Land at Cleator Moor Activity Centre, Wyndham Street, Cleator Moor, Whitehaven CA25 5AN

ECOLOGICAL SURVEY AND ASSESSMENT (Including a Licensed Bat Survey)

November 2023

ERAP (Consultant Ecologists) Ltd Reference: 2023-043

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Survey Type:	**Surveyors[1]**	**Survey Date(s)**
Phase 1 Habitat and Daylight Bat Survey	Brian Robinson B.Sc. (Hons) MCIEEM	7th June 2023
Dusk Emergence Survey Repetition 1	Tracy Cumberbatch and Brian Robinson	11th July 2023
Dusk Emergence Survey Repetition 2	Amy Sharples and Tracy Cumberbatch	10th August 2023
Dusk Emergence Survey Repetition 3	Amy Sharples and Tracy Cumberbatch	7th September 2023
Reporting	**Personnel**	**Date**
Author	Brian Robinson B.Sc. (Hons) MCIEEM Senior Ecologist	**Version 1:** 19th June 2023 **Version 2:** 1st November 2023
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[1] *Licence reference number*
Bats
Brian Robinson Natural England Class Survey Licence (bats, Level 2) Registration Number 2015-13161-CLS-CLS

SUMMARY

Introduction and Scope

i. This ecological survey and assessment presents the ecological, biodiversity and nature conservation status of the land at Cleator Moor Activity Centre. The assessment was requested in connection with proposals to demolish an outbuilding, extend the main leisure centre building, increase the associated car parking within the site and create a running path within the site boundary.

ii. This report presents the results of a desktop study, data search, extended Phase 1 Habitat Survey and a licensed bat survey carried out in June 2023. Further surveys were completed at the outbuilding (Building 2) to classify the type of bat roost present; the scope of survey undertaken is appropriate to identify potential ecological constraints, the remit of mitigation required and opportunities for biodiversity associated with the development proposals.

iii. The area at which the leisure centre extension is proposed comprises two buildings with associated hard standing, areas with colonising ruderal herbs, amenity grassland and ornamental shrubs, an area of seeded wildflower grassland, tall herb and Bramble scrub, neutral grassland located around the leisure centre building (Building 1) and an area of mixed plantation woodland.

iv. The area at which the running path is proposed supports an area of mixed plantation woodland, tall, infrequently managed neutral grassland, vegetation colonising bare ground and frequently trampled soils and an area of scrub.

v. Habitats within the remainder of the site which will be unaffected by the proposals comprise an area of scrub, an area of neutral grassland at the western end of the site, an area of marshy grassland at the northern end of the site and areas of hard standing and the all-weather pitch.

Results of Survey and Assessment

vi. The proposals will have no adverse direct or indirect effect on statutory or non-statutory designated sites for nature conservation.

vii. Only common and widespread plant species were found. The NVC communities present are typical of the geographical area and conditions present. The grasslands are moderately diverse in their plant species composition and provide a diversity of grassland habitat within the site, however it is not considered that they are representative of a Priority Habitat, and the habitats (either alone or in combination) do not meet the County Wildlife Site criteria presented in *Guidelines for Selection of County Wildlife Sites in Cumbria* (Cumbria Wildlife Trust, 2008).

viii. In terms of each habitat's importance in a geographical context, the grassland habitats (excluding the amenity grassland and area of seeded wildflower grassland) are considered to be of 'local' importance as they support a moderate diversity of plant species and grassland types across the site area, and will contribute as wildlife links across the wider area. The areas of scrub, plantation woodland and seeded wildflower grassland are of 'site' value only as the increase the diversity of habitats within the site itself but are not considered to contribute meaningfully to the nature conservation value of the wider area. The areas of amenity grassland, buildings and hard standing and trampled ground with colonising ruderal herbs are not considered to hold any importance on a geographical scale.

ix. In accordance with the proposals plan the development will be chiefly situated over the habitats of least value (i.e. the hard standing, amenity grassland, and areas of trampled earth with colonising ruderal herbs) with only small areas of plantation woodland affected. The proposed running path will chiefly be located on trampled areas and desire lines. It is considered that the proposals seek to retain the majority of habitats identified as being of most ecological value within the site, and are concentrated on those habitats of least value. Further recommendations in relation to the site layout are presented at **Section 5.3**.

x. Measures to ensure the proposals reduce potential impacts to retained habitats during the construction phase of the proposed development are also presented at **Section 5.3**. Creation of a site-wide landscape management plan to enhance the ecological value of the retained habitats will compensate for the minor losses of habitat associated with the proposals and is recommended at **Section 5.5**.

xi. Japanese Knotweed, an invasive species listed under Schedule 9 of the *Wildlife and Countryside Act* 1981 (as amended), has been detected within the site. It is considered that the proposals present an opportunity for the eradication of this species as part of the proposed development. Further guidance is presented at **Section 5.4**.

xii. The habitats are suitable for use by foraging and commuting bats; measure to ensure that habitats remain suitable for foraging and commuting bats are presented at **Section 5.3**. A day roost of common pipistrelle (as confirmed by DNA analysis) has been detected at Building 2; no emergence by bats was detected by the further surveys completed at the building in 2023. It is confirmed that the surveys were completed in the maternity season, and it is considered that the assessment of the roost completed by the daylight inspection is appropriate and accurate for the roost. A method statement for the protection of bats is appended at **Section 9.0**.

xiii. Habitats are suitable for use by nesting birds; measures for the protection of nesting birds during the construction phase of the proposed development are presented at **Section 5.3**.

xiv. The proposals have the potential to harm other wildlife (including reptile species, if present) if conducted in an inappropriate manner. It is considered that risks to reptile species are minimal and there is no requirement for further surveys at the site, provided the Reasonable Avoidance Measures (RAMs) for the protection of wildlife during the construction phase presented at **Section 5.3** are adhered to.

xv. No other protected species have been detected.

Recommendations

xvi. The recommendations in **Section 5.0** outline all the mandatory measures and additional actions to be applied to ensure compliance with wildlife legislation, the National Planning Policy Framework (NPPF) and best practice.

xvii. The proposals will secure an opportunity to implement beneficial measures such as habitat management and habitat creation that will safeguard habitats for wildlife such as birds and bats, with the aim of providing a net gain in biodiversity in accordance with the principles of the NPPF.

Conclusion

xviii. This ecological assessment has demonstrated that the proposed development at the site is feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework.

xix. It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as roosting bats, nesting birds and commuting / foraging bats associated with the site.

xx. Development at the site will provide an opportunity to secure ecological enhancement for fauna associated with the local area such as breeding birds and roosting bats.

1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned by Allied Leisure Services to carry out an ecological assessment of land at Cleator Moor Activity Centre, Wyndham Street, Cleator Moor, Whitehaven CA25 5AN (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is NY 02166 15134. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).

1.1.2 The assessment was requested in connection with a planning application to demolish an outbuilding, extend the main leisure centre building, increase the associated car parking within the site and create a running path within the site boundary.

1.2 Scope of Works

1.2.1 The scope of ecological works undertaken in June 2023 comprised:

a. A desktop study and data search for known ecological information at the site and the local area;

b. An Extended Phase 1 Habitat Survey and assessment;

c. Assessment of the ecological value of the habitats within the site with the use of the National Vegetation Classification (NVC) and the Ratcliffe criteria, as presented in *A Nature Conservation Review* (Ratcliffe, 1977);

d. Survey and assessment of all habitats for relevant statutorily protected species[1] and other wildlife including badger (*Meles meles*), barn owl (*Tyto alba*), bird species, great crested newt (*Triturus cristatus*) and reptiles;

e. A licensed daylight bat survey of the buildings and trees;

f. The identification of any potential ecological constraints on the proposals and the specification of the scope of mitigation and ecological enhancement required in accordance with wildlife legislation, planning policy guidance and other relevant guidance; and

g. The identification of any further surveys or precautionary actions that may be required to inform the progression of the site through the planning process or prior to the commencement of any construction activities.

1.2.2 Additional dusk emergence surveys were completed at Building 2 to classify the roost detected during the daylight inspection between July and September 2023.

[1] In accordance with *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact on the Planning System* (Ministry of Housing, Communities & Local Government, 2005) developers should not be required to undertake surveys for protected species unless there is reasonable likelihood of the species being present and affected by the development. In this instance (for example) there are no water bodies or water courses within or adjacent to the site; there has been no requirement to consider water vole (*Arvicola amphibius*) or otter (*Lutra lutra*) as part of this assessment.

2.0 METHOD OF SURVEY

2.1 Desktop Study and Data Search

2.1.1 The following sources of information and ecological records were consulted:

a. MAGiC Maps: A web-based interactive map which brings together geographic information on key environmental schemes and designations, including details of statutory nature conservation sites;

b. Cumbria Biodiversity Data Centre (CBDC); and

c. Cumbria Biodiversity Action Plan (BAP).

2.2 Vegetation and Habitats

2.2.1 An Extended Phase 1 Habitat Survey of the site was carried out by Brian Robinson on 7th June 2023. The weather was dry and sunny intervals, with a light air (Beaufort scale 1) and an air temperature of 20°C.

2.2.2 A habitat and vegetation map was produced for the site and the immediate surrounding area at a scale of 1:1,500 and is appended at **Figure 2**. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC, 2010) with minor adjustments to illustrate and examine the habitats with greater precision.

2.2.3 On site habitat mapping was assisted via use of GPS technology, using *Cleator Moor Activity Centre: Existing Site Plan E1001 Revision P02* (Roberts Limbrick, 2023) and ESRI World Imagery as base plans.

2.2.4 The plant species within the site boundary were determined with estimates of the distribution, ground cover, abundance and constancy of individual species. The estimation of abundance was based on the DAFOR system, where D = Dominant, A = Abundant, F = Frequent, O = Occasional and R = Rare, this being a widely used and accepted system employed by ecological surveyors. The terms L = Locally and V = Very were additionally used to describe the plant species distributions with greater precision.

2.2.5 Stands of vegetation and habitats were described and evaluated using the National Vegetation Classification (NVC). The NVC provides a systematic and comprehensive analysis of British vegetation and is a reliable framework for nature conservation and land-use planning.

2.2.6 Habitats within the site were assessed in accordance with the UK Habitats Classification / UKHab (Butcher, et al., 2020). The UKHab has been designed to function at two scales: fine scale (25m^2 or 5 metres length) and large scale (400m^2 or 20 metres length). It has been considered for the purposes of this survey that the fine scale of 25m^2 or 5 metres length is appropriate.

2.2.7 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the *Wildlife and Countryside Act 1981* (as amended) and species which are indicators of important and uncommon plant communities. Plant nomenclature follows *New Flora of the British Isles 3rd Edition* (Stace, 2010).

2.2.8 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended), including Japanese Knotweed (*Fallopia japonica*), Indian Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*).

2.3 Animal Life

Badger

2.3.1 The survey area for badger covered the site (as annotated on **Figure 2**) and extended to accessible land within a radius of 50 metres from the site boundary. Private gardens / land were excluded from the survey.

2.3.2 The survey was conducted in accordance with guidance presented within *Badgers and Development* (Natural England, 2007) and *Badgers: advice for making planning decisions* (Natural England, 2022).

2.3.3 The following signs of badger activity were searched for:

a. Sett entrances, e.g. entrances that are normally 25 to 35cm in diameter and shaped like a 'D' on its side;

b. Large spoil heaps outside sett entrances;

c. Bedding outside sett entrances;

d. Badger footprints;

e. Badger paths;

f. Latrines;

g. Badger hairs on fences or bushes;

h. Scratching posts; and

i. Signs of digging for food.

2.3.4 Habitats within and surrounding the site were assessed in terms of their suitability for use by foraging and sheltering badger in accordance with their known habitat preferences as detailed in current guidance and *Badger* (Roper, 2010).

Bat Species

Daylight Survey

Survey Personnel

2.3.5 The site was assessed for its suitability to support roosting bats by Brian Robinson, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-13161-CLS-CLS. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Buildings

2.3.6 The surveys were carried out in accordance with standard methodology including the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), the *Bat Workers' Manual 3rd Edition* (Mitchell-Jones & Mcleish, 2004) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* (Collins, J. (ed), 2016).

2.3.7 An inspection of the external surfaces, walls and roofs of the buildings was carried out to find potential bat roosting habitat or accesses into internal areas where roosts may be present. Searches for evidence of bat presence in the form of droppings, urine stains, feeding signs, grease marks and other evidence were also carried out.

2.3.8 The internal survey involved an examination of the accessible internal areas (including roof voids) to find roosting bats or evidence of past use of the buildings by bats such as droppings and prey remains.

2.3.9 A list of equipment used is detailed at **Table 2.1**.

Table 2.1: Survey Equipment used during Daylight Bat Survey

Ladders
LED Lenser P14 torch
Panasonic DMC- FT1 digital camera
8x20 binoculars
Ridgid Micro Inspection Camera Borescope CA-100

2.3.10 The suitability of each building has been assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn),* (Collins, J. (ed), 2016), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the building (including crevice dwelling species and species which can roost in the open in roof voids), and the suitability of the surrounding habitats for use by foraging and commuting bats.

Trees

2.3.11 A preliminary assessment of the trees within the site was conducted to assess their suitability for use by roosting bats, and to inform whether further surveys or precautionary measures were required.

2.3.12 Trees were assessed from the ground using binoculars and a high-powered torch. Each tree was searched for the presence of the following features:

Woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed platey bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy (Hedera helix) with stem diameters in excess of 50mm and bat, bird or dormouse (Muscardinus avellanarius) boxes.

2.3.13 Terms used to describe any features present follow (where possible) those outlined and described in *Bat Tree Habitat Key, 2nd Edition* (Andrews, H (ed), 2013) and *Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-care and Ecology Professionals* (BTHK, 2018).

Habitat Assessment for Commuting / Foraging Bats

2.3.14 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn),* (Collins, J. (ed), 2016). Reference has been made to the categories and descriptions / examples, presented at **Table 2.2**.

Table 2.2: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Commuting Habitat	Foraging Habitat
Negligible	Negligible habitat features on site likely to be used by commuting bats.	Negligible habitat features on site likely to be used by foraging bats.
Low	Habitat that could be used by small numbers of commuting bats 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 or patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.	Habitat that is linked to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape and is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Habitats close to and connected to known roosts.	High-quality habitat that is well-connected to the wider landscape and is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Habitats close to and connected to known roosts.

Presence / Absence Surveys: Dusk Emergence Surveys

2.3.15 Three dusk emergence surveys, supplemented by night vision aids (NVAs), were conducted at the building between July and September 2023. All surveys were conducted under suitable conditions.

2.3.16 The dusk emergence surveys commenced at least 15 minutes before sunset, and continued for at least 1.5 hours after sunset.

2.3.17 Surveyors, experienced in conducting bat surveys, were positioned at suitable locations to maximise the coverage of the building to determine any entry or emergence by roosting bats. Any bat emergence or re-entry activity was recorded, with brief notes relating to bat activity at each survey position collated at the end of the survey.

2.3.18 Anabat Scout bat detectors were used to determine any bat detected to species or group (*Myotis* species, for example, often cannot be reliably identified to species from their echolocation calls). Echolocation calls were analysed after the survey using Anabat Insight bat call analysis software.

2.3.19 Night vision aids (NVA)[2] , supplemented with additional infra-red lighting (comprising Nightfox XB5 torches and infra-red floodlights) were used at the surveyor positions described in **Table 2.3** and shown on **Figure 3**. Footage was subsequently reviewed using VLC Media Player to determine any emergence / re-entry at the building. Photographs showing both survey positions from the darkest point of the surveys are appended at **Photos 30** and **31**.

