New House Farm
Drigg
Cumbria

AVISON YOUNG

Preliminary Ecological Appraisal

Final

VERSION 2

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Contents

Executive Summary

BiOME Consulting Ltd was commissioned by Avison Young to undertake a Preliminary Ecological Appraisal (PEA) of a property (New House Farm (the 'site')) proposed for demolition.

The site, located within Drigg in western Cumbria, was a tenanted farm and included several barns/sheds, a house and yard area with roads to the north (B5344) and west (Station Road) and pasture to the east and south. Sparse residential housing was present in the wider area.

The results of the PEA, which was undertaken in April 2021, have been used to identify potential constraints to the proposed works and to recommend further ecological work required to allow the works to proceed lawfully. The ecological issues identified during the completed surveys were:

Designated Sites; There are five statutorily designated sites and six non-statutorily designated sites within 2km of the site. Considering the nature of the proposed works, no effects to designated sites are predicted assuming all works strictly follow pollution prevention best practice.

Bats; The PRA survey concluded that both the House and Stone Barn were of high suitability for roosting bats while the Outbuilding, Piggery and the sole tree present were of moderate suitability. Three nocturnal presence/absence (dusk 'emergence' and dawn 'return to roost') surveys of the high suitability buildings are required to evaluate if bats are roosting in the buildings, in addition to identifying bat species and numbers/type of roosts (if present). A minimum of two nocturnal surveys of the moderate suitability buildings are required. Detailed inspection (via tree climbing) of the moderate suitability tree, potentially followed by nocturnal surveys are required. No further survey work is necessary in relation to the Sheep Shed or Dutch Barn.

Badger; Although no Badger evidence was noted, the occasional presence of foraging Badgers was considered possible and precautions to ensure that this species is protected from harm during construction operations are recommended.

Breeding Birds; If possible, any vegetation clearance/building works should be completed outside the bird nesting season (1 March to 31 August), although it

should be noted that the nesting period may extend beyond these dates (for example, pigeons can breed in any month of the year in the UK). Should an occupied bird nest or a nest in the process of being constructed be encountered during works, clearance must cease in this area and should only re-commence once the birds have fledged or the nest is abandoned.

If works must be undertaken during the nesting season, a survey to identify any nests which may be impacted will be required. This survey should be undertaken by a SQE. Again, should an occupied nest or nest under construction be found, works must cease in this area until the birds have fledged or the nest has been abandoned.

No other legally protected species or species of particular nature conservation value are considered likely to be present, or represent a potential constraint to development.

Opportunities should be sought where possible for ecological enhancement at this site. Broad recommendations are included within this report, which should be formalised within an Ecological Enhancement Plan.

1. Introduction

BiOME Consulting Ltd was commissioned by Avison Young to undertake a Preliminary Ecological Appraisal (PEA) of a property proposed for demolition. This property, New House Farm (the 'site'), is centred on National Grid Reference SD 06556 99055 (**Figure 1**).

The PEA (which included a site survey and desk study) was undertaken in order to establish the baseline ecological conditions of the site, with particular attention given to the possible presence of protected, invasive or otherwise notable species.

The results of the completed surveys have been used to identify potential constraints to development (if present) and to recommend further ecological work required to enable the proposed works at the site to proceed lawfully.

