PRELIMINARY ECOLOGICAL ASSESSMENT

LAND AT PORTHCRESSA,
ST MARY'S, ISLES OF SCILLY

Client: *Ian Sibley*

Our reference: *21-12-1*

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Executive Summary

Overview
The Site known in this report as Land at Porthcressa was subject to a Preliminary Ecological Assessment (PEA) in April 2022. This report outlines the results of the PEA.
Proposals
The proposals relate to the construction of two new detached dwellings within the plot. The outline proposals were identified by the client in Plan 2138/06.
Ecological Assessment
The habitats are dominated by an ornamental garden area to the north; an area of tall ruderal vegetation to the south; and areas of dense scrub including self-set native species and non-native species, some of which derive from outgrown hedgerows. These habitats are well represented in the local environs and have limited ecological value, though they are likely to support nesting and foraging birds and small mammals as well as represent a resource for pollinators. No evidence of, or suitable habitat for, other protected species is noted. The site itself is not subject to any statutory or non-statutory nature designations and no impacts to external designated sites are identified as a result of the proposals.
Recommendations
Recommendations provided would allow impacts to protected species to be avoided and enhancement measures could provide a minor net gain if carefully developed. These outline recommendations include: • Timing of vegetation clearance works to avoid impacts to nesting birds; • Planting recommendations to include native trees and shrubs, hedgerows and ecologically valuable grassland within the new landscaping; • Erection of bird and bat boxes to provide additional habitat resource for these species;
Report Status
This report provides an appropriate baseline to inform Planning – no further ecological surveys are recommended.

Table of Contents

1. Introduction

1.1. Project Overview

The site is an area of land to the eastern end of Porthcressa Beach in Hugh Town, St Mary's in the Isles of Scilly. The site is currently occupied by an ornamental garden area to the north-west and an unmanaged area of green space to the south-east.

The proposals relate to the construction of two new detached dwellings within the plot. The outline proposals were identified by the client in Plan 2138/06.

Map 01 – Site location indicated by the red circle. Reproduced in accordance with Google's Fair Use Policy.

2. Site Location and Description

2.1. Site Location

The Site comprises an area of green space at the eastern end of Porthcressa in Hugh Town, St Mary's. The National Grid Reference for the centre of the site is SV 90523 10390 (see Map 1). The site is approximately 0.07 hectares (ha) in size

2.2. Local Landscape Setting

The Site is set at the eastern end of Porthcressa Beach on the southern edge of Hugh Town. This area of sandy beach is widely used by visitors to the islands but at the point where the Site is located, the beach grades into stone and boulders and takes on a wilder, less accessible character as it arcs to the south-east. The Site is separated from this coastline by a strip of amenity grassland and scattered trees.

The Site is bounded to the north by residential development which continues – along with small-scale commercial properties – through Hugh Town to the north, north-east and north-west. Some of these adjacent properties have associated areas of garden or green space, but the centre of Hugh Town is relatively densely developed.

A concrete track used by pedestrians runs immediately to the east of the Site, elevated above it due to the landform. A compacted track runs through well-maintained amenity grassland to the south of the site providing vehicular access to a further residential property to the south-east.

Map 02 – Showing the landscape and habitats immediately surrounding the site. Reproduced in accordance with Google's Fair Use Policy.

2.3. Relevant Designations

The Site itself is not subject to any statutory or non-statutory designations of relevance to the consideration of ecological value or impacts.

There are four statutory designated sites of conservation importance situated within a 1km radius of the site. Details of these designations are provided below:

- **Isles of Scilly SAC Complex –** Situated 20m to the south-west of the Site and continuing along the coastline to the south-east and north-west, the SAC is designated for its nationally important numbers of Grey Seal and the nationally rare Shore Dock. Annex 1 habitats that are the primary reason for site selection include mudflats; inter-tidal sandflats; reefs and sub-tidal sandbanks.

- **Isles of Scilly SPA Complex –** Situated 20m to the south-west of the Site and continuing along the coastline to the south-east and north-west, the SPA is designated for its internationally important seabird assemblage of 13 species including internationally important numbers of Lesser Black-backed Gull and nationally important numbers of European Storm Petrel and European Shag.

