



ROYAL ARSENAL RIVERSIDE
THE ROPEYARDS
PLOTS D & K

ECOLOGICAL ASSESSMENT

To Support a Reserved Matters
Application

MARCH 2024

BERKELEY HOMES
(EAST THAMES) LIMITED



ECOLOGYSOLUTIONS

Part of the ES Group

THE ROPEYARDS,
ROYAL ARSENAL RIVERSIDE,
PLOTS D & K
(BUILDINGS D1, D2, D3, D4, D5
AND K3 K4, K5)

Ecological Assessment

March 2024
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CONTENTS

1	INTRODUCTION	1
2	SURVEY METHODOLOGY	2
3	ECOLOGICAL FEATURES	5
4	WILDLIFE USE OF THE SITE	8
5	ECOLOGICAL EVALUATION	14
6	PLANNING POLICY CONTEXT	20
7	SUMMARY AND CONCLUSIONS	24

PLANS

PLAN ECO1	Site Location and Ecological Designations
PLAN ECO2	Ecological Features

PHOTOGRAPHS

PHOTOGRAPH 1	Building B1 southern elevation
PHOTOGRAPH 2	Hardstanding
PHOTOGRAPH 3	Modified grassland
PHOTOGRAPH 4	Introduced shrub
PHOTOGRAPH 5	Individual trees
PHOTOGRAPH 6	Hedgerow H1

APPENDICES

APPENDIX 1	Information downloaded from Multi-Agency Geographic Information for the Countryside (MAGIC)
APPENDIX 2	Bat Box Examples
APPENDIX 3	Bird Box Examples
APPENDIX 4	Invertebrate Aid Examples

1. INTRODUCTION

1.1. Background and Proposals

- 1.1.1. Ecology Solutions was commissioned in December 2022 by Berkeley Homes (East Thames) Limited to prepare an ecological assessment for The Ropeyards, Royal Arsenal Riverside, Plots D & K (Buildings D1, D2, D3, D4, D5 and K3 K4, K5), hereafter referred to as the site.
- 1.1.2. The proposals relate to the Submission of Reserved Matters (Appearance, Landscaping, Layout and Scale) pursuant to Condition 2 of planning permission reference 16/3025/MA, dated 17.03.2017, for residential units and non-residential floorspace within Plots D and K, along with public / private landscaping details, car / cycle parking, refuse / recycling facilities and play provision.

1.2. Site Characteristics

- 1.2.1. The Site is located on the western edge of the wider Royal Arsenal Riverside masterplan and is approximately 2.3 ha. The Site currently sits on a temporary park and is bound to the south by the A206, the RAR A & B Blocks to the north (and north east) and RAR Phase 3, the Brass Foundry and The Guard House to the west.
- 1.2.2. Beyond the immediate site boundaries, to the north of the site is the River Thames and to the south and south east of the site is Woolwich Town Centre including the main shopping area along Powis Street, General Gordon Square, the Woolwich Arsenal Overground Train Station and the Woolwich DLR Station.

1.3. Ecological Assessment

- 1.3.1. This document assesses the ecological interest of the site. The importance of the habitats within the site are evaluated with due consideration given to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹.
- 1.3.2. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and, where appropriate, potential enhancement measures are put forward and reference made to both national and local biodiversity priorities.

¹CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.2 – Updated April 2022. Chartered Institute of Ecology and Environmental Management, Winchester.

2. SURVEY METHODOLOGY

2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

2.2.1. In order to compile background information on the site, eCountability, who are in partnership with Greenspace Information for Greater London CIC (GIGL), was contacted to obtain background information of the site and its immediate surroundings. This data is referenced in this report where relevant.

2.2.2. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)² database, which uses information held by Natural England and other organisations. This information is reproduced at Appendix 1 and, where appropriate, on Plan ECO1.

2.3. Habitat Survey

2.3.1. Habitat surveys were carried out by Ecology Solutions in February 2023 and January 2024 in order to ascertain the general ecological value of the site and to identify the main habitats and associated plant species.

2.3.2. The site was surveyed based on UK Habitat Classification (UKHab)³ methodology as recommended by Natural England.

2.3.3. UKHab is a comprehensive system for mapping and recording habitats, designed to provide a simple and robust approach to survey and monitoring, and replaces the Phase 1 survey methods. UKHab comprises of a principal hierarchy ranging from level 1 (ecosystems) to level 5 (defined habitats including Annex 1 habitats) when classifying habitats, for this survey, all primary habitats were recorded to level 4 minimum. Secondary habitats are also used to provide further information on a main primary habitat where appropriate.

2.3.4. Primary and secondary habitats were classified and mapped using QField⁴ software, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.

2.3.5. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.3.6. All the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year since

² <http://www.magic.gov.uk>

³ UKHab Ltd (2023) *UK Habitat Classification Version 2.0* (at <https://ukhab.org>)

⁴ <https://qfield.org>

different species are apparent in different seasons. While the extended Phase 1 surveys were undertaken outside of the optimal period for botanical surveys, given the habitats identified on-site, it is considered an accurate and robust assessment has been made of the botanical interest of the site.

2.4. Faunal Survey

- 2.4.1. Obvious faunal activity, such as birds or mammals, observed visually or by call during the course of the surveys, was recorded. Specific attention was paid to any potential use of the site by protected species, priority species, or other notable species.
- 2.4.2. In addition to general observations of faunal activity, specific surveys were completed for Badgers *Meles meles* and bats.

Badgers

- 2.4.3. The site was thoroughly searched for evidence of Badger setts in February 2023 and January 2024. For any setts encountered each sett entrance would be noted and plotted, even if the entrance appeared disused. The following information would be recorded:
- i) The number and location of well used or very active entrances. These are clear of any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.
 - ii) The number and location of inactive entrances. These are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.
 - iii) The number of disused entrances. These have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be together with the remains of the spoil heap.
- 2.4.4. Secondly, evidence of Badger activity such as well-worn paths, run-throughs, snagged hair, footprints, latrines and foraging signs would be recorded so as to build up a picture of the use of the site by Badgers.

Bats

Building survey

- 2.4.5. Buildings B1, a modern three storey structure located towards the southern corner of the site clad in metal sheeting, and B2, a small brick-built single storey plant room associated with an off-site hotel and restaurant that extends onto site along the south-western boundary, were subject to external appraisals for their suitability to support bats in February 2023 and January 2024. Checks were undertaken in order to search for signs of any use by bats.

2.4.6. The probability of a building being used by bats as a summer roost site increases if it:

- is largely undisturbed;
- dates from pre-20th Century;
- has a large roof void with unobstructed flying spaces;
- has access points for bats (though not too draughty);
- has wooden cladding or hanging tiles; and
- is in a rural setting and close to woodland or water.

2.4.7. Conversely, the probability decreases if a building is of a modern or pre-fabricated design / construction, is in an urban setting, has small or cluttered roof voids, has few gaps at the eaves or is a heavily disturbed premises.