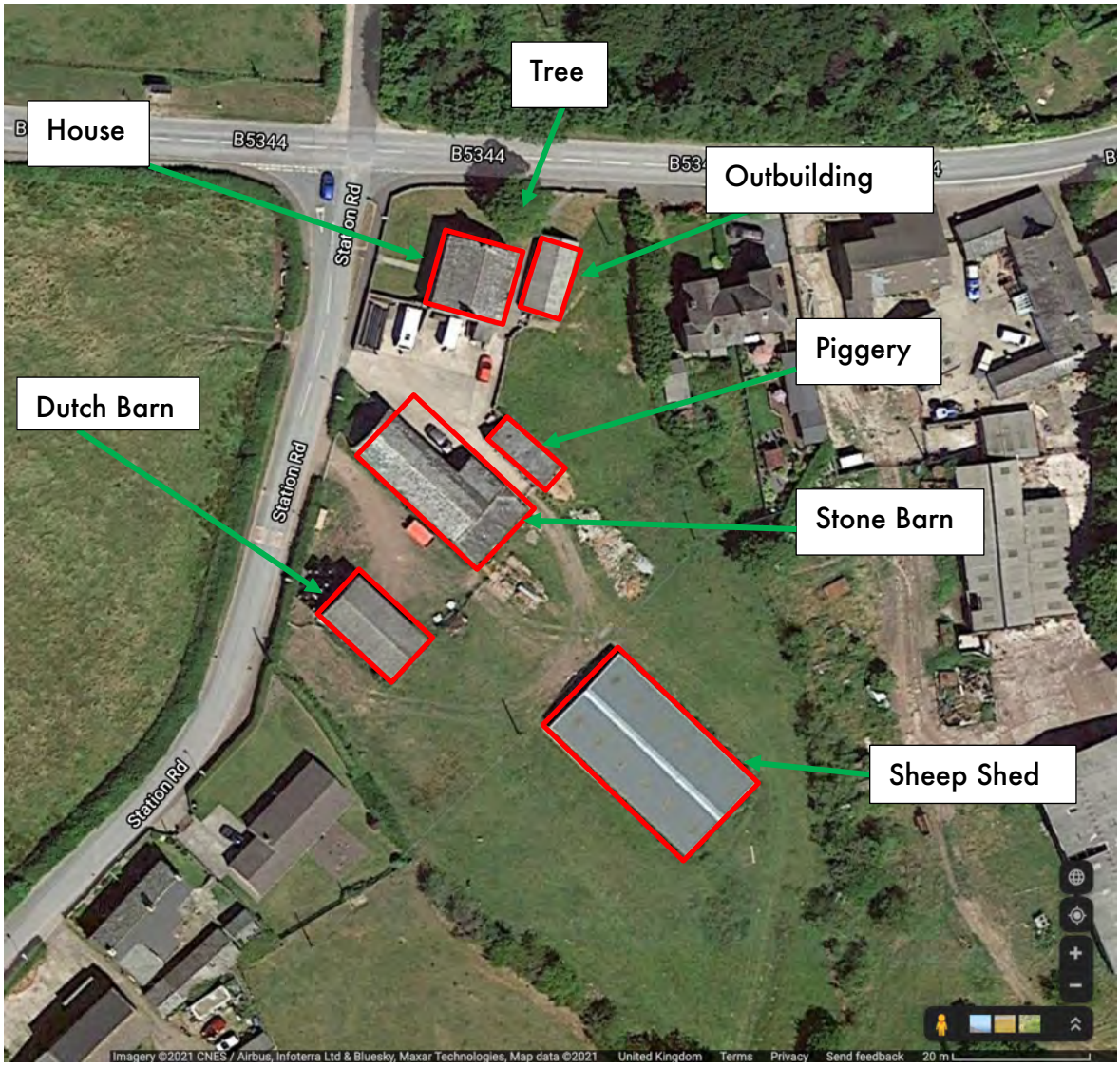
Figure 1. Site Location

1.1. Site Description

The site, located within Drigg in western Cumbria (**Figure 1**), was a tenanted farm and included several barns/sheds, a house and yard area with roads to the north (B5344) and west (Station Road) and pasture to the east and south. Sparse residential housing was present in the wider area.

The site layout is shown on **Figure 2**.

Figure 2. Site layout



1.2. Proposed Works

The demolition of all buildings within the site is proposed.

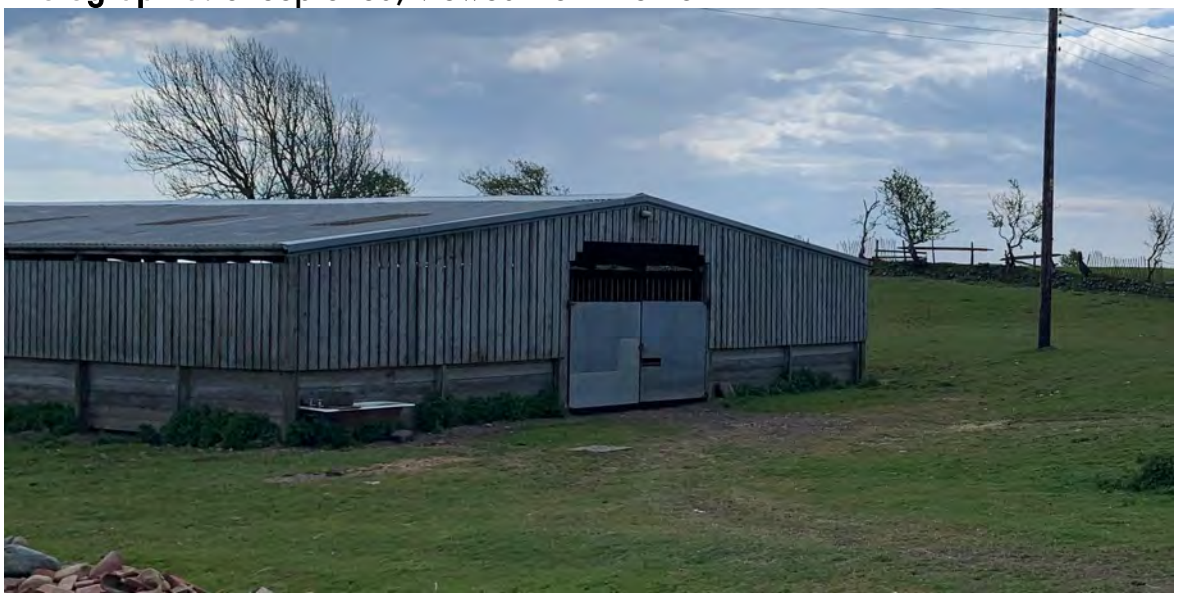
Photograph 1. The House, viewed from the west

