

**MAPLE PLACE
(FORMER CROCKERY AND SAMSON'S GYM),
DERBY ROAD, EASTLEIGH, HAMPSHIRE**

ECOLOGICAL IMPACT ASSESSMENT

Final Document

June 2023

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EcIA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

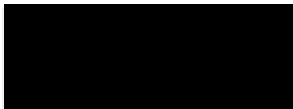
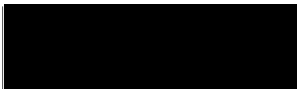
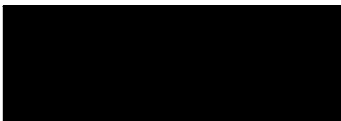
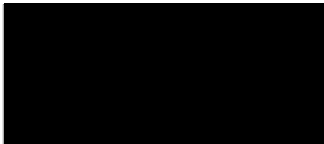
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ECOSA Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The Ecological Impact Assessment and report has been prepared in line with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018) and survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by Aspect (Eastleigh) Ltd to undertake an Ecological Impact Assessment to support a planning application for Maple Place; the redevelopment of the Former Crockery and Samson's Gym site, Derby Road, Eastleigh, Hampshire. The site is located in Eastleigh, Hampshire and comprises a vacant plot where the former crockery and gym buildings once stood, now demolished. The proposals entail redevelopment of the site for residential units.

The main findings of the Ecological Impact Assessment are:

- The site is located within 5.6 kilometres of the Solent and Southampton Water Ramsar site and SPA. The increase in residents may lead to additional recreational pressure on the Solent and Southampton Water Ramsar site/SPA and an increase in nitrates entering the Solent.
- The site is assessed as having low suitability for foraging and commuting bats. New external lighting may cause disturbance to foraging and commuting bats in the long-term therefore a sensitive lighting scheme will be devised.
- To address potential recreational impacts on the Solent and Southampton Water Ramsar site/SPA, a financial contribution will be made to towards the Solent Recreation Mitigation Strategy.
- A nitrogen budget will be calculated, and the relevant number of credits purchased from the Aspect (Eastleigh) Ltd nitrate neutrality scheme.
- The site will be enhanced for bats through the provision of integrated bat units and for birds through the provision of artificial nest boxes.
- The scheme will also result in +0.03 habitat units (a 100%) biodiversity net gain based on the Defra Metric 3.1 calculation (ECOSA, 2023).
- Given the impacts identified, and the mitigation, compensation and enhancement measures proposed it is considered that the proposals accord with all relevant local and national planning policy.
- If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Aspect (Eastleigh) Ltd to undertake an Ecological Impact Assessment to support a planning application for Maple Place; the redevelopment of the Former Crockery and Samson's Gym site, Derby Road, Eastleigh, Hampshire, SO50 5HX (hereafter referred to as the site).

An Ecological Appraisal report of the site was prepared in September 2020 by Johns Associates Ltd (Johns Associates, 2020). During the initial field survey, habitats recorded comprised buildings, hardstanding, and ruderal vegetation. The buildings were assessed as having low suitability for roosting bats and suitability for supporting nesting birds. A single bat emergence survey was carried out in September 2020 and no bats were observed emerging from the buildings.

Prior notification of the demolition proposals was submitted to Eastleigh Borough Council in November 2020 (Application no. PN/20/89301). It was determined that prior approval was required before demolition commenced. The following points requiring prior approval related to ecology:

- *“Confirmation that a nesting bird check, to be undertaken no more than one week before the commencement of demolition works, has been carried out by a suitably qualified ecologist.”*
- *“Measures for dealing with any nesting birds that are discovered prior to the demolition of the buildings.”*

ECOSA were commissioned to undertake a nesting bird check at the site which was completed in March 2021. The prior approval application was delayed by factors unrelated to ecology, which meant demolition was rescheduled for January 2022 (outside the nesting bird season). As such, no further nesting bird checks were carried out and no mitigation measures required. Permission to demolish the two buildings was granted in January 2022 and the buildings have since been demolished.

Pre-application advice is being sought on the proposals and a full planning application is due to be submitted to the Local Planning Authority (LPA) in 2023 for the development of the now vacant plot for residential units. The purpose of this report is to support this planning application.

