

PRELIMINARY ECOLOGICAL APPRAISAL OF:

SEAVIEW McFARLANDS DOWN ST MARY'S ISLES OF SCILLY TR21 0NS

Client: Duchy of Cornwall

Our reference: BS27-2019

Report date: 23rd March 2020

Author: Darren Mason BSc (Hons)

Report peer reviewed: Darren Hart BSc (Hons)

Report signed off: Sarah Mason

REPORT ISSUED IN ELECTRONIC FORMAT ONLY

This page is intentionally blank

Contents

Non-technical Summary	5
1.0 Introduction	6
1.1 Survey and reporting	6
1.2 Aims and Scope of the report.....	6
1.3 Site Setting and Description.....	6
1.4 Site proposals	8
2.0 Methodology	9
2.1 Zone of Influence (ZoI)	9
2.2 Desk Study	9
2.3 Extended Phase 1 Habitat Survey Methods	9
2.3.1 Vegetation.....	9
2.3.2 Bats	10
2.3.3 Birds.....	10
2.3.4 Reptiles/Amphibians	10
2.3.5 Invertebrates	10
2.4 Preliminary Ecological Appraisal Limitations	11
2.5 Initial Protected Species Assessment.....	11
2.6 Criteria used to Assess Ecological Value.....	11
3. Results	14
3.1 Surveyor Details	14
3.2 Desktop Study	14
3.2.1 Statutory Designated Sites	14
3.3 Vegetation.....	15
3.3.1 Scattered Trees.....	15
3.3.2 Improved grassland.....	15
3.3.3 Introduced shrubs	17
3.3.4 Scrub	17
3.3.5 Species-poor hedgerow.....	17
3.3.6 Wall.....	17
3.3.7 Buildings and hardstanding	17
3.3.8 Summary.....	17
3.4 Bats	18
3.5 Birds.....	18
3.6 Reptiles/amphibians.....	18
3.7 Invertebrates	18

4. Planning Policy Context	19
4.1 Planning Policy	19
4.1.1 National Policy.....	19
4.1.2 Local Policy	19
5. Evaluation, Potential Impacts and Recommendations	20
5.1 Site Evaluation	20
5.2 Summary of Potential Impacts	20
5.3 Summary of Key Recommendations.....	20
5.4 Evaluation Against Relevant Planning Policy	21
5.5 Updating Survey	24
6.0 Conclusion	24
7. Bibliography	25

Non-technical Summary

- On 20th March 2020, the Isles of Scilly Wildlife Trust (IoSWT) conducted a Preliminary Ecological Appraisal (PEA) of 'Seaview', McFarlands Down, St Mary's, Isles of Scilly, TR21 0NS (BS27-2019), for which there is a proposal to demolish the existing bungalow to ground level and replace with three new dwellings within the plot. The removal of the Maidenhair (*Muehlenbeckia* sp.) hedgerow to the east and part removal of the *Escallonia* sp. hedge to the south is included in the proposal
- The PEA was undertaken to ascertain the potential for protected habitats and species to be present within the site
- The habitats on site are assessed as being of low ecological value
- The property was deemed as having a low bat roost potential, but the proposals may impact negatively on the feeding and commuting habitat of bats as result of proposals to remove the complete hedge along the eastern boundary and part of the hedge along the southern boundary, as well as some of the scattered trees and introduced shrubs as part of the creation of the new dwellings
- The property was deemed to have high ecological value for breeding birds and these are likely to be negatively impacted as a result of a loss of breeding and feeding habitat.
- The property was deemed to have negligible ecological value for reptiles, amphibians and invertebrates
- Phase 2 bat surveys are recommended to ascertain the presence or likely absence of bats on site in order to enable the demolition of the property.
- Phase 2 bat surveys are recommended to evaluate the impact of the removal of the hedgerows on the feeding and commuting habitat of bats
- Due to the nature of the proposal mitigation will be required to support breeding birds and bats to off-set the loss of the hedgerows, scattered trees and introduced shrubs.
- A net gain in biodiversity is possible on this site if bird boxes and integrated bat boxes are erected on each of the new dwellings
- The proposed development has the potential to provide further ecological enhancements through the planting of native trees and shrub species (not like for like, or Pittosporum) and enhancement of the remaining grassland through over-seeding and plug planting with wild flowers.
- If works have not been completed by December 2021, it is recommended that this ecological appraisal is updated
- **It must be noted that this report alone is not sufficient to support a planning application.**