Photograph 2. Outbuilding, viewed from the north

Photograph 3. Piggery, viewed from the north

Photograph 4. Stone Barn, viewed from the west

Photograph 5. Sheep Shed, viewed from the north



Photograph 6. Dutch Barn, viewed from the north

2. Methodologies

2.1. Desk Study

Biological records data were obtained from Cumbria Biodiversity Data Centre (CBDC) on 10 May 2021. The provided data included:

- Protected and notable species records within 2km.
- Information in relation to non-statutorily designated sites within 2km.

Information in relation to nationally and internationally designated sites within 2km was obtained from Magic.gov.uk (accessed 17 May 2021).

Habitats and Species of Principal Importance[1] and the Local Biodiversity Action Plan (LBAP) priority habitats and species were also reviewed to compare to those habitats and species either recorded within the site during the survey or recorded as having potential to be present (due to habitat suitability). The LBAP which covers this site is the Cumbria Biodiversity Action Plan[2].

2.2. Preliminary Ecological Appraisal Survey

A PEA survey[3,4] was undertaken on 30 April 2021 by an experienced ecologist, Martyn Owen MCIEEM, in excellent weather conditions. During the survey all areas within the site and site boundaries were walked and habitat types assessed. Signs of protected species, invasive plants (*i.e.* those included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)) and other notable species were also searched for during the survey, as well as noting habitats considered to have the potential to support protected species.

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1 Habitats and Species of Principal Importance are listed under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006.
2 Cumbria County Council (2016). Cumbria Biodiversity Action Plan [online] available at: http://www.cumbria.gov.uk/planning-environment/conservation/biodiversity/bio_bap.asp (accessed 19 April 2021)
3 Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London
4 CIEEM (2017) *Guidelines for preliminary ecological appraisal* [online] available at: https://www.cieem.net/guidance-on-preliminary-ecological-appraisal-gpea- (accessed 19 April 2021)

During the PEA a Preliminary Roost Assessment (PRA) was completed to assess the presence/likely absence of roosting bats. The PRA involved the systematic search of accessible areas on the exterior and within the onsite buildings to identify potential or actual bat access points and roosting sites, and to locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining and/or squeaking noises. It should be noted that sometimes bats leave no visible sign of their presence on the outside of a building (and even when they do wet weather can wash away evidence).

The inspection of buildings and built structures for evidence of bats can be conducted at all times of year. The inspection was completed outside the main period of bat activity (May-September), however, it is expected that any obvious accumulations of bat evidence would have been visible to the surveyor.

The inspection was facilitated by the use of ladders, a high-powered torch, endoscope and small dental mirrors to inspect accessible crevices considered likely to support bats.

The potential suitability of the buildings/trees to be impacted by the proposed development for roosting bats was assessed in line with relevant guidelines[5] and allocated to one of the categories detailed within **Table 1**.

Table 1. Guidelines for assessing the potential suitability of proposed development sites for bats

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure/tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (*i.e.* unlikely to be suitable for maternity or hibernation).

5 Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn.). The Bat Conservation Trust, London

Suitability	Description of Roosting Habitats
Moderate	A structure/tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure/tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

The accessible areas of the site were also checked for evidence of nesting birds including nests, pellets, feathers, droppings, and live and/or dead specimens.

2.3. Limitations

The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of plants and animals, such as the time of year, migration patterns and behaviour.

Access to all areas outwith the site boundary was not possible; however, it was possible to adequately assess these areas from within the site or from public rights of way.

Access to the interior of the House and Stone Barn was not possible due to health and safety concerns. However, external inspections were completed and nocturnal surveys in relation to bats are required. This is not therefore considered a significant constraint and does not affect the validity of the recommendations within this report.

3. Results

3.1. Desk Study

There are five statutorily designated sites within the search area. Six non-statutorily designated site are present; details are provided within **Table 2**, with the locations shown in **Appendix A**.