2.4.8. The main requirements for a winter / hibernation roost site are that it maintains a stable (cool) temperature and humidity. Sites commonly utilised by bats as winter roosts include underground sites and parts of buildings. While different species may show a preference for one of these types of roost site, none are solely dependent on a single type.

Trees - Ground Level Roost Assessment

2.4.9. All trees within and immediately adjacent to site were assessed for their potential to support roosting bats in February 2023 and January 2024. Features typically favoured by bats or evidence of past use by bats were searched for including:

- Obvious holes, e.g. rot holes and old Woodpecker holes;
- Dark staining on the tree, below the hole;
- Tiny scratch marks around a hole from bats' claws;
- Cavities, splits and / or loose bark from broken or fallen branches, lightning strikes etc.; and
- Very dense covering of mature Ivy *Hedera helix* over trunk.

2.4.10. The main requirement for a winter / hibernation roost site is that it maintains a stable cool temperature and humidity, with sites commonly utilised by bats as winter roosts including cavities / holes in trees.

2.4.11. The site was also appraised for its suitability to support both foraging and commuting bats.

2.4.12. Field surveys were undertaken with regard to best practice guidelines issued by CIEEM (2023⁵), the Joint Nature Conservation Committee (2012⁶) and the Bat Conservation Trust (2023⁷).

⁵ Reason, P.F. and Wray, S. (2023) *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management (CIEEM)

⁶ Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2012). *Bat Workers' Manual*. 4th edition. Joint Nature Conservation Committee, Peterborough.

⁷ Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 4th Edition. The Bat Conservation Trust, London.

3. ECOLOGICAL FEATURES

3.1. Habitat surveys were undertaken by Ecology Solutions in February 2023 and January 2024. The following main habitat / vegetation types were identified on-site:

- Buildings;
- Hardstanding;
- Modified grassland;
- Introduced shrub;
- Individual trees; and
- Hedgerow.

3.2. The locations of these habitats are illustrated on Plan ECO2.

3.3. Buildings

3.3.1. Building B1, located towards the southern corner of the site, is a modern three storey structure with a flat roof. Externally, the building is clad in metal sheeting (see Photograph 1).

3.3.2. Building B2 is a hotel and restaurant primarily situated beyond the south-western site boundary, however, a small section of this building does extend onto site. The off-site section of this building is composed of six storeys and clad in metal sheeting, while the section of this building within the site boundary is a single storey brick-built plant room, associated with the hotel, with a flat roof.

3.4. Hardstanding

3.4.1. Hardstanding comprising existing infrastructure, footpaths (intersecting the northern section of site) and a car park forms a large portion the site (see Photograph 2). This habitat was devoid of vegetation.

3.5. Modified Grassland

3.5.1. This habitat is predominantly contained within the northern section of the site in the form of a well-managed open park maintained at a sward height of approximately 50mm. A further two parcels of well-managed modified grassland are also present towards the south of site, in the proximity of Building B1.

3.5.2. Species present in these southern parcels include dominant Perennial Rye Grass *Lolium perenne*, abundant Common Chickweed *Stellaria media* and Dandelion *Taraxacum officinale*, frequent Bent *Agrostis* sp. and Dovesfoot Cranesbill *Geranium mole* and rare Yarrow *Achillea millefolium*, Daisy *Bellis perennis*, Cat's-ear *Hypochaeris radicata* and Common Ragwort *Senecio jacobaea*.

3.5.3. Species present within the park include dominant Perennial Rye Grass, frequent Yarrow and Common Chickweed, occasional Daisy and Common Mouse-ear *Cerastium fontanum* and rare Dovesfoot Cranesbill, Burnet *Sanguisorba* sp., Common Ragwort and Dandelion (see Photograph 3).

3.6. Introduced Shrub

- 3.6.1. Numerous small parcels of introduced shrub are situated across site, however, the majority of this habitat is associated with the park that encompasses the northern section of the site.
- 3.6.2. Species present within the park area include Heaven Bell *Abelia* sp., Daisy *Bellis* sp., Bottlebrush *Callistemon* sp., Pendulous Sedge *Carex pendula*, Mexican Orange Blossom *Choisya ternata*, Dogwood *Cornus* sp., Oleaster *Elaeagnus x ebbingei*, Spurge *Euphorbia* sp., Hebe *Hebe* sp., Common Sneezeweed *Helenium autumnale*, Lavender *Lavandula angustifolia*, Privet *Ligustrum* sp., Honeysuckle *Lonicera periclymenum*, Box-leaved Honeysuckle *Lonicera pileate*, New Zealand Flax *Phormium tenax*, Portuguese Laurel *Prunus lusitanica*, Lamb's-ear *Stachys byzantine* and Viburnum *Viburnum* sp., all surrounded by a layer of mulch which suppresses ground flora.
- 3.6.3. Small areas of introduced shrub are also associated with the car park associated with Building B2 (see Photograph 4). Dogwood, Spurge, Persian Ivy *Hedera colchica*, Lavender, Cherry Laurel *Prunus laurocerasus*, Portuguese Laurel, Sage *Salvia officinalis*, Lamb's-ear and Viburnum are all present within these areas. Further introduced shrub planting is present along the eastern site boundary, to the east of the car park, the majority of which is dominated by Viburnum.
- 3.6.4. A small area of introduced shrub, associated with the adjacent development, has a higher proportion of native planting, with a species assemblage including Pendulous Sedge, Dogwood *Cornus sanguinea*, Hazel *Corylus avellana*, Spurge, Bracken *Pteridium aquilinum* and Elder *Sambucus nigra*, alongside aforementioned ornamental species found elsewhere on-site. Butterfly Bush *Buddleja davidii*, a species listed under Category 3 of the London Invasive Species Initiative (LISI), was also identified within this area.
- 3.6.5. Small parcels of well managed ornamental grass planting surrounded by mulch were also present to the south of Building B1.

3.7. Individual trees

- 3.7.1. A number of young trees including Silver Birch *Betula pendula*, Himalayan Birch *Betula utilis* var. *jacquemontii*, Tree Cotoneaster *Cotoneaster frigidus*, Wild Cherry *Prunus avium*, Sargent's Cherry *Prunus sargentii* and Tibetan Cherry *Prunus serrula* are scattered across the park towards the north of site (see Photograph 5). Three semi-mature London Plane *Platanus x hispanica* trees are also present towards the southern corner of site.

3.8. Hedgerows

- 3.8.1. Hedgerow H1, located to the south-west of Building B1, is an ornamental hedgerow approximately 1m high and 0.5m wide (see Photograph 6). This hedgerow comprises a single species, namely Garden Privet *Ligustrum ovalifolium*.