2.3.20 In accordance with *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys* (Bat Conservation Trust, May 2022)*:*

'The 4th edition of the survey guidelines will therefore transition away from the standard use of dawn surveys, particularly as a method for presence/absence surveys, in favour of dusk surveys supported by NVAs.'

2.3.21 NVAs were used at each survey position for each of the surveys completed. It has therefore been considered that no dawn re-entry survey (as could have been required in accordance with *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* (Collins, J. (ed), 2016)) is necessary to inform the survey results.

2.3.22 The dates of the surveys, surveyors, equipment used and weather conditions are presented at **Table 2.3**.

Table 2.3: Dusk Emergence Survey Dates, Weather Conditions and Surveyors

Date	**11th July 2023**	**10th August 2023**	**7th September 2023**
Sunset time:	21:46	20:58	19:52
Start & end time	21:20 until 23:15	20:40 until 22:30	19:35 until 21:22
Weather	Dry with a light breeze (Beaufort scale 2) and an air temperature of 13ºC	Dry with a light air (Beaufort scale 1) and an air temperature of 19ºC	Dry with a light air (Beaufort scale 1) and an air temperature of
Survey Position	**Surveyor, Detector and NVA**	**Surveyor, Detector and NVA**	**Surveyor, Detector and NVA**
1	Tracy Cumberbatch, Anabat Scout and Canon XA20	Amy Sharples, Anabat Scout and Canon XA60	Amy Sharples, Anabat Scout and Canon XA10
2	Brian Robinson, Anabat Scout and Canon XA20	Tracy Cumberbatch, Anabat Scout and Canon XA60	Tracy Cumberbatch, Anabat Scout and Canon XA40

Bird Species

2.3.23 Bird species observed and heard during the survey were recorded.

[2] Canon CA10, XA20, XA40 and XA60 camcorders.

2.3.24 Habitats throughout the site and in the immediate surrounding area were assessed for their value to roosting, feeding and nesting birds, as indicated by the amount of shelter, feeding value, woody vegetation structure and species diversity of tree and shrub species in the site.

2.3.25 During the internal inspection on 7th June 2023 both buildings were searched for pellets, faecal splashes and feathers which may indicate use by roosting or nesting barn owl in accordance with *The Barn Owl Conservation Handbook* (Barn Owl Trust, 2012) and *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment. Developing Best Practice in Survey and Reporting* (Shawyer, 2011).

Great Crested Newt

Desktop Search for Ponds

2.3.26 In accordance with *Great crested newts: advice for making planning decisions* (Natural England, 2022) all ponds within an unobstructed 500 metres of a site should be considered for their suitability to support breeding great crested newts. The potential of the proposed development to impact upon any great crested newt population(s) whose breeding ponds are within 500 metres must be considered.

2.3.27 The search of habitats in the wider area up to a distance of 500 metres from the site boundary revealed the presence of three ponds, as detailed in **Table 2.4**.

Table 2.4: Ponds within 500 metres of the Site

Pond Reference	OS Grid Reference	Distance from Site Boundary	Location (refer to Figure 1)
Pond 1	NY 02264 15419	165 metres to the north	SUDs pond associated with (and created for) the ongoing residential housing development to the east
Pond 2	NY 02407 15323	237 metres to the north-east	Field pond to the east
Pond 3	NY 02506 15252	279 metres to the east	Field pond to the east
Note: This table includes ponds which occur on OS maps but were found to be dry upon surveying, details of ponds are presented in **Section 3.0**.			

Consideration of Requirement for Further Survey

2.3.28 The requirement for further survey at each pond was then assessed using the following criteria:

a. Presence of dispersal barriers to great crested newt movements between ponds and the site, as detected during the walkover survey;

b. Distance of ponds from the site, and the potential influence of the proposed development of the site on any populations of great crested newt (if present at ponds), using the Natural England rapid risk assessment tool; and

c. Presence of other ponds which may form metapopulations and / or alter the influence of the site on ponds at greater distances.

Presence of Dispersal Barriers

2.3.29 There are no significant dispersal barriers between the ponds and the site.

Consideration of Distance of Ponds from Site and Relative Size of Site

2.3.30 To inform the requirement for further surveys, the Natural England Rapid Risk Assessment tool from *GCN Method Statement WML-A14-2 (Version April 2020* (Natural England, 2020) has been completed, as presented at **Table 2.5**.

2.3.31 The tool has been completed based on the distances of the ponds from the site, and the size of the proposed development (i.e. 0.81 hectares or 'ha') within the 4.25 hectares site. The rapid risk assessment tool assumes that great crested newt are present.

Table 2.5: Rapid Risk Assessment Result

Component	Likely Effect	Notional Offence Probability Score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.5 ha – 1 ha lost or damaged	0.3
Land >250m from any breeding pond(s)	0.5 ha – 1 ha lost or damaged	0.03
Individual great crested newts	No effect	0
	Maximum:	0.03
Rapid risk assessment result:	**AMBER: OFFENCE LIKELY**	

2.3.32 Likely impacts to great crested newt as a consequence of the proposed development are considered further at **Section 3.3**.

Reptile Species

2.3.33 The site and its surroundings were assessed in terms of their suitability for use by reptile species using the important characteristics for reptiles outlined in the draft document '*Reptile Mitigation Guidelines*' (Natural England, 2011), and the *Reptile Habitat Management Handbook* (Edgar, et al., 2010). These habitat characteristics are outlined in **Table 2.6**.

Table 2.6: Important Habitat Characteristics for Reptiles

1. Location (in relation to species range)	7. Connectivity to nearby good quality habitat
2. Vegetation Structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Other Wildlife

2.3.34 Evidence of other wildlife (including Priority Species) observed whilst on site (but for which specific surveys were not made) was recorded and has been included in this report where it is considered of relevance to the planning application. Habitats have been assessed for their suitability for Priority Species identified in the data search results where this is considered relevant to the application.

2.4 Survey and Reporting Limitations

2.4.1 The surveys were completed under suitable conditions and at a suitable time of year. No significant survey limitations were experienced.

2.4.2 All measurements within this report are approximate only, and have been either measured or estimated whilst on site or calculated using mapping software (QGIS) or internet-based mapping services such as MAGiC Maps and Google Earth.

2.5 Evaluation Methods

2.5.1 The habitats, vegetation and animal life were evaluated with reference to standard nature conservation criteria as described in *A Nature Conservation Review* (Ratcliffe, 1977) and *Guidelines for the Selection of Biological SSSIs* (Bainbridge, et al., 2013). These are size (extent), diversity, naturalness, rarity, fragility,

typicality, recorded history, position in an ecological or geographical unit, potential value and intrinsic appeal.

2.5.2 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities* (NERC) *Act 2006*. Where suitable, the ecological value of the habitats present has been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).

2.5.3 Government advice on wildlife, as set out in the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government, 2021) and associated government circulars has been taken into consideration. Legislation relating to protected species, such as those listed under Schedules 1, 5, 6 and 8 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.

2.5.4 The presence of any Priority Species, as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006* is noted, and habitats are assessed in terms of their suitability and value for these species. The presence of habitats and / or species listed by the Cumbria Biodiversity Action Plan has been taken into account in the evaluation of the site.

3.0 SURVEY RESULTS

3.1 Desktop Study and Data Search

Statutory Designated Sites for Nature Conservation and SSSI Impact Risk Zones

3.1.1 The site is not and does not form part of any statutory designated site for nature conservation.

3.1.2 The site lies within two Site of Special Scientific Interest (SSSI) Impact Risk Zones[3] for the overlapping River Ehen (Ennerdale Water to Keekle Confluence) SSSI and River Ehen Special Area of Conservation (SAC). These sites are located 0.8 kilometres to the south-east of the site and are designated for their population of freshwater pearl mussel (*Margaritifera margaritifera*) and Atlantic salmon (*Salmo salar*).

3.1.3 The SSSI Impact Risk Zone requires the Local Planning Authority to consult with Natural England on likely risks from the following development categories (Ordnance Survey, 2023):

a. Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

b. Planning applications for quarries, including: new proposals, Review of Minerals Permissions, extensions, variations to conditions etc. Oil and gas exploration / extraction.

c. Large non-residential developments outside existing settlements / urban areas where the net additional gross internal floorspace is greater than 1,000m² or the footprint exceeds 0.2 hectares.

d. Residential development of 100 units or more.

e. Any residential development of 50 or more houses outside existing settlements / urban areas.

f. Any industrial / agricultural development that could cause air pollution (includes industrial processes, livestock and poultry units with a floorspace greater than 500m², slurry lagoons and digestate stores greater than 200m² and manure stores greater than 250 tonnes).

[3] The development categories for the SSSI Impact Risk Zone closest to the SSSI have been provided.

g. General combustion processes greater than 20 megawatts energy input. Includes energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis / gasification, anaerobic digestion, sewage treatment works and other incineration / combustion.

h. Landfill, including inert landfill, non-hazardous landfill and hazardous landfill.

i. Any composting proposal with more than 500 tonnes maximum annual operational throughput. Includes open windrow composting, in-vessel composting, anaerobic digestion and other waste management.

j. Any discharge of water or liquid waste of more than 2m³ per day to ground (i.e. to seep away) or to surface water, such as a beck or stream.

k. Large infrastructure such as warehousing / industry where the net additional gross internal floorspace is greater than 1,000m², or any development needing its own water supply

3.1.4 The proposals do not match any of the development categories which would require further consultation in respect of likely risks from the proposed development to the statutory designated sites for nature conservation present in the wider area.

Non-statutory Designated Sites for Nature Conservation

3.1.5 The site is not and does not form part of any non-statutory designated site for nature conservation.

3.1.6 Five non-statutory designated sites for nature conservation are located within a 2 kilometres radius from the centre of the site, and are summarised at **Table 3.1**.

Table 3.1: Non-statutory Designated Sites for Nature Conservation Within a 2 Kilometres Radius from the Centre of the Site

Site Name	Distance and Direction from the Site
Birkhouse Pond County Wildlife Site	0.45 kilometres to the east.
Rheda South Park County Wildlife Site	0.83 Kilometres to the north.
Parkside Pond County Wildlife Site	0.91 kilometres to the east.
Frizington Park Quarry Local Geological Site	1.81 kilometres to the east
Keekle River Site of Invertebrate Significance	1.92 Kilometres to the north-west.

3.1.7 The presence of the non-statutory designated sites for nature conservation is considered further at **Section 4.2**.

Priority Habitats Inventory and Soilscape Information

3.1.8 The Priority Habitats Inventory[4] was checked via MAGiC Maps. No Priority Habitats are identified at the site by the inventory.

3.1.9 In accordance with *Soilscape (England)* as presented on MAGiC Maps (National Soil Resources Institute, 2005), the site supports '*slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils*', and the characteristic semi-natural habitats associated with the soils comprise '*lowland seasonally wet pastures and woodlands*'.

Protected and Notable Species

3.1.10 CBDC hold no records of protected and notable species for the site.

3.1.11 Records of protected and notable species for a 2 kilometres radius from the centre of the site are summarised at **Table 3.2**. Note that a distance calculation has not been provided for records with a central grid reference of less than 6 figures (e.g. to 100 metres) accuracy.

[4] A spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

Table 3.2: Records of Protected Species Within a 2 Kilometre Radius from the Centre of the Site

Taxon Group	Species Name and Designations[1] and Notes
Amphibians	Great crested newt (*Triturus cristatus*): EPS, WCAs5, PS & LBAP. 1 record from 1988.
	Common toad (*Bufo bufo*): WCAs5 (sale only), PS & LBAP. 7 records, dated between 1988 and 2017. The closest record is 700 metres to the east and from 1992.
	Common frog (*Rana temporaria*): WCAs5 (sale only). 5 records, dated between 1988 and 2011. The closest record is 1340 metres to the south-west and from 1998.
	Palmate newt (*Lissotriton helveticus*): WCAs5 (sale only). 1 record from 2011, located 1835 metres to the west.
	Smooth newt (*Lissotriton vulgaris*): WCAs5 (sale only). 2 records, dated 2005 and 2011. The closest record is 1140 metres to the west, and from 2005.
Birds – WCAs1 Species	Sensitive species t: WCAs1 & LBAP. 7 records, dated between 1999 and 2010. The closest record is 2200 metres to the west and from 2007.
	Crossbill (*Loxia curvirostra*): WCAs1. 3 records, dated between 2008 and 2010.
	Greylag goose (*Anser anser*): WCAs1. 9 records, dated between 1999 and 2010.
	Kingfisher (*Alcedo atthis*): WCAs1. 2 records, dated 2000 and 2009.
	Redwing (*Turdus iliacus*): WCAs1. 5 records, dated between 2007 and 2010. The closest record is 1685 metres to the south-west and from 2007.
	Whooper swan (*Cygnus cygnus*): WCAs1. 1 record from 2011.
	Sensitive species d: WCAs1. 5 records, dated between 2007 and 2009.
	Sensitive species n: WCAs1. 2 records, dated 1998 and 2009.
	Sensitive species w: WCAs1. 17 records, dated between 2007 and 2009. The closest record is 2330 metres to the south-west and from 2007.
	Sensitive species y: WCAs1. 2 records, dated 2007 and 2011.
Birds – PS and LBAP Species	**PS & LBAP:** Lapwing (*Vanellus vanellus*), curlew (*Numenius arquata*), cuckoo (*Cuculus canorus*), grey partridge (*Perdix perdix*), skylark (*Alauda arvensis*), yellowhammer (*Emberiza citrinella*), reed bunting (*Emberiza schoeniclus*), lesser redpoll (*Acanthis cabaret*), bullfinch (*Pyrrhula pyrrhula*), grasshopper warbler (*Locustella naevia*), tree pipit (*Anthus trivialis*), spotted flycatcher (*Muscicapa striata*), house sparrow (*Passer domesticus*), tree sparrow (*Passer montanus*), wood warbler (*Phylloscopus sibilatrix*), dunnock (*Prunella modularis*), starling (*Sturnus vulgaris*), song thrush (*Turdus philomelos*) and linnet (*Linaria cannabina*).
Bony Fish (*Actinopterygii*)	Atlantic salmon (*Salmo salar*): PS & LBAP. 7 records, dated between 1997 and 2004. The closest record is 1025 metres to the south-east and from 1997.
Insects - Butterflies	**PS & LBAP:** Dingy skipper (*Erynnis tages*), small heath (*Coenonympha pamphilus*), wall (*Lasiommata megera*) and grayling (*Hipparchia semele*).
Insects - Moths	**PS & LBAP:** Latticed heath (*Chiasmia clathrata*), small phoenix (*Ecliptopera silaceata*), dark-barred twin-spot carpet (*Xanthorhoe ferrugata*), garden tiger (*Arctia caja*), cinnabar (*Tyria jacobaeae*), dot moth (*Melanchra persicariae*), small square-spot (*Diarsia rubi*) and rosy rustic (*Hydraecia micacea*).
Terrestrial Mammals	Eurasian otter (*Lutra lutra*): EPS, WCAs5, PS & LBAP. 20 records, dated between 2002 and 2020. The closest record is 1020 metres to the south-east and from 2005.
	Noctule bat (*Nyctalus noctula*): EPS, WCAs5, PS & LBAP. 1 record from 2011, located 1565 metres to the north.
	Soprano pipistrelle (*Pipistrellus pygmaeus*): EPS, WCAs5, PS & LBAP. 3 records, dated between 2009 and 2018. The closest record is 1145 metres to the east and from 2018.
	Bat species (Order *Chiroptera*): EPS, WCAs5 & LBAP. 1 record from 2005, located 520 metres to the south.
	Common pipistrelle (*Pipistrellus pipistrellus*): EPS, WCAs5 & LBAP. 8 records, dated between 2002 and 2018. The closest record is 230 metres to the south-east and from 2010.
	Daubenton's bat (*Myotis daubentonii*): EPS, WCAs5 & LBAP. 1 record from 1996, located 1735 metres to the south-west.
	Myotis species (*Myotis* sp.): EPS, WCAs5 & LBAP. 1 record from 2018, located 1145 metres to the east.
	Natterer's bat (*Myotis nattereri*): EPS, WCAs5 & LBAP. 2 records, both from 2017. The closest record is 1735 metres to the south-west.
	Pipistrelle bat species (*Pipistrellus* sp.): EPS, WCAs5 & LBAP. 3 records, dated between 1986 and 1993. The closest record is 205 metres to the south and from 1993.
	Whiskered bat (*Myotis mystacinus*): EPS, WCAs5 & LBAP. 2 records, both from 1991.