Table 2. Designated site details

Site	Approx. Distance from Site Centre/Direction	Description
Statutorily Designated Sites		
Drigg Coast Site of Special Scientific Interest (SSSI)	0.9km/S	Extends for almost 11km along the west Cumbrian coast from Seascale, south towards Bootle and is centred on Ravenglass where the estuaries of the Irt, Mite and Esk meet to form the Esk channel, the course of which is determined by large sand and shingle splits to the north and south. This combination of features has resulted in a very broad range of maritime habitats supporting a particularly rich and varied flora including several species of local or national rare distribution.
Drigg Holme SSSI	1.2km/E	Drigg Holme is located on the flood plain of the River Irt. Much of the land lies on alluvial soils sloping southwards gently to the river. Drigg Holme comprises a suite of neutral and acidic grasslands with a rich and varied hay meadow flora. In West Cumbria the site is one of only two known flood meadow systems under a 'traditional' management regime, where the grasslands are in shared ownership. The grasslands are the second richest series known in West Cumbria with records for 150 different flowering plants. The site shows the full range of gradation from unimproved through semi-improved to improved grassland

Drigg Coast Special Areas of Conservation (SAC)	1.5km/W	**Annex I habitats that are a primary reason for selection of this site** 1130 Estuaries 2150 Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)* Priority feature 2170 Dunes with *Salix repens ssp. argentea (Salicion arenariae*) **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site** 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonizing mud and sand 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) 2110 Embryonic shifting dunes 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* (""white dunes"")" 2130 "Fixed coastal dunes with herbaceous vegetation (""grey dunes"")* Priority feature 2190 Humid dune slacks
Halsenna Moor National Nature Reserve (NNR)	1.6km/N	Hallsenna Moor NNR is one of the few remaining lowland heath and peatland habitats in Cumbria.
Halsenna Moor SSSI	1.6km/N	One of the few lowland heath and peatland complexes remaining in the county and is the largest in West Cumbria. It contains a wide range of habitats developed on peat which form a mosaic including wet and dry heath, nutrient poor fen, basin mire and woodland.

Non-Statutorily Designated Sites		
Drigg Dunes & Coast incl. Ravenglass Nature Reserve Site of Invertebrate Significant (SiS)	0.7km/S	No information available
Fishgarth Wood County Wildlife Site	1.5km/E	No information available
River Irt Grassland CWS	1.6km/ENE	No information available
Cookson Wood CWS	1.8km/NE	No information available
Hallsenna Moor SiS	1.6km/N	No information available
Seascale CWS	1.9km/NW	No information available
B3 A5 (1) Special Roadside Verge	1.7km/W	No information available

Records data provided by CBDC are summarised in the below sections when relevant.

3.2. Site Survey

3.2.2 Habitats

The site included the House (**Photograph 1**), Outbuilding (**Photograph 2**), Piggery (**Photograph 3**), Stone Barn (**Photograph 4**), Sheep Shed (**Photograph 5**) and Dutch Barn (**Photograph 6**). A yard area was present within the site, accessed off Station Road. The Sheep Shed was surrounded by pastoral farmland. A lawned garden was present to the north and west of the House, which include a mature Sycamore *Acer pseudoplatanus*.

The desk study returned records of:

- Snowdrop *Galanthus nivalis* (wo records, 2018)
- Field Gentian *Gentianella campestris* (one record, 1997
- Sticky Stork's-bill *Erodium lebelii* (three records, most recently in 1995)
- an Eyebright *Euphrasia tetraquetra* (one record,1992)
- Sea Spurge *Euphorbia* paralias (one record, 2017)
- Pretty Spurge *Euphorbia peplus* (one record, 2018)
- Portland Spurge *Euphorbia portlandica* (five records, most recently in 2017)

- Allseeed *Radiola linoides* (one record, 1987)
- Heath Dog-violet *Viola canina* (one record, 2018)
- Wild Pansy *Viola tricolor* (one record, 2017)
- Sea-buckthorn *Hippophae rhamnoides* (one record, 2018)
- Hound's Tongue *Cynoglossum officinale* (three records, most recently in 2010)

The habitats found in the site are common across England. No habitats that conform to LBAP or S41 priority habitats were identified within the site or in close proximity and no floral species of conservation significance were noted or considered likely to be present. No further work in relation to habitats are considered necessary.

3.2.3 Species

3.2.1.1. Bats

All bat species are European Protected Species (EPS) protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and receive protection under the Wildlife and Countryside Act 1981 (as amended).

All buildings within the site were assessed to determine their suitability to support roosting bats in line with the criteria detailed within **Table 1**. The nature of these buildings and the findings of the site survey are summarised below:

House

This large two-storey building exhibited a pitched slate roof, with coping stones along gable ends and two chimneys. The walls were constructed with sandstone which had been rendered, although there were numerous areas where this was degrading and falling from the building. uPVC windows were present which were intact and closed.