1.0 Introduction

1.1 Survey and reporting

This report details the results of a preliminary ecological appraisal (PEA) of 'Seaview', McFarlands Down, St Mary's, Isles of Scilly TR21 0JT, National Grid Reference SV9126212199 (see Map 1). The survey, carried out on 20th March 2020, was undertaken in order to inform proposals to demolish the existing bungalow to ground-level and replace with three new dwellings within the plot and includes the removal of the Maidenhair (*Muehlenbeckia* sp.) hedgerow to the east and part removal of the *Escallonia* sp. hedge to the south.

1.2 Aims and Scope of the report

This report is a Preliminary Ecological Appraisal (PEA). According to the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines, a PEA "*can be used as a scoping report (for non-Environmental Impact Assessment (EIA) projects), but should be submitted as part of a planning application unless it can be determined that the project would have no significant ecological effects, no mitigation is required and no further surveys are necessary.*"¹

This report is based on an extended Phase 1 habitat survey and desktop study aimed at assessing the suitability of the site to support notable habitats and protected species. This report will assess the compliance of the scheme with relevant local and national planning policy and will provide an initial assessment of the biodiversity value of the site to be made, identifying the likely ecological constraints associated with the project and identifying any mitigation measures likely to be required following the '*Mitigation Hierarchy*'². Any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA) will be identified, as will any opportunities to deliver ecological enhancement.

1.3 Site Setting and Description

Seaview is situated in the Isles of Scilly National Character Area (NCA), described by Natural England as follows³; "*The Isles of Scilly comprise over 200 granite islands scattered across 200 km², set out in the Atlantic some 45 km south-west of Land's End. Of these islands only five are currently inhabited, namely the islands of St Mary's, St Agnes, St Martin's, Tresco and Bryher. The occupied islands cover a total area of just over 14 km². The islands contain 26 Sites of Special Scientific Interest and one Special Area of Conservation (SAC), designated for a range of geological and biological features, including maritime heathland and grassland, as well as one Special Protection Area and Ramsar site, highlighting the*

important seabird colonies. The marine environment between and around the islands is designated as an SAC and a Marine Conservation Zone for the wealth of marine species it supports, from diverse rocky reef to grey seals that breed around the islands. For such a small land area, the islands display a striking diversity of landscape, including lowland heath and small pastures enclosed by stone walls and banks, plus tiny hedged bulb fields and a varied coastline. Many of these features have been in place for 4,000 years, and still retain their original purpose. Harsh conditions created by the maritime climate mean that woodland cover is minimal. It is a landscape rich in history, with 900 historic monuments. The most notable features are the outstanding prehistoric monuments of chambered barrows and standing stones of the late Neolithic and early Bronze Age. The entire NCA has been designated as an Area of Outstanding Natural Beauty (AONB) and is recognised as a Heritage coast.

The nearest and largest conurbation to Seaview is Hugh Town, situated 1.7km south-west. The proposed development is situated within a open rural landscape dominated by a patchwork of small enclosed cultivated fields used in the flower-farming industry, semi-natural grazed pasture interspersed by small deciduous and coniferous shelterbelts and a mosaic of coastal grassland and heathland (for a more detailed description of the surrounding habitat see report IoSWT-BS27-2019).

The site is approximately .13 hectares (ha.) in size and comprises a residential property sat in the centre of its own well-managed garden. The site is bounded on three sides by similar detached properties with the exception of pasture to the east.