3.9. Background Records

- 3.9.1. Two species listed under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) were returned by the data search. These include Bluebell *Hyacinthoides non-scripta* and Oxtongue Broomrape *Orobanche picridis*.
- 3.9.2. The closest historic record relates to Bluebell and was located approximately 0.5km south-east of the site in 2002, while the most recent record, also relating to Bluebell, dates from 2017 and was located approximately 2.5km south-east of the site.
- 3.9.3. A further two records for species listed under Section 41 the Natural Environment and Rural Communities (NERC) Act 2006 were returned by GiGL. The closer historic record relates to Cornflower *Centaurea cyanus*, located approximately 0.2km north-east of the site in 2002, while the most recent record, located approximately 1.4km south-west of the site, is attributed to Juniper *Juniperus communis* and dates from 2020.
- 3.9.4. Four records relating to species listed under Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended) were returned by the data search. These species include Wall Cotoneaster *Cotoneaster horizontalis*, Japanese Knotweed *Fallopia japonica*, Giant Hogweed *Heracleum mantegazzianum* and Rhododendron *Rhododendron ponticum*.
- 3.9.5. The closest and most recent record relates to Japanese Knotweed located approximately 0.8km east of the site in 2020.
- 3.9.6. Two species listed under Category 4 of the LISI were returned by the data search including Goat's-Rue *Galega officinalis* and Spanish Bluebell *Hyacinthoides hispanica*. The closest historic record, dating from 2002, relates to Goat's-Rue observed at a location approximately 1.4km south-east of the site. The most recent record, meanwhile, relates to Spanish Bluebell observed in 2017 at a location approximately 3km south-east of the site.
- 3.9.7. An additional two species registered under Category 3 of the LISI were also returned by the data search. These are Butterfly Bush and Floating Pennywort *Hydrocotyle ranunculoides*. The most recent record, attributed to the Butterfly Bush, dates from 2018 and relates to a location approximately 2.6km west of the site. The closest historic record, attributed to the same species, relates to a location approximately 1km east of the site in 2002.
- 3.9.8. Although Butterfly Bush was confirmed on-site within a small area of introduced shrub, no further notable flora, including all the species listed above, were observed over the course of the habitat survey and there is no reason to expect any other plant species listed on either Schedule 8 or 9 of the Wildlife and Countryside Act 1981 (as amended), the NERC Act 2006 and / or the LISI would be present on-site.

4. WILDLIFE USE OF THE SITE

4.1. General observations were made during the site survey of any faunal use of the site, with specific attention paid to the potential presence of protected species.

4.2. Badgers

4.2.1. No evidence of Badger was observed on-site and the habitats present across site are considered to offer negligible opportunities for this species. Given the site's location within Woolwich town centre, a highly urbanised environment, it is not expected that this species would be likely to disperse on-to site. Subsequently, no mitigation is necessary for this species.

Background Records

4.2.1. No records for Badger dating from the last ten years were returned by GiGL.

4.3. Bats

4.3.1. None of the trees or buildings present on-site are considered to contain Potential Roost Features (PRFs) that could offer opportunities for roosting bats. The trees on-site are relatively young and well managed meaning that PRFs have not, as yet, formed.

4.3.2. Building B1 is of a modern design and is a metal framed structure with metal sheeting on the exterior. The construction of the building does not present any potential for bats and nor does it possess any loft voids that would provide internal roosting opportunities. Building B2 is a modern single storey building used as a plant room for the adjacent hotel. It does not offer any roosting opportunities for bats.

4.3.3. Both buildings on-site are of negligible roost suitability for bats.

4.3.4. The green infrastructure across site offers limited interest for foraging and dispersing bats, with the likely interest being focused within the northern portion of the site. The majority of the site is likely to be subject to a fairly high degree of lighting which is likely to deter any significant bat activity within the site. With this said, some minor use of the site may occur by common and widespread bat species, however, it is not expected to be significant.

Background Records

4.3.5. The data search by GiGL returned 301 records of Common Pipistrelle *Pipistrellus pipistrellus*. The nearest record relates to a location approximately 0.3km south of the site from 2014 and the most recent record relates to a location approximately 2.6km south-east of the site from 2022.

4.3.6. Fifty records relating to Soprano Pipistrelle *Pipistrellus pygmaeus* were returned. The closest of these relates to a location approximately 0.3km south of the site from 2014 and the most recent, dated from 2022, relates to a location approximately 2.6km south-east of the site.

- 4.3.7. Eight records of Nathusius' Pipistrelle *Pipistrellus nathusii* was returned by the data search. The closest record relates to a location approximately 0.3km south of the site from 2014. The most recent record, from 2017, was located approximately 3km east of the site.
- 4.3.8. The data search also returned 16 records relating to unspecified Pipistrelle *Pipistrelle* sp. bat. The nearest historic record was from 1993 east of the site. The most recent record is located approximately 3km south of the site from 2018.
- 4.3.9. The closest and most recent records for two Leisler's Bat *Nyctalus leisleri* relates to a location approximately 2km south-east of the site from 2015.
- 4.3.10. Three records of Daubenton's Bat *Myotis daubentonii* were returned by the data search. The closest and most recent record relates to a location approximately 3km east of the site and dates from 2017.
- 4.3.11. Two records were returned for Serotine *Eptesicus serotinus*. The closest and most recent record was located 1.5km south-west of the site from 2017.
- 4.3.12. Thirty-four records were returned for Noctule *Nyctalus noctula*. The closest record relates to a location approximately 0.3km east of site and dates from 2020 while the most recent record relates to a location approximately 2.8km south-east of the site from 2022.
- 4.3.13. A single granted Natural England European Protected Species (EPS) licence application for bats is present within a 2.5km radius of the site. This relates to the destruction of a resting site for Common Pipistrelle from 2020 approximately 1.4km west of the site.

4.4. Hedgehogs

- 4.4.1. No Hedgehogs *Erinaceus europaeus* have been observed on-site, however, the grassland and introduced shrub habitat are considered to offer foraging and dispersal opportunities for this species, albeit limited in extent. The hardstanding that forms much of the site offers negligible opportunities for Hedgehogs and the surrounding infrastructure is likely to lower the use of the site by this species.

Background Records

- 4.4.2. From the data search 79 records of Hedgehog were returned by GiGL over the past ten years. The nearest record was approximately 1.3km south-west of the site from 2022. The most recent record was from 2022 and relates to a location 2.5km south-east from the site.

4.5. Other Mammals

- 4.5.1. It is considered that some common mammal species could be present on-site, but none of these are likely to be protected or otherwise notable species given the habitats present and the site's location.

Background Records

- 4.5.2. Six records for Water Vole *Arvicola amphibius* were returned by the data search, the most recent of which was from 2022. The data search record accuracy is to 10km between 1988 to 2022. The site is devoid of any suitable habitat and therefore this species cannot be supported by the site.

4.6. **Birds**

- 4.6.1. No bird species were observed on-site over the course of the habitat surveys. Limited opportunities for foraging and dispersing birds are offered through the green infrastructure across site, with nesting opportunities only offered by the London Planes and areas of denser introduced shrub and tree planting in the north of the site.

- 4.6.2. The current opportunities within the site would not be suitable for more notable species, such as Black Redstart *Phoenicurus ochruros*.