1.2 The Site

The site is located in Eastleigh, Hampshire centred on National Grid Reference (NGR) SU 4512 1843 (**Map 1**). The site covers approximately 0.1 hectares and comprises a vacant plot situated on the corner of Derby Road and Chamberlayne Road. Two vacant commercial buildings previously located on this land have recently been demolished.

In the wider area, the landscape is dominated by residential and industrial development associated with Eastleigh. Grantham Green (a recreational park) lies approximately 50 metres north-west. Beyond the town, the landscape is characterised by agricultural fields interspersed with woodland blocks.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out between March 2021 and May 2022. The report describes the habitats and species (hereafter referred to as ecological features) within the site's Zone of Influence (Paragraph 3.2) and provides a detailed assessment of potential ecological effects of the proposed development of the site. It identifies the need for any measures to avoid, mitigate or compensate for significant adverse effects¹ on ecological features and outlines enhancements to the site's ecology to be implemented as part of the development. The objectives of the assessment are:

- To provide baseline information on ecological features within the site's Zone of Influence;
- To assess, characterise and quantify the effects on ecological features, including cumulative effects, and identify effects in the absence of any mitigation;
- To set out measures to avoid, mitigate and compensate for significant ecological effects in accordance with the 'mitigation hierarchy'²; and
- To outline opportunities for enhancement in order to achieve a net gain for biodiversity.

1.4 Site Proposals

The proposals entail the construction of 12 new residential units comprising three houses facing Derby Road, nine apartments on the corner of Derby and Chamberlayne Roads, and associated external parking spaces with electric vehicle charging points.

¹ For the purposes of this assessment a 'significant' adverse effect is one which will have an adverse effect on the ecological feature at the site level or higher.

² In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

Bin and cycle storage, communal areas and gardens have also been included. Access will remain the same from Derby Road and Chamberlayne Road.

The Ecological Impact Assessment is based on the proposals plan 'Aspect (Eastleigh) Ltd Redevelopment of Samson's Gym – Proposed Site Plan' produced by FDG (Fairhursts Design Group), dated 17th May 2023 (Drawing No. 7694-08-600, Rev. P02) (**Appendix 1**).

A full planning application is anticipated to be submitted to the Local Planning Authority (LPA) in 2023.

2.0 PLANNING POLICY CONTEXT

2.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the Eastleigh Borough Council administrative area. This information is then used to assess the compliance of the scheme in relation to relevant planning policy and where necessary used to inform the necessary mitigation, compensation and enhancement measures (see Section 5.0).

2.2 Planning Policy

2.2.1 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with the most recent revised NPPF published in July 2021. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF "*Plans and decisions should apply a presumption in favour of sustainable development*". However, Paragraph 182 goes on to state that "*The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.*".

The NPPF sets out that development proposals should not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 174 states that the planning system should contribute to and enhance the natural environment by "*...minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...*".

A number of principles are set out in Paragraph 180, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats^[1], including ancient woodland^[2]. Where loss to irreplaceable

^[1] The NPPF defines irreplaceable habitats as "*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.*"

^[2] Natural England defines ancient woodland as "An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)."

habitats occurs planning permission would normally be refused unless there are wholly exceptional reasons and an adequate compensation strategy is in place. Paragraph 180 also states *“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”*. Paragraph 181 also sets out that potential SPAs, SACs and listed or proposed Ramsar sites or sites acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the 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”*. 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 Project Development, is established before planning permission is granted”*.

2.2.2 Local Policy

The Eastleigh Borough Local Plan 2016-2036 was adopted on 25th April 2022. It sets out the policies and plans to guide future development to 2036 and replaced the ‘saved’ policies in the Adopted Local Plan 2001-2011. A number of policies relate to ecology:

- **Policy S9: Green Infrastructure**

In relation to ecology, this policy states that the council will seek to provide green stepping stones such as street trees, green roofs and walls, pocket parks and urban copses as well as connected habitats linking the network of designated sites and existing propriety habitats, taking account of the Hampshire ecological network map.