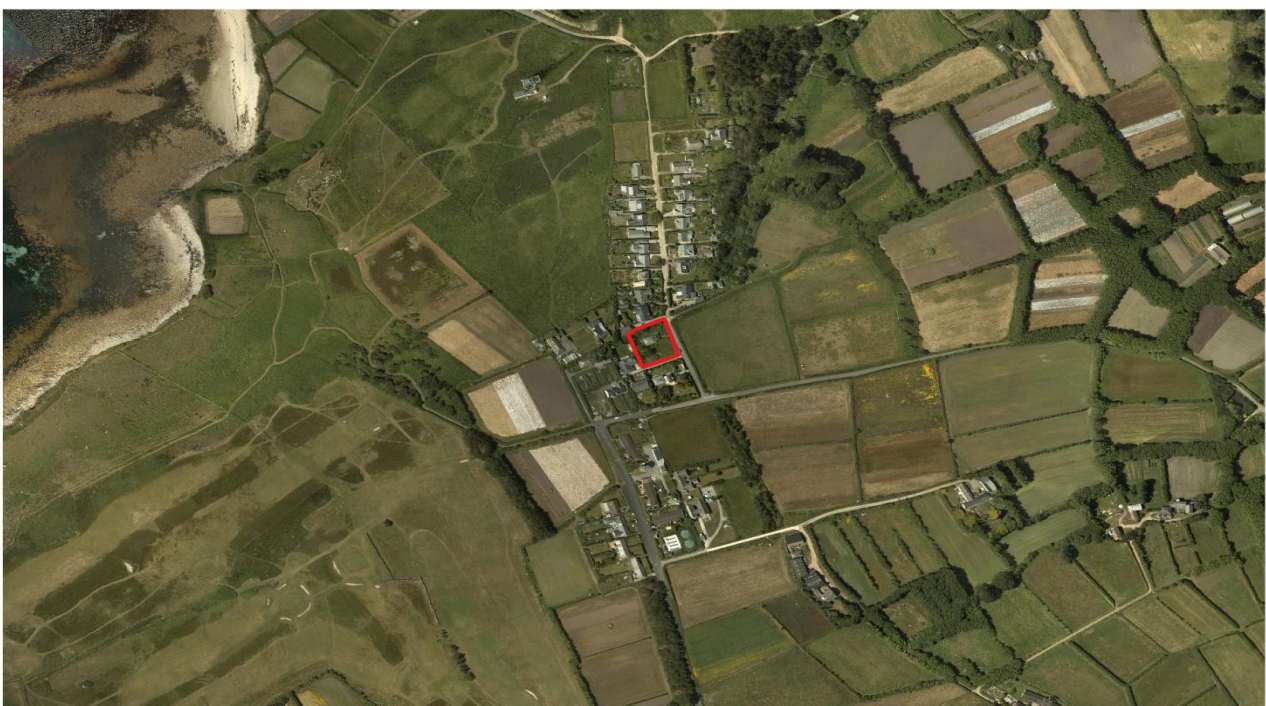


Figure 1 Site Location

1.4 Site proposals

This report is provided alongside a Preliminary Roost Assessment (PRA) (IoSWT-BS27-2019) in support of a planning application for the demolition of the existing property to facilitate the construction of three new dwellings. The proposals include the removal of the Maidenhair (*Muehlenbeckia* sp.) hedgerow along the eastern boundary of the site and replace with a low dry stone wall and access into the site and part removal of the *Escallonia* sp. hedge to the south. It is presumed that the existing garden landscaping will remain on site and that the planning application will be submitted in the summer of 2020 with construction commencing soon after planning has been achieved.

2.0 Methodology

2.1 Zone of Influence (ZoI)

The ZoI is the area encompassing all predicted negative ecological effects from the proposed scheme and is informed by the habitats present within the site and the nature of the proposals. Due to the scale and nature of the proposals it is considered that a ZoI of 1km from the centre of the site is appropriate for the gathering of information for the desk study. For the extended Phase 1 habitat survey the area within the red line boundary (see map 1.) was considered appropriate.

2.2 Desk Study

A full biological record centre desktop study was undertaken for the presence of bats (see report IoSWT-BS27-2019), but was not taken for the remaining assessment of the development, as it was not considered necessary given the limited scale of impacts and the nature of the on-site and surrounding habitats. 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 were aerial photography to identify the presence of habitats such as woodland blocks, watercourses and hedgerows in close proximity to the site. This assists in the assessment of the potential of the site and its surrounding habitat to support protected species.