- **Lower Moors SSSI –** Situated 450m east of the proposed development lies Lower Moors SSSI – this is a topogenous mire, whereby seasonal fluctuations of freshwater from rainfall cause the partial breakdown of plant material, which then turns to peat. The site has several small, shallow open water areas which are known to be important feeding areas for passage and over-wintering migrants and waders.

- **Peninnis Head SSSI –** Situated 400m south-east of the proposed development lies Peninnis Head SSSI, designated primarily for its geology including prominent granite cliffs and tors but it also supports maritime heathland, maritime grassland and scrub habitats together with populations of rare plant and lichen species.

2.4. Planning Context

2.4.1. National Planning Context

The National Planning Policy Framework (NPPF)[1] sets out the government's requirements for the planning system in England. A number of sections of the NPPF are relevant when taking into account development proposals and the environment.

Paragraphs 7 to 10 of the NPPF identify that "*the purpose of the planning system is to contribute to the achievement of sustainable development*." The general impetus of the NPPF in relation to ecology and biodiversity is for development

[1] Ministry of Housing, Communities & Local Government. (2019). National Planning Policy Framework. OGL

proposals to not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that "*Planning policies and decisions should contribute to and enhance the natural and local environment and minimise impacts on and providing net gains for biodiversity*." A number of principles are set out, including the principle that where harm cannot be adequately avoided then it should be adequately mitigated, or, as a last resort, compensated for.

In addition to the NPPF, the Office of the Deputy Prime Minister (ODPM) circular 06/0511[2] provides guidance on the application of law relating to planning and nature conservation. Paragraph 98 states "*the presence of a protected species is a material consideration when a planning authority is considering a development proposal, that if carried out, would be likely to result in harm to the species or its habitat*." Whilst Paragraph 99 states "*it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted*."

2.4.2. Local Planning Context

The following policies are most relevant to this assessment:

- **Core Policy 1** - Environmental Protection;
- **Policy OE2** - Biodiversity and Geodiversity.

The following planning guidance documents are also of relevance:

- The Isles of Scilly Local Development Framework Supplementary Planning Document Biodiversity and Geological Conservation[3].

[2] Office of the Deputy Prime Minister. (2005). Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System. ODPM Circular 06/2005

[3] https://www.scilly.gov.uk/sites/default/files/IslesofScillyBiodiversity&GeodiversitySPD.pdf

3. Survey Methodology

3.1. Desktop Survey

A full desktop study was undertaken for the presence of bats based on the list of roosts and other records held by the Isles of Scilly Bat Group. A full records centre search was not undertaken for other ecological groups, as it was not considered necessary given the small scale of the site; and the current and historic land use.

The desk study also included accessing the Multi-Agency Geographic Information for the Countryside (MAGIC)[4] database in order to establish the presence of statutory designated sites, including all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), RAMSAR sites and Sites of Special Scientific Interest (SSSIs) within 1km of the site.

Other resources used include aerial photography to identify the presence of habitats in close proximity to the Site, and historic OS maps revealing earlier land use. This assists in the assessment of the potential of the Site and its surrounding habitat to support protected species.

3.2. Vegetation and Habitat Assessment

An assessment was made of all areas of vegetation within the Site based on the standardised Phase 1 survey methodology[5]. This involved a walkover survey to identify broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate.

A list of characteristic plant species for each vegetation type was compiled and any invasive species encountered as an incidental result of the survey are noted.

3.3. Bats

3.3.1. Preliminary Bat Roost Assessment (PRA)

The PRA comprised an assessment of the Site's potential to provide roosting opportunities for bats. This included consideration of all potential roosting features (PRFs) within trees, buildings and rock formations which could provide roosting opportunities for bats in accordance with the relevant Best Practice Guidance[6].

Consideration was also given to the potential value of the Site as a foraging and commuting habitat for bats.

[4] http://defra.magic.gov.uk
[5] JNCC (2010). Handbook for Phase 1 Habitat Survey: A technique for environmental audit – Field manual
[6] Collins, J. (ed.) 2016 Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

3.4. Birds

The assessment of breeding and wintering birds on the Site was based on the suitability of habitat present, evidence of nesting such as old or currently active nests and the presence of bird species that may potentially nest within the available habitat.

3.5. Other Protected Species

An assessment of potential and suitability for other protected species was made based on the habitats present both on- and offsite; the local status of these species; and the background records.

No further protected species survey methodologies were required to support a comprehensive Ecological Assessment at this site.