There was no access to the building interior (due to unsafe conditions), however, it is understood that the House was re-roofed around five years ago and the slate roof was lined with a breathable membrane and that no bats were encountered during these works (owner, pers. comm.)

No evidence of bat usage was encountered on the exterior.

Potential roost features/bat access points noted were:

- Gaps in brickwork/render
- Gaps at eaves
- Slipped tiles/gaps around tiles
- Gaps around copping stones
- Gaps around chimneys

The House was assessed to have HIGH potential to support roosting bats (**Table 1**).

Outbuilding

This single-storey building possessed three component sections and was in use for storage. It was constructed of sandstone with mortar (which was missing in many areas) with a sheet asbestos roof on a wooden frame.

No evidence of bat usage was encountered on the exterior.

Potential roost features/bat access points noted were:

- Gaps around internal beams
- Holes in walls (including missing mortar)

The Outbuilding were assessed to have MODERATE potential to support roosting bats (**Table 1**).

Piggery

This single-storey building was comprised of three adjoining sections, which were in use to house animals. The building was constructed in stone with a slate roof (no lining) on a wooden frame.

No evidence of bat usage was encountered on the exterior or within.

The following PRFs/potential bat access points were noted:

- Access to interior via open doors
- Holes in walls/mortar
- Gaps under slates

The Piggery was assessed to have **MODERATE** potential to support roosting bats (**Table 1**).

Stone Barn

This large two-storey barn was constructed with stone/mortar walls. The roof was covered with slate tiles on a wooden frame (no lining). Windows and doors were present, numerous of which were open.

A number of lean-to sections were present, which adjoined the main barn, where lead flashing was present.

No evidence of bat usage was encountered on the exterior.

The following PRFs/potential bat access points were noted:

- Gaps in walls
- Access to interior
- Gaps under slates
- Gaps around lead flashing

Barn 2 was assessed to have **HIGH** potential to support roosting bats (**Table 1**).

Sheep Shed

This large agricultural building was constructed with wood walls and a sheet metal roof, which included numerous clear panels for interior illumination. No potential roost features were present and the building was well lit inside and draughty due to gaps in wooden walls. Consequently, it was assessed to have **NEGLIGIBLE** potential to support roosting bats (**Table 1**).

Dutch Barn

This large open-fronted agricultural building was constructed with sheet asbestos walls and roof. No potential roost features were present and the building was well lit inside and draughty due to its open frontage. Consequently, it was assessed to have **NEGLIGIBLE** potential to support roosting bats (**Table 1**).

Trees

One tree was present within the site, just to the north of the House. This tree possessed features of potential value to roosting bats including numerous rot/knot holes (**Photograph 6**). This tree was assessed to be of **MODERATE** bat roost potential (**Table 1**).

Photograph 6. Tree with moderate bat root potential

The desk study returned the following bat records:

- Unidentified bat (one record,1996).
- Natterer's Bat *Myotis nattereri* (One record, 2010).
- Noctule *Nyctalus noctula* (two records, 2017).
- Common Pipistrelle *Pipistrellus pipistrellus* (two records, most recently in 2011).

3.2.1.2. Badgers

Badgers are protected through the Protection of Badgers Act 1992, which makes it an offence to recklessly take, injure or kill a Badger or cause disturbance to its sett. Furthermore, Badgers are afforded protection from ill-treatment, which has been defined to include preventing a Badger accessing its sett, as well as causing the loss of significant foraging resources within a Badger territory. Badgers are also protected through this species' inclusion on Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), which prohibits their killing or taking by certain methods.

All areas within the site were surveyed for Badgers, including adjacent boundaries, and no setts or other evidence was recorded.

Eighteen records of this species were returned during the desk study, the closest of which was approximately 0.2km from the site.

Taking into account the nature of adjoining habitats, the occasional presence of foraging Badgers within the site was considered possible.

3.2.1.3. Other Section 41 Mammals

In England many of the rarest and most threatened species are included within Section 41 of the 2006 Natural Environment and Rural Communities Act. Although these species are afforded no additional legal protection, their rarity renders them an important consideration for planning applications. Section 40(1) of this Act imposes a duty to conserve biodiversity; '*Every public authority must, in exercising its function, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'*. Section 40(3) of the Act explains that '*Conserving biodiversity includes, in relation to living organism or type of habitat, restoring or enhancing a population or habitat'*.

No evidence of any Section 41 mammal was encountered during the site survey. The site could support occasional foraging Hedgehogs *Erinaceous europaeus*, although it is considered sub-optimal for any other Section 41 mammal species.