2.3 Extended Phase 1 Habitat Survey Methods

The survey involved a walkover of the site to identify the habitat types present and to record evidence of the more commonly encountered protected species. The scope of the protected species was based on the habitats present with particular reference to bats, birds, reptiles/amphibians and invertebrates (protected species such as Badger (*Meles meles*), Dormouse (*Muscardinus avellanarius*) and Great Crested Newt (*Triturus cristatus*) are not known to occur on the islands). Details of the species-specific appraisal methods are given below.

2.3.1 Vegetation

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 survey methodology⁵. 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 species⁶ encountered as an incidental result of the survey are noted.

2.3.2 Bats

An assessment was made of the suitability of the buildings and trees up to the site boundary to support roosting bats based on the presence of features such as loose or missing tiles, lifted lead flashing for buildings and holes, cracks, splits and loose bark for trees. An assessment was made of the suitability of the site and surrounding landscape to support foraging and/or commuting bat species. This survey confirmed to current Bat Conservation Trust (BCT) guidelines⁷. For in depth details of this survey please see report IoSWT-BS27-2019.

2.3.3 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.

2.3.4 Reptiles/Amphibians

The reptile survey was based on an assessment of the suitability of habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles are known to utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

2.3.5 Invertebrates

An assessment was made of the site for its potential value to support diverse communities of invertebrates. The assessment was made based on the presence of habitat features which may support invertebrate communities. These features include; an abundance of dead wood, the presence of diverse plant communities, the presence of varied woodland structure, sunny woodland edges, presence of ponds and water courses and free-draining soil. At the time of the Phase 1 survey no attempt was made to identify species present and where a site supports features that may be of importance to invertebrates then further surveys (Phase 2) may be required to assess the importance of the site.

2.4 Preliminary Ecological Appraisal Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. Therefore, the field survey has not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. The survey was undertaken at a time of year when many species of plant and animal are either dormant, not visible above ground or simply not present in the UK (such as migratory birds). Therefore, the survey was based upon an assessment of the habitat present on site and the suitability of this habitat to support protected species. For the limitations of the bat survey please see report IoSWT-BS27-2019.

2.5 Initial Protected Species Assessment

As part of a PEA, the assessment criteria is based on the potential for the site to support the species considered, this is usually based on habitat features, their suitability for the species and the results of any desk study data obtained as part of the appraisal. In many cases Phase 2 surveys will be required to assess the status of species and hence the importance of a population at a site. Therefore, the assessment should be considered a provisional assessment. Tables 1 and 2 below define the criteria used to assess the potential of the site to support protected species.

2.6 Criteria used to Assess Ecological Value

The ecological values provided within this report are based around both the professional judgement of the author of this report and current published relevant guidance, including information sources such as "*A Nature Conservation Review*⁸" and "*Guidelines for Ecological Impact Assessment in the United Kingdom*⁹."

Table 1 – Description of the categories used to classify a building’s bat roost potential and the survey effort required to determine the likely presence or absence of bats

	Roost status	Description	Survey effort required to determine the likely presence or absence of bats
Bat Roost Potential	High	Numerous features potentially suitable for use by roosting bats, optimal or good quality bat foraging habitat nearby and good habitat connectivity. Alternatively, a building with fewer features potentially suitable for use by roosting bats and optimal foraging habitat nearby.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey.
	Moderate	More than a few features potentially suitable for use by roosting bats, good foraging habitat nearby and limited habitat connectivity. Alternatively, a building with a few features potentially suitable for use by roosting bats but optimal foraging habitat nearby.	Two or three dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Low	Only a few features potentially suitable for use by roosting bats but good bat foraging habitat nearby. Alternatively, a building with more than a few features potentially suitable for use by roosting bats but sub-optimal foraging habitat nearby and limited habitat connectivity.	One or two dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Negligible	Very few features potentially suitable for use by roosting bats and / or in an area (such as a densely populated urban area) which has limited habitat connectivity and poor foraging habitat.	No further surveys required.