- **Policy DM10: Water and Waste Water**

This policy states that where new water supply or waste water infrastructure is required or proposed, the development will be phased alongside the provision of infrastructure to ensure compliance with the Habitats Regulations; that there is no deterioration of the status of water bodies; and the avoidance or mitigation of any other adverse impacts.

- **Policy DM11: Nature Conservation**

This policy states that developments should seek to protect, conserve and enhance international, national and local nature conservations designations

and networks of natural habitats. A 'project level' Habitats Regulations Assessment will be required where there are likely significant effects on international or European nature conservation sites. In particular, reference is made to the Solent, the New Forest and the River Itchen designated sites. The policy also states that a net gain of biodiversity will be sought on all development sites.

Development will not be permitted if it is likely to have adverse effects on priority habitats, protected or priority species, or on the local ecological network, unless it can be demonstrated that there are no alternative solutions, there is an overall biodiversity net gain or the benefits clearly outweigh the adverse effects.

In relation to ecological survey work, the policy states that development will not be permitted unless it can be demonstrated that there have been thorough habitat and species surveys conducted; a great crested newt strategic survey and strategy have been considered in all developments within 500 metres of a great crested newt pond; and a strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat network.

3.0 METHODS

3.1 Introduction

This section details the methods used during the field survey and desktop study carried out as part of the Ecological Impact Assessment. Any significant limitations to the assessment are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this assessment (Zone of Influence³), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the assessment (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals.

3.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 4.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the assessment of ecological effects and mitigation measures section (Section 5.0) of this report.

3.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this assessment. This was not considered necessary given the limited scale of impacts and the nature of on-site and surrounding habitats.

3.4.1 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) (DEFRA, 2022) database was reviewed on 4th May 2022 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any

³ The Zone of Influence (Zoi), as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species⁴. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European Protected Species to be present in the local area.

3.4.2 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

3.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including boundary features.

3.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010)⁵. This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each

⁴ Search areas for bat records are based upon information contained within Collins, J. (Ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Third Edition). The Bat Conservation Trust, London. Relevant distances for consideration of impacts on SPAs, SACs, Ramsar sites have been based on current published guidance available through web-based sources.

⁵ The standard JNCC Phase 1 habitat survey methodology involves the production of a Phase 1 map showing the location and extent of habitat types, however, given the limited size and complexity of the site surveyed a Phase 1 habitat map has not been produced in this instance.

vegetation type was compiled and any invasive species⁶ encountered as an incidental result of the survey recorded.

3.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as holes, cracks, splits, loose bark and ivy.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 4**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species

⁶ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

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

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

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

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 3.4.2), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species⁷, specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

3.6 Field Survey Details

The field survey was carried out by Helen Butt, Senior Ecologist of ECOSA on 10th May 2022. The weather conditions were dry with 100% cloud cover, an ambient temperature of 15°C and a moderate breeze.

During the survey, the surveyor was equipped with 10x40 binoculars, a high powered torch and a digital camera.

3.7 Field Survey 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. The field survey has therefore 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 absent or that it will not occur in the future.

⁷ LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

It is not always possible to provide definitive assessments of a species' presence/likely absence at a site and so in the absence of direct evidence, assessments and recommendations are based on the presence of suitable habitat within/adjacent to a site and the results of species records within the desk study data.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Introduction

This section details the results of the field survey and desktop study undertaken as part of the Ecological Impact Assessment for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey carried out on 6th May 2022.

4.2 Statutory Designated Sites

There are no statutory designated sites of nature conservation interest situated within one kilometre of the site boundary. The closest statutory site is River Itchen SSSI and SAC located 1.3 kilometres east of the site and designated for the presence of a chalk river.

The site lies within the 5.6-kilometre buffer of the Solent and Southampton Water Ramsar Site and SPA. Research has shown that an increase in residential development within 5.6 kilometres of the Solent will lead to more people visiting the coast for recreation, potentially causing disturbance to internationally important species and assemblages of birds (Bird Aware Solent, 2017). The site lies 5.3 kilometres north of the Solent and therefore the Zone of Influence has been extended to include the Solent and Southampton Water Ramsar Site and SPA. The Zone of Influence has also been extended to catchment level to incorporate rivers in the catchment of the Solent. This is due to the issue of nitrogen loading in the Solent and the need for all residential development to consider this issue.