Taxon Group	Species Name and Designations[1] and Notes
	Eurasian red squirrel (*Sciurus vulgaris*): WCAs5, PS & LBAP. 105 records, dated between 2001 and 2019. The closest record is 335 metres to the west and from 2012.
	Brown hare (*Lepus europaeus*): PS & LBAP. 1 record from 2004.
	Polecat (*Mustela putorius*): PS & LBAP. 2 records, both from 2013.
	West European hedgehog (*Erinaceus europaeus*): PS & LBAP. 33 records, dated between 1997 and 2016. The closest record is 275 metres to the south-west and from 2016.
	Eurasian badger (*Meles meles*): PBA. 2 records, dated 2011 and 2018. The closest record is over 1 kilometre from the site and from 2011.
[1]Key to Designation Codes: EPS = European Protected Species under *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.* WCAs1 = Species receives full protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). WCAs5 = Species receives full protection under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). PBA = Protection of Badger Act 1992. PS = Priority Species listed under Section 41 of the NERC Act 2006. LBAP = Species listed on the Cumbria Biodiversity Action Plan	

3.1.12 The presence of these protected and notable species within the wider area has been taken into account throughout this report.

3.2 Vegetation and Habitats

General Description

3.2.1 The approximately 4.25 hectares site is located at the north-eastern edge of the town of Cleator Moor, within a wider landscape characterised by housing to the north, east, west and south and agricultural fields to the north-east.

3.2.2 Note that the majority of the site will be unaffected by the proposed development, which will seek to develop the areas of hard standing and buildings at the centre of the site, and create a running path around the site perimeter. The 0.81 hectares area at which works are proposed at the site is shown at **Figures 1** and **2**.

3.2.3 The north-eastern site boundary is defined by fencing, beyond which lies an ongoing residential construction site at its northern end and agricultural fields at its southern end. The south-eastern and southern end of the north-western site boundaries are defined by an area of plantation woodland and fencing, beyond which lie residential gardens. The south-western and north-western site boundaries are defined by fencing beyond which lies housing,

3.2.4 The vegetation located within the area at which the leisure centre extension with associated hard standing and car parking is proposed comprises the two buildings, hard standing (with areas of colonising ruderals herbs), amenity grassland with ornamental shrub planting, an area of neutral grassland indicative of wildflower grassland seeding, tall-herb and Bramble scrub, an area of infrequently mown grassland located around the leisure centre building and an area of the mixed plantation woodland located to the east of the leisure centre building.

3.2.5 The vegetation which covers the area at which the running path is proposed comprises an area of scrub, neutral grassland and vegetation colonising bare ground / frequently trampled soils.

3.2.6 The remainder of the site supports the remainder of the mixed plantation woodland located near the leisure centre building, the remainder of the mixed plantation woodland located at the southern end of the site, areas of scrub, unmanaged neutral grassland, marshy grassland, hard standing and an all-weather pitch.

3.2.7 A Phase 1 Habitat Survey map is appended at **Figure 2**, and can be referred to for all habitat descriptions. Photographs are appended at **Section 8.3**.

Habitats Located within the Area at Which the Leisure Centre Extension and Associated Hard Standing are Proposed

Buildings and Hard Standing

3.2.8 The leisure centre (Building 1) and outbuilding (Building 2) are described in terms of their suitability for use by roosting bats at **Section 3.3**. Neither building supports any significant assemblage of plants. The buildings are described by the UKHab as u1b5 buildings.

3.2.9 Refer to **Photos 1** and **2**. The hard standing is composed of compacted stone, asphalt, brick setts and concrete paving slabs. Vegetation colonising the hard standing is characterised by occasional Dandelion (*Taraxacum officinale* agg.), locally frequent Scentless Mayweed (*Tripleurospermum inodorum*), very locally frequent Annual Meadow-grass (*Poa annua*), Black Medick (*Medicago lupulina*), Broad-leaved Willowherb (*Epilobium montanum*), Common Chickweed (*Stellaria media*), Procumbent Pearlwort (*Sagina procumbens*) and Red Fescue (*Festuca rubra*). A plant species list is appended at **Table 8.1**.

3.2.10 The habitat is not typical of any NVC community and described by the UKHab as u1b6 other developed land with the secondary code 17 ruderal / ephemeral.

Amenity Grassland and Ornamental Shrubs

3.2.11 Refer to **Photo 2**. Areas of amenity grassland are located around the exterior of Buildings 1 and 2. The vegetation is characterised by constant and frequent Perennial Rye-grass (*Lolium perenne*), Crested Dog's-tail (*Cynosurus cristatus*), Red Fescue and Yorkshire-fog (*Holcus lanatus*), constant, frequent and locally abundant White Clover (*Trifolium repens*), frequent Smooth Meadow-grass (*Poa pratensis*), and occasional and locally frequent Annual Meadow-grass and Creeping Buttercup (*Ranunculus repens*). A plant species list is appended at **Table 8.2.**

3.2.12 The habitat is characteristic of an *MG7 Lolium perenne leys and related grasslands* (Rodwell, 1992) of the NVC and is described by the UKHab as g4 modified grassland with the secondary code(s) 64 mown and 75 active management.

3.2.13 Ornamental shrubs are located around the exterior of the building and within areas of the amenity grassland; the shrubs are characterised by willow species (*Salix* sp.) and Firethorn (*Pyracantha* sp.). The ornamental shrubs do not form any NVC community and are described by the UKHab as h3h mixed scrub with the secondary code 48 non-native.

Seeded Wildflower Grassland, Tall-herb and Bramble Scrub

3.2.14 Refer to **Photo 3**. An area supporting a mixture of neutral grassland, tall-herb vegetation and Bramble scrub is located to the north of Building 2. The vegetation is characterised by frequent False Oat-grass (*Arrhenatherum elatius*), Rough Meadow-grass (*Poa trivialis*) and Yorkshire-fog, occasional and locally abundant Red Clover (*Trifolium pratense*), Creeping Thistle, Greater Bird's-foot-trefoil (*Lotus pedunculatus*), occasional and locally frequent Common Knapweed (*Centaurea nigra*), Crested Dog's-tail, Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue and Ribwort Plantain (*Plantago lanceolata*), and locally abundant Ground-elder (*Aegopodium podagraria*) and Bramble (*Rubus fruticosus* agg.). A plant species list is appended at **Table 8.3**.

3.2.15 The habitat holds characteristics of the *W24 Rubus fruticosus agg. – Holcus lanatus underscrub* (Rodwell, 1991) at its northern end, and some characteristics of a *MG1 Arrhenatherum elatius grassland* (Rodwell, 1992) at its southern end, although it is considered that the grassland is present as a consequence of the area being seeded to a wildflower mixture.

3.2.16 The habitat is described by the UKHab as g3c other neutral grassland with the secondary codes 14 scattered rushes, 10 scattered scrub, 16 tall herb, 161 tall or tussocky sward, 76 recent management (i.e. within 3 years), 64 mown and 160 sward type mosaic.

Grassland around the Existing Leisure Centre Building

3.2.17 Refer to **Photo 4**. The grassland located around leisure centre building (which will be affected by the proposed development) is characterised by constant and frequent Red Fescue, Crested Dog's-tail, Yorkshire-fog and Rough Meadow-grass, occasional and locally frequent Goat Willow (*Salix caprea*), Ribwort Plantain and False Oat-grass and occasional and very locally frequent Compact Rush (*Juncus conglomeratus*) and Sweet Vernal-grass. Cock's-foot (*Dactylis glomerata*), Common Sedge (*Carex nigra*), Bramble, Common Mouse-ear (*Cerastium fontanum*), Dandelion, Grey Sedge (*Carex divisa*), Field Horsetail (*Equisetum arvense*), Northern Marsh-orchid (*Dactylorhiza purpurella*) and Soft-rush (*Juncus effusus*) are of occasional occurrence and Red Clover, Great Willowherb (*Epilobium hirsutum*) and Hairy Sedge (*Carex hirta*) are locally frequent. A plant species list is appended at **Table 8.4.**

3.2.18 The grassland is not typical of any NVC community but holds characteristics of an *MG6 Lolium perenne – Cynosurus cristatus grassland* (Rodwell, 1992) and is described by the UKHab as g3c other neutral grassland with the secondary codes 10 scattered scrub, 14 scattered rushes, 160 sward type mosaic, 76 recent management (i.e. within 3 years) and 64 mown.

Mixed Plantation Woodland to the North and East of Building 1

3.2.19 Refer to **Photo 5**. Only a small (80m^2) area of the 1035m^2 plantation woodland will be removed to facilitate the extension of the leisure centre; the remaining 955m^2 (92%) will be retained.

3.2.20 The plantation woodland is located to the east of Building 1 is characterised by a dense canopy of trees which are approximately 6 to 8 metres in height, a sparse shrub layer and a ground flora characterised by Bramble scrub, tall-herb and grasses.

3.2.21 The vegetation is characterised by constant and abundant Alder (*Alnus glutinosa*), occasional Field Horsetail, Hawthorn (*Crataegus monogyna*) and Silver Birch (*Betula pendula*), locally abundant Scots Pine (*Pinus sylvestris*), Great Willowherb and Bramble, locally frequent Goat Willow and Soft-rush and very locally frequent Common Sorrel (*Rumex acetosa*), Compact Rush and Field Maple (*Acer campestre*). A plant species list is appended at **Table 8.5**.

3.2.22 The woodland is not typical of any NVC community and is described by the UKHab as w1h5 other woodland; mixed; mainly broadleaved with the secondary codes 16 tall herb, 36 plantation and 77 neglected (unmanaged for 3 to 10 years).

Habitats Located within the Area at Which the Running Track is Proposed

Tall, Infrequently Mown Neutral Grassland

3.2.23 Refer to **Photos 6**, **7**, **8** and **9**. The field of infrequently mown tall grassland is located at the southern end of the site. The tall, tussocky grassland supports a desire-line footpath located along the majority of the length at which the running path is proposed.

3.2.24 The vegetation is characterised by constant and frequent Rough Meadow-grass, False Oat-grass, Meadow Foxtail (*Alopecurus pratensis*) and Yorkshire-fog, occasional and locally abundant Bramble, occasional and locally frequent Compact Rush, Meadow Fescue (*Festuca pratensis*), Red Fescue, Crested Dog's-tail, Common Knapweed and Oxeye Daisy (*Leucanthemum vulgare*), occasional and very locally frequent Great Willowherb and occasional Cock's-foot, Broad-leaved Dock, Common Mouse-ear, Creeping Buttercup and Creeping Thistle. A plant species list is appended at **Table 8.6**.

3.2.25 The habitat holds characteristics of an *MG1 Arrhenatherum elatius grassland* (Rodwell, 1992) and is described by the UKHab as g3c5 Arrhenatherum (Oat-grass) neutral grassland with the secondary codes 10 scattered scrub, 14 scattered rushes, 16 tall herb, 161 tall or tussocky sward and 77 neglected (unmanaged for 3 to 10 years).

Vegetation Colonising Bare Ground / Frequently Trampled Soils

3.2.26 Refer to **Photos 10** to **12**. The vegetation located around the all weather pitch and where the northern portion of the running path is proposed is characterised by trampled vegetation colonising bare earth and loose stone. The vegetation appears regularly trampled and forms part of the desire-line footpath system within the site and supports bare soils and stone with colonising plant species characterised by occasional and locally frequent Annual Meadow-grass, Creeping Buttercup, White Clover, Yorkshire-fog, Perennial Rye-grass, False Oat-grass, Field Horsetail and Red Clover. A plant species list is appended at **Table 8.7**.

3.2.27 The vegetation is not typical of any NVC community, and is described by the UKHab as u1c artificial unvegetated; unsealed surface with the secondary codes 17 ruderal / ephemeral and 115 track.

Scrub to the North of the Buildings

3.2.28 Refer to **Photo 13**. An area of scrub is located to the north of the buildings; it is proposed to locate the running path through the scrub. The scrub is characterised by constant and abundant Goat Willow with occasional Common Whitebeam (*Sorbus aria*) and Hawthorn and rare Silver Birch (*Betula pendula*). The ground flora is characterised by constant and frequent Rough Meadow-grass with frequent Common Vetch (*Vicia sativa*) and occasional Meadow Foxtail, False Oat-grass, Yorkshire-fog, Field Horsetail, Ribwort Plantain and Meadow Buttercup.

3.2.29 The vegetation is not typical of any NVC community and is described by the UKHab as h3h mixed scrub - no secondary codes were noted.

Habitats within the Remainder of the Site, Not Previously Described

Mixed Plantation Woodland at the Southern End of the Site

3.2.30 Refer to **Photos 6** and **7**. The plantation woodland located at the southern end of the site is characterised by frequent and locally abundant Leyland Cypress (*X Cuprocyparis leylandii*), occasional Hawthorn and Silver Birch, locally abundant Dogwood (*Cornus sanguinea*), Alder, Bramble, Norway Maple (*Acer platanoides*) and Common Nettle (*Urtica dioica*) and locally frequent Ivy (*Hedera helix*).

3.2.31 The vegetation is not typical of any NVC community and is described by the UKHab as w1h6 other woodland; mixed; mainly conifer with the secondary code 36 plantation.

Scrub at the South-western end of the Site

3.2.32 Refer to **Photo 14**. An area of scrub vegetation is located at the western end of the south-western site boundary. The scrub is characterised by constant and frequent Goat Willow, locally abundant Silver Birch and locally frequent Smooth Meadow-grass and Colt's-foot (*Tussilago farfara*). Northern Marsh-orchid was also noted at the margins of the scrub.

3.2.33 The vegetation is not typical of any NVC community and is described by the UKHab as h3h mixed scrub - no secondary codes were noted.

Neutral Grassland at the Western End of the Site

3.2.34 Refer to **Photo 15**. An area of neutral grassland with locally frequent scrub is located at the western end of the site. The grassland is characterised by fine leaved species (as opposed to taller, tussocky coarse grasses) and areas of scrub, with frequent Crested Dogs'-tail, Red Fescue and Meadow Buttercup, occasional and locally frequent Compact Rush, Hairy Sedge, Glaucous Sedge and Goat Willow, occasional Common Knapweed and locally frequent Oxeye Daisy.