Table 1. Categorising and classifying a building’s bat roost potential

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

Table 2 – Description of the categories used to classify a sites potential and the survey effort required to determine the likely presence or absence of a protected species or protected group of species

Potential	Description	Survey effort required to determine the likely presence or absence of the species
High	On site habitat is of high quality for a species or species group. The site is within or near a geographic stronghold. Good quality surrounding habitat and good connectivity.	If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
Moderate	On site habitat is of moderate quality, providing most of the species/species group requirements. Limiting factors may include small habitat area or disturbance	If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
Low	On site habitat is of poor to moderate quality for the species or group. Presence cannot be discounted on the basis of distribution, isolation or surrounding habitats etc.	If species are likely to be affected by the proposals, further Phase 2 surveys will be required to establish the presence/likely absence of the species.
Negligible	Site includes very limited or poor quality habitat for the species or group. Surrounding habitat is unlikely to support wider populations.	Further Phase 2 surveys are unlikely to be required as species is unlikely to be present

Table 2. Categorising and classifying a sites protected species potential

3. Results

3.1 Surveyor Details

The survey was undertaken by Darren Mason BSc (Hons) of the Isles of Scilly Wildlife Trust. Darren has undertaken professional Bat Licence Training to permit him to undertake professional surveys and has gathered sufficient 'working hours' to achieve a Natural England Class Level 2 licence.

3.2 Desktop Study

3.2.1 Statutory Designated Sites

There are four statutory designated sites of conservation importance situated within a 1km radius of the site. Details of these designations are provided below. For further information on statutory designated sites please see Appendix 2.

- i.) Isles of Scilly SAC Complex** – Situated 673m north of the proposed development designated for its nationally important numbers of Grey Seal (*Halichoerus grypus*) and the nationally rare Shore Dock (*Rumex rupestris*). Annex 1 habitats that are the primary reason for site selection include; Mudflats; inter-tidal sandflats; reefs and sub-tidal sandbanks

- ii.) Isles of Scilly SPA Complex** – Situated 673m north of the proposed development and designated for its internationally important seabird assemblage of 13 species including; internationally important numbers of Lesser Black-backed Gull (*Larus fuscus*) and nationally important numbers of European Storm Petrel (*Hydrobates pelagicus*) and European Shag (*Phalacrocorax aristotelis*).

- iii.) Porthloo SSSI** – Situated 815m south-west of the proposed development lies Porthloo SSSI designated for its geology, particularly for its Quaternary sediments in the cliffs that show changes in the climates and environments of the Quaternary period in Scilly.

- iv.) Watermill Cove SSSI** – Lying 1km due east of Seaview, Watermill Cove SSSI is designated for its cliff exposures of Quaternary sediments, that clearly show the sequence of changes in the climate and environment during the Quaternary period.

3.3 Vegetation

The vegetation within the site is described here in general terms using Phase 1 habitat survey terminology and refers to dominant, characteristic and other noteworthy species in each vegetation type within the survey area. The habitat types on site consist of:

- Scattered Trees
- Improved grassland
- Introduced shrubs
- Scrub
- Species poor hedgerow
- Wall
- Building and hardstanding

3.3.1 Scattered Trees

The trees on site consist of two even age Dutch Elm (*Ulmus x hollandica*) situated along the northern boundary of the property (see photo 1.), a juvenile Blue Gum (*Eucalyptus globulus*) set within the western half of the grounds and a Cherry species (*Prunus* sp.) in the north-eastern most corner of the plot.

3.3.2 Improved grassland

Mown grassland makes up the majority of the landscape of the garden (see photos 2 and 3.). Creeping Bent (*Agrostis capillaris*), Cock's-foot (*Dactylis glomerata*) and Perennial Rye-grass (*Lolium perenne*) are the dominant grasses. The grassland also contains some herbaceous species typical of sandy soils that may also reflect past cultivation practices which include; Common Field Speedwell (*Veronica persica*), Common Fumitory (*Fumaria officinalis*), Hairy Bitter-cress (*Cardamine hirsuta*) and Hairy Tare (*Vicia hirsuta*). More typical species associated with well mown grassland include; Creeping Buttercup (*Ranunculus repens*), Common Daisy (*Bellis perennis*), White Clover (*Trifolium repens*) and Greater Plantain (*Plantago major*).

