforded to the widespread species of reptile listed above, these species are protected further under Schedule 5 (Sections 9.4b and 9.4c) of the Wildlife and Countryside Act 1981 (as amended). They are also European Protected Species protected under the Habitat Regulations 2017 (as amended). This legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture Sand Lizards or Smooth Snakes;
- Intentionally, deliberately or recklessly disturb Sand Lizards or Smooth Snakes in such a way as to be likely to significantly affect the ability of any significant group of Sand Lizards or Smooth Snakes to survive, breed, or rear or nurture their young or the local distribution or abundance of either species;
- Intentionally or recklessly damage, destroy or obstruct any place used by Sand Lizards or Smooth Snakes for shelter or protection, or intentionally or recklessly disturb a Sand Lizard or Smooth Snake whilst it is occupying such a place;
- Damage or destroy a breeding site or resting place of a Sand Lizard or Smooth Snake;
- Keep, sell, or exchange Sand Lizards or Smooth Snakes or their eggs; and
- Deliberately take or destroy their eggs
-

Development proposals affecting Smooth Snake or Sand Lizard require a European Protected Species licence from Natural England.

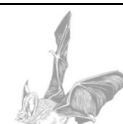
Great Crested Newt

The Great Crested Newt *Triturus cristatus* is a Species of Principal Importance in England. It is legally protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and is afforded significant further protection as a European Protected Species under the Habitats Regulations 2017 (as amended). Collectively, this legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture Great Crested Newts;
- Intentionally, deliberately or recklessly disturb Great Crested Newts in such a way as to be likely to significantly affect the ability of any significant group of Newts to survive, breed, or rear or nurture their young or the local distribution of or abundance the species;
- Intentionally or recklessly damage, destroy or obstruct any place used by Great Crested Newts for shelter or protection, or intentionally or recklessly disturb a Great Crested Newt whilst it is occupying such a place;
- Damage or destroy a breeding site or resting place of a Great Crested Newt; and
- Possess, sell or transport a Great Crested Newt, or anything derived from it.

Development proposals affecting the Great Crested Newt require a European Protected Species licence from Natural England. Intentional or reckless behaviour leading to an offence being committed as detailed above may result in maximum penalties of:

- Up to £5,000 fine per offence committed;
- A custodial sentence of up to six months instead of, or in addition to, a fine; and/or
- Items of equipment involved in committing the offence may be seized and detained.



In addition to the above penalties, it is likely that any European Protected Species mitigation Licence (EPSL) obtained for a site will be revoked whilst any wildlife offence is investigated. This will lead to immediate temporary and, depending on investigation outcomes, possible permanent restrictions on site works, as well as associated cost.

Species of Principal Importance in England

943 species have been identified as being of Principal Importance in England for the conservation of biodiversity under Section 41 (S41) of the NERC Act 2006. This list of species includes species found in England which have been identified as requiring action under the now superseded UK Biodiversity Action Plan 2007 (plus the Hen Harrier). While these species may not be legally protected, there is a clear responsibility on planning authorities to further their conservation. These species can be a material consideration in development control decisions and so developers are advised to take reasonable measures to avoid or mitigate impacts to prevent the net loss of these species and habitats and to enhance them where possible.

Invasive Non-Native Species

There are a number of species not ordinarily resident to the UK. Those which pose a significant threat to our ecology and economy are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). For an offence to be committed, a species must be released or allowed to escape into the wild. For example, if a plant listed on Schedule 9 is not adequately controlled by a land owner, once they are aware that it is present, and the species is allowed to spread into adjoining areas, then this could constitute an offence.



Appendix 7: Author Qualifications

Adam West, Principal Ecologist

BSc (Hons) Animal and Wildlife Management, ACIEEM.

Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Bachelor's degree in Animal and Wildlife Management, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence and a Natural England Level 2 bat survey class licence.

James Foster, Assistant Ecologist

BSc (Hons) Biology.

James gained his undergraduate degree in biology in 2012 from University of Leeds. James has plenty of experience in ecology, having worked countless projects of different scales all over the north and midlands. James has 9 years of experience surveying anything from reptiles to hedgerows and holds a Great crested newt licence level 1 and is working towards his bat licence and barn owl licence.

Grace Bramley, Assistant Ecologist

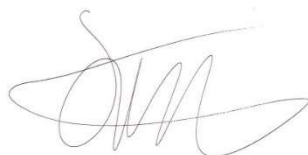
BSc (Hons) Design and Innovation with Environmental Science

Grace joined JCA in 2024 after completing her degree from The Open University with a first-class honour's degree in design and environmental science. Prior to this she spent six years working in the automotive industry followed by three years in the chemical industry. She is conducting Preliminary Ecological Appraisal and Biodiversity Net Gain Assessments and working towards her protected species licenses.



The information, evidence and advice which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and bona fide opinions.

Author



.....
James Foster *BSc (Hons)*
27/02/2026

First review by



.....
Grace Bramley *BSc (Hons)*
27/02/2026

Final review by



.....
Elizabeth Davies *BSc (Hons), MCIEEM*
17/03/2026



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ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes
- Butterfly & Insect Surveys

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)
- Planting Schemes
- Monitoring of bird or bat boxes.

ARBORICULTURAL SERVICES

Guidance for Architects & Developers

- British Standard 5837 Surveys
- Arboricultural Implications Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control



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