Background Records

- 4.6.3. GiGL returned twenty-eight species under the Bird Directive Annex 1, with a combined 2052 occurrences. These include Skylark *Alauda arvensis*, Kingfisher *Alcedo atthis*, Short-eared Owl *Asio flammeus*, Pochard *Aythya farina*, Bittern *Botaurus stellaris*, Dunlin *Calidris alpina*, Black Tern *Chlidonias niger*, Marsh Harrier *Circus aeruginosus*, Little Egret *Egretta garzetta*, Merlin *Falco columbarius*, White-tailed Eagle *Haliaeetus albicilla*, Herring Gull *Larus argentatus*, Lesser Black-backed Gull *Larus fuscus*, Black Kite *Milvus migrans*, Red Kite *Milvus milvus*, Curlew *Numenius arquata*, Osprey *Pandion haliaetus*, Honey-buzzard *Pernis apivorus*, Golden Plover *Pluvialis apricaria*, Avocet *Recurvirostra avosetta*, Woodcock *Scolopax rusticola*, Common Tern *Sterna hirundo*, Arctic Tern *Sterna paradisaea*, Starling *Sturnus vulgaris*, Wood Sandpiper *Tringa glareola*, Song Thrush *Turdus philomelos*, Mistle Thrush *Turdus viscivorus*, and Lapwing *Vanellus vanellus*.

- 4.6.4. The nearest record was located 0.2km south of the site from 2019 of multiple species: Herring Gull, Common Tern, Starling, Mistle Thrush and Lapwing. The most recent record was of a Song Thrush 2.9km south of the site from 2022.

- 4.6.5. Eighteen bird species under the designation Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) were returned from the GiGL data search. These species include Scaup *Aythya marila*, Lapland Bunting *Calcarius lapponicus*, Little Ringed Plover *Charadrius dubius*, Brambling *Fringilla montifringilla*, Little Gull *Hydrocoloeus minutus*, Black-tailed Godwit *Limosa limosa*, Savi's Warbler *Locustella luscinioides*, Common Scoter *Melanitta nigra*, Whimbrel *Numenius phaeopus*, Ruff *Philomachus pugnax*, Snow Bunting *Plectrophenax nivalis*, Dunnock *Prunella modularis*, Firecrest *Regulus ignicapilla*, Greenshank *Tringa nebularia*, Green Sandpiper *Tringa ochropus*, Redwing *Turdus iliacus*, Fieldfare *Turdus pilaris* and Hoopoe *Upupa epops*.

- 4.6.6. The nearest record relates a Black-tailed Godwit from 2019, approximately 0.2km south of the site and the most recent record was of a Redwing from 2022, recorded 2.7km south-east of the site.

- 4.6.7. Ten bird species listed under Section 41 of the NERC Act 2006 were returned from the GiGL data search with a sum of 295 occurrence records. These species include Lesser Redpoll *Acanthis cabaret*, Tree Pipit *Anthus trivialis*, Cuckoo *Cuculus canorus*, Yellowhammer *Emberiza citronella*, Reed Bunting *Emberiza schoeniclus*, Grasshopper Warbler *Locustella naevia*, Spotted Flycatcher *Muscicapa striata*, House Sparrow *Passer domesticus*, Tree Sparrow *Passer montanus* and Ring Ouzel *Turdus torquatus*.
- 4.6.8. The closest record was of a House Sparrow from 2019, located approximately 0.2km south of the site and the most recent record of a Lesser Redpoll was 2.9km south of the site from 2019.
- 4.6.9. Four species, totalling 290 occurrences, fell under the designation of Local Species of Conservation Concern. The species reported were Pied Flycatcher *Ficedula hypoleuca*, Grey Wagtail *Motacilla cinerea*, Yellow Wagtail *Motacilla flava* and Whinchat *Saxicola rubetra*.
- 4.6.10. The closest historic record from 2012 relates to a location approximately 0.2km south of the site and the most recent record relates to a location approximately 1.8km north-west of the site from 2019, both associated with Grey Wagtail.
- 4.6.11. The London Priority Species List (LPSL) returned 11 species in the data search, with 1806 total occurrences. Species included in this list are Common Sandpiper *Actitis hypoleucos*, Swift *Apus apus*, Ringed Plover *Charadrius hiaticula*, Lesser Whitethroat *Curruca curruca*, House Martin *Delichon urbicum*, Baltic Gull *Larus fuscus fuscus*, Linnet *Linaria cannabina*, Gadwall *Mareca strepera*, Sand Martin *Riparia riparia*, Tawny Owl *Strix aluco* and Shelduck *Tadorna tadorna*.
- 4.6.12. The nearest records of a Baltic Gull and Gadwall were 0.2km south of the site from 2019 and the two most recent records from 2023 are associated with Sand Martin 1.7km north-east of the site and Tawny Owl 2.4km south of the site.
- 4.6.13. The Red List for Birds (also known as Birds of Conservation Concern 5) within the GiGL data search returned five species totalling 265 occurrences. These species include Common Redpoll *Acanthis flammea*, Greenfinch *Chloris chloris*, Puffin *Fratercula arctica*, Kittiwake *Rissa tridactyla* and Arctic Skua *Stercorarius parasiticus*.
- 4.6.14. The nearest historic record was 0.2km south of the site from 1983 and the most recent record located 1.3km north-east of the site from 2019 is associated with a Kittiwake.
- 4.6.15. Under the London Invasive Species List (LISI) category 4 and Schedule 9 Part 1 of the Wildlife and Countryside Act 1981 (as amended), occurrence records accurate to 1km of nine Ring-necked Parakeets *Psittacula krameria* were reported between 2013 and 2021.

4.7. Reptiles

- 4.7.1. The site does not contain any tussocky grassland or scrub habitat capable of supporting common reptile species. Additionally, the site is bounded by existing structures and infrastructure, preventing dispersal by reptiles onto site, and a review of aerial photography would indicate an absence of any suitable habitat in the vicinity of the site. Consequently, this group is not considered to be present on-site and no mitigation for reptiles is warranted.

Background Records

- 4.7.2. Four records relating to Slow Worm *Anguis fragilis* were returned within the last 10 years. The closest records refer to a location approximately 2.5km south-east of the site from 2014, while the most recent records, which date from 2021, refer to a location approximately 2.6km east of the site.
- 4.7.3. Two records relating to Grass Snake *Natrix helvetica* were returned, the nearest and most recent of which refers to a location approximately 2.5km south-west of the site from 2020.

4.8. Amphibians (Great Crested Newts)

- 4.8.1. No waterbodies capable of supporting Great Crested Newts *Triturus cristatus* are present on-site. Additionally, the site does not contain any habitats that offer suitability for this species during its terrestrial phase.
- 4.8.2. Given the presence of infrastructure and developed land bounding the site and the site's wider location within Woolwich town centre, the dispersal by Great Crested Newts, or any other amphibian species, onto site would be prohibited. Great Crested Newts, therefore, are not considered to be present and no mitigation for this, or any other amphibian species, is deemed necessary.