The desk study returned four records of Brown Hare *Lepus europaeus* (most recently in 2016), fourteen records of Red Squirrel *Sciurus vulgaris* (most recently

in 2009), four records of Otter *Lutra lutra* (most recently in 2016) and three records of Hedgehog (most recently in 2006).

No further works in relation to other Section 41 mammals are considered necessary.

3.2.1.4. Amphibians

A number of amphibian species are legally protected under Section 9 of the Wildlife and Countryside Act 1981, as listed under Schedule 5. Great Crested Newts (GCN) *Triturus cristatus* and Natterjack Toads *Epidalea calamita* are also afforded additional protection as EPS, as defined under the EC Habitats and Species Directive 92/43/EEC.

A single large garden pond was shown as present on Ordnance Survey mapping within 0.25km of the site (considered to be the typical terrestrial ranging distance from a breeding pond for the majority of a population of GCN[6]). No access was possible to this pond, but aerial imagery indicated that it was no longer present.

The desk study returned 25 records of GCN, most recently in 1999 and all in excess of 0.9km from site from within Drigg Dunes.

The desk study returned 257 records Natterjack Toads (most recently in 2018), from the coast to the west. No suitable habitat for this species is present within the site.

Potential refugia (stones, etc) within the site were searched during the site survey; no amphibians were encountered.

In addition to the above detailed amphibian records, the desk study also returned records of Common Toad *Bufo bufo* (41, most recently in 2016).

No further work in relation to amphibians is considered necessary, and amphibians are not considered further within this report.

6 English Nature (2001). *Great Crested Newt Mitigation Guidelines*

3.2.1.5. Reptiles

Reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981. Section 9(1) of the Wildlife and Countryside Act 1981 prohibits the killing, injuring or taking by any method. All native reptiles are also S41 priority species.

Habitats favoured by reptiles tend to be sunny, well-drained and often south-facing. Typical habitats include grass and heather heathland, chalk downland, coppiced woodland, sand dunes, disused allotments, suburban wasteland, road/railway embankments, golf course roughs, rough grassland, open woodland and woodland edge, immature plantation forestry, sea cliffs, moorland, disused quarries, non-intensive farmland and wild gardens. In addition, Grass Snakes *Natrix natrix* favour damp habitats[7].

None of the habitats within the site were considered suitable for reptiles.

The desk study returned two records of Slow-worm *Anguis fragilis* (most recently in 1992), Common Lizard *Zootoca vivipara* (12 record, most recently in 2017), and Adder *Vipera berus* (17 records, most recently in 2013). The vast majority of records were from the coast to the west.

No further work in relation to reptiles is considered necessary, and reptiles are not considered further within this report.

3.2.1.6. Birds

All wild birds (defined as species which are resident or are visitors to the United Kingdom (UK), but generally not game birds) are protected by the Wildlife and Countryside Act 1981 (as amended). As far as planning and development is concerned, it is an offence to kill, injure or take any wild bird. Some species, listed in Schedule 1 of the Act, are protected by special provisions because of their rarity and it would constitute an offence to disturb them while nesting (which includes nest building). It is also an offence to disturb dependent young of a Schedule 1 bird.

During the survey the following common bird species were recorded within/overflying the site; House Sparrow *Passer domesticus,* Chaffinch *Fringilla*

7 Froglife (1999). *Froglife Advice Sheet 10; Reptile Survey. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*

coelebs, Blackbird *Turdus merula*, and Woodpigeon *Columba palumbus*. Evidence of nesting House Sparrows was present and it is considered likely that Swallows *Hirundo rustica* and other common species (e.g. Jackdaw *Corvus monedula*) nest within on-site buildings and the lone tree.

To evaluate the potential presence of Barn Owl *Tyto alba* internal inspection of the Dutch Barn and Stone Barn was completed; no evidence of usage was present and the site occupants have not encountered this species within on-site buildings. No access to the remaining on-site buildings was possible. It is considered highly unlikely that this species nests on site.

The desk study returned 3,465 records of 128 bird species.

3.2.1.7. Invertebrates

A number of invertebrate species are afforded legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). These species are protected from intentional killing, injuring or taking, possession or control, intentional damage/destruction of any structure or place used for shelter or protection, intentional disturbance while occupying such a structure/place, selling or offering for sale or buying. Numerous species are also included on S41 of the NERC Act.

The desk study returned 378 records of 92 invertebrate species.

Taking into account the nature of the habitats on-site it is considered highly unlikely that significant populations/species of invertebrates are present and no further works relating to invertebrates are recommended.

