



## **Preliminary Ecological Appraisal**

**Jefferson Park, Whitehaven, Cumbria, CA28 9HE**

**2021**

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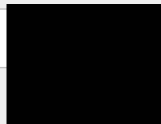
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# Quality Management

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# 1. Introduction

## 1.1. BACKGROUND AND PRE-EXISTING SITE INFORMATION

This report details a Preliminary Ecological Appraisal conducted on at Jefferson Park, Whitehaven, Cumbria, CA28 9HE (Nat. Grid Ref. NX 97446 16791 - Approx. centre of site).

Plans 'as proposed' have been provided (see Figure 1 & 2) and it is thereby understood that a proposal exists for a residential development consisting of '14 new affordable rented dwellings'. It is understood (pers. comms. Elsa Brailey, Home Group) that a planning application has already been submitted for the scheme, and that this was validated by Copeland Borough Council with no requirement for an ecological report being identified pre-validation. Copeland Borough Council have subsequently requested a Preliminary Ecological Appraisal of the site so as to inform the officers report / decision notice. Copeland Borough Council 's planning application search facility (<https://www.copeland.gov.uk/planning/application-search>) does not allow planning applications to be searched using 'location', 'site name' nor 'post-code' and is therefore unfit for the purpose of verifying the planning history of the site. No previous ecological survey data for the site has been identified via the planning system.

This survey has been commissioned to complete a baseline preliminary ecological assessment of the site and specifically to identify;

- Any areas of potential conservation interest,
- Any potential impacts to legally protected species / species groups,
- Any likely impacts on statutory and non-statutory designated sites as a result of the proposal,
- The presence of any invasive species listed in Schedule 9 of The Wildlife and Countryside Act 1981 (as amended).
- Opportunities to enhance the biodiversity value of the site in line with the National Planning Policy Framework (2019)

Jonathan Tibbitts of Thomas Armstrong (Construction) Ltd. commissioned Hesketh Ecology to complete this survey and report in August 2021. It is understood that this report will be used to accompany a full planning application for the proposed development.

## 1.2. FULL DETAILS OF PROPOSED WORKS ON SITE

The proposed development consists of 14no. residential units. It is understood these will be 2 bedroom, semi-detached and terraced properties and that all of the proposed properties will be 'affordable renting dwellings'.

The development is located within the existing Jefferson Park estate and will effectively be 'in-fill' development making economical use of existing infrastructure and minimising the requirement for new access roads etc.



Figure 1: Location Plan.



Figure 2: Jefferson Park - Site Plan - Drawing No. 202 by Home Group.



## 2. Legislation and Policy

### 2.1. DESIGNATED SITES

There are broadly 3 levels of designation currently in place to protect the most significant areas for habitats and wildlife. These are Internationally Designated Sites (Special Areas of Conservation, Special Protection Areas etc.), Domestically Designated Sites (Sites of Special Scientific Interest, National Nature Reserves etc.) and Locally Designated Sites (County Wildlife Sites, Local Nature Reserves etc.).

The Conservation of Habitats and Species Regulations 2017 provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

### 2.2. INTERNATIONALLY DESIGNATED SITES

Special Areas of Conservation (SACs) are areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats. All SAC's are also designated as SSSI's. The legal requirements relating to the designation and management of SACs in England are set out in The Conservation of Habitats and Species Regulations 2017. The SAC designation is recognition that some or all of the wildlife and habitats are particularly valued in a European context.

Special Protection Areas (SPAs) are areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the 'Birds Directive 1979' which provides enhanced protection given by the Site of Special Scientific Interest (SSSI) status all SPAs also hold. The legal requirements relating to the management and protection of SPAs in England are set out in The Conservation of Habitats and Species Regulations 2017.

Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) which they designate under the 1979 Birds Directive. Natura 2000 is not a system of strict nature reserves where all human activities are excluded. Whereas the network does include nature reserves most of the land is privately owned and the emphasis is on ensuring that future management is sustainable, both ecologically and economically.

The 'competent authority' is required to complete an Appropriate Assessment of a proposal, if the proposed activities would be likely to have a significant effect on the Natura 2000 site. An Appropriate Assessment aims to determine if the proposed development would have an adverse effect on the notified interest features of the SAC. The developer or proposers of the plan or project shall provide such information as the competent authority may reasonably require for the purposes of the assessment (Regulation. 43(2)).

### 2.3. DOMESTICALLY DESIGNATED SITE

Sites of Special Scientific Interest (SSSIs) are the country's very best wildlife and geological sites and give legal protection to these sites in England. Natural England now has responsibility for identifying and protecting SSSIs in England under the Wildlife and Countryside Act 1981 (as amended). The SSSI notification package includes a list of operations requiring Natural England's consent (formerly known as operations likely to damage the special interest). None of the listed operations can be carried out without Natural England's consent, or the consent of another public body (provided that the other body has formally consulted us). Operations listed on the list of operations requiring Natural England's consent (which are not already consented to) requires permission from Natural England. To obtain consent, a written notice must be submitted to Natural England containing the details of the operations in order for the proposal to be assessed and permission granted.

National Nature Reserves (NNRs) are all also designated as SSSIs. It is via this designation that legal protection is afforded to NNRs.

### 2.4. LOCALLY DESIGNATED SITES

There are currently a number of different terms in use to describe Local Wildlife Sites, including Sites of Importance for Nature Conservation (SINCs), Sites of Nature Conservation Importance (SNCIs) and County Wildlife Sites. Local Wildlife Sites are usually selected within a local authority area and this process is often managed by the local Wildlife Trust together with representatives of the local authority and other local wildlife conservation groups. They support both locally and nationally threatened wildlife, and many sites will contain habitats and species that are priorities under the county or UK Biodiversity Action Plans (BAP).

In Cumbria, Local Wildlife Sites are known as 'County Wildlife Sites'. They are designated and reviewed at a county level by the Wildlife Selection Panel for the Cumbria Local Sites Partnership, administered by Cumbria Wildlife Trust. County Wildlife Sites are not afforded any legal protection.

### 2.5. PROTECTED SPECIES

The legislation protecting wildlife exists regardless of the requirements of any planning consent.

The legal protection of animals and plants in the United Kingdom is mainly provided for by:

- The Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000,
- The Habitats and Species Directive (92/43/EC) enacted through The Conservation of Habitats and Species Regulations 2017.
- The Protection of Badgers Act 1992.

The level of protection for each species varies according to the conservation status of the species.

The Conservation of Habitats and Species Regulations 2017 provides safeguards for European Protected Sites and Species (as listed in the Habitats Directive). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

The Countryside and Rights of Way Act 2000 supplemented existing legislation for wildlife protection by prohibiting reckless acts that result in the killing or injuring of protected species.

The Natural Environment and Rural Communities Act 2006 requires that every public authority in exercising its functions must have regard as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Section 41 of this Act requires the Secretary of State to have prepared lists of species and habitats which are considered to be of principal importance for the purpose of conserving biodiversity [The UK Biological Action Plan (BAP) species].

## 2.6. SCHEDULE 2 - EUROPEAN PROTECTED SPECIES OF ANIMAL

These species are listed in Schedule 2 of the Habitat Regulations and in Schedule 5 of the

Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 2 Animals
Horseshoe bats <i>Rhinolophidae</i> - all species
Common bats <i>Vespertilionidae</i> - all species
Wild cat ( <i>Felis silvestris</i> )
Dolphins, porpoises and whales <i>Cetacea</i> – all sp.
Dormouse ( <i>Muscardinus avellanarius</i> )
Pool frog ( <i>Rana lessonae</i> )
Sand lizard ( <i>Lacerta agilis</i> )
Fisher's estuarine moth ( <i>Gortyna borelii lunata</i> )
Great crested newt ( <i>Triturus cristatus</i> )
Otter ( <i>Lutra lutra</i> )
Lesser whirlpool ram's-horn snail ( <i>Anisus vorticulus</i> )
Smooth snake ( <i>Coronella austriaca</i> )
Sturgeon ( <i>Acipenser sturio</i> )
Natterjack toad ( <i>Epidalea calamita</i> )
Marine turtles ( <i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempii</i> , <i>Eretmochelys imbricata</i> and <i>Dermochelys coriacea</i> )

**Table 1:** Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 2 Animals

Wildlife & Countryside Act 1981. The legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take);
- Deliberately disturb;
- Recklessly disturb or obstruct access to any place used for rest and shelter

- Damage or destroy any place used for rest and shelter
- Possess or transport an animal or any part of, unless acquired legally,
- Sell (or offer for sale) or exchange

Work that disturbs Schedule 2 species is illegal without a Wildlife Development Licence issued by Natural England.