Further details of the statutory designations listed above are provided in **Appendix 5**.

4.3 Habitats

4.3.1 Desktop Study Results

Consultation with the MAGIC database showed there are no notable habitats on the site or adjacent to the site.

4.3.2 Field Survey Results

Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Built-Up Areas - Hardstanding

The entire site comprises concrete hardstanding and rubble where previous buildings once stood (now demolished) (**Figure 1** and **Figure 2**).



Figure 1: Site comprising hardstanding



Figure 2: Hardstanding where demolished buildings once stood

Summary

The site comprises concrete hardstanding and rubble where demolished buildings previously stood. No other habitats are present on site and there are no vegetated areas.

4.4 Notable and Legally Protected Species

4.4.1 Bats

Desktop Study Results

There are five granted EPSM licenses in relation to bats located within two kilometres of the site boundary. The closest to the site is located approximately 800 metres north of the site and was granted in 2018 for the destruction of a resting place of common pipistrelle *Pipistrellus pipistrellus*. During the bat emergence survey carried out by Johns Associates in 2020, common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus* and noctule *Nyctalus noctula* were recorded foraging around the vicinity of the site.

Foraging and Commuting Habitat

The site does not support any vegetation that would be suitable for supporting foraging and commuting bats. The wider area comprises well-connected residential gardens, trees and parks where low numbers of bats are likely to forage. Therefore, the habitat within the Zone of Influence is assessed as having low suitability for foraging and commuting bats.

4.4.2 Otter

Desktop Study Results

Consultation with the MAGIC database showed no licenses in relation to otter *Lutra lutra* within the desktop study area. The River Itchen lies 1.5 kilometres east of the site and Monk's Brook lies 830 metres west of the site.

Field Survey Results

There are no watercourses, ditches, wetlands or waterbodies present on site or adjacent and there is no hydrological connectivity between the site and the River Itchen or Monk's Brook. Furthermore, the site does not support habitat suitable for holt construction or resting places for otter. As such, otter is considered likely absent from the site and the species is not discussed further in this report.

4.4.3 Badger

Field Survey Results

The site does not support any habitats suitable for sett construction or foraging badger *Meles Meles* as it comprises hardstanding only with no vegetated areas and no ecological connectivity to the wider area. The site is unsuitable for badger and therefore the species is not considered further in this report.

4.4.4 Hazel Dormouse

Desktop Study Results

Consultation with the MAGIC database showed two granted EPSM licenses in relation to hazel dormouse. The closest to the site is located 1.5 kilometres south and was granted in 2011. The second is located two kilometres south of the site and was granted in 2014.

Field Survey Results

The site comprises hardstanding only and does not support any habitats suitable for hazel dormouse such as woodland, hedgerows or continuous scrub. As such, hazel dormouse is considered likely absent from the site is not discussed further in this report.

4.4.5 Water Vole

Desk Study Results

Online OS mapping and aerial imagery show that the River Itchen lies 1.5 kilometres east of the site and Monk's Brook lies 830 metres west of the site. There are also a number of waterbodies within the wider area including lakes 820 metres south-west of the site where water vole *Arvicola amphibius* may be present.

Field Survey Results

There are no watercourses, ditches, ponds or lakes present on site or adjacent and there is no hydrological connectivity between the site and the River Itchen, Monk's Brook or lakes 820 metres south-west. As such, water vole is considered likely absent from the site and the species is not discussed further in this report.

4.4.6 Birds

Field Survey Results

The site comprises hardstanding only and does not support any habitats suitable for nesting birds such as trees, hedgerows or buildings. Nor is the site suitable for wintering birds such as waders, waterfowl or gulls due to the lack of suitable habitats (waterbodies or open fields). The habitat on site is unsuitable for birds and therefore this species group is not considered further in this report.

4.4.7 Reptiles

Field Survey Results

The site does not support any vegetated areas such as scrub, grassland or hedgerows that would be suitable for supporting reptiles. The site comprises hardstanding only and therefore reptiles are considered to be likely absent from the site. As such, this species group is not discussed further in this report.