Along the eastern boundary, north-eastern corner and along the western boundary there appears to have been past ground disturbance, possibly as a result of shrub removal (large brash pile situated in southern



Photo 2. Expanse of improved grassland and brash pile in background



Photo 3. Expanse of improved grassland and Dutch Elm in background

half of the garden (see photos 2 and 4.). As a result the ground flora is dominated by Red Campion (*Silene dioica*), Hogweed (*Heracleum sphondylium*), Common Nettle (*Urtica dioica*) and Scarlet Pimpernel (*Anagallis arvensis*). Immediately to the south-west a small patch of Sheep's-sorrel (*Rumex acetosella*), Cleavers (*Galium aparine*), Common Cat's-ear (*Hypochaeris radicata*) and Procumbent Pearlwort (*Sagina procumbens*) suggest more acid conditions, likely due to a previous fire site. Under all the hedgerows the ground flora is dominated by the non-native invasive Three-cornered Leek (*Allium triquetum*) and Monbretia (*Crococsmia x corocosmiliflora*), which are also found scattered throughout the area of disturbed ground to the north and west of the site.



Photo 4 Disturbed grassland with Pittosporum hedge and Eucalyptus tree

3.3.3 Introduced shrubs

Planted within the mown grassland areas are occasional introduced shrub species that include; Common Laurustinus (*Viburnum tinus*), Rhododendron (*Rhododendron ponticus*), Dogwood species (*Cornus* sp.), Yucca species (*Yucca* sp.) and Pittosporum (*Pittosporum tenuifolium*). Found along the eastern boundary several mature specimens of New Zealand Flax (*Phormium tenax*).

3.3.4 Scrub

Though rare several shrubs of European Gorse (*Ulex europea*) are found along the eastern border bounding the species poor hedgerow, as is a small stand of Bramble (*Rubus fruticosus*) situated under the Yucca along the southern boundary.

3.3.5 Species-poor hedgerow

The development is fully enclosed on two sides by species-poor hedgerow which consists of: a hedgerow of Cordoba (*Escallonia corodbensis*) along the southern boundary; a hedgerow of Pittosporum along the western and northern boundary. The latter is interspersed with two Dutch Elm trees and is not complete towards its north-western corner; the eastern boundary is part enclosed by a hedgerow of Maidenhair (*Muehlenbeckia complexa*) south of the driveway into the property.

3.3.6 Wall

Two short sections of granite stone wall extend along part of the northern boundary and the eastern boundary (north of the access drive). These are typical in design for the islands being soil-filled. Species recorded include the lichens; *Flavoparmelia caperata*, *Parmotrema perlatum*, *Ramalina siliquosa* and *Ochrolechia parella*, all species typical of a granite substrate.

3.3.7 Buildings and hardstanding

The property sits almost centrally within the plot, comprising of a detached bungalow which is described in detail in the corresponding report IoSWT-BS27-2019. The hardstanding comprises of a short access drive that intersects the eastern boundary and runs up to the front door of the bungalow, comprised of compacted 'ram.'

3.3.8 Summary

The site comprises a residential property with the associated managed garden landscape. The most significant habitat features in the context of the site itself are the species-poor hedgerows. However, these are not rare or notable and overall the site is assessed as being of **low ecological value**.

3.4 Bats

For a full assessment of the potential for the building, immediate garden and surrounding foraging and commuting habitat potential for bats please see the corresponding report IoSWT-BS27-2019. In summary however, the building has only a few features potentially suitable for use by roosting bats, in particular crevice-dwelling species of the pipistrellus genus, but the site has optimal foraging habitat nearby and has good habitat connectivity. Overall, the site is assessed as being of **low roost potential**. However, the proposed complete removal of the Maidenhair hedge and part removal of the Escallonia hedge may have implications on both foraging and commuting habitat and is worthy of further investigation.

3.5 Birds

During the site visit Song Thrush (*Turdus philomelos*), Blackbird (*Turdus merula*), Wren (*Troglodytes troglodytes*) and Dunnock (*Prunella modularis*) were recorded. Song Thrush was seen feeding on the lawns, Wren singing from the top of the large brash pile in the south of the garden and Dunnock feeding along the bottom of the Pittosporum hedge that forms the western boundary. No active bird nests were recorded. The wider landscape comprises ample suitable nesting bird habitat in the form of grazed pasture, heathland, shelterbelts and a contiguous hedgerow network. Overall, the site is considered to have **high potential** for supporting nesting birds.