## 2.7. SCHEDULE 5 - EUROPEAN PROTECTED SPECIES OF PLANTS

Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 5 – Plants
Shore dock ( <i>Rumex rupestris</i> )
Killarney fern ( <i>Trichomanes speciosum</i> )
Early gentian ( <i>Gentianella anglica</i> )
Lady's-slipper ( <i>Cypripedium calceolus</i> )
Creeping marshwort ( <i>Apium repens</i> )
Slender naiad ( <i>Najas flexilis</i> )
Fen orchid ( <i>Liparis loeselii</i> )
Floating-leaved water plantain ( <i>Luronium natans</i> )
Yellow marsh saxifrage ( <i>Saxifraga hirculus</i> )

**Table 2:** Conservation of Habitats and Species Regulations 2010 (as amended): Schedule 5 - Plants

These species are listed in Schedule 5 of the Habitat Regulations and in Schedule 8 of the Wildlife & Countryside Act 1981. The legislation makes it illegal to pick, uproot, destroy, or trade in these plants.

## 2.8. OTTERS

Otters are protected under Section 39 of The Conservation of Habitats and Species Regulations 2017 as European Protected Species and Section 9 of the Wildlife and Countryside Act 1981 (as amended) (Schedule 5). It is an offence to:

- Deliberately capture, injure or kill an Otter;
- Intentionally or recklessly disturb an Otter in a place used for shelter or protection, or deliberately disturb Otters in such a way as to be likely significantly to affect (i) the ability of any significant group of Otters to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance.
- Damage or destroy a breeding or resting place

- Intentionally or recklessly obstruct access to a place used for shelter or protection
- Possess an Otter (alive or dead), or any part of an Otter.

Work that disturbs otters is illegal without a Wildlife Development Licence issued by Natural England.

## 2.9. BADGERS

Badgers are a protected species. In addition to The Wildlife and Countryside Act 1981, The Countryside and Rights of Way (CROW) Act 2000 and The Conservation of Habitats and Species Regulations 2017, badgers and their setts are also covered by the provisions of the Protection of Badgers Act (1992). A sett is defined as "any structure or place which displays signs indicating current use by a badger". The legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take) badgers;
- Damage a badger sett or any part of it;
- Destroy a badger sett;
- Obstruct access to, or any entrance of, a badger sett;
- Disturb a badger when it is occupying a badger sett;

Work that disturbs badgers is illegal without a Wildlife Development Licence issued by Natural England.

## 2.10. BREEDING BIRDS

All wild birds (birds in a wild state resident in or visiting Great Britain) and their nests and eggs are protected under the Wildlife & Countryside Act 1981. Particular emphasis is given to the protection of breeding birds. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds
- Take, damage or destroy the nest of wild birds while in use or being built
- Take or destroy the eggs of wild birds
- Disturb wild birds listed in Schedule 1 when nest building or at a nest containing eggs or young, or disturb dependent young of wild birds

## 2.11. REPTILES

Reptiles, including common lizards, slow worms and grass snakes, are protected under the Wildlife & Countryside Act 1981 against deliberate killing, injuring and sale (Sub-Sections 9 (1) and 9 (5)). These species are listed in Schedule 5.

## 2.12. OTHER MAMMALS

Mammal species not covered by the above legislation (rabbits, foxes, hares, moles etc) are protected by the Wild Mammals (Protection) Act 1996. This states; 'any person [whom] mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering he shall be guilty of an offence.' This is potentially relevant in the case of burrowing animals on a development site.

## 2.13. INVASIVE NON-NATIVE SPECIES

In the UK, it is an offence under section 14(2) of the Wildlife and Countryside Act 1981 to "plant or otherwise cause to grow in the wild" any plant listed in Schedule 9, Part II to the Act. This could include cutting the plant or roots and disturbing surrounding soil if not correctly managed.

An offence under the Wildlife and Countryside Act can result in a criminal prosecution. An infringement under the Environmental Protection Act can result in enforcement action being taken by the Environment Agency (EA) which can result in an unlimited fine.

Schedule 9 – List of Invasive plant species	
Australian swamp stonecrop or New Zealand pygmyweed ( <i>Crassula helmsii</i> )	Small-leaved cotoneaster ( <i>Cotoneaster microphyllus</i> )
Californian red seaweed ( <i>Pikea californica</i> )	Three-cornered garlic ( <i>Allium triquetrum</i> )
Curly waterweed ( <i>Lagarosiphon major</i> )	Variiegated yellow archangel ( <i>Lamiastrum galeobdolon subsp. argentatum</i> )
Duck potato ( <i>Sagittaria latifolia</i> )	Virginia creeper ( <i>Parthenocissus quinquefolia</i> )
Entire-leaved cotoneaster ( <i>Cotoneaster integrifolius</i> )	Wakame ( <i>Undaria pinnatifida</i> )
False Virginia creeper ( <i>Parthenocissus inserta</i> )	Giant salvinia ( <i>Salvinia molesta</i> )
Fanwort or Carolina water-shield ( <i>Cabomba caroliniana</i> )	Green seafingers ( <i>Codium fragile</i> )
Few-flowered garlic ( <i>Allium paradoxum</i> )	Himalayan cotoneaster ( <i>Cotoneaster simonsii</i> )
Floating pennywort ( <i>Hydrocotyle ranunculoides</i> )	Hollyberry cotoneaster ( <i>Cotoneaster bullatus</i> )
Floating water primrose ( <i>Ludwigia peploides</i> )	Hooked asparagus seaweed ( <i>Asparagopsis armata</i> )
Giant hogweed ( <i>Heracleum mantegazzianum</i> )	Hottentot fig ( <i>Carpobrotus edulis</i> )
Giant kelp ( <i>Macrocystis</i> spp.)	Hybrid knotweed ( <i>Fallopia japonica</i> × <i>Fallopia sachalinensis</i> )
Giant knotweed ( <i>Fallopia sachalinensis</i> )	Indian (Himalayan) balsam ( <i>Impatiens glandulifera</i> )
Giant rhubarb ( <i>Gunnera tinctoria</i> )	Japanese knotweed ( <i>Fallopia japonica</i> )
Japanese rose ( <i>Rosa rugosa</i> )	Wall cotoneaster ( <i>Cotoneaster horizontalis</i> )
Japanese seaweed ( <i>Sargassum muticum</i> )	Water fern ( <i>Azolla filiculoides</i> )
Laver seaweeds (except native species) ( <i>Porphyra</i> spp)	Water hyacinth ( <i>Eichhornia crassipes</i> )
Parrot's-feather ( <i>Myriophyllum aquaticum</i> )	Water lettuce ( <i>Pistia stratiotes</i> )
Perfoliate alexanders ( <i>Smyrniium perfoliatum</i> )	Water primrose ( <i>Ludwigia grandiflora</i> )
Pontic rhododendron ( <i>Rhododendron ponticum</i> )	Water primrose ( <i>Ludwigia uruguayensis</i> )

Schedule 9 – List of Invasive plant species	
Red algae ( <i>Grateloupia luxurians</i> )	Waterweeds ( <i>Elodea</i> spp.)
Rhododendron ( <i>Rhododendron ponticum</i> x <i>Rhododendron maximum</i> )	Yellow azalea ( <i>Rhododendron luteum</i> )
Purple dewplant ( <i>Disphyma crassifolium</i> )	

**Table 3:** Schedule 9 – List of Invasive plant species

#### 2.14. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT (2006)

Beyond the legal protection afforded to species in the UK, the Natural Environment and Rural Communities (NERC) Act (2006) states;

*'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.'*

NERC Act 2006 - Section 40.

*'The Secretary of State must, as respects England, publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity.'*

*'Without prejudice to section 40(1) and (2), the Secretary of State must—*

*(a) take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or*

*(b) promote the taking by others of such steps.'*

NERC Act 2006 - Section 41

#### 2.15. UK BIODIVERSITY ACTION PLAN (BAP) PRIORITY SPECIES / UK POST-2010 BIODIVERSITY FRAMEWORK

UK Biodiversity Action Plan (BAP) priority species were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original list of UK BAP priority species was created between 1995 and 1999.

In 2007, however, a revised list was produced, following a 2-year review of UK BAP processes and priorities, which included a review of the priority species and habitats lists.

The UK BAP has now been superseded by the UK Post-2010 Biodiversity Framework. The UK Post-2010 Biodiversity Framework covers the period from 2011 to 2020, and was developed in response to two main drivers: the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020 and its five strategic goals and 20 'Aichi Biodiversity Targets', published in October 2010; and the EU Biodiversity Strategy (EUBS), released in May 2011. The UK Post-2010 Biodiversity Framework now serves to meet the

statutory obligation imposed by Section 41 of the NERC Act. The UK BAP list, as revised in 2007, was incorporated into the UK Post-2010 Biodiversity Framework with only minor alterations.