Background Records

- 4.8.3. The GiGL dataset did not return any records for Great Crested Newts.
- 4.8.4. Thirty-three records for Common Toad *Bufo bufo*, a species listed under Section 41 of the NERC Act 2006, were returned. The most recent record was located approximately 2.9km south of the site from 2022, while the nearest record relates to a location approximately south-east of the site. This is a historical record dating from 1999.
- 4.8.5. Sixty-six records for Common Frog *Rana temporaria* records were returned, with the most recent record from 2021, located 2.9km south of the site. Again, the nearest record fell pre-ten years ago, 0.9km west of the site.

4.9. Invertebrates

- 4.9.1. Given the habitats present it is likely an assemblage of common and widespread invertebrate species would be present on-site, however, there is no reason to suggest that any protected or otherwise notable species would be reliant on the site given the extent and nature of habitats.

Background Records

- 4.9.2. Forty occurrence records for Jersey Tiger moth *Euplagia quadripunctaria*, listed under Habitats and Species Directive Annex 2, were returned from the data search. The nearest record dates from 2016, 1.1km east of the site and the most recent record from 2023, was located 1.2km north-east of the site.
- 4.9.3. A large proportion of records are attributed to species listed in Section 41 of the NERC Act 2006. From the data search 32 species were returned. These records include Knot Grass *Acrionicta rumicis*, Ear Moth *Amphipoea oculatea*, Dusky Brocade *Apamea remissa*, Deep-brown Dart *Aporophyla lutulenta*, Centre-barred Sallow *Atethmia centrago*, Brown-Banded Carder Bee *Bombus humilis*, Moss Carder Bee *Bombus muscorum*, Red-shanked Carder Bee *Bombus ruderarius*, Large Garden Bumblebee *Bombus ruderatus*, Shrill Carder Bee *Bombus sylvarum*, Sallow *Cirrhia icteritia*, Small Heath *Coenonympha pamphilus*, Small Blue *Cupido minimus*, Small Square-spot *Diarsia rubi*, Dusky Thorn *Ennomos fuscantaria*, August Thorn *Ennomos quercinaria*, Dingy Skipper *Erynnis tages tages*, Garden Dart *Euxoa nigricans*, Crescent *Helotropha leucostigma*, Small Emerald *Hemistola chrysoprasaria*, Rustic *Hoplodrina blanda*, Wood White *Leptidea sinapis*, Rosy Minor *Litoligia literosa*, Brindled Beauty *Lycia hirtaria*, Dark Brocade *Mniotype adusta*, Powdered Quaker White-letter Hairstreak *Satyrium w-album*, White Ermine *Spilosoma lubricipeda*, Hedge Rustic *Tholera cespitis*, Pale Eggar *Trichiura crataegi*, Cinnabar *Tyria jacobaeae* and Oak Hook-tip *Watsonalla binaria*.
- 4.9.4. The closest record is attributed to a Brown-Banded Carder Bee 1km south-west of the site from 2019. The most recent record from 2022 and 1.8km south of the site, relates to a Dusky Thorn moth.
- 4.9.5. The five species, designated under LPSL, returned by the GiGL data search include Small Copper *Lycaena phlaeas*, Large Skipper *Ochlodes sylvanus*, Dark Green Fritillary *Speyeria aglaja*, Essex Skipper *Thymelicus lineola* and Small Skipper *Thymelicus sylvestris*.
- 4.9.6. Of these, the nearest historic record was attributed to a Small Skipper, 0.8km south-east of the site from 2002. The same species was also the most recently recorded, noted 2.2km south-east of the site from 2022.
- 4.9.7. A single Nationally Notable A species was recorded relating to a Brown Tree Ant *Lasius brunneus*. The nearest and most recent record relates to 2.7km south-west of the site from 2017.
- 4.9.8. Two species designated under the Nationally Notable B legislation relate to Four-banded Flower Bee *Anthophora quadrimaculata* and Adonis' Ladybird *Hippodamia variegata*.
- 4.9.9. The closest record to site was of the Adonis' Ladybird, 1.7km north from 2018 and the most recent record relates to the Four-banded Flower bee, 3km south of the site from 2019.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Ecological Evaluation

- 5.1.1. The guidelines for ecological evaluation produced by CIEEM propose an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.
- 5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe⁸. These are broadly used across the United Kingdom to rank sites so priorities for nature conservation can be attained. For example, current Sites of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.
- 5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.
- 5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.
- 5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England, may be of importance at its northern limits, say in the border country.
- 5.1.6. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.
- 5.1.7. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP). Both the London and Royal Borough of Greenwich BAP are considered as part of this assessment and are referenced where relevant.
- 5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

5.2. Habitat Evaluation

Designated Sites

- 5.2.1. **Statutory Sites.** There are no statutory designations of nature conservation value within or immediately adjacent to site. The closest SSSI is Gilbert's Pit SSSI. This SSSI is located approximately 1.7km beyond the eastern site boundary and is designated for geological reasons. The closest SSSI designated for ecological reasons is Oxleas

⁸ Ratcliffe, D. A. (1977). *A Nature Conservation Review: The Selection of Biological Sites of National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

Woodlands SSSI. This 72.7ha site is located approximately 2.7km to the south and is formed from three woodland parcels. This designated site contains a diverse assemblage of tree and shrub species, several of which have a restricted distribution within Greater London. This site has also been identified to contain a rich insect flora and a range of woodland birds. This SSSI also overlaps with Oxleas Wood Local Nature Reserve (LNR).

- 5.2.2. The closest LNR is Maryon Wilson Park and Gilbert's Pit LNR. This site, which is located 1.7km east of the site, contains areas of acid grassland, gorse and broom scrub and secondary woodland, in addition to a small stream and areas of wet grassland which support a number of locally rare plants.
- 5.2.3. The development site falls within the Impact Risk Zones (IRZ) of the surrounding SSSIs and consequently the Local Planning Authority (LPA) should consult Natural England regarding the likely risks. However, owing to the intervening distances, nature of the development, as well as its location within an existing urban area it is considered unlikely that any adverse impacts would occur on the integrity of the surrounding SSSIs.
- 5.2.4. In the same regard, it is considered unlikely that any adverse impacts will occur to any other type of statutory designated site as a result of the site's redevelopment.
- 5.2.5. **Non-statutory Sites.** Sites of Metropolitan Importance, Sites of Borough Importance (borough I and borough II) and Sites of Local Importance are the three tiers of sites included within the Sites of Importance for Nature Conservation (SINCs), which are sites recognised by the Greater London Authority and London borough councils as important sites for wildlife.
- 5.2.6. There are no non-statutory sites within or directly adjacent to the site boundary.
- 5.2.7. The closest non-statutory site is River Thames and Tidal Tributaries SINC Site of Metropolitan Importance, which is located approximately 100m north of site. This is a large 2313ha site spanning across multiple London boroughs and supports a range of freshwater, estuarine and marine communities that are rare in London. It is an area of particular importance for birds, including provide feeding areas for Black Redstart.
- 5.2.8. The closest SINC Site of Borough Importance (borough I) is Royal Docks, located approximately 920m north of site and the closest SINC Site of Borough Importance (borough II) is Plumstead Railway Cutting located approximately 390 southeast of site. The former site is important for its value to birds, including its use as a nesting habitat for Common Tern and a hunting area for Peregrine Falcon *Falco peregrinus* that nest nearby. The latter site contains areas of Sycamore *Acer pseudoplatanus* woodland, Bramble scrub and patches of Bracken that support a population of common birds and invertebrates.
- 5.2.9. The closest SINC Site of Local Importance is St Mary Magdalene Churchyard located approximately 380m west of site. The site has numerous mature trees and walls that support locally scarce ferns including Common Polypody *Polypodium vulgare* and Maidenhair Spleenwort *Asplenium trichomanes*.