4.4.8 Great Crested Newt

Desktop Study Results

Consultation with the MAGIC database showed no granted EPSM licenses in relation to great crested newt *Triturus cristatus* within two kilometres of the site boundary. Online OS mapping and aerial imagery do not show any standing waterbodies within 500 metres of the site.

Field Survey Results

There are no waterbodies on site, therefore a breeding population of great crested newt would not be present. Given the absence of waterbodies within 500 metres and the lack of suitable terrestrial habitat on site, great crested newt is considered likely absent from the site and the species is not discussed further in this report.

4.4.9 Invertebrates

Field Survey Results

The site comprises hardstanding only and does not support any vegetated habitats that would be suitable for notable or rare invertebrate species or assemblages. As such, notable invertebrates are considered likely absent from the site and the species group is not discussed further in this report.

4.4.10 Other Relevant Species

Field Survey Results

As there are no vegetated habitats present on site and no ecological connectivity to the wider area, no other relevant species are likely to be present. As such, no other species are considered further in this report.

4.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- The site lies within the 5.6-kilometre buffer of the Solent and Southampton Water Ramsar site and SPA and within the catchment of the other designated sites associated with the Solent.
- Habitat within the Zone of Influence is assessed as having low suitability for foraging and commuting bats.

5.0 ASSESSMENT OF ECOLOGICAL EFFECTS AND MITIGATION/COMPENSATION/ENHANCEMENT MEASURES

5.1 Introduction

This section assesses the ecological effects of the proposed development scheme on the identified ecological features as identified in Section 4.0. Methods for addressing potential impacts and effects on ecological features have been approached in accordance with the mitigation hierarchy⁸ with avoidance of impacts prioritised where possible. Where significant adverse effects cannot be avoided other forms of mitigation are prioritised over compensation. Enhancement measures have been detailed, where relevant, in order to not only minimise the impacts on biodiversity but also to provide enhancement in accordance with Paragraph 170 of the NPPF (Paragraph 2.2.1). It is anticipated that mitigation, compensation and enhancement measures will be secured through the planning process.

5.2 Scheme Design

The proposals entail the construction of 12 new residential units comprising three houses facing Derby Road, nine apartments on the corner of Derby and Chamberlayne Roads, and associated external parking spaces with electric vehicle charging points. Bin and cycle storage, communal areas and gardens have also been included. Access will remain the same from Derby Road and Chamberlayne Road.

The potential ecological impacts and effects of these proposals, in the absence of mitigation, are described for each ecological feature below. For each ecological feature, measures to mitigate and/or compensate for significant effects are described.

5.3 Designated Sites

5.3.1 *Potential Impacts and Effects*

Given the scale of the development and the distance between the site and the Solent, no impacts on the Solent and Southampton Water Ramsar site/SPA are anticipated during the construction phase. Once in operation, the increase in residents may lead to additional recreational pressure on the Solent and Southampton Water Ramsar site/SPA. Due to the site's position within the Solent catchment, the proposals may lead to an increase in nitrates entering the Solent as a result of the increased number of residents the scheme will house. Research shows that nutrient inputs from residential wastewater is negatively impacting the Solent's protected habitats and bird species (Natural England, 2022).

⁸ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

5.3.2 Mitigation and Compensation Measures

As the development site falls within 5.6 kilometres of the Solent and Southampton Water SPA/Ramsar site, a contribution will be made towards the Solent Recreation Mitigation Strategy. At the time of preparing this report, developer contributions are determined on a sliding scale depending on the number of bedrooms per dwelling. Contributions range from £337.00 for a one-bedroom dwelling to £637.00 for a three bedroom dwelling (Bird Aware Solent, 2017).

In response to the established problem of nitrate pollutants, and to help ensure that developments achieve nutrient neutrality, Eastleigh Borough Council has put a scheme in place so that developers can offset their nutrient outputs against council land through the purchase of credits.

Eastleigh Borough Council currently has 3,633 credits (1 credit = 1 kilogram of nitrates per year) across 78.5 hectares of council-owned land. The cost per credit is £3,000.00 + VAT. Undertaking for legal and administrative costs is also required (Bird Aware Solent, 2017).