The Cumbria Biodiversity Action Plan (CBAP) was designed to implement national biodiversity targets set out in the UK BAP at a local level, with an emphasis on local priorities. At its inception the CBAP included 40 species / species groups, 21 of which had dedicated action plans with a further 19 without action plans. The original CBAP list was updated in 2010 to include all UK BAP species which occur in Cumbria.

## 2.16. NATIONAL PLANNING POLICY FRAMEWORK (NPPF) 2019

The National Planning Policy Framework (NPPF) was originally published by the Department of Communities and Local Government in 2012, consolidating over two dozen previously issued documents called Planning Policy Statements (PPS) and Planning Policy Guidance Notes (PPG) for use in England. A revised NPPF was published by the UK Government's Ministry of Housing, Communities and Local Government in 2018 and then again in 2019. The revised National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in 2012, and revised in 2018.

Chapter 15 of the NPPF, Conserving and Enhancing the Natural Environment, states (NB the following is a summary only, selecting points which relate to biodiversity and species only, for the full text see National Planning Policy Framework; February 2019, Ministry of Housing, Communities and Local Government ;

*'Planning policies and decisions should contribute to and enhance the natural and local environment by:*

- *protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;'*

Paragraph 170, Pg. 49.

*To protect and enhance biodiversity and geodiversity, plans should:*

- *Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- *promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

Paragraph 174, Pg. 50.



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

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;*

Paragraph 175, Pg. 50.

## 3. Methodology

### 3.1. DESK BASED INVESTIGATION

Natural England's MAGIC website (<http://www.magic.gov.uk>) was consulted for information relating to statutory designated sites adjacent to the site or within the immediate area.

A data search was commissioned from Cumbria Biodiversity Data Centre for all records of rare, scarce, protected or invasive non-native species and non-statutory designated sites within a 2km radius of national grid ref. NX 97446 16791 (the approximate centre of the site).

### 3.2. FIELD SURVEY

A daytime inspection of the site was conducted during which all areas of the site were inspected in detail during a walk over survey. A methodology based on that outlined in the JNCC Phase 1 Habitat Survey Guidelines was employed, as per the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013), and the species / habitat codes presented therein used. Areas immediately adjacent the site were inspected from public rights of way only. Mature trees were inspected from ground level only using binoculars and an AG80 20x- 60x spotting scope as necessary. The following evidence of potential for protected species is a brief summary only.

#### **Bats**

Evidence of potential for bats includes:

- Evidence of bats (droppings, seeing bats, smelling bats)
- Older trees/woodlands for foraging and roosting;
  - Woodpecker holes
  - Gap / crevices behind bark
  - Rot holes
  - Bird / bat boxes
  - Cracks associated with damaged limbs
- Linear landscape elements e.g. hedgerows and watercourses for commuting and foraging
- Built structures e.g. buildings and bridges for summer roosting or hibernation

In relation to bats, the survey methodology conformed with that laid out in '*Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London*'. Any buildings, woodland areas and standard trees within the site were categorised (negligible, low, medium or high) for their potential to support roosting bats.

The survey area for bats comprised all land within the site boundary.

## **Amphibians**

Evidence of potential for protected amphibian species includes:

- Evidence of protected amphibian species (seeing great crested newts or natterjack toads)
- Ponds or other bodies of open standing water on site or within 500m of site
- Suitable terrestrial habitat including foraging habitat and / or hibernation potential

In relation to great crested newts, the survey methodology conformed with that laid out in '*English Nature (2001) Great crested newt mitigation guidelines Version: August 2001. English Nature. ISBN 1 85716 568 3*'. All ponds onsite or within 500m of the site boundary were identified using OS maps and a Habitat Suitability Index Score was calculated using '*Oldham R.S., Keeble J., Swan M.J.S., and Jeffcote M. (2000) Evaluating the suitability of habitat for the great crested newt. Herpetological Journal 10: 143-155*'.

The survey area for amphibians comprised accessible land within 500m of the site boundary.

## **Otter**

Evidence of potential for otters includes:

- Evidence of otters (seeing otters, spraint, footprints, feeding remains)
- Watercourses / water bodies
- Woodland or rough grassland / scrub for holts and lying up

In relation to otter, the survey methodology conformed with that laid out in '*Chanin (2003) Monitoring the Otter*' and '*Liles (2003) Conserving Otter Breeding Sites*'. Any evidence of otter, such as places of rest (holts or couches), spraint sites, prints and slides, as well as any otter sightings would be recorded.

The survey area for otters comprised land within the site boundary.

## **Badger**

Evidence of potential for badgers includes:

- Evidence of badgers (latrines, setts, footprints, fur, runs)
- Woodland for foraging and setts

In relation to badger, the survey methodology conformed with that laid out in '*Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines. Version 1.*'. Any evidence of badger, such as latrines, setts, footprints, fur and runs, as well as any badger sightings would be recorded.

The survey area for badgers comprised land within the site boundary.

## **Birds**

Evidence of potential for breeding birds includes:

- Evidence of breeding birds (nests, nest building behaviour, courtship and display behaviour, distraction display, used nests or eggshells)

- Trees/woodlands for nesting
- Built structures for nesting
- Natural habitat features for nesting (watercourses, embankments, rough grassland)

In relation to breeding birds the survey methodology employed a simple ‘look and see’, Visual Encounter Survey technique in which the evidence identified above was recorded as encountered.

The survey area for birds comprised land within the site boundary and immediately adjacent the site boundary only.

### **Reptiles**

Evidence for potential for reptiles includes:

- Evidence of reptiles (seeing reptiles, sloughed skin)
- Rough grassland
- South facing slopes

In relation to reptiles, the survey methodology involved a Habitat Suitability Assessment using the characteristics laid out in ‘*Natural England Technical Information Note TIN102 Reptile mitigation guidelines*’ [WITHDRAWN].

The survey area for reptiles comprised land within the site boundary and immediately adjacent the site boundary only.

### **‘Other Mammals’**

Evidence for potential for ‘other mammal’ species:

- Evidence of ‘other mammals’ (seeing other mammals, droppings, burrows, mole hills)

In relation to ‘other mammals’, the survey methodology conformed with that laid out in ‘*The Mammal Society (2013). How to Find and Identify Mammals*’.

