

Technical Note

Project	Anchor Springs (Former Waitrose), Avon Road, Littlehampton, West Sussex	Date	September 2020
Note	Biodiversity Enhancement Recommendations	Ref	UE0274
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Status	Final		

1. Introduction

Planning consent is being sought for redevelopment of the site to provide 50 residential units and flexible commercial floorspace together with the provision of car and cycle parking and landscaping (application ref: LU/214/20/PL).

In response to the planning application comments by the Environment Officer of Chichester DC, acting on behalf of Arun DC, were received requesting further information on the schemes proposed biodiversity enhancement measures, in respect of Policy ENV DM5 of the Arun District Local Plan.

2. Site Description

The Site is set within the largely urban area of Littlehampton and is c.0.56 ha in size. It currently comprises the vacant ex-Waitrose food store, hardstanding in the form of a private car park and Avon Road, ornamental planting, fences and walls. The Site is bounded by Anchor Springs (road) and retail development to the south, Duke Street to the east, Franciscan Way to the north and East Street and residential development to the east.

3. Documents Reviewed

The following documents were reviewed in order to inform our advice on biodiversity enhancement measures;

- Waterman Infrastructure & Environment Limited, 2018. Preliminary Ecological Appraisal (PEA);
- Urban Edge Environmental Consulting, 2018. Bat Survey Report;
- Waterman Infrastructure & Environment Limited, 2018. Ecological Impact Assessment (EclA);

- Urban Symbiotics, 2020. Design and Access Statement (DAS); and
- Urban Symbiotics, 2020. Proposed Site Plan (Dwg no LH1-USY-R0-MP-DR-A-0002).

4. Ecological Constraints

Due to the very urban nature of the site the PEA carried out in April 2018 identified very limited potential for protected or notable species, as summarised below.

Bats – The former Waitrose store was assessed as of low potential for roosting bats and there was little or no habitat for foraging or commuting bats.

Birds – the building and planted area offered very limited opportunities for nesting birds.

Terrestrial invertebrates – The small area of ornamental planting provided very limited opportunities for common invertebrate species.

A bat survey, for emergence of bats from the former Waitrose store, as well as of foraging and commuting bats, was carried out in July 2018. No bats were recorded emerging from the former Waitrose store and only a very low level of foraging and commuting bats was recorded.

5. Previous Biodiversity Enhancement Recommendations and Proposals

The following recommendations or suggestions for biodiversity enhancements were made in the in the PEA.

- Provision of a variety of habitats to provide floristic diversity e.g lawns, hedgerows, shrub planting and herbaceous planting;
- Use of native species or species of benefit to wildlife within the proposed landscape scheme to provide foraging opportunities for birds, bats, invertebrates and other fauna;
- Brown and green roofs to provide suitable foraging opportunities for local fauna such as bats, bird and invertebrates;
- Provision of bat boxes (e.g. Schwegler 1FR 'bat tube' and 1WQ 'summer and winter bat roost') in or on the new buildings installed at least 4m above ground level facing south, south-east or south-west;
- Provision of bird boxes targeted at ??? species (e.g. Schwegler Starling Next Box 3S, Schwegler Sparrow Terrace 1SP, Schwegler Nest Box 1B) placed at least 3m above ground level and facing east or north; and
- Provision of pollen and nectar producing floral species for invertebrate species.

Thw EclA stated that the following biodiversity enhancements would be provided by the proposed development;

- The provision of a variety of habitats to provide floristic diversity (e.g. lawns, trees, shrub planting and herbaceous planting) and the use of native species and species of benefit to wildlife within the Development's landscape scheme;
- The provision of a green roof to provide suitable foraging opportunities for local fauna, such as bats, birds and invertebrates; and
- The provision of a minimum of two bat boxes installed at least 4m above ground level facing south, south-east or south-west; and
- The provision of a minimum of two bird boxes installed at least 4m above ground level facing north, north east or east.

It was presumed that the detail of these measures would be secured by a planning condition attached to the consented development.