3.2.35 The grassland is not typical of any NVC community but holds characteristics of an *MG6 Lolium perenne – Cynosurus cristatus grassland* (Rodwell, 1992) and is described by the UKHab as g3c other neutral grassland with the secondary codes 10 scattered scrub, 14 scattered rushes and 160 sward type mosaic.

Marshy Grassland

3.2.36 Refer to **Photos 16** and **17**. An area of marshy grassland is located at the northern end of the site, and is characterised by constant and frequent Common Club-rush (*Schoenoplectus lacustris*), locally abundant Great Willowherb, occasional and locally frequent Compact Rush, and locally frequent Hairy Sedge (Carex hirta) and Bottle Sedge (*Carex rostrata*).

3.2.37 The grassland is not typical of any NVC community and is described by the UKHab as g3c other neutral grassland with the secondary code(s) 10 scattered scrub, 16 tall herb, 14 scattered rushes and 119 seasonally wet.

Hard Standing and All-weather Playing Field

3.2.38 Refer to **Photo 18**. An area of compacted stone is located at the southern end of the site and is used as a car park. The car park and the all weather pitch as devoid of vegetation and are described by the UKHab as u1b developed land; sealed surface with the secondary code 89 car park applicable to the compacted stone area.

Invasive Plant Species

3.2.39 A stand of Japanese Knotweed is located to the south of Building 1 (refer to **Figure 2**). No other invasive plant species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) were detected within the site. The presence of Japanese Knotweed within the site is considered further at **Section 4.3**.

3.3 Animal Life

Badger

3.3.1 No badger or signs of badger were detected within the site or within the accessible 50 metres around the site. The presence of badger is reasonably discounted.

Bat Species

Daylight Survey: Buildings

Building 1

3.3.2 Refer to **Photos 18** to **24**. Building 1 is a detached single-storey leisure centre constructed from walls of mortared blockwork to 2 metres, above which they are composed of corrugated metal sheeting. The building supports a pitched roof of corrugated metal sheeting.

3.3.3 The building is well sealed at its exterior; gaps around the raised sections of the corrugated metal sheeting appeared to be sealed for nesting birds when checked and no further gaps were noted at the building's exterior.

3.3.4 Internally the building is open to the roof which is unlined and supported on metal beams. No features suitable for use by either crevice dwelling species, such as common pipistrelle (*Pipistrellus pipistrellus*) or species which may roost in the open in voids, such as brown long-eared bats (*Plecotus auritus*) are present.

3.3.5 Building 1 is considered to be of 'negligible' suitability for use by roosting bats.

Building 2

3.3.6 Refer to **Photos 25** to **29**. Building 2 is an L-shaped detached single-storey storeroom constructed from walls of mortared brick and rendered blockwork, which supports a pitched roof of concrete tiles with plastic fascias and dry verge capping at its gable ends.

3.3.7 Gaps suitable for access by bats are present behind the dry verge capping and at ventilation bricks which are present at each gable end.

3.3.8 Internally the building supports a single roof void which is 1 metre from ridgeline to the floor of the void. The roof void is uninsulated, and the roofing tiles are lined with bitumastic roofing felt and supported by timber purlins and rafters.

3.3.9 Approximately 30 very old (degraded to dust) and 5 old droppings were present at the interior of the south-western gable end (refer to **Photo 28**). The droppings which were recent enough to still retain their shape were of a size and shape which indicate a pipistrelle species; a sample of the droppings was sent for DNA analysis for formal identification of the species, and the species was confirmed as common pipistrelle. Results are appended at **Section 8.4**.

3.3.10 The number of droppings and their age indicates that the building has been used as a roost by a low number of bats; the evidence is indicative of a day roost[5] of a pipistrelle species.

3.3.11 The presence of roosting bats at Building 2 is considered further at **Section 4.4**.

Trees

3.3.12 No trees support any features suitable for use by roosting bats. The presence of roosting bats is reasonably discounted from the trees within the site.

Habitat Assessment for Commuting and Foraging Bats

3.3.13 The buildings and hard standing within the site are unlikely to provide an abundance or diversity of invertebrate prey, and is therefore considered to be of low suitability for use by foraging bats.

3.3.14 The grassland, plantation woodland and areas of scrub provide a diversity of habitats and suitable edge habitat to contribute to the wider foraging area of edge-feeding foraging bats, such as common pipistrelle (*Pipistrellus pipistrellus*), and also species known to forage over open habitats and over wide areas, such as noctule (*Nyctalus noctula*). The tall, tussocky grassland, areas of scrub and marshy grassland provide a diversity of habitat which will increase the diversity and abundance of invertebrate prey across the site, and it is considered that they may also provide suitable foraging habitat for species such as brown long-eared bats and *Myotis* species.

3.3.15 The grassland, woodland and scrub within the site are assessed to be of 'moderate' suitability for use by foraging and commuting bats.

Dusk Emergence Surveys

11th July 2023

3.3.16 No bat emergence was detected at Building 2. Common pipistrelle were detected between 22:26 and 23:06, with the first recording 40 minutes after sunset. No other species were recorded.

3.3.17 Raw data are appended at **Table 8.8**.

10th August 2023

3.3.18 No bat emergence was detected at Building 2. Common pipistrelle were detected between 21:12 and 22:27, with the first recording 14 minutes after sunset. Noctule were detected between 21:26 and 22:20, with the first recording 29 minutes after sunset. No other species were recorded.

[5] Day roost: a roost where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

3.3.19 Raw data are appended at **Table 8.9**.

7th September 2023

3.3.20 No bat emergence was detected at Building 2. One common pipistrelle was observed investigated both gable ends (i.e. repeatedly approaching both gable ends) at 20:19, but no emergence or re-entry was detected.

3.3.21 Common pipistrelle were detected between 20:12 and 21:21, with the first recording 20 minutes after sunset. A single pass by a Myotis species was detected at 21:20, 1 hour and 28 minutes after sunset. No other species were recorded.

3.3.22 Raw data are appended at **Table 8.10**.

Summary of Results

3.3.23 A summary of the survey results presented above is provided at **Table 3.3**. The results are evaluated at **Section 4.4**.

Table 3.3: Summary of Bat Survey Results

Building/Tree Ref	Suitability for Use by Roosting Bats	Requirement for Further Survey / Results of Activity Surveys
Building 1	Negligible	No requirement for further survey
Building 2	Confirmed Roost	**Roost 1:** Common pipistrelle droppings, indicative of a day roost, were detected at the roof void of Building 2 (OS Grid Reference NY 02141 15104)**.** No roosting bats were detected by the subsequent dusk emergence surveys, and a day roost is considered an appropriate assessment of the roost type.
Trees	Negligible	No requirement for further survey.
Foraging / Commuting habitat	Low for buildings and hard standing, moderate for remainder of the site	The requirement for further surveys depends upon levels of impact from the proposed development; further consideration is presented at **Section 4.4**.

Bird Species

3.3.24 Birds detected in the site in June 2023 are listed in **Table 3.4**.

Table 3.4: Bird species Detected on 7th June 2023

Scientific Name	Common Name	BOCC Status[1]
Carduelis carduelis	Goldfinch	Green
Columba palumbus	Wood pigeon	Green
Corvus monedula	Jackdaw	Green
Cyanistes caeruleus	Blue tit	Green
Erithacus rubecula	Robin	Green
Fringilla coelebs	Chaffinch	Green
Fringilla coelebs	Chaffinch	Green
Passer domesticus	**House sparrow**	**Red**
Phasianus colchicus	Pheasant	Green
Phylloscopus collybita	Chiffchaff	Green
Troglodytes troglodytes	Wren	Green
Turdus merula	Blackbird	Green
[1]BOCC: Birds of Conservation Concern (Stanbury, et al., 2021). Priority Species are presented in **bold**.		

3.3.25 The trees, shrubs and Building 2 are all suitable for use by nesting passerine (i.e. perching) species, including those detected within the site during the survey. This is considered further at **Section 4.4**.

3.3.26 The areas of grassland are considered to be of poor suitability for use by Priority Species of ground nesting species such as lapwing (*Vanellus vanellus*), curlew (*Numenius arquata*) and skylark (*Alauda arvensis*) due to their proximity to housing and regular disturbance from the all weather pitch and due to the grassland at the southern end of the site being tall, tussocky and regularly disturbed by walkers.

3.3.27 No sign of nesting barn owl was detected during the internal inspection of the buildings; the presence of nesting or roosting barn owl is reasonably discounted at the site.

Great Crested Newt

3.3.28 The grassland habitats, marshy grassland, woodland and scrub are suitable for use as terrestrial habitats by foraging and sheltering great crested newt. It is noted however that that Pond 1, a SUDs pond associated with the ongoing housing development to the north of the site has only been recently created (circa 2020) and is likely to remain dry for the majority of the year; the pond is unlikely to be suitable for use by breeding great crested newt. Pond 2 is distant from the site (at 237 metres); it is considered that the site is sufficiently distant from the pond that the proposed development at the site is reasonably unlikely to impact upon any population of breeding great crested newt associated with it.

3.3.29 The potential for impacts to great crested newt to be affected by the proposed development are considered further at **Section 4.4**.

Reptiles

3.3.30 There are no records of reptiles for the site or a 2 kilometres radius from the site.

3.3.31 The buildings, hard standing and all weather pitch provide poor quality habitat for sheltering, basking and hibernating reptiles. These areas support sparse or no vegetation cover and will not provide suitable habitat for foraging or sheltering reptiles.

3.3.32 The grassland areas provide habitats which are potentially suitable for reptile species; the areas of tall grassland and scrub will provide suitable habitat for sheltering and hibernating reptiles such as common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*) and the shorter areas of grassland and marshy grassland will provide suitable habitat for foraging reptiles.

3.3.33 Potential impacts to any reptile species which may be present at the site and consideration of any requirement for further surveys is presented at **Section 4.4**.

Other Wildlife

3.3.34 The site provides suitable habitat for foraging and sheltering hedgehog (*Erinaceus europaeus*), a Priority Species. Consideration of potential impacts to hedgehog as a consequence of the proposed development are presented at **Section 4.4**.

4.0 EVALUATION AND ASSESSMENT

4.1 Introduction and Description of Proposals

4.1.1 In accordance with *Cleator Moor Activity Centre: Landscape Masterplan P8101 Revision P02* (Roberts Limbrick, 2023), hereafter the 'proposals plan', it is proposed to demolish Building 2 and extend Building 1 to the north-east into areas currently occupied by hard standing, mixed plantation woodland and grassland. A Sustainable Urban Drainage (SUDs) Pond is proposed at the area currently occupied by Building 2. Areas of amenity grassland and ornamental planting around Building 1 will also be removed to facilitate the development.

4.1.2 A hoggin running path will be installed and will be located primarily following the route of the existing desire line footpaths within the grassland at the southern end of the site, and a hard standing track will be installed around the all weather playing field.

4.1.3 **Section 4.2** provides an assessment of any impacts of the proposed development on the designated sites for nature conservation present in the wider area. The ecological value of habitats within the site is evaluated at **Section 4.3**, and protected and notable species are considered at **Section 4.4**.

4.2 Designated Sites for Nature Conservation

4.2.1 It is considered that the site is sufficiently distant from all designated sites for nature conservation that the proposed development will have no impact upon them.

4.2.2 The site is not functionally linked to any of the statutory or non-statutory designated sites for nature conservation present in the wider area, and is unlikely to provide contributary habitat to any of these sites.

4.3 Vegetation and Habitats

4.3.1 Only common and widespread plant species were found. The NVC communities present are typical of the geographical area and conditions present.

4.3.2 The grasslands are moderately diverse in their plant species composition and provide a diversity of grassland habitat within the site, however it is not considered that they are representative of a Priority Habitat, and the habitats (either alone or in combination) do not meet the County Wildlife Site criteria presented in *Guidelines for Selection of County Wildlife Sites in Cumbria* (Cumbria Wildlife Trust, 2008).

4.3.3 In terms of each habitat's importance in a geographical context[6], the grassland habitats (excluding the amenity grassland and area of seeded wildflower grassland) are considered to be of 'local' importance as they support a moderate diversity of plant species and grassland types across the site area, and will contribute as wildlife links across the wider area. The areas of scrub and plantation woodland and wildflower seeded grassland are of 'site' value only as they increase the diversity of habitats within the site itself but are not considered to contribute meaningfully to the nature conservation value of the wider area. The areas of amenity grassland, buildings and hard standing and trampled ground with colonising ruderal herbs are not considered to hold any importance on a geographical scale.

4.3.4 In accordance the proposals plan the development will be chiefly situated over the habitats of least value (i.e. the hard standing, amenity grassland, and areas of trampled earth with colonising ruderal herbs) with only small areas of plantation woodland affected. The creation of a path will formalise areas already used

[6] Using the terms presented at Section 4.7 of *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018), i.e. International and European, National, Regional, Local Authority-wide area, River Basin District, Estuarine system / Coastal cell or Local. The term 'site' value is additionally used to highlight ecological features considered to be of importance in the context of the wider site habitats, but which are of negligible value in the context of the local area.

within the southern grassland for pedestrians; it is noted that the proposed running path will chiefly be located on trampled areas and desire lines.

4.3.5 It is considered that the proposals seek to retain the majority of habitats identified as being of most ecological value within the site, and are concentrated on those habitats of least value.

4.3.6 Further recommendations in relation to the site layout are presented at **Section 5.3**.

4.3.7 It is recognised that the retained habitats could, in the presence of inappropriate construction techniques, be damaged during the construction phase of the proposed development. Measures to ensure the proposals reduce potential impacts to retained habitats during the construction phase of the proposed development are also presented at **Section 5.3**.

4.3.8 It is recognised that the proposed extension of Building 1 and creation of a car parking area will remove some habitats identified as being of local value, and it is recommended that these losses are compensated for by the creation of compensatory wildflower grassland within the landscape design of the site and by appropriate landscape planting of native woody species. It is noted that the proposals plan accommodates this recommendation via the provision of a wetland wildflower seed mix within the SUDs pond. It is also considered that creation of a site-wide landscape management plan to enhance the ecological value of the retained habitats will compensate for the minor losses of habitat associated with the proposals' the proposals for selective thinning of the plantation woodland and replanting with native shrubs and trees as presented on the proposals plan are in accordance with suitable long-term management of these habitats. The provision of a site wide habitat management plan is recommended at **Section 5.5**.

4.3.9 Japanese Knotweed, an invasive species listed under Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) has been detected within the site. It is considered that the proposals present an opportunity for the eradication of this species as part of the proposed development. Further guidance is presented at **Section 5.4** of this report.

4.4 Protected Species and Other Wildlife

Bats

Foraging and Commuting Bats

4.4.1 Habitats within and adjacent to the site are suitable for foraging and commuting bats. It is not considered that the proposed removal of habitat to facilitate the development will significantly reduce the suitability of the site for foraging or commuting bats; the proposals are chiefly set within areas of poor suitability for use by foraging bats and will only directly impact a small proportion of the site. It is recognised that inappropriate use of artificial lighting can negatively impact upon foraging bat species; relating to the protection of features suitable for use by foraging and commuting bats and use of appropriate lighting at the site both during the construction and operational phases of the proposed development are presented at **Section 5.3**.

Roosting Bats

Assessment of Impact

4.4.2 The presence of roosting bats is reasonably discounted at Building 1, and no trees were identified to support features suitable for use by roosting bats.

4.4.3 One confirmed common pipistrelle roost is presented at Building 2. No bats were observed emerging from or re-entering the roost in 2023, and it is considered that the assessment of the roost as a 'day' roost[7] is appropriate.