3.6. Surveyor Competence

The surveys were undertaken by James Faulconbridge MRes MCIEEM trading as IOS Ecology. James is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM); he is a Licenced Bat Worker (Class Licence Level 2) and has over 14 years' experience undertaking a range of ecological surveys and assessing the factors that affect ecology in relation to construction and the built environment.

3.7. Survey Dates

The PRA and PEA surveys were both undertaken on 29th April 2022.

3.8. Zone of Influence

The Zone of Influence (ZOI) is the area within which the ecological impacts arising from a proposed development are likely to be significant. Due to the nature of the proposed development the ZOI is identified as the Site and the habitats which immediately bound it.

The sensitivity and value of offsite statutory and non-statutory sites mean that the potential for impacts arising from the proposed development should be considered within a wider ZOI. Therefore, scoping for direct and indirect impacts to designated sites is conducted within a ZOI of 1km of the Survey Site.

3.9. Assessment of Ecological Value

The ecological values provided within this report are based around both the professional judgement of the author and current published relevant guidance, including "Guidelines for Ecological Impact Assessment in the United Kingdom."[7]

[7] CIEEM (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester.

4. Results

4.1. Onsite Habitats

Map 03 – Showing the broad Phase 1 Habitat designations associated with the Site. Note that there are several habitats which do not neatly or directly accord with a single Phase 1 Habitat code; for example the species-poor hedgerow is based around a stone wall through much of its scope. Therefore the areas identified within the map should be viewed alongside the narrative descriptions outlined in Section 4.1 of this report. Reproduced in accordance with Google's Fair Use Policy.

4.1.1. Species Poor Hedge

This broad Phase 1 Habitat Classification is used to describe the boundary feature which runs around the site perimeter on all but the southern-most aspect. This comprises a stone wall throughout much of the boundary with various woody and herbaceous species including dominant ivy (*Hedera helix*) and gorse (*Ulex europeus*) with bramble (*Rubus fruticosus agg*.) growing through and typical herbaceous species in the base such as alexanders (*Smyrnium olusatrum*).

On the eastern boundary, this wall is elevated above the majority of the Site due to the landform. However it is on a level on the western boundary with the gradient declining around the northern curve.

4.1.2. Dense Scrub

There is abundant dense scrub within the Site – this was inaccessible in places but was inspected as fully as possible.

Species within and between the ornamental garden and the area of tall ruderal vegetation comprise typical windbreak species which are self-set in places

although evidence of linear planting and pollarding indicating an outgrown hedge was also noted. This also occurs on the southern boundary of the Site where a tumbled-down wall is noted at the centre of the shrubs. Species recorded include coprosma (*Coprosma repens*), karo (*Pittosporum crassifolium*), tamarisk (*Tamarix gallica*) with ivy and bramble growing through.

This habitat also describes the steep, rocky face on the eastern side of the site which rises up to the boundary – in contrast with the previously described species assemblage, species represented here are predominantly opportunistic native species including gorse, bramble and ivy. These native species were also recorded covering a granite-block structure situated to the eastern edge of the ornamental garden area. Inspection of historic maps indicates that this is likely to the base of a derelict building but the structure could not be closely inspected due to the density of vegetation.

Due to the intermingling of native and ornamental species including planted and self-set individuals, the different types of dense scrub are not delineated in Map 03.

4.1.3. Tall Ruderal Vegetation

The land to the south of the Site shows signs of relatively recent clearance within the last 1-2 years; however a ruderal stand has developed in the interim. The area is used for storage of a boat and other debris items such as rubble sacks. Species recorded include Madeira geranium, three-cornered leek (*Allium triquetrum*), red campion (*Silene dioica*), vetch (*Vicia sativa*), Yorkshire fog (*Holcus lanatus*), alexanders, fescue (*Festuca sp*.), lesser trefoil (*Trifolium dubium*), fennel (*Foeniculum vulgare*), bracken (*Pteridium aquilinum*) and wild carrot (*Daucus carota*). The area is being encroached upon by the dense scrub habitats around the periphery as described in Section 4.1.2 above.

4.1.4. Ornamental Garden

The land to the north of the Site includes an area of ornamental garden which is managed and maintained at the time of survey. There are areas of typical amenity grassland forming paths between herbaceous beds with scattered shrubs and trees. There are various supporting and delineating granite rock placements to create beds and define the structure of the garden.