- 5.2.10. It is considered highly unlikely that any direct adverse impact will occur to these or any other non-statutory sites as a result of the development of the site. However, as the closest non-statutory site is 100m from the proposed development there is a risk of indirect impacts via pollution during construction.
- 5.2.11. Adherence to government pollution prevention guidance and the implementation of best practice measures for the construction industry will ensure that such potentially adverse effects are avoided. Particular attention should be had in relation to the management of any silt and surface runoff and dust that is created during construction and of any other chemicals, such as machinery fuel, that could potentially enter the nearby waterways.

Habitats

- 5.2.12. The site is dominated by hardstanding in the south and a mix of modified grassland, introduced shrub and hardstanding in the north. There are a number of young trees scattered across the site, mainly in the north associated with the temporary park.
- 5.2.13. The proposed development will result in the loss of majority of the existing habitats. With this said, there is limited ecological value in these habitat, therefore new planting would allow for the development of the site to offer valuable ecological enhancements.
- 5.2.14. The landscaping plans seek to create a rich mosaic of habitats including species-rich grassland, swale planting and pockets of woodland planting along the western boundary of site. These habitats will utilise native species where possible, in order to maximise the biodiversity net gains achieved by the development.
- 5.2.15. Furthermore, proposals will achieve an increase in green infrastructure via biodiverse green roofs and podium gardens, the latter including shrubs, ornamental grasses, herbaceous species and hedgerows. This planting will bolster ground level planting and offer new species-rich planting across several heights throughout the development.
- 5.2.16. The development will introduce a number of new trees, both native and non-native, within landscaped areas, lining streets and within podium gardens, resulting in an overall increase in tree coverage.

Biodiversity Net Gain

- 5.2.17. As of 12 February 2024, all new major development is mandated to achieve a minimum 10% Biodiversity Net Gain, as set out within the Environment Act 2021 and Schedule 7A of the Town and Country Planning Act 1990. With this said, current guidance by the Department for Environment, Food, and Rural Affairs (DEFRA) approval of reserved matters for outline planning permissions are not within the scope of Biodiversity Net Gain, as they are not a grant of planning permission.
- 5.2.18. While the proposals are not subject to the mandatory 10% Biodiversity Net Gain, the scheme has been assessed using the Statutory Metric with this

illustrating the development far surpasses the minimum 10% Biodiversity Net Gain and meets with overall net gains set out within national and local policy. Further details on how the site will achieve a net gain in biodiversity are set out within the separate Biodiversity Net Gain Report and associated Statutory Metric submitted in support of the reserved matters application.

Invasive Non-native Species

- 5.2.19. The presence of Buddleia has been identified on-site. This species is categorised as an invasive species in the LISI, a sub-group of the London Biodiversity Partnership which encourages better co-ordination and partnership working to prevent, reduce and eliminate the impacts caused by invasive non-native species across the city.
- 5.2.20. Buddleia is classed as an LISI 3. These species, in London, are:
- Species of high impact or concern which are widespread in London and require concerted coordinated and extensive action to control / eradicate.**
- 5.2.21. It is noted that the control of species listed under the LISI is not a legal requirement, however, where works result in the disturbance of this species, precautions should be taken to prevent its spread.
- 5.2.22. It is recommended that at the start of the construction phase Buddleia will be cut, chipped and removed from the site to ensure it does not disperse into any surrounding areas.

5.3. Faunal Evaluation

Bats

- 5.3.1. **Legislation.** All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (“the Habitats Regulations”). These include provisions making it an offence to:
- Deliberately kill, injure or take (capture) bats;
 - Deliberately disturb bats in such a way as to significantly affect:-
 - (i) be likely to impair their ability to survive, to breed or rear or nurture their young; or to hibernate or migrate; or
 - (ii) to affect significantly the local distribution or abundance of the species to which they belong;
 - Damage or destroy any breeding or resting place used by bats;
 - Intentionally or recklessly obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).
- 5.3.2. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.
- 5.3.3. The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.

- 5.3.4. In accordance with the Habitats Regulations the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:
1. the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
 2. there must be no satisfactory alternative; and
 3. the favourable conservation status of the species concerned must be maintained.
- 5.3.5. Licences can usually only be granted if the development is in receipt of full planning permission.
- 5.3.6. **Site Usage.** The on-site trees and buildings contain no PRF's or roost suitability, therefore there is negligible opportunities for roosting bats. There are very limited opportunities for foraging and dispersing bats, due to the lack of suitable habitats. Suitability is made even more limited due to the site's urban location with expected high levels of light spill.
- 5.3.7. **Mitigation and Enhancements.** No mitigation is required for the loss of trees or buildings in regard to roosting bats given the lack of opportunities currently present on-site.
- 5.3.8. An increase tree planting and ornamental species will be provided as a result of the site's development, alongside the creation of several new hedgerows mainly surrounding the podium gardens and towards the east of site. These newly created habitats will improve the foraging and commuting opportunities for bats that will exist post-development.
- 5.3.9. Additionally, the provision of new areas of native wildflower meadow, green roofs, swale, and shrub planting will heighten the invertebrate suitability of the site and therefore improve food resource for bats.
- 5.3.10. Adoption of lighting safeguards as part of a sensitive lighting scheme for future development would ensure artificial lighting does not represent an indirect effect on bats and that dark corridors remain across and around the site. Lighting should adhere to published guidance from the Bat Conservation Trust and Institute of Lighting Professionals⁹ and will be reviewed by an ecologist to ensure guidance is adhered to.
- 5.3.11. The provision of bat boxes incorporated into newly constructed buildings will offer new roosting opportunities on-site not present pre-development. Suitable examples are given in Appendix 2.

Birds

- 5.3.12. **Legislation.** Section 1 of the Wildlife and Countryside Act 1981 (as amended) is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.