[7] Day roost: a roost where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

4.4.4 No further surveys are required to inform this assessment.

4.4.5 No evidence of a roost of higher conservation significance (such as a maternity roost[8]) has been detected. Building 2 is not considered to be suitable for use by hibernating bats due to its construction type.

4.4.6 In accordance with Figure 4 of *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), day roosts of pipistrelle bats (i.e. small numbers of common species, not a maternity site) are of 'low' conservation significance.

Requirement for an Appropriate European Protected Species Mitigation (EPSM) Licence

4.4.7 Bats and their roosts are protected under the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, hereafter referred to as 'the Regulations'. Any development proposals which could impact upon bats and their roosts must only be conducted under a suitable European Protected Species Mitigation (EPSM) licence, granted by Natural England.

4.4.8 An EPSM licence application may only be applied for once planning permission has been granted.

4.4.9 A mitigation strategy is appended at **Section 9.0**.

4.4.10 It is considered that the site meets the criteria and qualifies to be registered under the Natural England Bat Mitigation Class Licence: Low Impact (BMCL)[9], as it supports no more than three roosting positions, common pipistrelle is named as species for which this licensing approach is appropriate, and the roost is not a maternity roost nor a hibernation site[10].

4.4.11 A Method Statement for the proposed works demonstrating the proposed approach for the protection of bats during works and all necessary measures for mitigation and compensation for roosting bats to be adopted at the site is presented at **Section 9.0**. Natural England assess all EPSM Licence Applications (including the BMCL applications) using the 'three tests'[11]; an assessment of the proposals in accordance with the 'three tests' is also provided below.

4.4.12 Enhancements to be included within the site for roosting bats are presented at **Section 5.5**; please note that these measures do not form part of the proposed mitigation and compensation, and will not form part of the measures adopted under the BMCL Licence.

Assessment of the Proposals under the 'Three Tests'

4.4.13 In determining whether or not to grant a licence Natural England must apply the requirements of Regulation 55 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b):

Test 1: *Demonstration that the proposals for which a licence is sought are for the purposes of 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a*

[8] Maternity roost: where female bats give birth and raise their young to independence.
[9] Formerly known as the Bats: Low Impact Class Licence (or BLICL).
[10] Victoria Burrows and Brian Robinson of ERAP (Consultant Ecologists) Ltd are Registered Consultants (RC) under the BMCL licence (registration numbers RC038 and RC160 respectively).
[11] In determining whether or not to grant a licence Natural England must apply the requirements of Regulation 55 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b):
(1) Regulation 55(2)(e) states: *a licence can be granted for the purposes of 'preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment', hereafter referred to as the 'Overriding Public Importance Test'*;
(2) Regulation 55(9)(a) states: '*the relevant licensing body must not grant a licence under this regulation unless it is satisfied that there is no satisfactory alternative', hereafter referred to as the 'No Satisfactory Alternative Test'*; and
(3) Regulation 55(9)(b) states: '*the relevant licensing body must not grant a licence under this regulation unless it is satisfied that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.', hereafter referred to as the 'Favourable Conservation Status'* test.

social or economic nature and beneficial consequences of primary importance for the environment' [Regulation 55(2)(e)]

***Test 2:** Consideration of 'There is no satisfactory alternative' including the implications of the 'do-nothing' option [Regulation 55(9)(a)]*

***Test 3**: That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range [Regulation 55 (9)(b)]*

4.4.14 Implementation of the actions detailed at **Section 9.0** are appropriate and proportionate and will ensure the proposals and site satisfy the 'favourable conservation' test of *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.*

4.4.15 It is considered that the proposals are of overriding public interest as they will create additional facilities within the site to increase the value of the leisure centre to the local area, and provide a safe location for exercise. Building 2 cannot be realistically retained, converted or incorporated into the site design without a loss of car parking or additional impacts to habitats within the site. Not developing the site will not secure the benefits proposed for roosting bats (as set out at **Section 9.0**).

Birds

4.4.16 Building 2 and the areas of plantation woodland and scrub to be affected provide suitable habitat for use by nesting birds; all wild birds are protected while they are nesting under the *Wildlife and Countryside Act 1981* (as amended). Measures for the protection of nesting birds during the proposed works are presented at **Section 5.3**.

4.4.17 Measures to enhance habitats for nesting birds as a consequence of the proposed development are presented at **Section 5.5**.

Reptiles and Other Wildlife

4.4.18 The site supports habitats suitable for use by reptile species such as common lizard and slow worm, which are protected under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). The site also provides suitable habitat for Priority Species such as hedgehog. The proposed development will create only minor impacts to areas suitable for use by reptiles and hedgehog however, and will retain the majority of habitats which support suitability for reptile species.

4.4.19 It is therefore considered, in this instance, that further surveys to determine the presence or absence of reptile species are not necessary and, provided works are completed in a suitable careful and precautionary manner (including the creation of the running track) that further surveys are not required to inform the proposed development.

4.4.20 A method statement for the protection of wildlife (including reptile species) during the proposed construction phase of the proposed development is presented at **Section 5.3**.

4.4.21 It is considered that the proposed development at the site will equally only have minor impacts to the terrestrial habitats considered suitable for use by amphibian species (including great crested newt). The closest pond potentially suitable for breeding amphibians is distant from the site (237 metres from the site boundary) and is not linked to the site by any habitat linkage. It is considered the measures proposed for the protection of reptile species outlined at **Section 5.3** will equally protect any amphibian species present, and there is no requirement for further surveys to determine the presence or absence of great crested newt at Pond 2 to inform the planning application.

5.0 RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 These recommendations aim to ensure that the development is implemented in accordance with relevant wildlife legislation, Natural England guidance, the principles of the National Planning Policy Framework (NPPF), local planning policy and best practice.

5.1.2 The recommendations address the potential impacts identified in **Section 4.0** and are appropriate and proportionate.

5.1.3 In accordance with Chapter 15, paragraph 180(d) of the NPPF:

'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'.

5.1.4 Where possible, opportunities to enhance the ecological interest and habitat connectivity and seek biodiversity gain through appropriate landscape planting and habitat creation have been identified.

5.1.5 All recommendations are appropriate to the geographical area, the habitats in the wider area, the wildlife present in the local area (and likely to use the site post-construction) and take into consideration the end use of the site as a leisure centre complex.

5.2 Surveys Validity for Bats

5.2.1 It is recommended that, if works have not commenced before the next bat activity survey season (i.e. May to September 2024), then a single dusk emergence survey is completed at Building 2 to ensure the findings of this report remain accurate and the proposed mitigation strategy remain appropriate.

5.3 Protection of Existing Vegetation and Wildlife and Recommendations in Relation to Site Layout

Protection of Trees and Shrubs

5.3.1 During the construction phase, temporary protective demarcation fencing will be used to protect the trees and shrubs to be retained. The fencing must extend outside the canopy of the retained trees and must remain in position until all areas have been developed to ensure protection is provided throughout the construction phase.

5.3.2 The fencing will be in accordance with BS5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations* (BSI, 2012).

Provision of a CEMP

5.3.3 A CEMP will be required as part of the proposed development to ensure that impacts associated with construction are avoided at the retained habitats within the site. The CEMP should include the following:

a. *Provision of demarcation fencing and identification of the construction zone.* Appropriate (e.g. heras) fencing will ensure that the construction zone is clearly defined and prevent (for example) storage of materials or movement of machinery in inappropriate areas;

b. *Plan of Works to Minimise Working Areas.* To ensure the proposals do not negatively impact upon the retained habitats within the site the working area will be minimised where-ever possible. Materials should be stored at existing areas of hard standing and not extend the working area of the site to the retained areas of grassland habitat, plantation woodland or scrub. A suitable plan of works to be employed to ensure the creation of the running path does not impact the surrounding grassland will be developed to minimise impacts to the retained grassland habitats. For example, using the course of

the proposed path to transport materials rather than transporting materials alongside the proposed path will minimise the area affected by the proposals.

c. *Biosecurity measures:* Plant and machinery to be brought to the site must be clean and clear of plant material and excessive mud and other materials. Contractors must not accept any hired plant or machinery onto the site that contains plant material or excessive mud / earth cover. This will help prevent impacts such as the spread of invasive plant species;

d. *Noise limitation.* All contractors and sub-contractors working on site have a general duty to take all possible measures to minimise nuisance from noise and vibration that may impact on wildlife in the wider area. Measures such as appropriate selection of plant and appropriate operation and maintenance of plant will ensure that impacts associated with noise are minimised;

e. *Control of dust and maintenance of air quality.* Air quality has the potential to be impacted by fumes from vehicles and plant, and the potential for dust created during periods of dry weather from the construction activities and the earthworks may adversely affect retained on site vegetation and habitats and off-site vegetation / habitats. The potential for the operations to produce dust will be minimised by implementing best practice measures such as dampening of exposed soil and material stockpiles using dowsing, sprinklers and hoses when necessary to prevent dust and particulate matter becoming mobile. Wheel washing facilities will be installed at all exits as well as procedures for effective cleaning and inspection of vehicles will aid with suppression of dust; and

f. *Good site practice.* To ensure no additional impacts to wildlife are created, such as wind-blown debris and attraction of vermin (for example), good site practice will be applied at all times, and will include keeping the working area in a clean, tidy condition, provision of adequate toilet facilities and removal of litter.

g. *Lighting:* Any lighting to be used at the site during construction should be directional and screened where possible to avoid impacts to wildlife within the site during the proposed works.

Protection of Roosting Bats and Consideration of Foraging / Commuting Bats

5.3.4 A Method Statement for the protection of bats during the construction phase of the proposed development is appended at **Section 9.0**.

5.3.5 Paragraph 185(c) in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

5.3.6 The lighting scheme to be implemented at the developed site must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the retained habitats and areas of ecological enhancement and any landscape planting, as lighting overspill may deter use by wildlife such as foraging bats.

5.3.7 The lighting scheme will be designed with reference to current guidance, namely:

a. *Guidance Note 8: Bats and Artificial Lighting in the UK* (Institution of Lighting Professionals & Bat Conservation Trust, 2018); and

b. *Bats and lighting: Overview of current evidence and mitigation guidance* (Stone, 2014).

Protection of Nesting Birds

5.3.8 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. It is advised that any works such as vegetation clearance that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season. Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive.

5.3.9 If breeding birds are detected the ecologist will issue guidance in relation to the protection of the nesting birds in conjunction with the scheduled works. This may involve cordoning off an area of the site until the young birds have fledged.

Protection of Other Wildlife During Works

5.3.10 The following Reasonable Avoidance Measures (RAMs) Method Statement will be adhered to during the construction phase of the proposed development:

a. All site personnel must be made aware of this RAMs;

b. Prior to any soil strip, vegetation will be strimmed to a height of no less than 0.15 metre and all arising removed (including the areas at which the running path is proposed);

c. During construction, any holes, trenches or other pits which wildlife species could fall into will be covered overnight, or have sloped banks or ramps top allow escape;

d. The use of chemicals (such as fertilisers and herbicides) harmful to wildlife should be avoided wherever possible;

e. In the unlikely event of the discovery of a reptile or great crested newt whilst any site clearance or construction operations are in progress then all works in the area must cease and ERAP (Consultant Ecologists) Ltd. (01772 750502) must be contacted immediately for further assistance; and

f. If any other wildlife species (such as a common frog, common toad or hedgehog) is detected, it must be carefully picked up, placed in a clean bucket and moved to an area of suitable habitat beyond the development area.

5.4 Invasive Plant Species

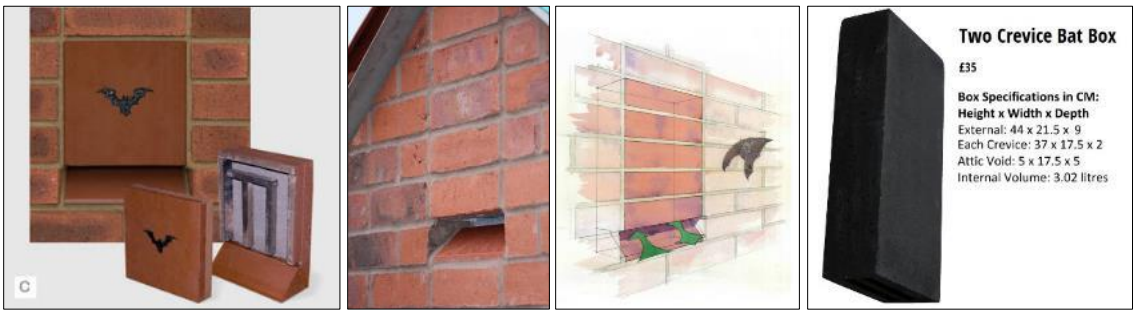
5.4.1 It is an offence under the *Wildlife and Countryside Act 1981* (as amended) to cause the spread of Japanese Knotweed in the wild. It is recommended that a specialist contractor is employed for the eradication/control of Japanese Knotweed at the site, and that this is completed under a suitable Invasive Species Management Plan.

5.5 Enhancements for Wildlife

Enhancing Habitats for Roosting Bats

5.5.1 It is recommended that the development incorporates the installation of one bat access panel at the extended building.

5.5.2 The bat access panel should be sited at least 4 metres above ground level, ideally facing or close to areas of landscape planting or existing linear features. The access panel should not be positioned over windows or doorways where bat droppings may become a nuisance. Once the development layout has been finalised, an ecologist should advise on appropriate positions for the bat access panel. Suitable bat access panels are available from NHBS Ecology (www.nhbs.com), Wild Care (www.wildcare.co.uk) and / or Greenwood's Ecohabitats (www.greenwoodsecohabitats.co.uk) and are presented at **Insert 1**.



Insert 1: Examples of integrated bat access panels and an externally mounted box[12]

5.5.3 It is recommended that five bat boxes are erected onto suitable retained mature trees within the site. An ecologist will advise on the siting of the bat boxes whilst on site.

5.5.4 Bat boxes should be installed to the following guidelines (Bat Conservation Trust, 2016):

a. At least 4 metres above the ground (where safe installation is possible);

b. Sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west). Ideally several bat boxes will be installed to provide a variety of different thermal options for bats. Grouping a number of boxes each with a different aspect can achieve this; while a number of boxes is preferable to one, a single box is still viable and may be used by roosting bats;

c. Located close to unlit linear features, such as lines of trees or hedgerows; and

d. Installed where the bat box entrance is not cluttered or impeded by branches, or accessible to predators (such as cats) by large branches underneath them.

5.5.5 Suitable bat boxes are the Schwegler 1FF, Greenwood Ecohabitat's single or double cavity boxes and Schwegler 1FD, see **Insert 2**.

Insert 2: Schwegler 1FF, Greenwood Ecohabitat's single cavity and Schwegler 1FD bat boxes

Enhancing Habitats for Nesting Birds

5.5.6 Five bird boxes associated with a variety of bird species are to be installed at the retained mature trees within the site. An ecologist will advise on the siting of the woodland bird boxes whilst on site. RSPB advice states that boxes should ideally be sited facing north to east, to avoid exposure to direct sunlight, which may cause overheating of chicks in the nest. The boxes should be at least 4 metres from ground level.

5.5.7 A variety of each of the boxes presented at **Insert 3** will be used.

[12] Left to right: IBstock Enclosed Bat Box 'c' (left); Habibat Bat Access Panels (centre left and centre right) and Greenwood's Ecohabitat's two crevice bat box (right). Products with a brick face are illustrated, however the Habibat bat access panels can be supplied unfaced to enable the addition of matching material.

Insert 3: Schwegler 3S, Schwegler 1N, Schwegler 2M and Schwegler 2H bird boxes, suitable for a variety of birds.