Ornamental herbaceous species include aeonium (*Aeonium arboretum*), tree echium (*Echium pininana*), Madeira geranium (*Geranium maderense*), lupin (*Lupinus sp*.), borage (*Borago officinalis*), lily (*Lilium sp*.), Spanish bluebell (*Hyacinthoides hispanica*) and fennel.

Shrubs and small trees include butterfly bush (*Buddleia davidii*), karo and dracaena (*Cordyline australis*).

Photo 01 – Showing the eastern site boundary from the adjacent track.

Photo 02 – Showing the southern portion of the Site viewed from the eastern boundary to illustrate the change in level.

Photo 03 – Showing the ornamental garden area of the Site with grass paths between herbaceous beds and scattered small trees & shrubs. The dense native scrub habitat rising up the eastern boundary can be seen to the rear.

Photo 04 – Showing a typical area of dense scrub dominated by tamerisk, karo and coprosma.

Photo 05 – Showing the tall ruderal habitat to the south of the Site including the boat which is currently stored.

Photo 06 – Showing the northern portion of the Site viewed from the eastern boundary to illustrate the change in level.

4.2. Bats

4.2.1. Background Data

The desk study showed that no species of bat had previously been recorded roosting on the Site or associated with properties bounding the Site.

A data search revealed information on five species of bat recorded on St Mary's. The species conclusively identified were common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auritus*). Leisler's bat (*Nyctalus leisleri*) and Nathusius pipistrelle (*Pipistrellus nathusii*) records were also returned though these species are not known to be resident on the island.

Three records of common pipistrelle roosts are identified in relatively close proximity to the property – these relate to individual bats utilising features such as hanging slates around dormer windows.

4.2.2. PRA Results – Roosting Potential

No suitable habitat for roosting bats was identified associated with the Site.

This judgement was reached in accordance with the survey methodologies and evaluation criteria outlined in the Bat Surveys for Professional Ecologists: Good Practice Guidelines.[8]

4.2.3. Foraging and Commuting

The Site is likely to provide suitable foraging habitat for common pipistrelle bats as part of a much wider foraging resource including the strandline of Porthcressa Beach and Town Beach, as well as the habitats of Buzza Hill and beyond.

The Site may represent a component of the local commuting routes used by common pipistrelle bats, though this functionality is likely to be widely replicated through adjacent offsite habitat features.

4.3. Birds

No active bird nests were recorded at the time of survey, though the Site is considered to have high potential for supporting nesting birds in onsite vegetation and rock structures/features including the boundary wall and the rock-face to the east of the Site.

The Site is also likely to be used as a foraging resource by local bird populations as part of a much wider habitat resource.

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

4.4. Other Protected Species

The PEA survey did not identify suitable habitat for other protected or notable species.

5. Evaluation

5.1. Proposals

The proposed works were identified in outline in plans provided by the Client – reference 2138/06. These involve the construction of two detached dwellings within the Site along with associated access infrastructure and gardens.

5.2. Assessment of Ecological Impacts

5.2.1. Statutory and non-statutory Sites

The proposed development would not impact directly or indirectly upon any offsite statutory sites.

5.2.2. Habitats

The habitats associated with the Site are of relatively low ecological value comprising largely non-native species along with areas of self-set shrubs and ruderal vegetation which are relatively ubiquitous in similar habitats in the local environs.

The habitats do hold inherent value as green space and will support a range of typical species including birds, small mammals and pollinators. The proposals will result in an increase in built infrastructure on the site, and a significant reduction in the area of 'green space' within the Site.

The design of the proposed layout would not permit a like-for-like replacement of lost habitat; therefore any biodiversity enhancement measures should be targeted at the increase in the ecological value of a reduced habitat space within the new development.

5.2.3. Bats

No impacts to roosting bats are identified. The inclusion of bat roosting features within the new proposals could therefore result in a net increase in the availability of suitable roosting habitat within the local environs.

The proposals may result in a minor decrease in the availability of foraging habitat within the local environs; however this is not considered to be significant given the situation of the Site and the abundance of offsite habitat.

Continuity of potential commuting routes for local bat populations could be secured through the specification of hedgerows or other shrubby vegetation along the western Site boundary.

5.2.4. Birds

The site provides various suitable habitats for use by common nesting bird species. The removal of these elements could result in disturbance to nests if appropriate measures are not put in placed to avoid this.