3.2.1.8. Invasive Plants

No invasive non-native plants (listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended)) were identified within the site.

The desk study returned records of Monbrettia *Crocosmia pottsii x aurea* = C. *x crocosmiiflora* (one record, 2018), Japanese Knotweed *Fallopia japonica* (11 records, most recently in 2018), Indian Balsam *Impatiens glandulifera* (eight records, most recently in 2014), Rhododendron *Rhododendron ponticum* (one record, 2018) and Japanese Rose *Rosa rugosa* (one record, 2018).

4. Conclusions and Recommendations

4.1. Designated Sites

There are five statutorily designated sites and six non-statutorily designated sites within 2km of the site. Considering the nature of the proposed works, no effects to designated sites are predicted, assuming all works strictly follow pollution prevention best practice.

4.2. Habitats

None of the habitats identified on-site were considered to be of significant ecological value and are not considered to represent a constraint to the proposed works.

Retained trees on/near site should be protected in line with BS 5837:2012[8]. Where vegetation clearance is required, vegetation should be reinstated on at least a like-for-like basis. Standard pollution control measures should be implemented during construction to protect all habitats.

All works should be undertaken in accordance with *Guidance for Pollution Prevention (GPP5) and PPG1 Understanding your Environmental Responsibilities*.

4.3. Bats

The PRA survey concluded that the House and Stone Barn were of high suitability for roosting bats while the Outbuilding, Piggery and the sole tree were of moderate suitability. Three nocturnal presence/absence (dusk 'emergence' and dawn 'return to roost') surveys of the high are required to evaluate if bats are entering/exiting the buildings at dawn/dusk, in addition to identifying bat species and numbers/type of roosts (if present). A minimum of two nocturnal surveys of the moderate suitability buildings are required. Detailed inspection (via tree climbing) of the moderate suitability tree, potentially followed by nocturnal surveys are required. No further survey work is necessary in relation to the Sheep Shed or Dutch Barn are required.

8 British Standards Institute BS 5837:2012. Trees in relation to design, demolition and construction.

All bat survey methods employed should be in line with the latest Bat Conservation Trust (BCT) survey guidance[9]. The optimal time for emergence/re-entry surveys is between May and August (inclusive).

If, following these further bat surveys, the proposed works are determined to likely cause destruction/disturbance to any bat roosts then a EPS licence will need to be sought from Natural England to enable the re-development works to proceed legally. This licence would need to detail how the works would avoid any harm to bats in addition to providing appropriate compensatory roosting sites.

4.4. Badgers

No Badger setts were present within the site or adjacent accessible areas. Nevertheless, the occasional presence of foraging Badgers is considered possible; it would therefore be prudent to consider Badgers during renovation works, this may include (if relevant):

- covering trenches at the conclusion of each working day, or include a means of escape for any animal falling into excavations, and
- any temporarily exposed open pipe system should be capped in such a way as to prevent Badgers gaining access.

4.5. Breeding Birds

If possible, any vegetation clearance/building works should be completed outside the bird nesting season (1 March to 31 August), although it should be noted that the nesting period may extend beyond these dates (for example, pigeons can breed in any month of the year in the UK). Should an occupied bird nest or a nest in the process of being constructed be encountered during works, clearance must cease in this area and should only re-commence once the birds have fledged or the nest is abandoned.

If works must be undertaken during the nesting season, a survey to identify any nests which may be impacted will be required. This survey should be undertaken by a Suitably Qualified Ecologist (SQE). Again, should an occupied nest or nest

9 Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn.). The Bat Conservation Trust, London

under construction be found, works must cease in this area until the birds have fledged or the nest has been abandoned.

4.6. Other Species and General Mitigation

No further works in relation to other species are considered necessary at this time.

If any protected species are encountered during the works, all works in the vicinity should stop immediately and a SQE contacted for advice on how to proceed.

4.7. Opportunities for Enhancement

The National Planning Policy Framework (NPPF) sets out national planning policies for the protection of biodiversity (and geological) conservation through the planning system. A key principle of NPPF is that, '*Opportunities to incorporate biodiversity in and around developments should be encouraged*'. Taking the requirements of NPPF into account, opportunities should be sought where possible for nature conservation enhancement at this site, potentially including:

- The creation of habitat areas through landscape planting using native, locally sourced plants/trees.
- The planting of native fruiting species to provide a food source for invertebrates, birds and mammals.
- The installation of bird and bat boxes on retained tree/s. S41 priority species such as the House Sparrow (which were noted in the area) and Barn Owl could potentially benefit from the provision of appropriate boxes.
- Pond creation.

Such measures would be beneficial to nature conservation and show compliance with the latest policy guidance. It would be prudent to include details of enhancements within an Ecological Enhancement Plan.