5.6 Enhancement and Management of Retained Habitats and Landscape Planting

Enhancement and Management of the Retained Habitats

5.6.1 It is recommended that the retained areas of plantation woodland and grassland are brought into active management for biodiversity and to promote the longevity of the habitat. A Habitat Management Plan would be prepared to include the following:

a. Establishing a suitable mowing regime at the grassland areas to encourage a diversity of plant species and ensure encroachment of scrub does not dominate the grassland areas;

b. Consideration of overseeding the southern grassland with Yellow-rattle (*Rhinanthus minor*) to reduce the vigour of the grass species and encourage a greater number of flowering herbs;

c. Regular monitoring of the woodland areas to ensure their health and to ensure dead / dying trees are suitably managed; and

d. Establishing a monitoring regime for the grassland habitats to ensure that they retain their species diversity and remain free from invasive plant species.

Landscape Planting

5.6.2 It is recommended that the landscape planting within the site is composed from native species and species known to be of value for the attraction of wildlife.

5.6.3 It is recommended that trees which support blossom and fruit which will attract insects are incorporated into the landscape planting. Suitable species are presented at **Table 5.1**.

Table 5.1: Suitable Native Species for Tree and Shrub Planting

Scientific Name	Common Name	Scientific Name	Common Name
Acer campestre	Field Maple	*Prunus spinosa*	Blackthorn
Corylus avellana	Hazel	*Rosa arvensis*	Field Rose
Crataegus monogyna	Hawthorn	*Rosa canina*	Dog-rose
Ilex aquifolium	Holly	*Sambucus nigra*	Elder
Malus sylvestris	Crab Apple	*Sorbus aucuparia*	Rowan
Prunus avium	Wild Cherry	*Ulmus glabra*	Wych Elm
Prunus padus	Bird Cherry	*Viburnum opulus*	Guelder Rose

5.6.4 The understorey and ground cover planting design should be prepared to optimise the attraction of invertebrates such as feeding bumblebees and butterflies. Where possible the use of native species should be maximised but where necessary non-native species known to be attractive to invertebrates should be used.

5.6.5 Planting schemes that include flowering species such as *Viburnum, Ceanothus, Hebe*, *Lavandula*, *Lonicera, Potentilla, Rosmarinus* and *Vinca* can maximise opportunities for feeding invertebrates and for the attraction of foraging bats and birds.

5.6.6 For further plants suitable for the attraction of pollinators please refer to the *Perfect for Pollinators Plant List* (Royal Horticultural Society, 2012). It is recommended that the selection of plant species at the site ensures that a variety of flowering species are available throughout the year.

5.6.7 It is recommended that an area of wildflower grassland is seeded within an appropriate location within the site to compensate for the loss of seeded wildflower grassland associated with the proposals. The seeded wildflower grassland should be managed in the long term to secure its species richness and should be included within the Habitat Management Plan described above.

6.0 CONCLUSION

6.1 This ecological assessment has demonstrated that the proposed development at the site is feasible and acceptable in accordance with ecological considerations and the National Planning Policy Framework.

6.2 It is possible to implement reasonable actions for the protection and long-term conservation of fauna such as roosting bats, nesting birds and commuting / foraging bats associated with the site.

6.3 Development at the site will provide an opportunity to secure ecological enhancement for fauna associated with the local area such as breeding birds and roosting bats.

7.0 REFERENCES

Andrews, H (ed), 2013. *Bat Tree Habitat Key, 3rd Edition.* Bridgewater: AEcol Ltd.

ARG UK, 2010. *ARG Advice Note 5: Great Crested Newt Habitat Suitability Index.* [Online]
Available at: http://www.arguk.org/advice-and-guidance/view-category

Bainbridge, I. et al., 2013. *Guidelines for the Selection of Biological SSSIs.* Peterborough: Joint Nature Conservancy Council.

Barn Owl Trust, 2012. *Barn Owl Conservation Handbook.* Exeter: Pelagic Publishing.

Bat Conservation Trust, 2016. *Bat Box Information Pack.* [Online]
Available at: https://cdn.bats.org.uk/pdf/Bat-Box-Information-Pack.pdf?mtime=20181101151309
[Accessed 11 April 2019].

Bat Conservation Trust, May 2022. *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys,* London: Bat Conservation Trust.

BSI, 2012. *Trees in relation to design, demolition and construction. Recommendations.* London: BSI Standards Limited.

BTHK, 2018. *Bat Roosts in Trees - A Guide to Identification and Assessment for Tree-Care and Ecology Professionals,* Exeter: Pelagic Publishing.

Butcher, B. et al., 2020. *UK Habitats Classification User Manual Version 1.1,* Stockport: UKHab Ltd.

CIEEM, 2013. *Technical Guidance Series Competencies for Species: Bats.* Winchester: Chartered Institute of Ecology and Environmental Management.

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

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

Cumbria Wildlife Trust, 2008. *Guidelines for Selection of County Wildlife Sites in Cumbria,* Kendal: Cumbria Wildlife Trust.

Edgar, P., Foster, P & Baker, J., 2010. *Reptile Habitat Management Handbook.* Bournemouth: Amphibian and Reptile Conservation.

English Nature / Natural England, 2001. *Great Crested Newt Mitigation Guidelines.* Peterborough: English Nature / Natural England.

Great Britain, 1981. *Wildlife and Countryside Act.* London: H.M.S.O.

Great Britain, 2006. *Natural Environment and Rural Communities Act.* London: H.M.S.O.

Great Britain, 2019. *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations.* London: H.M.S.O.

Institution of Lighting Professionals & Bat Conservation Trust, 2018. *Guidance Note 8: Bats and Artificial Lighting in the UK.* [Online]
Available at: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/
[Accessed 16 June 2023].

JNCC, 2010. *Handbook for Phase 1 Habitat Survey: A technique for Environmental Audit.* Peterborough: NCC.

Langton, T. E., Beckett, C. L. & Foster, J. P., 2001. *Great Crested Newt Conservation Handbook.* Halesworth: Froglife.

Maddock, A (ed), 2008. *UK Biodiversity Action Plan: Priority Habitat Descriptions.* [Online]
Available at: http://jncc.defra.gov.uk/page-5718

Ministry of Housing, Communities & Local Government, 2005. *Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System,* London: Office of the Deputy Prime Minister.

Ministry of Housing, Communities and Local Government, 2021. *National Planning Policy Framework.* London: H.M.S.O.

Mitchell-Jones, A., 2004. *Bat Mitigation Guidelines.* Peterborough: English Nature.

Mitchell-Jones, A. J. & Mcleish, A. P., 2004. *Bat Workers' Manual, 3rd Edition.* Peterborough: Joint Nature Conservation Committee.

National Soil Resources Institute, 2005. *Soilscape (England) ,* Cranfield: National Soil Resources Institute.

Natural England, 2007. *Badgers and Development,* Peterborough: Natural England.

Natural England, 2011. *The Reptile Mitigation Guidelines.* Peterborough: Natural England.

Natural England, 2020. *GCN Method Statement WML-A14-2 (Version April 2020).* [Online]
Available at: https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence

Natural England, 2022. *Badgers: advice for making planning decisions.* [Online]
Available at: https://www.gov.uk/guidance/badgers-advice-for-making-planning-decisions
[Accessed 12 June 2023].

Natural England, 2022. *Great crested newts: advice for making planning decisions.* [Online]
Available at: https://www.gov.uk/guidance/great-crested-newts-advice-for-making-planning-decisions
[Accessed 19 June 2023].

Oldham, R. S., Keeble, J., Swan, M. J. S. & Jeffcote, M., 2000. Evaluating the Suitability of Habitat for the Great Crested Newt (Triturus cristatus). *Herpetological Journal,* Volume 10(4), pp. 143-155.

Ordnance Survey, 2023. *Site Check Report Centroid Grid Ref: NY02181507.* [Online]
Available at: http://magic.defra.gov.uk/magicmap.aspx
[Accessed 12 June 2023].

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

Roberts Limbrick, 2023. *Cleator Moor Activity Centre: Existing Site Plan E1001 Revision P02 ,* Gloucester: Roberts Limbrick.

Roberts Limbrick, 2023. *Cleator Moor Activity Centre: Landscape Masterplan P8101 Revision P02,* Gloucester: Roberts Limbrick.

Rodwell, J. S., 1991. *British Plant Communities: Volume 1, Woodlands and Scrub.* Cambridge: Cambridge University Press.

Rodwell, J. S., 1992. *British Plant Communities: Volume 3, Grasslands and Montane Communities.* Cambridge: Cambridge University Press.

Roper, T., 2010. *Badger (Collins New Naturalist Library, Book 114).* Glasgow: Harper Collins.

Royal Horticultural Society, 2012. *Perfect for Pollinators, Garden Plants.* [Online]
Available at: https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators

Shawyer, C., 2011. *Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment. Developing Best Practice in Survey and Reporting,* Winchester: IEEM.

Stace, C. A., 2010. *New Flora of the British Isles 3rd Edition.* Cambridge: Cambridge University Press.

Stanbury, A. et al., 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds,* Issue 108, pp. 723-747.

Stone, E. L., 2014. *Bats and Lighting: Overview of current evidence and mitigation guidance.* Bristol: University of Bristol.

8.0 APPENDIX 1: TABLES, PHOTOGRAPHS AND FIGURES

8.1 Plant Species Lists

Table 8.1: Vegetation Colonising Hard Standing

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
Acer platanoides	Norway Maple	R	<1%
Herb Species			
Arabidopsis thaliana	Thale Cress	R	<1%
Bromus hordeaceus	Common Soft-brome	R	<1%
Cirsium arvense	Creeping Thistle	R	<1%
Epilobium hirsutum	Great Willowherb	R	<1%
Epilobium montanum	Broad-leaved Willowherb	VLF	<1%
Festuca rubra	Red Fescue	VLF	<1%
Medicago lupulina	Black Medick	VLF	<1%
Plantago major	Greater Plantain	R	<1%
Poa annua	Annual Meadow-grass	VLF	<1%
Rumex crispus	Curled Dock	R	<1%
Sagina procumbens	Procumbent Pearlwort	VLF	<1%
Senecio vulgaris	Groundsel	R	<1%
Sisymbrium officinale	Hedge Mustard	R	<1%
Sonchus asper	Prickly Sow-thistle	R	<1%
Sonchus oleraceus	Smooth Sow-thistle	R	<1%
Stellaria media	Common Chickweed	VLF	<1%
Taraxacum officinale agg.	Dandelion	O	<1%
Tripleurospermum inodorum	Scentless Mayweed	LF	<1%
[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

Table 8.2: Amenity Grassland

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
Betula pendula	Silver Birch	VLA	<1%
Salix sp.	Willow species	VLA	1%
Herb Species			
Anthoxanthum odoratum	Sweet Vernal-grass	O	<1%
Arrhenatherum elatius	False Oat-grass	R	<1%
Bellis perennis	Daisy	LF	<1%
Cerastium fontanum	Common Mouse-ear	O	<1%
Cynosurus cristatus	Crested Dog's-tail	F*	10%
Dactylis glomerata	Cock's-foot	R	<1%
Dactylorhiza purpurella	Northern Marsh-orchid	R	<1%
Festuca rubra	Red Fescue	F*	20%
Holcus lanatus	Yorkshire-fog	F*	20%
Lolium perenne	Perennial Rye-grass	F*	30%
Pilosella aurantiaca	Fox-and-cubs	R	<1%
Plantago lanceolata	Ribwort Plantain	O	<1%
Poa annua	Annual Meadow-grass	O/LF	5%
Poa pratensis	Smooth Meadow-grass	F	10%
Ranunculus repens	Creeping Buttercup	O/LF	5%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Senecio jacobaea	Common Ragwort	O	<1%
Taraxacum officinale agg.	Dandelion	O	5%
Trifolium pratense	Red Clover	R	<1%
Trifolium repens	White Clover	F/LA*	10%
[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

Table 8.3: Neutral Grassland, Tall-herb and Scrub Vegetation

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
Salix caprea	Goat Willow	LF	<1%
Herb Species			
Aegopodium podagraria	Ground-elder	LA	20%
Agrostis stolonifera	Creeping Bent	VLF	<1%
Alopecurus pratensis	Meadow Foxtail	VLF	<1%
Anthoxanthum odoratum	Sweet Vernal-grass	O/LF	10%
Arrhenatherum elatius	False Oat-grass	F	20%
Bromus hordeaceus	Common Soft-brome	VLF	<1%
Carex divisa	Divided Sedge	VLF	<1%
Carex hirta	Hairy Sedge	LF	<1%
Centaurea nigra	Common Knapweed	O/LF	1%
Chamerion angustifolium	Rosebay Willowherb	O	<1%
Cirsium arvense	Creeping Thistle	O/LA	10%
Cynosurus cristatus	Crested Dog's-tail	O/LF	5%
Dactylis glomerata	Cock's-foot	O	<1%
Dactylorhiza purpurella	Northern Marsh-orchid	R	<1%
Epilobium hirsutum	Great Willowherb	O/VLF	<1%
Equisetum arvense	Field Horsetail	O	5%
Eupatorium cannabinum	Hemp-agrimony	R	<1%
Festuca pratensis	Meadow Fescue	O	<1%
Festuca rubra	Red Fescue	O/LF	20%
Holcus lanatus	Yorkshire-fog	F	20%
Juncus conglomeratus	Compact Rush	VLF	<1%
Leucanthemum vulgare	Oxeye Daisy	LF	5%
Lotus pedunculatus	Greater Bird's-foot-trefoil	O/LA	10%
Lychnis coronaria	Rose Campion	O/VLF	<1%
Medicago lupulina	Black Medick	VLF	<1%
Plantago lanceolata	Ribwort Plantain	O/LF	<1%
Poa trivialis	Rough Meadow-grass	F	20%
Potentilla anserina	Silverweed	VLF	<1%
Ranunculus acris	Meadow Buttercup	LF	<1%
Ranunculus repens	Creeping Buttercup	O	<1%
Rhinanthus minor	Yellow-rattle	VLF	<1%
Rubus fruticosus agg.	Bramble	VLA	10%
Rumex acetosa	Common Sorrel	R	<1%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Sanguisorba minor subsp. *minor*	Salad Burnet	O	<1%
Stachys sylvatica	Hedge Woundwort	O	<1%
Taraxacum officinale agg.	Dandelion	O	<1%
Trifolium pratense	Red Clover	O/LA	5%
Tussilago farfara	Colt's-foot	O	<1%
Urtica dioica	Common Nettle	VLF	<1%
Veronica chamaedrys	Germander Speedwell	R	<1%

[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.4: Grassland Around the Existing Leisure Centre Building