To date the nitrate credits being made available by Aspect (Eastleigh) Ltd are all through the cessation of farming practices and do not rely on any proactive interventions i.e. creation of wetland, planting of woodland, installation of nitrate retaining Sustainable Urban Drainage (SUD) features, or similar. It is anticipated that a nitrogen budget will be calculated and the relevant number of credits purchased from Aspect (Eastleigh) Ltd to address increased nitrogen levels.

5.3.3 Enhancement

No enhancement measures in relation to designated sites are proposed.

5.4 Habitats

5.4.1 Potential Impacts and Effects

The proposals will result in the loss of approximately 0.1 hectares of hardstanding. Given that this habitat has negligible ecological value, this loss is not considered to represent a significant impact.

5.4.2 Mitigation and Compensation Measures

Given that no adverse impacts on existing habitats are anticipated, no mitigation or compensation measures are required.

5.4.3 Enhancement

New landscaping is proposed for within the site and associated with the new residential dwellings. According to the Biodiversity Net Gain Assessment (ECOSA, 2023), there will be a +0.03 habitat unit increase as a result. Gardens will be laid to lawn and will

comprise a native grassland seed mix such as Emorsgate EM1 Basic General Purpose Meadow Mixture (or similar) which responds well to regular mowing. Landscaping in the form of introduced shrub will incorporate native woody species including field maple *Acer campestre*, pedunculate oak *Quercus robur*, ash *Fraxinus excelsior*, crab apple *Malus sylvestris* and cherry *Prunus avium*. A raised planting bed is to be installed within the centre of the site and recommended that shrubs to be of benefit for pollinating invertebrates, such as plants listed on the Royal Horticultural Society 'Plants for Pollinators' (RHS, 2019) list including lavender *Lavandula* species and honeysuckle *Lonicera* species.

5.5 Bats

5.5.1 Potential Impacts and Effects

Construction lighting may cause disturbance to foraging and commuting bats, if works are undertaken outside of daylight hours. During the operational phase, it is possible that external lighting installed on newly constructed buildings may cause disturbance to foraging and commuting bats in the long-term.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017. Refer to **Appendix 3** for details.

5.5.2 Mitigation and Compensation Measures

Guidance on bats and artificial lighting will be followed (Bat Conservation Trust, 2018) to avoid disturbance to foraging, commuting bats. External lighting will comprise hooded luminaires directed downwards. Ideally the bulbs will be LED and at the warmer end of the spectrum (e.g. avoiding blue or white light). LED lights emit much lower levels of UV and therefore have a lower impact on wildlife. Any lighting on the outside of buildings will be motion-activated and task related, associated with specific entrance/exit points. The lux level will be as low as possible to allow tasks to be carried out safely and effectively. Guidance on task related lighting levels published by the Chartered Institution of Building Services Engineers (CIBSE) (CIBSE, 2002) will be followed.

5.5.3 Enhancement

To enhance the site for bats, each of the three houses will be built with a single integrated bat roost unit installed into the fabric of each building. In addition, the block of flats will contain a total of four integrated bat roost units. These will provide additional roosting opportunities for bats at the site in the long-term.

5.6 Birds

5.6.1 Potential Impacts and Effects

As there are no habitats present on site that are suitable for nesting or wintering birds, no impacts on this species group are anticipated during the construction phase.

Once in operation, the increase in residents may lead to additional recreational pressure on the Solent and Southampton Water Ramsar site/SPA (see Paragraph 5.3.1). This may result in disturbance to internationally important birds which are designating features of the Solent and Southampton Water SPA, through trampling or dog walking.

All birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act 1981 (as amended). Refer to **Appendix 3** for details.

5.6.2 Mitigation and Compensation Measures

As described in Paragraph 5.3.2, a financial contribution will be made towards the Solent Recreation Mitigation Strategy (Bird Aware Solent, 2017). These contributions will go towards provisions for rangers, communication, marketing and education initiatives, dog walking initiatives, codes of conduct development, creation and enhancement of greenspaces, site-specific access management and monitoring.

5.6.3 Enhancement

The site will be enhanced for breeding birds through the provision of artificial nest boxes. Five swift boxes will be installed on the new flat block. These will be positioned together on the north-eastern elevation, at least five metres above ground under eaves. In addition, a single house sparrow terrace box will be installed on each of the three new houses to provide nesting opportunities for a range of bird species in the long-term.