Long term opportunities to increase the range of nesting habitats within the site can be secured through hedgerow and tree planting, and through the installation of bird boxes.

5.2.5. Other Protected Species

The assessment did not identify the presence of, or suitable habitat for, other protected species. No further impact assessment is therefore provided.

6. Recommendations

6.1. Introduction and Scope

The following section provides an overview of recommendations which should be incorporated into the proposals to avoid impacts to protected species; mitigate loss of green space; and provide enhancements for key species where appropriate.

These recommendations are provided in outline only at this stage – full details and specifications should be developed to support the final scheme. This could be Conditioned following determination of planning.

6.2. Timing of Works

The following features within or adjacent to the Site offer suitable nesting habitat for breeding birds:

- Trees and shrubs and woody herbaceous species within the Site;
- Boundary features including hedgerows and stone walls.

Removal or disturbance of these features should be conducted outside of the bird breeding season which runs from March to August inclusive. Works affecting the features specified above should therefore be targeted between **September and February inclusive**.

If works affecting the above specified features proceed during the breeding season, a nesting bird survey would need to be carried out by a suitably qualified person prior to clearance. Nests are only protected if they are active (i.e. being used to rear young) or in the process of being built.

- Where active nests are identified, works affecting these must be delayed until the chicks have fledged the nest.
- Once it is confirmed that nests are absent or no longer active, the works can proceed.

6.3. Landscaping

The landscaping scheme for the gardens should include the planting of native trees and shrubs to replace those lost in the development works and to provide continued nesting and foraging habitat for breeding birds and bats.

It is recommended that a Flowering Lawn mix be used in areas of grassland likely to be used actively by new residents – these mixes include a range of species which provide pollinator resource whilst also being tolerant of regular mowing and footfall.

To address the removal of self-set woody vegetation which could be used by commuting bats to navigate the local environs as well as by nesting birds, compensatory planting in the form of native boundary hedges should be specified between the new dwellings and along the western Site boundary. To enhance the development and to provide a small net gain in biodiversity, all replacement hedgerows and standard trees should consist of native species, known to be present on the islands, or were once present on the islands. Shrubby or hedgerow species include hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*)) and hazel (*Corylus avellana*); whilst appropriate tree species include oak (*Quercus petraea*), birch (*Betula pendula*) and crab apple (*Malus sylvestris*).

6.4. Bat and Bird Boxes

The new buildings should include built-in or otherwise attached boxes to provide additional bat roosting and bird nesting habitat.

- One in-line Habibat bat box, or Schwegler 1FE Bat box should be installed at the apex of the gable end of each new dwelling (one box for each dwelling). These boxes should face different aspects to provide varying environmental conditions that bats can take advantage of;
- One or more bird boxes should be installed on each new dwelling. House sparrows nest communally and nest boxes could accommodate this, either through the installation of a single purpose-built nest box comprising several individual chambers with separate entrances, or the installation of 3+ nest boxes in close proximity. Nest boxes suitable for hole-dwelling species such as blue tits, or open-fronted boxes for species such as blackbird and robin also have a high likelihood of occupation. Boxes should be mounted on a wall, at a height of at least 3m above the ground with an entrance clear of vegetation/other features which may put them at risk of predation from cats.

6.5. Invasive Species

Under the Wildlife and Countryside Act, 1981, a number of alien plant species are listed in Schedule 9 Part II. These are species which have become naturalised in Britain, usually as garden escapees. Section 14 (2) of the Act states that an offence is committed "*if any person plants or otherwise causes to grow in the wild any plant*" in Schedule 9.

Three-cornered leek is ubiquitous across the islands and its low-level presence on the site is commonplace. Other species such as Hottentot fig (*Carpobrotus edulis*) were recorded in close proximity to the Site – these and other species could potentially be present within the Site boundary in areas where access was restricted.

It is incumbent on a landowner to ensure that any actions of land management or development do not result in the plant being spread either within the existing

site or elsewhere. Working practises during demolition and construction should be designed to ensure this.

6.6. Survey Validity and Update

The data supporting this ecological assessment are considered to provide an appropriate baseline for planning in 2022.

It is advised that if site clearance works are not completed by November 2023 (18 months after the survey was completed), then an updated PEA survey should be undertaken in order to identify any changes in the ecological assessment of the Site.