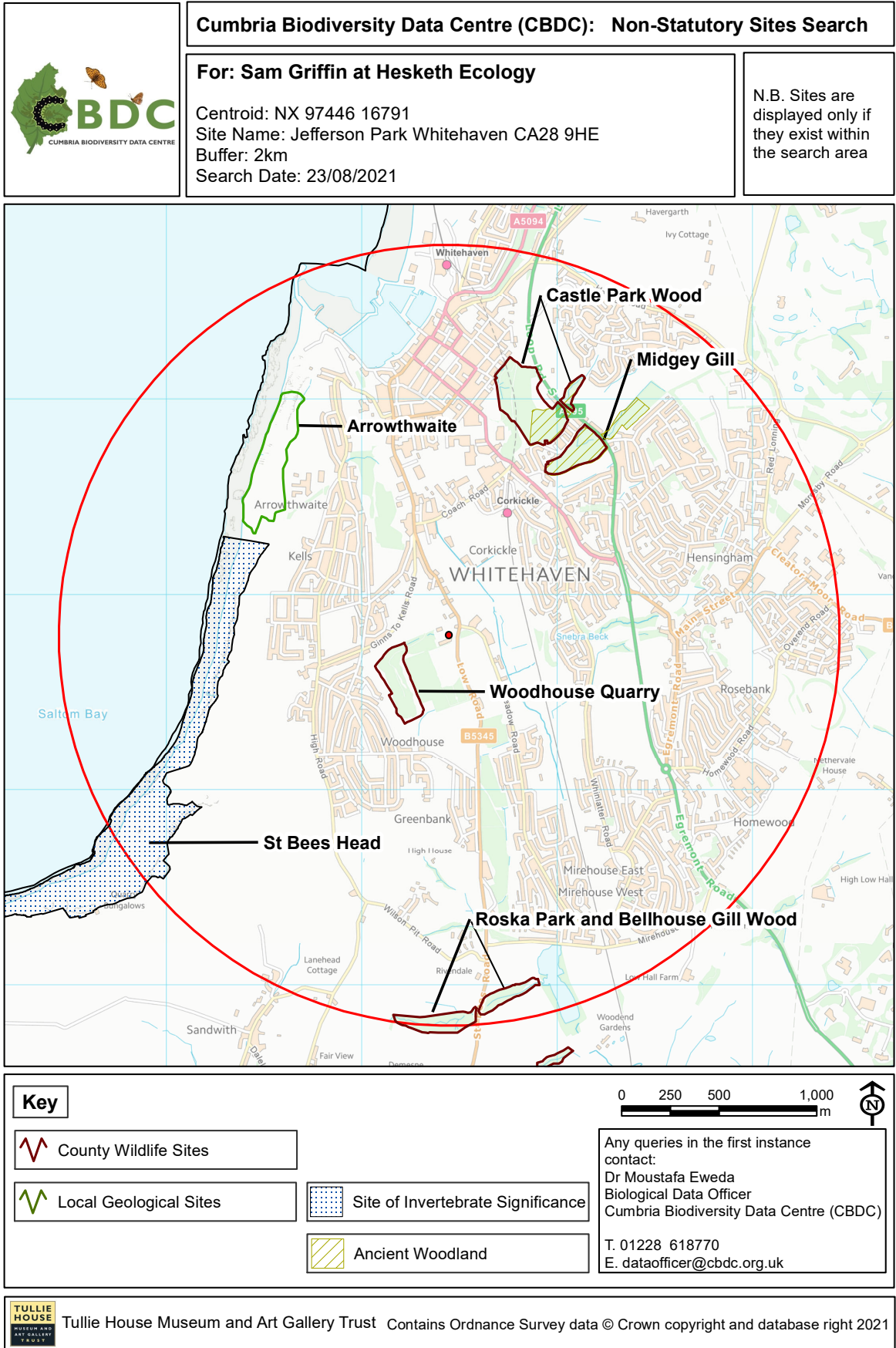
### 3.3. TIMING

The survey was conducted on 23rd August 2021.

### 3.4. WEATHER CONDITIONS

Date	Activity	Weather conditions			
		Temp (°C)	Wind (Beaufort scale)	Cloud (%)	Precipitation
23/08/2021	Site inspection	20	0	20	None

**Table 4: Weather conditions.**



**Figure 3: Cumbria Biodiversity Data Centre (CBDC): Non-Statutory Sites Search - Centroid: NX 97446 16791, Site Name: Jefferson Park Whitehaven CA28 9HE, Search Buffer: 2km, Search Date: 23/08/2021.**

3.5. PERSONNEL

The site inspection was conducted by Sam Griffin BSc ACIEEM.

## 4. Results

### 4.1. DESIGNATED SITES

#### Internationally Designated Sites

A search for all 'land-based' designated sites on Natural England's MAGIC website (<http://www.magic.gov.uk>) conducted on 24/08/2021 has confirmed that no internationally designated sites exist within a 2km radius of national grid ref. NX 97446 16791 (the approximate centre of the site). The site is not directly connected to any more distant internationally designated site and consequently it is concluded that the proposed works will not affect any internationally designated site.

**No internationally designated sites exist within a 2km radius of the site and therefore no potential impacts to any internationally designated sites are anticipated.**

#### Domestically Designated Sites

A search for all 'land-based' designated sites on Natural England's MAGIC website (<http://www.magic.gov.uk>) conducted on 24/08/2021 has confirmed that a single domestically designated sites exists within a 2km radius of national grid ref. NX 97446 16791 (the approximate centre of the site). This is St. Bees Head Site of Special Scientific Interest (SSSI) which lies c.1km to the west at its closest point.

St. Bess Head is a mixed interest SSSI, having both geological and biological interest features listed on the citation. In summary, the site is notified as '*the best exposure of the Permian rock sequence and marine strata in Cumbria and also the best available exposure of the Whitehaven Sandstone formation*' and for '*the sheer cliffs which provide the only breeding site on the coast of Cumbria for a variety of colonial seabirds*'.

Unit 1 of St. Bees Head SSSI, that which lies c.1km to the west, contains geological interest features only. The Units containing biological interest features lie 2.5km to the south west. The proposed work will not impact geological interest features of Unit 1 of St. Bees Head SSSI and is sufficiently distant from other Units that no impacts to biological interest features are anticipated.

The site is not directly connected to any more distant domestically designated site and consequently it is concluded that the proposed works will not affect any domestically designated site.

**No potential impacts to any domestically designated sites are anticipated.**

#### Locally Designated Sites

A detailed data search for all locally designated sites was commissioned from Cumbria Biodiversity Data Centre (CBDC) for all Locally Designated Sites within a 2km radius of Nat. Grid Ref. NX 97446 16791 (the approximate centre of the site). This revealed that the site is not designated as a County Wildlife Site but that a total of four County Wildlife Sites, one Local Geological Site and one Site of Invertebrate Significance exist within 2km of the site boundary. The details of these are as follows;

- Woodhouse Quarry County Wildlife Site (approximately 0.2km to the west)
- Midgey Gill County Wildlife Site (approximately 1.6km to the north east)
- Castle Park Wood County Wildlife Site (approximately 1.65km to the north east)
- Roska Park and Bellhouse Gill Wood (approximately 1.9km to the south)
- Arrowthwaite Local Geological Site (approximately 1.7km to the north west)
- St Bees Head Site of Invertebrate Significance (approximately 1.4km to the west)

Woodhouse Quarry CWS (Site Ref. CO-NX91-12) lies c.200m to the west and appears to represent a similar situation to Jefferson Park - specifically open areas of neutral grassland within an area of deciduous woodland. The Cumbria County Wildlife Sites citation document for Woodhouse Quarry describes the site as follows;

*'An old brickworks quarry with geological and botanical interest. Both northern marsh and common spotted orchids (Dactylorhiza fuchsii) can be found in the quarry with common valerian (Valeriana officinalis), tufted vetch (Vicia cracca), kidney vetch (Anthyllis vulneraria), creeping soft grass (Holcus mollis), crested dog's-tail (Cynosurus cristatus), bents (Agrostis spp) and tufted hair-grass (Deschampsia caespitosa).'*

The Jefferson Park site is not directly adjacent any locally designated site, and is not connected to any such site via a distinct linear habitat feature.

**Due to the proximity of these locally designated sites, it is concluded that the proposed development will not impact upon any locally designated site.**

#### 4.2. HABITAT DESCRIPTION

The area proposed for development is located on Jefferson Park, Whitehaven which lies off the B5345 (Low Road) approximately 1.5km to the south of Whitehaven town centre. The site is an enclosed residential estate which currently consists of residential units on the northern and southern boundary, with an undeveloped area of mown amenity grassland in the centre. An area to the north and east of the access road consists of neutral grassland with some amenity tree planting. Jefferson Park is bounded to the south by Whitehaven Cemetery and to the west and north by areas of mature semi-natural deciduous woodland. A private residential dwelling known as Rose Cottage lies on the eastern boundary between the site and Low Road. A narrow belt of screening scrub currently exists between Jefferson Park and Rose Cottage.

A review of historic maps and aerial photography has shown that the site was undeveloped during the latter part of the C.19th but does appear to be part of a larger field marked as 'Brick Field', which suggests it may have been used as a small clay pit to serve brick works in the area. Between 1867 and 1899 the site is surrounded by open agricultural land, the deep gill to the north is marked as woodland and Whitehaven and Preston Quarter Cemetery lies some 100m to the south. By 1900, the cemetery has expanded north to meet the current southern boundary of the Jefferson Park site and a mineral railway has been constructed within the deep wooded gill which runs along the northern boundary of the site. The Jefferson Park site itself is - at this time - marked as 'Clay Pits' with numerous small tracks connecting the site with a 'Fire Brick Works' approximately 100m to the north. By 1925 the clay extraction has moved to the west and the access track between the clay pits and the Fire Brick Works is via a tunnel which passes beneath the Mineral Railway which runs along the northern boundary. A large building marked as 'Laundry' is marked on the OS Cumberland



Series: Cumberland map from 1925. This occupies the majority of the southern portion of the current Jefferson Park site. The site then remains broadly unchanged throughout the latter part of the C.20th, with only minor extensions to the Laundry building (later known as Lake-land Laundry) occurring sometime after 1938. By 1979 the site is surrounded by developed residential areas, although the cemetery and Woodhouse Quarry remain as areas of woodland surrounded by suburbs of Whitehaven Town.

By 2003 (when the first aerial photography of the site becomes available) the laundry building has been completely demolished and the site appears to consist of grassland and scrub surrounded by areas of mature deciduous woodland. The fire brickwork to the north appear to have been recently demolished and the Jefferson Park site appears to be broadly disused. Aerial photography from 2008 shows the site has been completely cleared and construction of the properties which currently exist on the site is underway. At this time the site is surrounded by woodland, but all ground within the boundary of Jefferson Park is bare and in use as an active development site. From 2016 onwards the site is consistently shown as it currently exists. This review of historic maps and aerial photography shows that the site has undergone significant changes over the last 150 years. The site appears to have been cleared on a number of occasions, most recently during 2008 when the most recent phase development occurred and the buildings which currently occupy the site were constructed. Although impossible to accurately ascertain from maps and aerial photography alone (and considering the limitations of the Copeland Borough Council online planning application search facility), it would appear that the habitats on site have developed entirely since c.2008-2009 and are therefore relatively young.