5.7 Residual and Cumulative Effects

Given the mitigation and compensation measures outlined above, no significant residual effects are anticipated on any of the species considered. Therefore, there will be no cumulative effects on local populations as a result of the development.

6.0 CONCLUSIONS

6.1 Conclusion

The site is located within 5.6 kilometres of the Solent and Southampton Water Ramsar site and SPA. The site is also assessed as having low suitability for foraging and commuting bats.

In order to address potential recreational impacts on the Solent and Southampton Water Ramsar site/SPA as a result of the proposals, a financial contribution will be made towards the Solent Recreation Mitigation Strategy. A nitrogen budget will also be calculated and the relevant number of credits purchased from the Aspect (Eastleigh) Ltd nitrate neutrality scheme.

The site will be enhanced for bats through the provision of integrated bat units and for birds through the provision of artificial nest boxes. The scheme will also result in a +0.03 unit increase in habitat units (a biodiversity net gain) based on the Defra Metric 3.1 calculation (ECOSA, 2023).

As such it is considered that the proposals will accord with all relevant national and local planning policy in relation to ecology including Policies S9, DM10 and DM11 of the Eastleigh Borough Council Local Plan and the NPPF (see Section 2.0).

6.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

7.0 REFERENCES

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Map 1 Site Location Plan



MAPLE PLACE (FORMER CROCKERY AND SAMSON'S GYM), DERBY ROAD, EASTLEIGH, HAMPSHIRE

ECOLOGICAL IMPACT ASSESSMENT

Map 1 - Site Location Plan

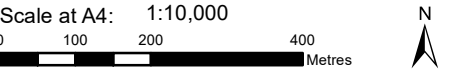
Client:	Aspect (Eastleigh) Ltd
Date:	June 2023
Status:	Final

KEY

 Site Boundary



Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community



Prepared by: OW	Date: 200223
Last amended by: N/A	Date: N/A



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Appendix 1 Site Proposals Plan



- KEY:
- Site boundary line
 - Grassed areas
 - Block paved areas
 - Tarmac areas
 - Concrete slab paved areas
 - Landscaped areas
 - Existing trees to be removed
 - Existing trees to be retained
 - 1m high walls with railings to building frontages
 - 1.8m high brick walls to gardens
 - 1.8m high timber fence between gardens
 - Gravel edging to buildings
 - Concrete Kerbs
 - Concrete Drop Kerbs
 - Car Charging point

PREP	Issued for Planning	LOJ	21/05/22
PREP	Issued for Planning	LOJ	21/05/22
PREP	Issued for Planning	LOJ	21/05/22
REV	Description	By	Date
Project Status	Stage 3	Planning	

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Client/Project

Aspect (Eastleigh) Ltd
Redevelopment of
Samson's Gym

Drawn

**PROPOSED
SITE PLAN**

Rev	Description	By	Date
17/05/2022	1:100	@ A1	
EF	LOJ	EF	

Drawn by: **FDG**
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Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) form a network of protected sites across the European Union and United Kingdom. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to SPAs and SACs.

SACs are sites which support internationally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds. SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on SPAs, SACs or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an "Appropriate Assessment" to fully assess the plan or project against the site's conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a SPA, SAC or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSI) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNR) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNR) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Appendix 3 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Appendix 4 Appraisal Criteria for Bats

The criteria used to assess the suitability of foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 1**⁹.

Table 1: Criteria used to Assess Suitability of Foraging/Commuting Habitat for Bats

Suitability	Commuting and foraging habitats
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat). Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.

⁹ Table adapted from (Collins, 2016)

Appendix 5 Statutory Designated Sites within the Desktop Study Area

Details of statutory designated sites within the desktop study area, as listed in Paragraph 4.2, are provided in **Table 2**.