3.6 Reptiles/amphibians

The majority of the site is sub-optimal for reptiles, with only the introduced shrub and the species poor hedgerow suitable for hunting and commuting along with the drystone walls as potential hibernacula. There are no ponds on site and no ponds within 500m of the development. Though the surrounding habitat has good habitat connectivity in the form of mature garden and hedgerows the site is considered to have **negligible potential** to support reptiles and amphibians

3.7 Invertebrates

The site consists of a managed garden landscape and is highly unlikely to support an important food plant or rare or notable species, or species assemblage of terrestrial invertebrate. Therefore, the site is considered to offer **negligible potential** for supporting any rare or scarce species or species assemblage of invertebrate.

4. Planning Policy Context

4.1 Planning Policy

4.1.1 National Policy

The National Planning Policy Framework (NPPF)¹⁰ 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. As set out in within Paragraphs 7 to 10 of the NPPF "*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 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 in Paragraph 175 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 provides guidance on the application of law relating to planning and nature conservation as it applies in England. 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.*"

4.1.2 Local Policy

Local planning policy with the Isles of Scilly Council is provided by the current Local Plan 'A 2020 Vision.' A single over-arching policy within this document makes specific reference to environmental protection.

Policy 1 – Environmental protection

- *Protect a statutorily-protected plant or animal species and the wildlife, geological and geomorphological interest and features of designated Sites of Special Scientific Interest; and locally important biodiversity habitats, species and landscape features;*

5. Evaluation, Potential Impacts and Recommendations

5.1 Site Evaluation

The site is approximately .13ha. in size and comprises a residential property and associated managed garden. The protected species potential on site includes roosting, foraging and commuting bat and nesting birds. Overall, the site is assessed as being of low ecological value.

5.2 Summary of Potential Impacts

The proposed development entails the demolition of the existing building, replacing it with three new dwellings along with the complete removal of the hedge along the eastern boundary and replacing it with a low dry-stone wall and the part removal of the hedge along the southern boundary. In the absence of mitigation, the potential ecological impact of these works is:

- Direct impact on roosting bats as a result of building demolition and long-term loss of roost(s)
- Loss of feeding or commuting habitat for bats as a result of complete removal and partial removal of species poor hedgerows
- Loss of nesting habitat for breeding birds as a result of complete removal of species poor hedgerow
- Loss of feeding habitat for breeding birds as a result of complete removal of species poor hedgerow, loss of open grassland area and associated shrubs due to the erection of two further developments within the plot

5.3 Summary of Key Recommendations

The following recommendations have been designed to minimise the potential impacts and enhance the site for wildlife:

- Phase 2 bat surveys to be undertaken (as per the recommendations set out in the report IoSWT-BS27-2019) to assess the presence or likely absence of bats at the existing property
- Phase 2 bat survey (as above) to assess the likely impact of the removal of the hedgerows around the property on the foraging and community habitat of bats
- The planting of native trees and shrubs (not like for like replacement, or use of Pittosporum) along the eastern boundary as mitigation for the removal of the Maidenhair hedge and any introduced shrubs within the existing grassland to provide continued nesting and feeding habitat for breeding birds and foraging bats

- To mitigate against losses of the existing grassland to the new footprints of the two new dwellings any remaining grassland should be enhanced. Enhancement to include over-seeding and plug planting of wildflowers.

5.4 Evaluation Against Relevant Planning Policy

Given the impacts identified and the subsequent recommendations made it is considered that the proposals will accord with all relevant national and local planning policy in relation to ecology (see Section 4). Providing there is scope within the proposals to support the necessary mitigation for roosting bats.