The site is set within an urban environment on the southern side of Whitehaven town. Although urban environments are technically undefined in the 'Cumbria Landscape Character Guidance and Toolkit PART ONE Landscape Character Guidance, Cumbria County Council 2011' this area does lie within Landscape Character Type 4: Coastal Sandstone. This landscape sub type is found between Whitehaven and Sellafield and is characterised by;

- Coastal sandstone cliffs
- Sandstone rolling hills and plateaus
- Large open fields
- Prominent hedge banks bound pastoral fields
- Small woodland blocks along valley sides
- Exposed coastal edge moving to intimate and enclosed farmland inland

*Coastal Sandstone cliffs are significant for breeding sea bird colonies, but also 'support large areas of coastal heath and species-rich grassland including sea campion, bloody crane's bill, kidney vetch, thrift, common scurvy grass and red fescue. Inland the landscape is largely agricultural, but along the valley of Pow Beck there is areas of rush pasture, reed bed and swamp vegetation. Small, deeply incised tributaries to Pow Beck hold small semi natural woodlands.*

Cumbria Landscape Character Guidance and Toolkit PART ONE Landscape Character Guidance, Cumbria County Council 2011, Pg. 63.

The site contains two distinct habitats, these being close mown amenity grassland and herb rich neutral grassland. These two habitats are only distinct due to the management regime observed on the two sections. The central area of Jefferson Park, bounded by access roads to the north and south, is routinely mown to a short sward and is therefore dominated by

grasses and lacking any three dimensional structure. Identification of species within this mown sward was difficult and complicated by the fact the area had been recently mown, however the following species were recorded; Yorkshire fog (*Holcus lanatus*), rough meadow grass (*Poa trivialis*), common bent (*Agrostis capillaris*), false oat grass (*Arrhenatherum elatius*), ragwort (*Jacobaea vulgaris*), red bartsia (*Odontites vernus*), daisy (*Bellis perennis*), herb Robert (*Geranium robertianum*), white clover (*Trifolium repens*), red clover (*T. pratense*), broadleaved dock (*Rumex obtusifolius*), curly dock (*R. crispus*), wood dock (*R. sanguineus*), selfheal (*Prunella vulgaris*), enchanters nightshade (*Circaea lutetiana*), ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*) and black medic (*Medicago lupulina*). This area also contains a small number of semi-mature deciduous trees at the western end. These are birch, sycamore, oak, goat willow and whitebeam (See 'JEFFERSON PARK WHITEHAVEN: Pre-development Arboricultural Report', Prepared for: Thomas Armstrong Construction - 17 June 2021 By Treescapes Consultancy Ltd. Reference No. AH/AIA/170621) and are all classified as 'Category C - Low Quality Trees'. Of the 8no. Trees identified within the proposed development site boundary, 4no. Will be retained (birch, white beam, goat willow x2) and 4no. Have been 'proposed for removal to facilitate the proposed development' (oak and sycamore x3).

The area to the north / north east of the access road consists of herb rich neutral grassland. This is a relatively small area of land measuring c.0.12ha, which is subject to routine mowing within a strip of approximately 1m directly adjacent to the footpath only. The rest of this area is left completely unmanaged and has therefore developed a structure which consists of areas of bare ground, areas of relatively short sward and scattered clumps of ranker, tussock forming grasses. In this neutral grassland *Salix* sp. trees have been planted. These are commercial cultivars which were presumably planted following the completion of the development phase in 2008 and have seemingly struggled to thrive in the thin, compacted soil which is present in this area. The lack of any formal management of this area has allowed a diverse floral community to develop, which in turn supports a diverse invertebrate community. The plant species recorded here include, Yorkshire fog (*Holcus lanatus*), false oat grass (*Arrhenatherum elatius*), red fescue (*Festuca rubra*), knapweed (*Centaurea nigra*), broadleaved dock (*Rumex obtusifolius*), curly dock (*R. crispus*), ragwort (*Jacobaea vulgaris*), red bartsia (*Odontites vernus*), white clover (*Trifolium repens*), red clover (*T. pratense*), ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*), black medic (*Medicago lupulina*), oxeye daisy (*Leucanthemum vulgare*), hogweed (*Heracleum sphondylium*), creeping thistle (*Cirsium arvense*), spear thistle (*C. vulgare*), marsh thistle (*C. palustre*), field horsetail (*Equisetum arvense*), figwort (*Scrophularia nodosa*), silverweed (*Potentilla anserina*), Angelica (*Angelica sylvestris*), greater plantain (*Plantago major*), nipplewort (*Lapsana communis*), rosebay willow herb (*Chamaenerion angustifolium*), greater willow herb (*Epilobium hirsutum*), hemp agrimony (*Eupatorium cannabinum*), doves-foot cranesbill (*Geranium molle*), coltsfoot (*Tussilago farfara*), perforate St. Johns wort (*Hypericum perforatum*), nettle (*Urtica dioica*), birds-foot trefoil (*Lotus corniculatus*), meadow vetchling (*Lathyrus pratensis*), tufted vetch (*Vicia cracca*), bush vetch (*V. sepium*) and common vetch (*V. sativa*). Although field horsetail is dominant in places, this area is generally diverse and offers a mosaic of structure which is of some value to invertebrates. Common blue butterfly (*Polyommatus icarus*) and speckled wood (*Pararge aegeria*) were both observed on site during the site inspection.

The boundaries of the area of neutral grassland to the north east of the access road (i.e. in a strip screening Jefferson Park from the adjacent Rose Cottage) are planted with scrub / immature trees. This contains a variety of native and non-native species and is outside of the proposed development footprint and will therefore be unaffected by the proposed works.

The amenity grassland is of no intrinsic conservation value and offers very little potential for any legally protected or priority species. The unmanaged neutral grassland to the north east of the access road is likely to be of some value to wildlife and may support legally protected species (specifically common reptiles), but is broadly typical of vacant land in the surrounding area.