The DAS included the following measures that are of relevance;

- Public and private open space, including landscape planting;
- Hedge(s); and
- Sustainable Urban Drainage Scheme, including rain garden(s)

6. Further Recommendations for Biodiversity Enhancement

Grassland

Grassland areas could be sown and managed as either wildflower meadow or flowering lawn. These would provide resources especially for invertebrates and birds. An appropriate native seed mixture should be used such as the following, or equivalent;

- Emorsgate Seeds EM2 Standard General Purpose Meadow Mixture;
- Emorsgate Seeds EL1 Flowering Lawn Mixture; and
- Emorsgate Seeds EN1 Special Pollen and Nectar Meadow Mixture.

Tree, shrub and herbaceous planting

Planting, for example within both the public and private open spaces, should aim to provide a range of, as far as possible, year-round resources, including pollen and nectar, and fruits, seeds and nuts, for a range of wildlife species, including pollinators, birds and mammals. An appropriate mix of native and non-native species should be used (e.g. see suggestions for hedge(s) below).

Hedge(s)

Hedge(s) should be planted with a species rich mix of native species, including, for example, the following species;

Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Blackthorn	<i>Prunus spinosa</i>
Dogwood	<i>Cornus sanguinea</i>
Wild privet	<i>Ligustrum vulgare</i>
Spindle	<i>Euonymus europaeus</i>
Dog rose	<i>Rosa canina</i>
Holly	<i>Ilex aquifolium</i>
Wayfaring tree	<i>Viburnum lantana</i>
Guelder rose	<i>Viburnum opulus</i>
Rowan	<i>Sorbus aucuparia</i>
Honeysuckle	<i>Lonicera periclymenum</i>

Green Roof(s)/Roof Gardens

Green roof(s) / Roof Gardens should aim to provide resources especially for invertebrates and birds. This could be provided by sowing with an appropriate species and flower rich seed mix, for example one based on chalk/calcareous grassland (depending on substrate), such as Emorsgate Seeds EM6 Meadow Mixture for Chalk and Limestone Soils, but with a reduced grass seed component (e.g. 20%) and larger wildflower seed component (e.g. 80%). Some areas could be left unsown to provide bare ground, which is of benefit to some invertebrate species.

Other features, such as variation in micro-topography, including small banks or mounds and depressions, log and rubble piles, and small ponds or wet depressions, which would provide additional shelter and foraging opportunities, could also be provided.

Further information on the creation of green roofs to benefit invertebrates is provided by Buglife.

https://cdn.buglife.org.uk/2019/07/Creating-Green-Roofs-for-Invertebrates_Best-practice-guidance.pdf

Ponds / SuDS / Rain gardens

Small pond(s) could be created, which would provide habitat, for example, for aquatic/wetland invertebrates. These could be planted with appropriate native aquatic and emergent species.

SuDS / Rain gardens should be sown/planted with appropriate native plant species, for example an appropriate wildflower meadow mixture, such as Emorsgate Seeds EM8 Meadow Mixture for Wetlands, and/or marginal species such as;

Water mint	Mentha aquatica
Ragged robin	Lycnis flos-cuculi
Purple loosestrife	Lythrum salicaria
Marsh marigold	Caltha palustris
Brooklime	Veronica beccabunga
Yellow iris	Iris pseudoacorus
Wild angelica	Angelica sylvestris
Greater bird's-foot-trefoil	Lotus uliginosus
meadowsweet	Filipendula ulmaria
Common valerian	Valeriana officinalis
Lesser spearwort	Ranunculus flammula
Yellow loosestrife	Lysimachia vulgaris
Gypsywort	Lycopus europaeus
Hemp agrimony	Eupatorium cannabinum
Marsh bedstraw	Galium palustre
Silverweed	Potentilla anserina

Artificial Breeding Bird Resources

In addition to the nest boxes for starling and house sparrow recommended in the PEA, nest boxes for swifts could also be provided, for example the Schwegler 17 Swift Box or equivalent. As swifts are social ideally several of these should be installed relatively close together (e.g. c.1m apart) under eaves on a northerly or easterly aspect at least 4.5m above ground level and with clear adjacent airspace (as swifts approach nest sites by direct flight at relatively high speed).