Table 2: Statutory Designated Sites Located Within the Desktop Study Area

Site Name	Solent and Southampton Water
Site Designation	Ramsar Site
Approximate Relative Location	5.3 kilometres south-west
Reasons for Designation:	
The intertidal area is predominantly sedimentary in nature with extensive intertidal mud and sandflats within the sheltered harbours and areas of gravel and pebble sediments on more exposed beaches. The Solent system supports a wide range of saltmarsh communities. There are several shingle spits including Hurst spit, Needs Ore Point, Calshot spit and Newtown Harbour spits which support a characteristic shingle flora. A range of grassland types lie inshore of the intertidal zone including unimproved species-rich neutral and calcareous grasslands, brackish grazing marsh systems and reed dominated freshwater marshes. The brackish water lagoons associated with grazing marsh systems behind the seawalls, e.g. Keyhaven-Lymington, Gilkicker lagoon, and at Brading Marshes contain internationally important communities of rare and endangered invertebrates and plants. The notable species of birds include: Mediterranean gull <i>Larus melanocephalus</i>, Black-headed gull <i>Larus ridibundus</i>, Sandwich tern <i>Sterna Thalasseus sandvicensis sandvicensis</i>, Roseate tern <i>Sterna dougallii dougallii</i>, Common tern <i>Sterna hirundo hirundo</i>, Little tern <i>Sterna albifrons albifrons</i>, Little egret <i>Egretta garzetta</i>. Nationally important species of invertebrate occurring at the site include: <i>Allomelita pellucida</i>, <i>Gammarus insensibilis</i>, <i>Nematostella vectensis</i>, <i>Arctosa fulvolineata</i>, <i>Aulonia albimana</i>, <i>Anisodactylus poeciloides</i>, <i>Anthonomus rufus</i>, <i>Baris analis</i>, <i>Berosus spinosus</i>, <i>Cantharis fusca</i>, <i>Drypta dentata</i>, <i>Leptura fulva</i>, <i>Meligethes bidentatus</i>, <i>Paracymus aeneus</i>, <i>Staphylinus caesareus</i>, <i>Aphrosylus mitis</i>, <i>Atylotus latistriatus</i>, <i>Dorycera graminum</i>, <i>Haematopoda grandis</i>, <i>Hippobosca equina</i>, <i>Linnaemya comta</i>, <i>Stratiomys longicornis</i>, <i>Syntormon mikii</i>, <i>Tetanocera freyi</i>, <i>Villa circumdata</i>, <i>Trachysphaera lobata</i>, <i>Paludinella littorina</i>, <i>Truncatellina cylindrica</i>, <i>Andrena alfenella</i>, <i>Acleris lorquiniana</i>, <i>Elachista littoricola</i>, <i>Melissoblaptis zelleri</i>, <i>Platytes alpinella</i>, <i>Psamathrocrita argentella</i>, <i>Armandia cirrhosa</i>. Higher plant species include: <i>Eleocharis parvula</i>, <i>Geranium purpureum forsteri</i>, <i>Lotus angustissimus</i>, <i>Ludwigia palustris</i>, <i>Orobancha purpurea</i>, <i>Lamprothamnium papulosum</i>, <i>Spartina maritima</i> <i>Zostera marina</i>.	

Site Name	Solent and Southampton Water
Site Designation	SPA
Approximate Relative Location	5.3 kilometres south-west
Reasons for Designation:	
The area comprises habitats consisting of tidal rivers, estuaries, mud flats, sand flats and lagoons (including saltwork basins), salt marshes, shingle and mixed grassland. During the breeding season the area regularly supports important numbers of breeding Mediterranean gull <i>Larus melanocephalus</i>, little tern <i>Sterna albifrons</i>, roseate tern <i>Sterna dougallii</i>, common tern <i>Sterna hirundo</i> and Sandwich tern <i>Sterna sandvicensis</i>. Over winter the area regularly supports important numbers of teal <i>Anas crecca</i>, dark-bellied brent goose <i>Branta bernicla bernicla</i>, ringed plover <i>Charadrius hiaticula</i> and black-tailed godwit <i>Limosa limosa islandica</i>. The following are qualifying features of the SPA: ▪ Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons ▪ Salt marshes. Salt pastures. Salt steppes ▪ Coastal sand dunes. Sand beaches. Machair ▪ Shingle. Sea cliffs. Islet ▪ Bogs, marshes. Water fringed vegetation. Fens ▪ Humid, mesophile grasslands ▪ Broadleaved deciduous woodland.	