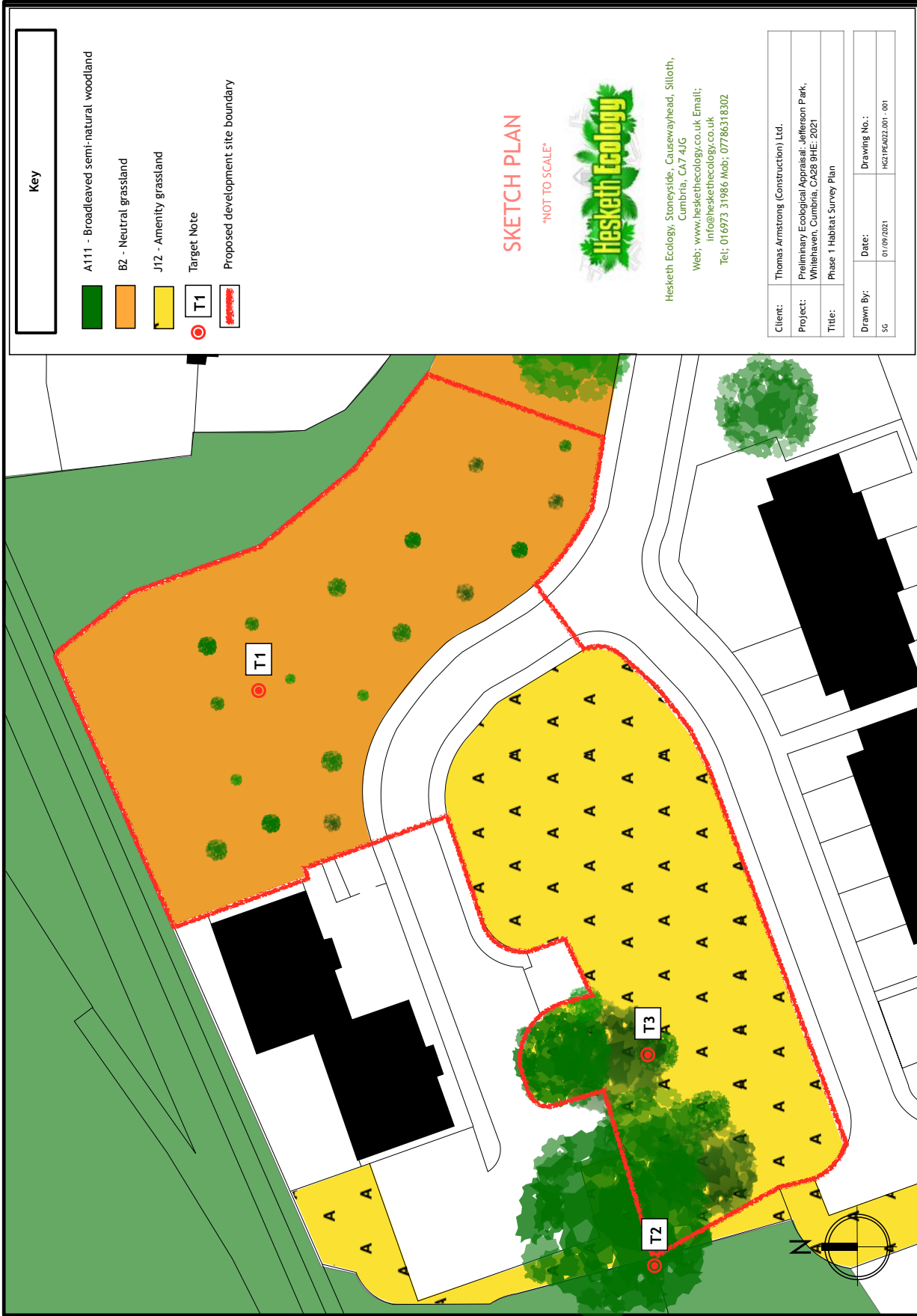


Figure 4: Phase 1 Habitat Surveys Plan.

Target Note	Location	Comment
T1	NX974168	<p>Unmanaged neutral grassland to the north east of the access road is likely to be of some value to wildlife and may support legally protected species (specifically common reptiles), but is broadly typical of vacant land in the surrounding area.</p> <p>If common reptiles do occur on site, they would certainly be affected by the proposed works. The risk of harm to common reptiles is currently unknown - further survey effort is recommended to confirm presence / likely absence of reptiles.</p>
T2	NX 97374 16786	<p>During the survey Japanese knotweed was recorded on the western boundary of the site. Here the knotweed is growing under dense tree cover, which is likely to limit its vigour, but it was found to be growing widely within the woodland to the west.</p>
T3	NX973167	<p>The immature deciduous trees identified in the Pre-development Arboricultural Report as proposed for removal to facilitate the proposed development do offer some potential for breeding birds. The 'oak' tree which will be removed contained evidence of two nests which were disused at the time of the site inspection. Confirmation of the species concerned was therefore not possible, but the nests were poorly constructed and were felt likely to have been made by wood pigeons.</p> <p>No evidence of squirrel dens or dreys was recorded during the site inspection, but it is possible that squirrels could occasionally occur on site.</p> <p>Vegetation clearance should occur outside of the bird nesting season (March - August).</p> <p>A checking survey must be conducted immediately prior to vegetation clearance commencing.</p>

**Table 5:** Target Notes (See Figure 4).

### 4.3. LEGALLY PROTECTED SPECIES

A data search was commissioned from Cumbria Biodiversity Data Centre for all records of rare, scarce, protected or invasive non-native species within a 2km radius of nat. grid. ref. NX 97446 16791 (the approximate centre of the site). The search was conducted on 23/08/2021. This detailed biological records search returned a total of 3123 records of 229 rare, scarce and protected species.

Taxon Group	Number of historic records	Number of species
Fungus	0	0
Lichen	0	0
Moss	0	0
Conifer	4	1
Flowering Plant	20	7
Chromist	1	1
Mollusc	1	1
Crustacean	3	1
Spider	0	0
Insect	367	75
Jawless Fish	0	0
Bony Fish	1	1
Cartilagenous fish	1	1
Amphibian	19	4
Reptile	45	2
Bird	2334	118
Marine Mammal	17	3
Terrestrial Mammal (including unidentified bat species)	310	14
<b>TOTAL</b>	<b>3123</b>	<b>229</b>

**Table 6:** Summary of detailed biological records search from Cumbria Biodiversity Data Centre.

With 3123 individual historic records of 229 species; species of all taxon groups are well recorded in this search area. However, historic biological records are of use in identifying potential presence of a species in an area, but should never be taken to imply likely absence. A lack of records is more likely to suggest lack of recorder effort than likely absence. This being the case, each species / species group is considered individually in relation to the site and the features of the site which may offer potential for the species / species group.

#### 4.4. BATS

Records obtained from Cumbria Biodiversity Data Centre include 9 historic records of bat species from within 2km of the site. These historic records positively identify two species, specifically common pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bats (*Plecotus auritus*) but records of 'bats' and 'pipistrelles' also exist.

Of the 9 historic records, four relate to bat roosts with the remainder relating to 'field records' and 'bat detector recordings'. The four previously identified roosts are all >1km from the site boundary and will be entirely unaffected by the proposed development. The closest 'field record' of bats is c.0.8km from the site boundary. No bat roosts nor individual bats have been previously recorded with CBDC on the site.

No buildings or built structures exist within the proposed development boundary. The existing properties within Jefferson Park (without the new development boundary but directly adjacent to the site) are modern, offer no more than 'negligible' roost potential and will not be physically affected by the works. No large mature trees exist within the proposed development site boundary, but a total of 8 semi-mature trees do exist at the extreme western end of the site. Of these 4 will be removed to facilitate development. None of the trees proposed for removal were found to contain any high quality Potential Roost Features and were concluded to represent 'negligible' roost potential for bats. The development will not physically alter the woodland edge which bounds the western and northern sides of the site but there is some limited potential for light spillage from the site, during both the development phase and the operational phase, to impact upon bat activity in the area. As Jefferson Park already contains occupied residential buildings, and as the site is situated within an urban environment, the potential for light disturbance to have a significant detrimental effect on individual bats is considered to be 'low'.

**The risk of bat roosts occurring within the works area is 'nil'. The site itself is unlikely to be of significance to foraging or commuting bats in the wider area. There is some limited potential for bats using the woodland edge habitat to the north and west for foraging and commuting but considering the site in the context of its current usage and its surroundings, the risk of disturbing individual bats is therefore considered to be 'negligible'.**

#### 4.5. AMPHIBIANS

Records obtained from Cumbria Biodiversity Data Centre include 19 historic records of amphibians from within 2km of the site. These historic records include common toad (*Bufo bufo*), common frog (*Rana temporaria*), smooth newt (*Lissotriton vulgaris*) and palmate newt (*Lissotriton helveticus*) within the search area. Great crested newt (*Triturus cristatus*) have not been previously recorded within the search area.

A review of data contained on Natural England's MAGIC website (<http://www.magic.gov.uk>) conducted on 31/08/2021 has identified no 'Great Crested Newt Class Licence Returns' and no granted 'European Protected species Applications' for great crested newts within 2km of the site boundary.

The Association of Local Government Ecologists (ALGE) trigger list for when protected species surveys may be required suggests that any pond within 500m of a major proposal (one that is more than 10 dwellings or more than 0.5 hectares) or within 100m of a minor proposal (fewer than 10 dwellings or less than 0.5 hectares) may require full survey work for great

crested newts unless a barrier to dispersal exists. The site here considered must be considered as a 'major' proposal meaning that ponds within 500m of the site boundary should be identified and potentially surveyed for great crested newts if deemed to be suitable for this species.

No ponds or other bodies of open standing water (i.e. wet ditches) were identified within 500m of the site boundary via OS maps. No ponds or other bodies of open standing water were identified on the ground during the site inspection. Terrestrial habitat within the area of neutral grassland (as well as in the adjacent woodland) is theoretically suitable for great crested newts, but in the absence of any suitable waterbodies within 500m it is highly unlikely that the site would be occupied by great crested newts.

**The risk of great crested newts occurring on site is considered to be 'nil' and consequently the risk of great crested newts being affected by the proposed works is also considered to be 'nil'.**

#### 4.6. OTTERS

Records obtained from Cumbria Biodiversity Data Centre include 5 historic record of otter (*Lutra lutra*) within 2km of the site. These records all relate to 'field records' (i.e. sightings) collected at Whitehaven Harbour (approximately 1.8km to the north).

Otter are now widespread in Cumbria and are likely to at least occasionally use *any* watercourse. No main rivers exist on or adjacent the site. The site contains no ponds or other bodies of standing water and contains no habitat suitable for otters to lie-up.

No evidence of otters having been present on the site was discovered during the site inspection.

**The risk of otter being affected by the proposed works is considered to be 'nil'.**

#### 4.7. BADGERS

Records obtained from Cumbria Biodiversity Data Centre include a single historic record of badger (*Meles meles*) within 2km of the site. This single record relates to a road casualty which was recorded in 1999 on the B5322 in Mirehouse, approximately 1.7km to the south.