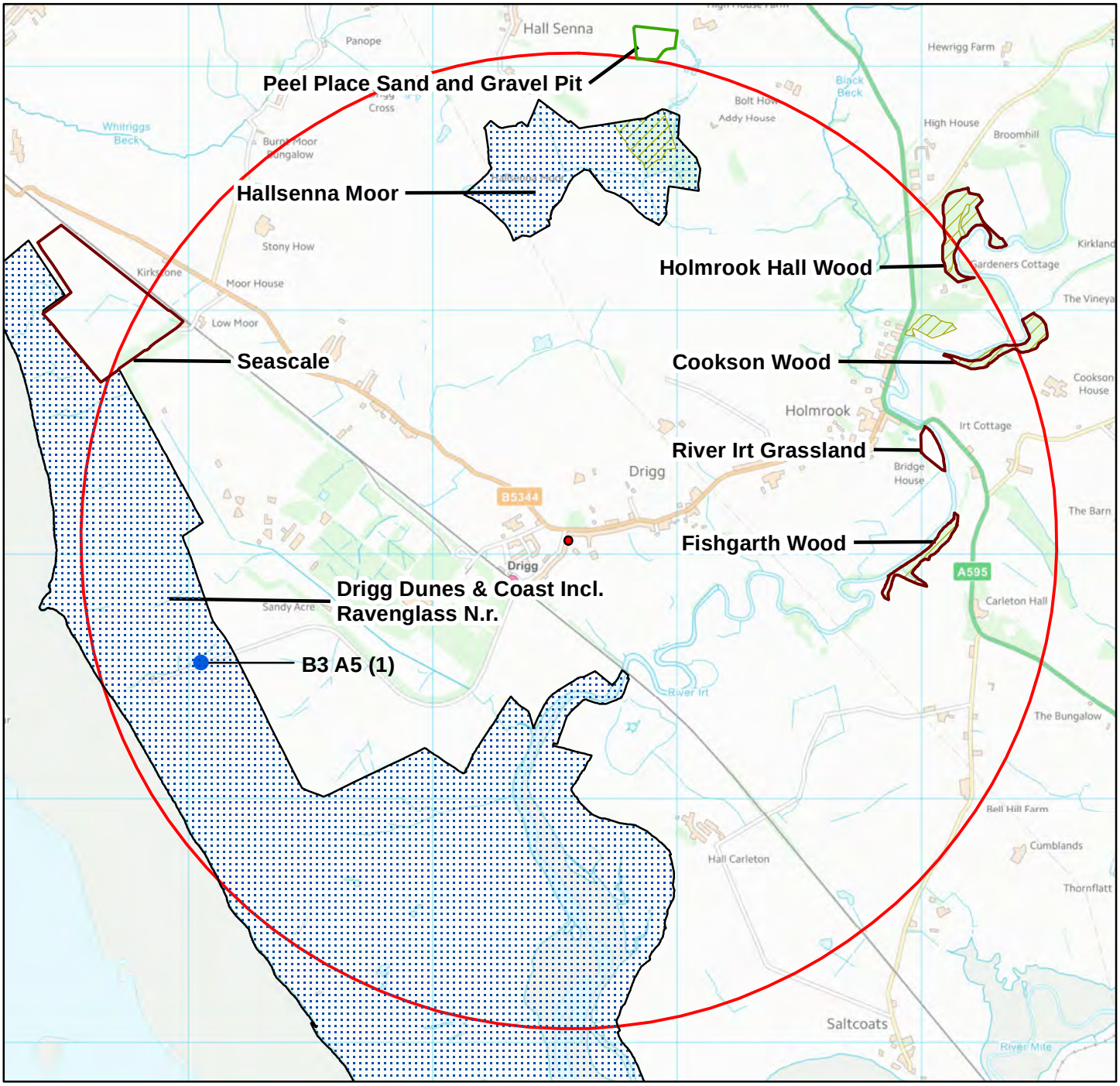
Appendix A Desk Study Data

Cumbria Biodiversity Data Centre (CBDC): Non-Statutory Sites Search

For: Martyn Owen at BiOME Consulting

Centroid: SD 06556 99055
Site Name: New House Farm
Buffer: 2km
Search Date: 09/05/2021

N.B. Sites are displayed only if they exist within the search area



Key

- County Wildlife Sites
- Local Geological Sites
- Site of Invertebrate Significance
- Special Roadside Verges
- Ancient Woodland

0 250 500 1,000 m

N

Any queries in the first instance contact:
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Cumbria Biodiversity Data Centre (CBDC)

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E. dataofficer@cbdc.org.uk