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
Betula pendula	Silver Birch	R	<1%
Pyracantha coccinea	Firethorn	VLA	<1%
Quercus robur	Pedunculate Oak	R	<1%
Rosa canina	Dog-rose	R	<1%
Salix caprea	Goat Willow	O/LF	5%
Herb Species			
Alchemilla mollis	Garden Lady's-mantle	R	<1%
Alopecurus pratensis	Meadow Foxtail	VLF	<1%
Anthoxanthum odoratum	Sweet Vernal-grass	O/VLF	<1%
Arrhenatherum elatius	False Oat-grass	O/LF	10%
Bellis perennis	Daisy	VLF	<1%
Cardamine pratensis	Cuckooflower	R	<1%
Carex divisa	Divided Sedge	O	<1%
Carex flacca	Glaucous Sedge	VLF	5%
Carex hirta	Hairy Sedge	LF	<1%
Carex nigra	Common Sedge	O	5%
Cerastium fontanum	Common Mouse-ear	O	<1%
Crepis biennis	Rough Hawk's-beard	R	<1%
Cynosurus cristatus	Crested Dog's-tail	F*	20%
Dactylis glomerata	Cock's-foot	O	5%
Dactylorhiza fuchsii	Common Spotted-orchid	R	<1%
Dactylorhiza purpurella	Northern Marsh-orchid	O	<1%
Epilobium hirsutum	Great Willowherb	LF	<1%
Equisetum arvense	Field Horsetail	O	<1%
Eupatorium cannabinum	Hemp-agrimony	VLF	<1%
Fallopia japonica	Japanese Knotweed	R	<1%
Festuca rubra	Red Fescue	F*	10%
Heracleum sphondylium	Hogweed	R	<1%
Hieracium sp.	Hawkweed species	R	<1%
Holcus lanatus	Yorkshire-fog	F*	20%
Juncus conglomeratus	Compact Rush	O/VLF	<1%
Juncus effusus	Soft-rush	O	<1%
Juncus inflexus	Hard Rush	R	<1%
Pilosella aurantiaca	Fox-and-cubs	VLF	<1%
Plantago lanceolata	Ribwort Plantain	O/LF	5%
Poa trivialis	Rough Meadow-grass	F*	30%
Potentilla anserina	Silverweed	VLF	<1%
Rubus fruticosus agg.	Bramble	O	<1%
Rumex crispus	Curled Dock	R	<1%
Stellaria media	Common Chickweed	R	<1%
Taraxacum officinale agg.	Dandelion	O	<1%
Trifolium pratense	Red Clover	LF	5%
Tussilago farfara	Colt's-foot	VLF	<1%

[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.5: Mixed Plantation Woodland to the North and East of Building 1

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
Acer campestre	Field Maple	VLF	<1%
Alnus glutinosa	Alder	A*	60%
Betula pendula	Silver Birch	O	<1%
Crataegus monogyna	Hawthorn	O	<1%
Pinus sylvestris	Scots Pine	LA	10%
Prunus spinosa	Blackthorn	R	<1%
Salix caprea	Goat Willow	LF	<1%
Herb Species			
Epilobium hirsutum	Great Willowherb	LA	20%
Equisetum arvense	Field Horsetail	O	<1%
Juncus conglomeratus	Compact Rush	VLF	<1%
Juncus effusus	Soft-rush	LF	<1%
Rubus fruticosus agg.	Bramble	LA	30%
Rumex acetosa	Common Sorrel	VLF	<1%
[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

Table 8.6: Tall, Infrequently Mown Neutral Grassland

Scientific Name	Common Name	DAFOR	% Cover
Woody Species			
Acer pseudoplatanus	Sycamore	LF	<1%
Alnus glutinosa	Alder	LF	5%
Crataegus monogyna	Hawthorn	O	<1%
Fraxinus excelsior	Ash	VLF	<1%
Salix caprea	Goat Willow	VLF	<1%
Herb Species			
Alopecurus pratensis	Meadow Foxtail	F*	20%
Anthoxanthum odoratum	Sweet Vernal-grass	LF	<1%
Arrhenatherum elatius	False Oat-grass	F*	20%
Carex flacca	Glaucous Sedge	LF	<1%
Carex hirta	Hairy Sedge	LF	<1%
Carex nigra	Common Sedge	LF	5%
Centaurea nigra	Common Knapweed	O/LF	<1%
Cerastium fontanum	Common Mouse-ear	O	<1%
Cirsium arvense	Creeping Thistle	O	<1%
Cynosurus cristatus	Crested Dog's-tail	O/LF	10%
Dactylis glomerata	Cock's-foot	O	10%
Dactylorhiza purpurella	Northern Marsh-orchid	VLF	<1%
Dryopteris dilatata	Broad Buckler-fern	R	<1%
Epilobium hirsutum	Great Willowherb	O/VLF	<1%
Equisetum arvense	Field Horsetail	O	<1%
Eupatorium cannabinum	Hemp-agrimony	O	<1%
Festuca pratensis	Meadow Fescue	O/LF	5%
Festuca rubra	Red Fescue	O/LF	5%
Filipendula ulmaria	Meadowsweet	VLF	<1%
Holcus lanatus	Yorkshire-fog	F*	30%
Iris pseudacorus	Yellow Iris	VLF	<1%
Juncus conglomeratus	Compact Rush	O/LF	1%
Juncus effusus	Soft-rush	O	<1%
Juncus inflexus	Hard Rush	O	<1%
Leucanthemum vulgare	Oxeye Daisy	O/LF	<1%
Lotus pedunculatus	Greater Bird's-foot-trefoil	O	<1%
Poa trivialis	Rough Meadow-grass	F*	10%
Potentilla anserina	Silverweed	VLF	<1%
Ranunculus repens	Creeping Buttercup	O	<1%
Rubus fruticosus agg.	Bramble	O/LA	10%
Rumex obtusifolius	Broad-leaved Dock	O	<1%
Trifolium pratense	Red Clover	O	<1%
Urtica dioica	Common Nettle	VLF	<1%

[1]**Key to DAFOR**: D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species

Table 8.7: Vegetation Colonising Bare Ground / Frequently Trampled Soils

Scientific Name	Common Name	DAFOR	% Cover
Agrostis stolonifera	Creeping Bent	LF	5%
Arrhenatherum elatius	False Oat-grass	O/LF	<1%
Carex hirta	Hairy Sedge	VLF	<1%
Centaurea nigra	Common Knapweed	VLF	<1%
Cirsium arvense	Creeping Thistle	VLF	<1%
Cynosurus cristatus	Crested Dog's-tail	O	<1%
Equisetum arvense	Field Horsetail	O/LF	5%
Festuca rubra	Red Fescue	O	5%
Heracleum sphondylium	Hogweed	R	<1%
Holcus lanatus	Yorkshire-fog	O/LF	5%
Juncus articulatus	Jointed Rush	VLF	<1%
Juncus inflexus	Hard Rush	O	<1%
Leucanthemum vulgare	Oxeye Daisy	VLF	<1%
Lolium perenne	Perennial Rye-grass	O/LF	10%
Medicago lupulina	Black Medick	VLF	<1%
Plantago lanceolata	Ribwort Plantain	O	5%
Poa annua	Annual Meadow-grass	O/LF	5%
Ranunculus repens	Creeping Buttercup	O/LF	5%
Rumex crispus	Curled Dock	R	<1%
Schoenoplectus lacustris	Common Club-rush	R	<1%
Trifolium pratense	Red Clover	O/LF	<1%
Trifolium repens	White Clover	O/LF	5%
Vicia cracca	Tufted Vetch	R	<1%
[1]**Key to DAFOR:** D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare, V=Very, L=Local and *denotes a constant species			

8.2 Raw Data from Bat Activity Surveys

Table 8.8: Dusk Emergence Survey 1, 11th July 2023, Sunset Time 21:46, Start Time 21:20

Survey Position 1: Tracy Cumberbatch

Time	Species	Notes
22:33 until 23:06	Common pipistrelle	No emergence detected. Occasional foraging activity detected around building
The Anabat Scout made the following recordings: 12 recordings of common pipistrelle between 22:33 and 23:06.		

Survey Position 2: Brian Robinson

Time	Species	Notes
22:26 until 22:50	Common pipistrelle	No emergence detected. Occasional foraging activity detected around building
The Anabat Scout made the following recordings: 29 recordings of common pipistrelle between 22:26 and 22:50.		

Table 8.9: Dusk Emergence Survey 2, 10th August 2023, Sunset Time 20:58, Start Time 20:40

Survey Position 1: Amy Sharples

Time	Species	Notes
21:17 until 22:27	Common pipistrelle	No emergence detected. Occasional foraging activity detected around building
21:26 until 22:20	Noctule	No emergence detected. Occasional activity detected, high over the site
The Anabat Scout made the following recordings: 35 recordings of common pipistrelle between 21:17 and 22:27; and 5 recordings of noctule between 21:26 and 22:20.		

Survey Position 2: Tracy Cumberbatch

Time	Species	Notes
21:12 until 22:24	Common pipistrelle	No emergence detected. Occasional foraging activity detected around building
21:26 until 22:20	Noctule	No emergence detected. Occasional activity detected, high over the site
The Anabat Scout made the following recordings: 30 recordings of common pipistrelle between 21:12 and 22:24; and 3 recordings of noctule between 21:26 and 22:20.		

Table 8.10: Dusk Emergence Survey 3, 7th September 2023, Sunset Time 19:52, Start Time 19:35

Survey Position 1: Amy Sharples

Time	Species	Notes
20:19 until 21:21	Common pipistrelle	No emergence detected. One bat investigated (i.e. repeatedly flew up to) the gable ends of the building at 20:19 but did not re-enter. Occasional foraging activity detected around building
21:20	Myotis species	No emergence detected. Single, brief pass recorded
The Anabat Scout made the following recordings: 33 recordings of common pipistrelle between 20:19 and 21:21; and 1 recording of Myotis species at 21:20.		

Survey Position 2: Tracy Cumberbatch

Time	Species	Notes
20:12 until 21:19	Common pipistrelle	No emergence detected. Occasional Foraging activity detected around building
The Anabat Scout made the following recordings: 16 recordings of common pipistrelle between 20:12 and 21:19.		

8.3 Photographs

Habitats Located within the Area at Which the Leisure Centre Extension and Associated Hard Standing are Proposed

Photo 1: Hard standing

Photo 2: Hard standing, amenity grassland and ornamental shrubs

Photo 3: Neutral grassland, tall-herb and Bramble scrub to the north of Building 2

Photo 4: Grassland located to the immediate north of Building 1

Photo 5: Mixed plantation woodland to the north and East of Building 1

Habitats Located within the Area at Which the Running Path is Proposed

Photo 6: Unmanaged grassland at the southern end of the site and mixed plantation woodland

Photo 7: Unmanaged grassland at the southern end of the site and mixed plantation woodland and

Photo 8: Infrequently mown neutral grassland

Photo 9: Infrequently mown neutral grassland

Photo 10: Vegetation colonising bare ground / frequently trampled soils

Photo 11: Vegetation colonising bare ground / frequently trampled soils

Photo 12: Vegetation colonising bare ground / frequently trampled soils

Photo 13: Scrub to the north of the buildings

Habitats within the Remainder of the Site, Not Previously Described

Photo 14: Scrub at the south-western end of the site

Photo 15: Neutral grassland at the western end of the site

Photo 16: Marshy grassland at the northern end of the site

Photo 17: Marshy grassland at the northern end of the site

Photo 18: Hard standing

Buildings 1 and 2

Photo 19: Building 1, south-western (front) elevation

Photo 20: Building 1, north-western elevation

Photo 21: Building 1, north-eastern elevation

Photo 22: Building 1, south-eastern elevation

Photo 23: Building 1, internal area, facing north-west

Photo 24: Building 1, internal area, facing south-east

Photo 25: Building 2, south-western and south-eastern elevation

Photo 26: Building 2, north-eastern and north-western elevations

Photo 27: Building 2, south-western gable end, showing location where bat droppings were found internally (Roost 1)

Photo 28: Old and decomposed bat droppings at the internal side of the south-western gable (Roost 1)

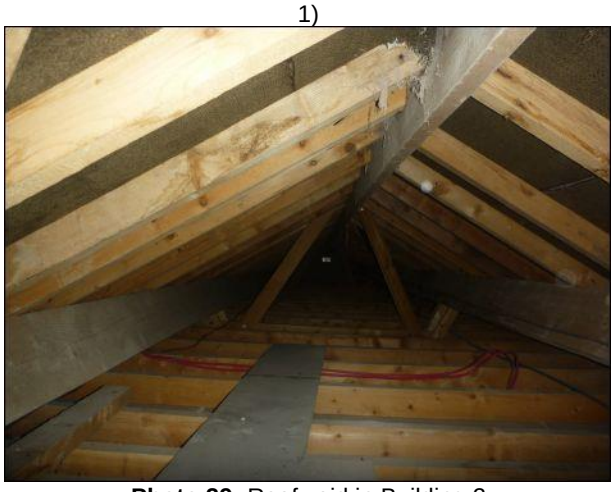


Photo 29: Roof void in Building 2

Images Showing Infra-red Cameras Positions from Darkest Points of the Survey

Photo 30: Survey Position 1

Photo 31: Survey Position 2

8.4 Results of DNA Analysis of Guano Detected at Roost 1

WARWICK
THE UNIVERSITY OF WARWICK

EcoWarwicker
Ecological Forensics

27 June 23

Re: Identification Results for Brian Robinson, ERAP Ltd

Job number 19766, received 14 June 2023
Sample labelled: PO: 2023-043 Cleator Moor
PCR amplification successful. DNA sequence:
AACATTCGAAATCCCACCCCCTGATCAAAATCATCAATAACTCATTCATTGATCTACC
AGCTCCATCAAACATTTCAGCATGAGAAATTTGGGTCCCTATTAGGCATC

Phylogenetic analysis identification: *Pipistrellus pipistrellus*

Confirmed by maximum likelihood, maximum parsimony, bootstrap 100%.

Best regards,

Professor Robin Allaby

The results and conclusions in this report are based on an investigation of mtDNA sequence analysis. The results obtained have been reported with accuracy. The interpretation represents the most probable conclusion for the DNA sequence obtained rather than the sample provided given current levels of species data. It should be borne in mind that different circumstances might produce different results. Therefore, care must be taken with interpretation of the results especially if they are used as the basis for commercial recommendations.