The site currently consists of amenity grassland which is intensively managed and a small area of neutral grassland, both of which lie adjacent to areas of deciduous woodland, but are contained within an intact perimeter fence. The site is also situated in an urban environment which is unlikely to be attractive to badgers. No evidence of badgers having been present on the site was discovered during the site inspection.

**The risk of badger being affected by the proposed works is considered to be 'nil'.**

#### 4.8. REPTILES

Records obtained from Cumbria Biodiversity Data Centre include 45 historic records of reptiles within 2km of the site. The species previously recorded in the search area are common lizard (*Zootoca vivipara*) and slow worm (*Anguise fragilis*).



The vast majority of these historic records come from land adjacent Corkickle Railway Station which lies approximately 0.5km to the north east and were collected by Sam Griffin (the author of this report). Further to the historic records already held on the CBDC database, Sam Griffin has also collected records in recent years which are awaiting verification for inclusion on the CDDB database. These include populations of common lizards and slow worms on land at Haig Pit (c.0.95km to the north west) and at land adjacent Watersedge Close (C.0.85km to the south west). The identified populations at Corkickle Station and land adjacent Watersedge Close both lie on the line of the former mineral railway which passed along the northern boundary of the site. This railway - particularly the track bed and cuttings - are highly likely to have offered highly suitable reptile habitat throughout most of the C.19th and C.20th and has, until relatively recently, offered strong connectivity to known, extant populations of common lizards and slow worms to the east and west of the site.

The following list gives characters that influence reptile habitat suitability;

- Location in relation to species range
- Vegetation structure
- Isolation
- Aspect
- Topography
- Surface geology
- Connectivity to nearby good quality habitat
- Prey abundance
- Refuge opportunity
- Hibernation habitat potential
- Disturbance regime

The amenity grassland on site is currently intensively managed and is therefore unsuitable for reptiles. The neutral grassland to the north east of the access road contains a highly suitable vegetation structure, with good prey abundance and refuge / hibernation site potential. Although small in extent - and notwithstanding the fact that the site was recently cleared to facilitate the previous phase of development - the neutral grassland to the north east of the access road is considered to offer suitable reptile habitat.

**Portions of the site offer suitable reptile habitat which may be occupied by common reptiles (common lizards and / or slow worms). If common reptiles do occur on site, they would certainly be affected by the proposed works. The risk of harm to common reptiles is currently unknown - further survey effort is recommended to confirm presence / likely absence of reptiles.**

#### 4.9. BREEDING BIRDS

Records obtained from Cumbria Biodiversity Data Centre include 2334 records of birds relating to 118 species occurring within 2km of the site. The majority of species recorded are identified as either possible, probable or confirmed as breeding. The precise location of bird records, specifically nest sites, is rarely provided in historic data.

The amenity grassland on site is currently intensively managed and is therefore broadly unsuitable for breeding birds. The neutral grassland is broadly unmanaged and does offer some potential for ground nesting species, primarily at the interface between the grassland habitats and the scrub / trees on the peripheries of the site. Beyond the site boundaries

woodland and scrub offer potential for nesting birds, but these areas will be physically unaffected by the proposed works.

The immature deciduous trees identified in the Pre-development Arboricultural Report as proposed for removal to facilitate the proposed development do offer some potential for breeding birds. The 'oak' tree which will be removed contained evidence of two nests which were disused at the time of the site inspection. Confirmation of the species concerned was therefore not possible, but the nests were poorly constructed and were felt likely to have been made by wood pigeons.

The loss of the grassland habitat within the site boundary is unlikely to significantly impact upon breeding birds in the wider area. Areas of adjacent woodland and scrub will remain and will be available for breeding birds during both the development phase and the operational phase.

All wild birds (birds in a wild state resident in or visiting Great Britain) and their nests and eggs are protected under the Wildlife & Countryside Act 1981. Particular emphasis is given to the protection of breeding birds. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds
- Take, damage or destroy the nest of wild birds while in use or being built
- Take or destroy the eggs of wild birds

**The risk of breeding birds being affected by the proposed works is considered to be 'low'. No further survey effort is deemed to be necessary, but mitigation measures should be observed to remove the risk of breeding birds being affected during site clearance (See Section 7).**

#### 4.10. RED SQUIRRELS

Records obtained from Cumbria Biodiversity Data Centre included 179 records of red squirrels (*Sciurus vulgaris*) and 25 records of grey squirrels (*Sciurus carolinensis*) within 2km of the site. Red squirrels have been recorded between 2002 - 2016; grey squirrels have been recorded between 2006 and 2015. Both red and grey squirrels have been previously recorded in suitable habitat throughout the wider area. Red squirrels have been recorded with the cemetery to the south and in gardens directly adjacent to the site.

The proposed development site boundary contains a total of 8 semi-mature trees. Of these 4 will be removed. No evidence of squirrel dens or dreys was recorded during the site inspection, but it is possible that squirrels could occasionally occur on site. Considering the exposed nature of the trees within the proposed development site boundary and the level of disturbance in this area, it is considered unlikely that squirrels would occupy these trees between the time of the site inspection and commencement of works.

**The risk of red squirrels being affected by the proposed works is considered to be 'negligible' and no further survey effort is recommended, however, in recognition of the fact that red squirrels do occur in the vicinity, measures should be observed to remove the risk to red squirrels during site clearance (See Section 7).**

#### 4.11. OTHER MAMMALS

Records obtained from Cumbria Biodiversity Data Centre include records of roe deer (*Capreolus capreolus*), hedgehog (*Erinaceus europaeus*), weasel (*Mustela nivalis*), stoat (*Mustela erminea*), common shrew (*Sorex araneus*), brown hare (*Lepus europaeus*) and rabbit (*Oryctolagus cuniculus*) from within 2km of the site.

No small mammal burrows were identified during the site inspection but small mammal species are likely to occur on site.

**'Other mammals', including burrow dwelling species may occur on site. There is a risk that 'other mammals' will be affected by the proposed works.**

#### 4.12. INVASIVE NON-NATIVE SPECIES

Records obtained from Cumbria Biodiversity Data Centre include historic records of three Schedule 9 - Invasive Plant Species occurring within 2km of the site. These are Japanese rose (*Rosa rugosa*), Rhododendron (*Rhododendron ponticum*) and Japanese knotweed (*Fallopia japonica*). Japanese knotweed particularly has been extensively recorded throughout the wider area.

During the survey Japanese knotweed was recorded on the western boundary of the site. Here the knotweed is growing under dense tree cover, which is likely to limit its vigour, but it was found to be growing widely within the woodland to the west.

**The risk of invasive non-native species currently growing on site being spread within or beyond the site boundary is currently considered to be 'high'. Any disturbance of rhizomes is likely to result in the plant being spread either within the site boundary or beyond the site boundary if contaminated material is transported from the site.**

**The generic risk of invasive non-native species being introduced to the site and then spread within or beyond the site boundary is considered to be 'low'.**

## 5. Photographs



**Figure 5:** Showing the mown amenity grassland within the centre of the site looking south to the existing properties on Jefferson Park.



**Figure 6:** Showing the immature sycamore (x3) and oak (x1) trees to be felled within the area of mown amenity grassland looking north. Inset shows disused bird nests identified in the oak tree proposed for removal.



**Figure 7:** Showing the neutral grassland to the north east of the access road which is deemed to offer potential for common reptile species.



**Figure 8:** Showing the neutral grassland to the north east of the access road with small, *Salix sp. var.* trees planted throughout and a mown strip adjacent the footpath.



**Figure 9:** *Showing the Japanese knotweed growing on the north western corner of the proposed site boundary and extensively within the woodland beyond.*

## 6. Impact Assessment

### 6.1. SUMMARY OF PREDICTED IMPACTS

This survey has identified potential ecological impacts to;

- Reptiles\*
- Breeding birds
- Red squirrels
- 'Other Mammals'
- Invasive Non-Native Species

*\* - The risk to reptiles is currently unquantified and must be informed by further survey effort.*

Each of these features will be discussed below.

### 6.2. REPTILES

**Portions of the site offer suitable reptile habitat which may be occupied by common reptiles (common lizards and / or slow worms). If common reptiles do occur on site, they would certainly be affected by the proposed works. The risk of harm to common reptiles is currently unknown - further survey effort is recommended to confirm presence / likely absence of reptiles.**

Potential impacts to reptiles as a result of activities on site include;

- Direct harm to reptiles. If reptiles occur on site, there is a risk they would be killed and / or injured during the development phase.