⁹ Bat Conservation Trust (2023). Guideline Note 8 - Bats and Artificial Lighting at Night. Bat Conservation Trust, London

- 5.3.13. **Site Usage.** The site supports limited opportunities for nesting and foraging of common bird species, primarily provided by the London Plane and denser areas of introduced shrub. No species were recorded throughout the duration of the survey.
- 5.3.14. There is currently no on-site suitability for Black Redstart as this species favours older or damaged buildings for nesting opportunities and ruderal stoney areas for foraging, neither of which are present on-site.
- 5.3.15. **Mitigation and Enhancements.** It is recommended that any clearance of trees and shrub takes place outside the nesting season (March to August inclusive) to avoid a potential offence under the legislation. Where this cannot be achieved, a check survey for nesting birds should be undertaken by a SQE, with any confirmed nests left in situ until the young have fledged.
- 5.3.16. Black Redstart are known to nest in piles of rubble produced during the construction phase of development, therefore extra consideration must be taken for this species. This includes avoiding producing suitable rubble piles during the breeding bird season, or if they are created, they should only be cleared once outside the breeding bird season or checked by an ecologist to determine the absence of any active nests.
- 5.3.17. Due to the location of the development near to an airport, consideration should be taken to ensure landscaping does not increase risk of bird strike incidents, for example, consideration should be taken towards the number of fruit bearing species planted and where required reduce the numbers to deter flocking birds. Shrub and hedgerow management programmes can be used to limit berry production and therefore be used as a further mitigation measure.
- 5.3.18. The loss of shrub and trees on-site will occur as a result of the development, however, the loss of this habitat to the development is not considered to be of ecological significance considering its limited suitability for foraging and nesting potential. The proposed landscaping plans includes significant new woodland, tree, shrub and hedgerow planting, which shall ensure continued, and enhanced, opportunities are present on-site for nesting and foraging birds.
- 5.3.19. As an additional enhancement, a variety of bird boxes will be incorporated into new buildings. Boxes should be chosen that offer opportunities for local target species, such as Black Redstart (see Appendix 3).

Invertebrates

- 5.3.20. **Site Usage.** The site likely supports common and widespread invertebrate species, however, given the habitats present, it is unlikely any notable species are present.
- 5.3.21. **Mitigation and Enhancements.** No specific mitigation is required. New landscaping proposals include the introduction of new biodiverse green roofs and the creation of a mosaic of newly created habitats in the west of site which includes swale, species-rich grassland, ornamental planting and woodland planting. These new habitats, particularly those incorporating native species, will increase the floristic diversity on-site and increase opportunities for a range of common invertebrate species.

- 5.3.22. Further enhancements for invertebrates will be provided as part of the development with the provision of Stag Beetle *Lucanus cervus* loggeries and bee posts (see Appendix 4), with these situated throughout the ground level planting within the west of the site. Introduction of deadwood/log piles within discreet areas of new ground level planting and on green roofs would provide additional enhancements for saprophytic invertebrate species.

6. PLANNING POLICY CONTEXT

- 6.1. The planning policy framework that relates to nature conservation at the site is issued at three main administrative levels: nationally through the National Planning Policy Framework (NPPF), regionally through the London Plan and locally through the planning policies of the Royal Borough of Greenwich.
- 6.2. Any proposed development will be judged in relation to the policies contained within these documents.

6.3. National Policy

National Planning Policy Framework (December 2023)

- 6.3.1. Guidance on national policy for biodiversity and geological conservation is provided by the National Planning Policy Framework (NPPF), published in March 2012, revised on 24 July 2018, 19 February 2019, 20 July 2021, 5 September 2023 and again on 19 December 2023. It is noted that the NPPF continues to refer to further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system provided by Circular 06/05 (DEFRA / ODPM, 2005) accompanying the now-defunct Planning Policy Statement 9 (PPS9).
- 6.3.2. The key element of the NPPF is that there should be “a presumption in favour of sustainable development” (paragraphs 10 to 11). It is important to note that this presumption “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” (paragraph 188). ‘Habitats site’ has the same meaning as the term ‘European site’ as used in the Habitats Regulations 2017.
- 6.3.3. Hence, the direction of Government policy is clear. That is, the presumption in favour of sustainable development is to apply in circumstances where there is potential for an effect on a European site, if it has been shown that there will be no adverse effect on that designated site as a result of the development in prospect.
- 6.3.4. A number of policies in the NPPF are comparable to those in PPS9, including reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 180).
- 6.3.5. The NPPF also considers the strategic approach that Local Authorities should adopt with regard to the protection, maintenance and enhancement of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.
- 6.3.6. Paragraphs 185 to 187 of the NPPF comprise a number of principles that Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments; provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for; applying the protection given to European sites to potential Special Protection Areas (SPA), possible Special Areas of Protection (SAC), listed or proposed Ramsar sites and sites identified (or required) as compensatory measures for adverse effects on European

sites; and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats – unless there are 'wholly exceptional reasons' (for instance, infrastructure projects where the public benefit would clearly outweigh the loss or deterioration of habitat) and a suitable compensation strategy exists.

- 6.3.7. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.4. Regional Planning Policy

The London Plan (March 2021)

- 6.4.1. The new London Plan was published in March 2021. This document sets out a framework for how London will develop over the next 20-25 years.
- 6.4.2. The policy areas within the London Plan are formed by six Good Growth objectives. These policies are: GG1 Building strong and inclusive communities; GG2 Making the best use of land; GG3 Creating a healthy city; GG4 Delivering the homes Londoners need; GG5 Growing a good economy; and GG6 Increasing efficiency and resilience.
- 6.4.3. Of these objectives, GG2 is concerned with protecting and enhancing London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces. It also seeks to promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible.
- 6.4.4. Five new policies have been introduced specifically relating to green infrastructure and the natural environment.
- 6.4.5. **Policy G1 Green Infrastructure** states that green features in the built environment, such as street trees and green roofs, should be planned, designed and managed in an integrated way to achieve multiple benefits.
- 6.4.6. **Policy G2 London's Green Belt** states that the Green Belt should be protected from inappropriate development.
- 6.4.7. **Policy G5 Urban Greening** requires major developments to incorporate measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.
- 6.4.8. **Policy G6 Biodiversity and Access to Nature** requires the protection of SINC's. Boroughs should also support the protection and conservation of priority species and habitats that sit outside of the SINC network and promote opportunities for enhancing them using Biodiversity Action Plans.
- 6.4.9. **Policy G7 Trees and Woodlands** is concerned with the protection of these features, including 'veteran' trees and ancient woodland not already in a protected site and identifying opportunities for tree planting in strategic locations. It encourages the retention of existing trees, wherever possible, and the planting of new trees as part of development.

6.5. Local Policy

- 6.5.1. The Royal Borough of Greenwich's Local Development Framework consists of the Core Strategy, together with supplementary and procedural documents. A new Local Plan that will set out the Council's vision until 2036 is currently undergoing consultation.