Professor Robin Allaby

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8.5 Figures

Figure 1: Aerial Image of the Site and its Surroundings

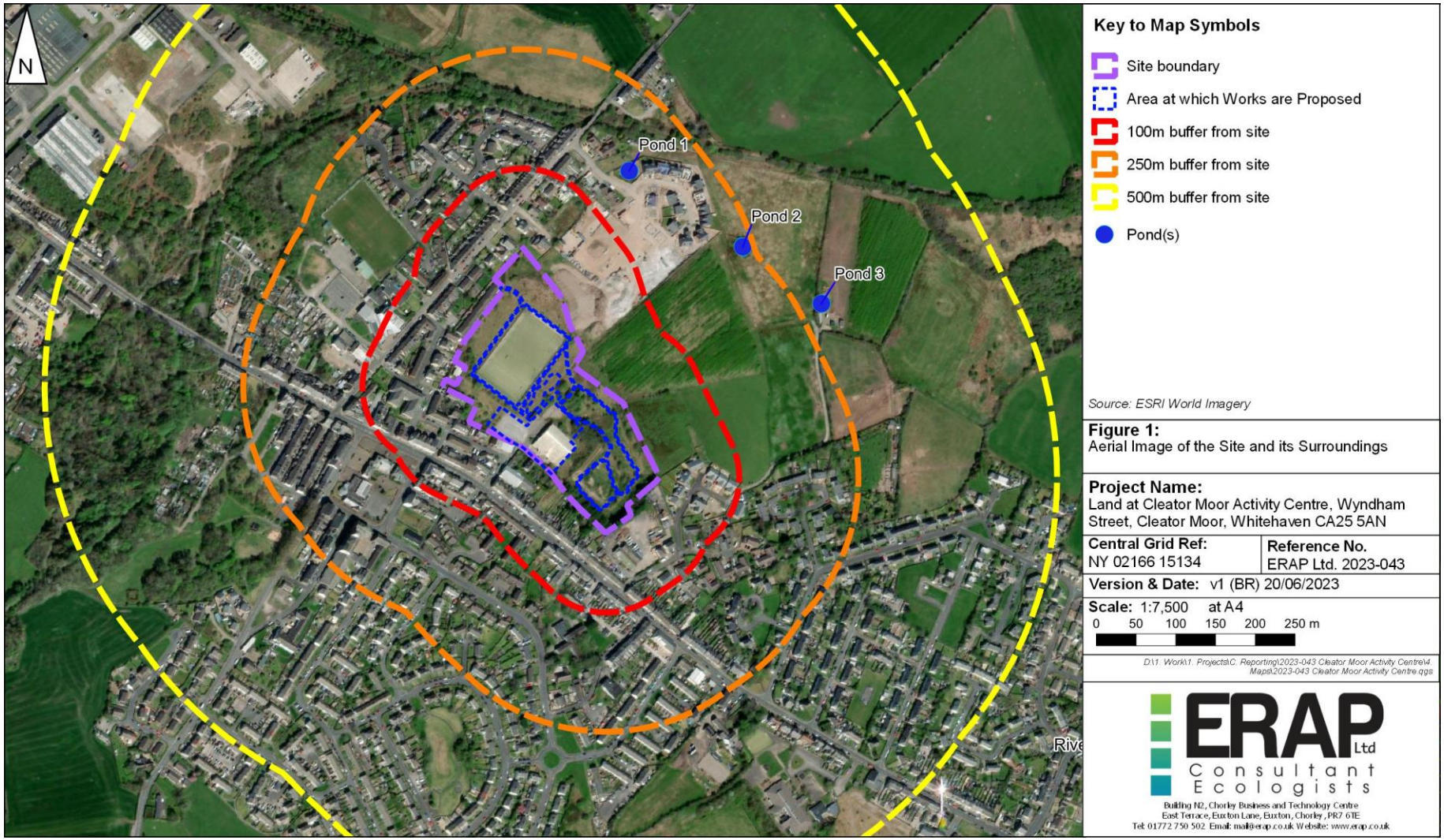


Figure 2: **Phase 1 Habitat and Vegetation Map**

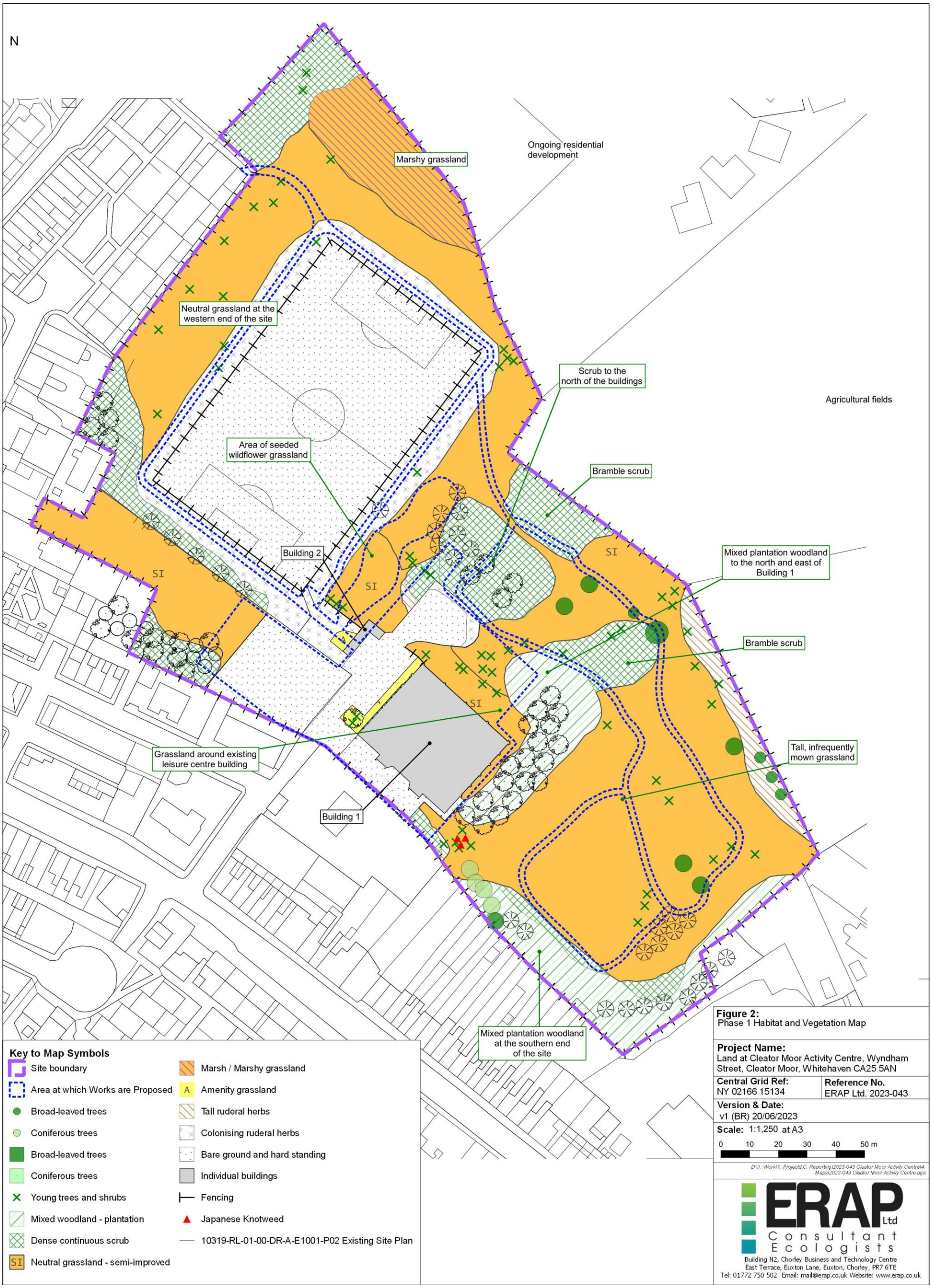
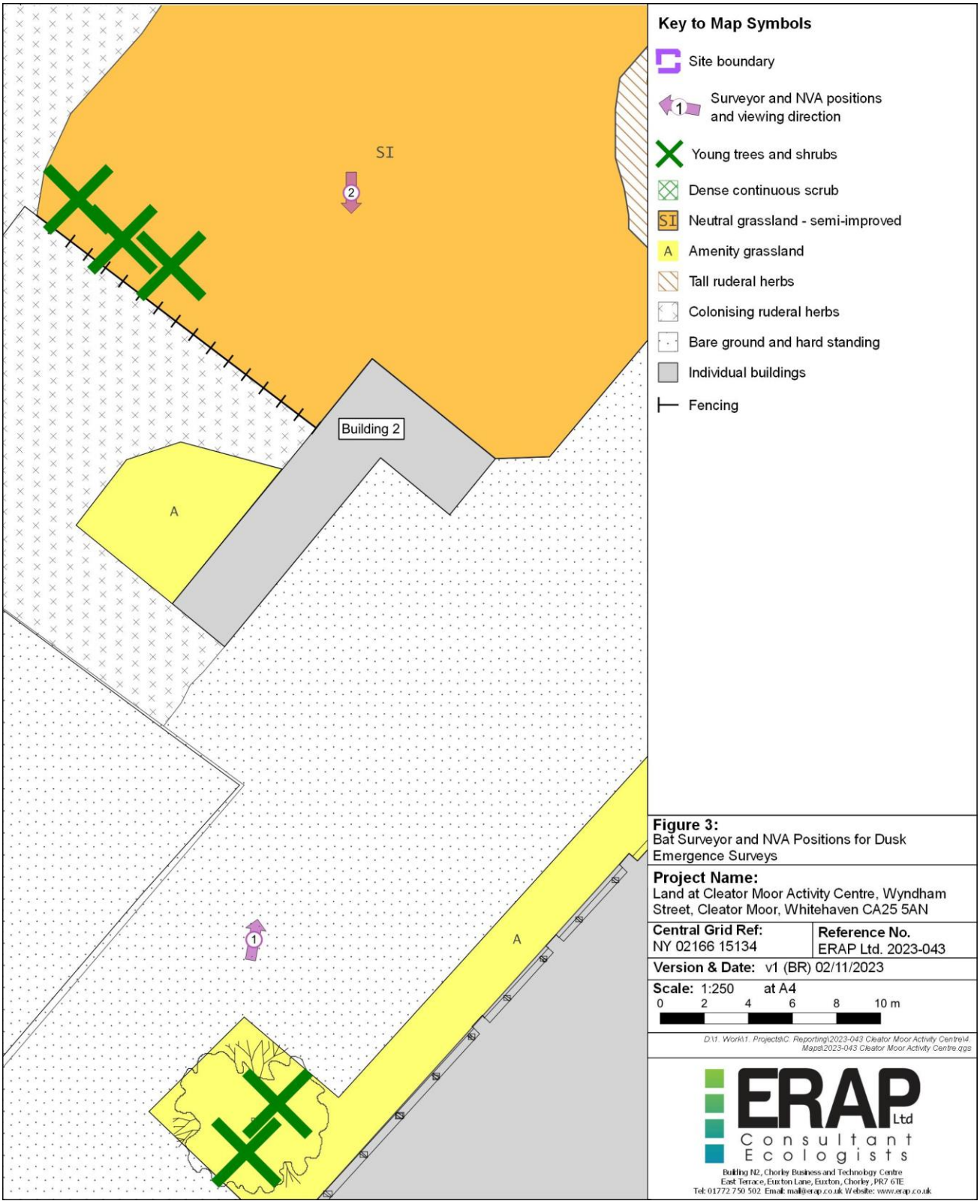


Figure 3: Bat Surveyor and NVA Positions for Dusk Emergence Surveys



9.0 APPENDIX 2: PROVISIONAL METHOD STATEMENT FOR THE PROTECTION OF BATS

9.1 Requirement for a Licence

9.1.1 All British bat species and their roosts are protected under the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*.

9.1.2 Building 2 supports a common pipistrelle roost (Roost 1) and, once approved, the demolition of the structure must only be carried out under an appropriate Natural England licence granted under Regulation 55 of *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. The licence permits the destruction of a bat roost which would otherwise be an offence.

9.1.3 Based on the assessment it is suggested that the site meets the criteria and qualifies to be registered under the Natural England Bat Mitigation Class Licence: Low Impact (BMCL). Victoria Burrows and Brian Robinson of ERAP (Consultant Ecologists) Ltd are both Registered Consultants (RC) under the BMCL licence (registration numbers RC038 and RC160 respectively).

9.1.4 In accordance with current Natural England guidance, at least two further surveys are required to ensure the data are valid and an application can be made to register the site under the BMCL. Note that a site visit by the Registered Consultant must be carried out within 3 months of the date of registration of the licence application.

9.2 Mitigation Strategy

Works to be Carried Out Prior to Demolition

Toolbox Talk

9.2.1 Once Natural England has confirmed that the site has been registered, prior to the commencement of works in the vicinity of the roost, the Registered Consultant will inform contractors of the following:

a. That bats and a bat roost are present;
b. The wildlife legislation and protection afforded to bats and their roosts;
c. The measures that will be used to protect bats;
d. The presence of the licence and method statement and the need to abide by the content (i.e. measures that will be used to protect bats);
e. Good working practices (i.e. roof tiles and ridge copings to be lifted, rather than slid);
f. Outline of the licensable activities;
g. The protocol to be followed if a bat is discovered when the licensed bat worker is not on site; and
h. An outline of the proposals and timescales.

Creation of New Roost Opportunities

9.2.2 As the habitats around the site will not be significantly altered by the proposals (or any pending proposals in the immediate future) it is likely that bats will continue to use the site in the future. In accordance with good practice and the requirements of the BMCL it is recommended that one bat box is installed at retained a mature tree within the wider site (and within the land ownership of the client) prior to construction. A suitable bat box is presented at **Insert 9.1**.

Insert 9.1: Greenwoods Ecohabitats Single Crevice Box

9.2.3 Bat boxes are available from Greenwoods Ecohabitats[13]. Other designs of box are also suitable, and are available from NHBS, Ibstock[14]and Habibat[15].

9.2.4 A suitable location for the box will be provided by ERAP (Consultant Ecologists) Ltd once the proposals for the site have been finalised.

9.2.5 This scale of compensation is proportionate and appropriate and in accordance with Annex A and B of the BMCL.

Actions to be Applied During the Demolition Period

Pre-work Inspection and Destructive Search

9.2.6 The Registered Consultant will carry out an examination of the roost area and determine the presence of any bats prior to the commencement of works.

9.2.7 The Registered Consultant will then instruct and supervise the careful removal, by hand, of the roof slates and chimney at the known roost locations and any other features determined to have opportunities suitable for use by roosting bats.

9.2.8 If a single common pipistrelle bat is present (or a low number of bats are present) then the Registered Consultant will carefully collect the bat(s), using a hand held static net or by direct handling, place the bat in an appropriate container and either release the bat at the site later the same day or place the bat in the bat box, as detailed below. Instruction will then be provided to proceed carefully with the removal of the remainder of the relevant parts of the roof under the supervision of the Registered Consultant, as appropriate.

9.2.9 If bat(s) are found unexpectedly in cold or adverse weather conditions then the protocol in Appendix II of the BMCL will be followed.

9.2.10 If any other species of bat is present or a large number of bats are present it is essential under the terms and conditions of the BMCL that the Registered Consultant contacts Natural England immediately for advice.

Timing

9.2.11 Based on the results of the surveys and the types of roost present there is no timing restriction on the commencement of works.

Discovery of a Bat

9.2.12 If bats are discovered during the works when the licensed bat worker / Registered Consultant is not present, all workers must withdraw from the area and the bat worker must be contacted for guidance

[13] http://www.greenwoodsecohabitats.co.uk/
[14] https://www.ibstock.com/kevington/eco-products/
[15] http://www.habibat.co.uk/

(Victoria Burrows or Brian Robinson at ERAP (Consultant Ecologists) Ltd on 01772 750502). Victoria and Brian have the appropriate experience and vaccinations to handle bats.

Mechanism for Ensuring Implementation/Success

9.2.13 If the licensed bat surveyor / Registered Consultant has any concerns regarding the quality of workmanship or there is non-compliance with the terms and conditions of the BMCL and the mitigation strategy and / or guidance provided by the licensed bat worker then this will result in additional site visits to make inspections.

9.2.14 It is always the intention to ensure all parties are aware of the importance of the Natural England licence and compliance with the mitigation strategy and this is achieved through good communication. However in extreme / significant cases of non-compliance the licensed bat surveyor will report the issue to Natural England and further action may be taken.

Post-development Site Safeguard and Habitat / Site Management and Maintenance

9.2.15 All site estate and maintenance staff will be made aware of the presence of the bat box, the protection afforded to bats and their roosts and the need to contact a licensed bat surveyor if any future maintenance works will directly affect or disturb the bat box.

Population Monitoring

9.2.16 As stated on Figure 4 in the *Bat Mitigation Guidelines* (2004) the post-development monitoring requirements for a summer roost of a common species[16] are minimal.

9.2.17 Under the BMCL there is no requirement for any post-development monitoring of the population of bats at the site. ERAP (Consultant Ecologists) Ltd will endeavour to position the boxes so that inspections for evidence of use by bats can be carried out by an appropriately licensed person, as needed.

[16] Common pipistrelle bats are listed as 'common and widespread' in the National Bat Monitoring Programme publications prepared by the Bat Conservation Trust