**Further survey effort is recommended to confirm 'presence / likely absence' of reptiles within the site boundary.**

### 6.3. BREEDING BIRDS

**The risk of breeding birds being affected by the proposed works is considered to be 'low'. No further survey effort is deemed to be necessary, but mitigation measures should be observed to remove the risk of breeding birds being affected during site clearance**

Potential impacts to breeding birds as a result of activities on site include;

- Disturbance / destruction of active nest sites and harm to nesting birds. Clearance of vegetation during the bird nesting season would risk disturbing / destroying active nest sites and harming nesting birds. This would only be a risk during the bird breeding season (March - September inclusive).

### 6.4. RED SQUIRRELS

**The risk of red squirrels being affected by the proposed works is considered to be 'negligible' and no further survey effort is recommended, however, in recognition of the fact that red squirrels do occur in the vicinity, measures should be observed to remove the risk to red squirrels during site clearance.**

Potential impacts to red squirrels as a result of activities on site include;

- Disturbance / destruction of active den / drey and harm to red squirrels. Felling of the 4no. Trees proposed for removal would risk disturbing / destroying active den / drey sites and harming red squirrels which may have occupied the site between the time of the site inspection and the commencement of works.

#### 6.5. 'OTHER MAMMALS'

**'Other mammals', including burrow dwelling species may occur on site. There is a risk that 'other mammals' will be affected by the proposed works.**

The proposed works could have the following impacts;

- Harm to burrow dwelling mammals. Burrow dwelling mammals (i.e. rabbits) could be crushed or asphyxiated in burrows if heavy plant is operated on ground above active burrows.

#### 6.6. INVASIVE NON-NATIVE SPECIES

**The risk of invasive non-native species currently growing on site being spread within or beyond the site boundary is currently considered to be 'high'. Any disturbance of rhizomes is likely to result in the plant being spread either within the site boundary or beyond the site boundary if contaminated material is transported from the site.**

**The generic risk of invasive non-native species being introduced to the site and then spread within or beyond the site boundary is considered to be 'low'.**

The potential risks as regards invasive non-native species are as follows;

- Spread of invasive non-native species on site. Japanese knotweed has been identified as currently growing on the western boundary of the site. There is a high risk that Japanese knotweed could be spread within the site boundary due to vegetative material (rhizomes) adhering to plant, equipment or materials used on site.
- Spread of invasive non-native species off site. There is a risk that any top soil or materials exported from the site could contain Japanese knotweed which could then be spread beyond the site boundary.
- Introduction of invasive non-native species to the site, leading to spread of invasive non-native species on / off site. There is a generic risk that invasive non-native species could be introduced to the site via seeds or vegetative material adhering to plant, equipment or materials delivered to site. Should this occur, there would then be a risk that these species could be spread within the site during works, or beyond the site boundary via seed or vegetative material adhering to plant / equipment leaving the site.





## 7. Mitigation / Recommendations

The following potential impacts have been identified;

- Reptiles
  - Direct harm to reptiles.
  - UNKNOWN IMPACTS - further survey effort required
- Breeding Birds
  - Disturbance / destruction of active nest sites and harm to nesting birds.
- Red squirrels
  - Disturbance / destruction of active den / drey and harm to red squirrels.
- 'Other Mammals'
  - Harm to burrow dwelling mammals
- Invasive Non-Native Species
  - Spread of invasive non-native species on / off site.

### 7.1. REPTILES

The further survey effort recommended to confirm the presence / likely absence of reptiles on site are as follows;

- A reptile presence / likely absence survey should be conducted on site. This should employ an Artificial Cover Object (ACO) survey, combined with Visual Encounter Survey techniques. Artificial Cover Objects should be placed on site at an appropriate density in all suitable habitat and then 7no. repeat survey visits conducted during suitable weather conditions during the period March - September.
- If reptile presence is confirmed during the presence / likely absence survey, a further 7no. Repeat survey visits should be conducted to ascertain a Population Size Class so as to inform an appropriate mitigation strategy.

### 7.2. BREEDING BIRDS

Disturbance / destruction of active nest sites and harm to nesting birds

- Vegetation clearance should occur outside of the bird nesting season (March - August).
- If any vegetation clearance must occur during the bird breeding season, a breeding bird survey must be conducted immediately prior to vegetation clearance commencing. Should evidence of active nest sites (or dependant young) be identified, no work will be possible until the nest can be confirmed as no longer active or the young have fledged and / or moved out of the works area. This should be conducted by a suitably experienced ecologist.

### 7.3. RED SQUIRRELS

#### Disturbance / destruction of active den / drey and harm to red squirrels.

- A checking survey must be conducted immediately prior to vegetation clearance commencing. Should evidence of red squirrel dens / dreys be identified, no work will be possible until the den / drey can be confirmed as no longer active. This should be conducted by a suitably experienced ecologist.

### 7.4. 'OTHER MAMMALS'

#### Harm to burrow dwelling mammals

- All plant operatives will be vigilant for mammal burrows. If burrows are discovered, no plant will operate within 5m of any burrow entrance until an experienced ecologist can confirm if the burrow is active. If burrows are found to be active, measures will be taken to exclude mammals before works in the area may proceed.

### 7.5. INVASIVE NON-NATIVE SPECIES

The recommended mitigation measures to reduce the risk of spreading invasive non-native species on / off site are as follows;

- The identified stand of Japanese knotweed on the western boundary should be subject to herbicidal treatment designed to eradicate this species from within 10m of the site boundary. This should commence as soon as possible and continue until no new above ground re-growth is observed over a 2 year period.
- Until the identified stand of Japanese knotweed has been completely eradicated (and no new re-growth observed for 2 years), there should be no excavation within 10m of the extant above ground growth.
- All plant and equipment (including boots and hand tools) will be washed to remove any mud or debris, allowed to dry and remain dry for a period of 48hrs prior to being delivered to site.
- All loose aggregates delivered to site must be clean and free from contamination with seeds or vegetative material from invasive non-native species and certified as such by the supplier.
- All top soil delivered to site must be clean and free from contamination with seeds or vegetative material from invasive non-native species and certified as such by the supplier. Imported top-soil should conform to Section N.6.4.5 of BS 3882:1994; The British Standard for Topsoil.
- All plant and equipment (including boots and hand tools) will be thoroughly washed to remove any mud or debris prior to being removed from the site.

- No arisings from vegetation clearance work should be removed from the site unless confirmed as being free of invasive non-native species, or otherwise to an appropriate facility as contaminated waste.
- No spoil (top soil, sub-soil, aggregate etc.) will be removed from the site unless confirmed as being free of invasive non-native species, or otherwise to an appropriate facility as contaminated waste.

## 8. Summary

### 8.1. SUMMARY OF DEVELOPMENT AND MITIGATION

This report details a Preliminary Ecological Appraisal conducted on at Jefferson Park, Whitehaven, Cumbria, CA28 9HE (Nat. Grid Ref. NX 97446 16791 - Approx. centre of site).

Plans 'as proposed' have been provided (see Figure 1 & 2) and it is thereby understood that a proposal exists for a residential development consisting of '14 new affordable rented dwellings'. It is understood (pers. comms. Elsa Brailey, Home Group) that a planning application has already been submitted for the scheme, and that this was validated by Copeland Borough Council with no requirement for an ecological report being identified pre-validation. Copeland Borough Council have subsequently requested a Preliminary Ecological Appraisal of the site so as to inform the officers report / decision notice.

The site contains two distinct habitats, these being close mown amenity grassland and herb rich neutral grassland. These two habitats are only distinct due to the management regime observed on the two sections.

The amenity grassland is of no intrinsic conservation value and offers very little potential for any legally protected or priority species. The unmanaged neutral grassland to the north east of the access road is likely to be of some value to wildlife and may support legally protected species (specifically common reptiles), but is broadly typical of vacant land in the surrounding area.

This survey has identified the following potential ecological impacts;

- Reptiles
  - Direct harm to reptiles.
  - UNKNOWN IMPACTS - further survey effort required
- Breeding Birds
  - Disturbance / destruction of active nest sites and harm to nesting birds.
- Red squirrels
  - Disturbance / destruction of active den / drey and harm to red squirrels.
- 'Other Mammals'
  - Harm to burrow dwelling mammals
- Invasive Non-Native Species
  - Spread of invasive non-native species on / off site.

With the exception of potential impacts to reptiles (which are unknown and must be informed by further survey effort), mitigation measures have been presented in Section 7 to address identified risks to ecological receptors. Provided that these measures are adhered to, no residual ecological impacts as a result of the proposed works are anticipated.

In order to quantify the potential impacts to reptiles, a presence / likely absence survey should be conducted - followed by a population size class survey if necessary - so as to inform a bespoke impact assessment and mitigation strategy for this species group.

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