Ecological Feature	Summary	Potential Impacts of the Development	Recommendations
Designated Sites	Isles of Scilly SAC and SPA complex and associated SSSIs	The development proposal may result in an increase in residents, therefore there is a risk that there will be an increase in recreational pressure on designations within the wider countryside	Monitoring, evaluation and resolution of recreational disturbance events should be carried out in accordance with the local authorities recreational pressure assessment and strategy
Vegetation	The site comprises a managed garden landscape of low ecological value	The proposal is anticipated to result in a loss in a large area of improved grassland and associated introduced shrubs; the complete removal of one hedgerow along the eastern boundary and the part removal of the hedgerow along the southern boundary	The proposal should include the planting of native trees and shrubs to replace those lost in the development works and any remaining grassland should be enhanced with over-seeding and plug planting of wildflowers
Bats (for greater detail see report IoSWT-BS27-2019)	The site has few features that has the potential to host roosting bats and surrounding landscape provides optimal foraging and commuting habitat. The development is deemed to have low bat roost potential	Demolition of the building may lead to the loss of a bat roost(s) and may cause harm to roosting bats. The loss of suitable foraging and commuting habitat has the capacity to impact on bats	Phase 2 surveys of the development and hedgerows to ascertain presence or likely absence of bats and an assessment of how they use the site.
Birds	The site has been assessed as having high potential to support nesting birds within the scattered trees, introduced shrubs and hedgerows	The complete removal of the hedgerow on the eastern boundary, the part removal of the hedgerow along the southern boundary and any introduced shrub or scattered tree within the existing grassland to make way for the new dwellings is likely to have a negative impact on nesting birds. The loss of grassland and hedgerows are also likely to have a negative impact on feeding birds.	There is potential to mitigate against these losses by replanting of native trees and shrubs as part of the proposal and an opportunity to make net gains in biodiversity by installing Shwegler bird boxes on each of the new properties

Table 4. Potential impacts and recommendations

Ecological Feature	Summary	Potential Impacts of the Development	Recommendations
Reptiles/Amphibians	The dry stone wall has the potential to support hibernating amphibians. But, overall the site is assessed as having negligible potential to support reptiles/amphibians	There are no anticipated impacts associated with reptiles and amphibians as the existing dry stone walls are to be retained and new dry stone walls are proposed along the eastern boundary	There are no recommendations to be made in respect of reptiles and amphibians
Invertebrates	The site is assessed as having negligible potential to support any rare or notable invertebrate species or species assemblages	There are no anticipated impacts associated with rare or notable invertebrates and the proposals	There is potential to improve the habitat for invertebrates when native trees, shrubs and wildflowers are planted as part of any mitigation scheme

Table 4. Potential impacts and recommendations cont....

5.5 Updating Survey

If the works have not commenced by December 2021, it is recommended that this PEA is updated. This recommendation is made as many of the species considered during the current survey are highly mobile and the ecology of the site is likely to change over a two year period. Similarly, if the planning application boundary changes or the proposals of the site alter, a re-assessment of the impacts may be required.

6.0 Conclusion

Seaview comprises a residential property with its associated managed garden landscape which has been assessed as low ecological value. The property has been surveyed for its bat roost potential (see IoSWT-BS27-2019) and has been assessed as low roost potential. Further Phase 2 surveys will be required to ascertain the presence or likely absence of bats and to ascertain if/how bats use the hedgerows bounding the property as feeding or commuting habitat. The site also has potential to host nesting birds and the loss of the hedgerows and introduced shrubs is likely to have a negative impact on these species. There is no impact on reptiles/amphibians and invertebrates anticipated. The site does have the potential to provide a net gain in biodiversity, in keeping with national and local planning policy via the erection of bird boxes for breeding birds and integrated bat boxes in the new dwellings. Mitigation in the form of planting new native trees and shrubs and improvement of the remaining grassland has the potential to enhance the development for all protected species.

7. Bibliography

1. CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management. Winchester
2. BSI (2013). *Biodiversity. Code of practice for planning and development*. BS42020. British Standards Institute
3. Natural England (2015). *National Character Area profile: 158. Isles of Scilly*. Catalogue Code: NE507. ISBN: 978-1-78367-067-3
4. <http://defra.magic.gov.uk>
5. JNCC (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit – Field manual*
6. H.M.S.O. (1981). *The Wildlife and Countryside Act 1981* (as amended). London.
7. Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)*. The Bat Conservation Trust
8. Ratcliffe, D. (1977). *A Nature Conservation Review*. Cambridge University Press
9. CIEEM (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland*. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester.
10. Ministry of Housing, Communities & Local Government. (2019). *National Planning Policy Framework*. OGL
11. Office of the Deputy Prime Minister. (2005). *Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*. ODPM Circular 06/2005