Royal Greenwich Local Plan: Core Strategy with Detailed Policies (July 2014)

- 6.5.2. The Royal Greenwich Local Plan: Core Strategy with Detailed Policies document was adopted in July 2014. Policies are of particular relevance to nature conservation issues are detailed below.
- 6.5.3. On the policies map, the site, either in whole or in part, is located within a Strategic Development Location – Policy H1, Woolwich Town Centre – Policy TC2, a Conservation Area – Policy DH(h) and the Thames Policy Area – DH(k). The site is also in a Wildlife Deficiency Area – Policy OS(e).
- 6.5.4. **Policy H1 – New Housing.** The site is situated within Woolwich town centre, one of Royal Greenwich's six Strategic Development Locations. This policy outlines that these locations will be specifically targeted for growth, with new housing expected to be developed.
- 6.5.5. **Policy TC2 – Woolwich Town Centre.** This policy aims to develop Woolwich as a Metropolitan Centre through the construction of new retail and office development, improved transport links and facilitating leisure, cultural and tourism uses.
- 6.5.6. **Policy DH(h) – Conservation Areas.** This policy outlines that development proposals must give particular attention to preserving or enhancing the character and / or appearance of Conservation Areas. This includes developments in the vicinity of these areas that would present visual impacts. Buildings within Conservation Areas that are considered to contribute positively will have their demolition resisted and developments that would negatively impact Conservation Areas will be controlled.
- 6.5.7. **Policy DH(k) – Thames Policy Area.** This policy details the actions which will be taken to protect and enhance the River Thames and its foreshore for wildlife and nature conservation.
- 6.5.8. **Policy OS4 – Biodiversity.** This policy states that Royal Greenwich's rich biodiversity will be protected, restored and enhanced. This includes the protection of designated sites including SSSIs, SINCs and LNRs.
- 6.5.9. **Policy OS(e) – Wildlife Deficiency Areas.** This policy seeks to improve areas of wildlife deficiency by securing provision of areas to be managed as wildlife habitats.
- 6.5.10. **Policy OS(f) – Ecological Factors.** This policy states that development proposals will be expected to take account of ecological factors. This includes considering the biodiversity of the site and surrounding area, specifically regarding protected species. On-site trees should be surveyed and development decisions will be based on the requirements to protect trees and achieve appropriate replacement where removal is agreed.

- 6.5.11. Landscaping schemes should also include environmentally appropriate planting using local native species. Development proposals must consider “*the retention of trees and the protection and enhancement of natural and ecological features, tree ridge lines, green corridors, wildlife habitats, boundary walls, surface materials, hedgerows and other features where these will contribute to biodiversity.*” Additionally, they must also consider “*the protection, enhancement and restoration of natural river features and corridors by appropriate landscaping and design.*”
- 6.5.12. **Policy OS(g) – Green and River Corridors.** This policy seeks to protect and enhance Royal Greenwich’s rivers, canals and lakes.

6.6. Discussion

- 6.6.1. The development proposals for the site would be judged against the policies summarised above.
- 6.6.2. The presence of protected and notable species within the site has been assessed and appropriate mitigation set out to ensure that their interests are safeguarded. Specific enhancements have been recommended to ensure that the development promotes the use of the site by these species and improve the biodiversity of the site.
- 6.6.3. The site is dominated by hardstanding, modified grassland and introduced shrub which are of limited nature conservation interest. As per published guidance¹⁰, “*The approval of reserved matters for outline planning permission is not subject to the biodiversity net gain condition (as it is not a grant of planning permission)*”. As the site was granted outline planning permission prior to this becoming a mandatory requirement, it is not considered to require the provision of a 10% net gain. Nevertheless, the development has delivered a comprehensive landscape strategy that has been designed to the principles of green infrastructure, succeeding in securing a Biodiversity Net Gain, as detailed within the Biodiversity Net Gain Report¹¹ by Ecology Solutions.
- 6.6.4. Taking the recommendations within this report into account, it is considered that the development of the site would be in line with the planning policies summarised above.

¹⁰ Department for Levelling Up, Housing and Communities (2024). *Guidance – Biodiversity net gain* (at <https://www.gov.uk/guidance/biodiversity-net-gain>)

¹¹ Ecology Solutions (2024). *The Ropeyards, Royal Arsenal Riverside, Plots D and K (Buildings D1, D2, D3, D4, D5 and K3 K4, K5) – Biodiversity Net Gain Report*. Ref: 10995.BNGReport.vf (complete).

7. SUMMARY AND CONCLUSIONS

- 7.1. Ecology Solutions was commissioned in December 2022 by Berkeley Homes (East Thames) Limited to prepare an ecological assessment for The Ropeyards, Royal Arsenal Riverside, Plots D & K (Buildings D1, D2, D3, D4, D5 and K3 K4, K5).
- 7.2. The site is seeking to progress with a reserved matters application pursuant to the outline consent granted for 'The Waterfront Masterplan' which comprises a residential led development (planning ref: 16/3025/MA). In addition to the new housing and commercial space, the development will provide new public realm.
- 7.3. The site was subject to habitat surveys in February 2023 and January 2024; a desk-based study was also undertaken to inform this assessment.
- 7.4. **Statutory Sites.** There are several statutory designated sites in the vicinity of the site, although given the distances between the proposed development and designated sites it is not expected that any adverse impacts will occur as a result of the development.
- 7.5. **Non-statutory Sites.** There are small number of non-statutory designated sites within a 2km radius of the site, however, not in a close proximity that would result in development having a direct detrimental impact on these. Adherence to government pollution prevention guidance and the implementation of best practice measures for the construction industry will ensure that any potentially indirect adverse effects are avoided.
- 7.6. **Habitats.** The habitats within the site consist of common and widespread species, with majority of the area consisting of hardstanding, modified grassland, and introduced shrub which are of limited nature conservation interest.

The proposed landscaping includes a mosaic of habitats in the west of site including species-rich grassland, swale planting and pockets of woodland planting creating a distinct green corridor in the west of the site. New tree planting is proposed through the site increasing tree coverage across the development. Biodiverse green roofs and podium gardens will bolster ground level planting and provide species-rich habitats across various heights and will contribute to the increase of green infrastructure over the current baseline of the site.

- 7.7. While the proposals are not subject to the mandatory 10% Biodiversity Net Gain, due to current guidance by DEFRA stating that the approval of reserved matters for outline planning permissions are not within the scope of Biodiversity Net Gain as they are not a grant of planning permission, the scheme has been assessed using the Statutory Metric with this illustrating that the development far surpasses the minimum 10% Biodiversity Net Gain and meets with overall net gains set out within national and local policy.
- 7.8. **Invasive Non-native Species.** Buddleia was identified on-site in an area of introduced shrub planting towards the easter boundary. While not listed on the Wildlife and Countryside Act 1981 (as amended), Buddleia is categorised as an invasive species in London by the LISI. Efforts should be made during the construction phase of redevelopment to limit the spread of this species and have the removed vegetation disposed of appropriately.

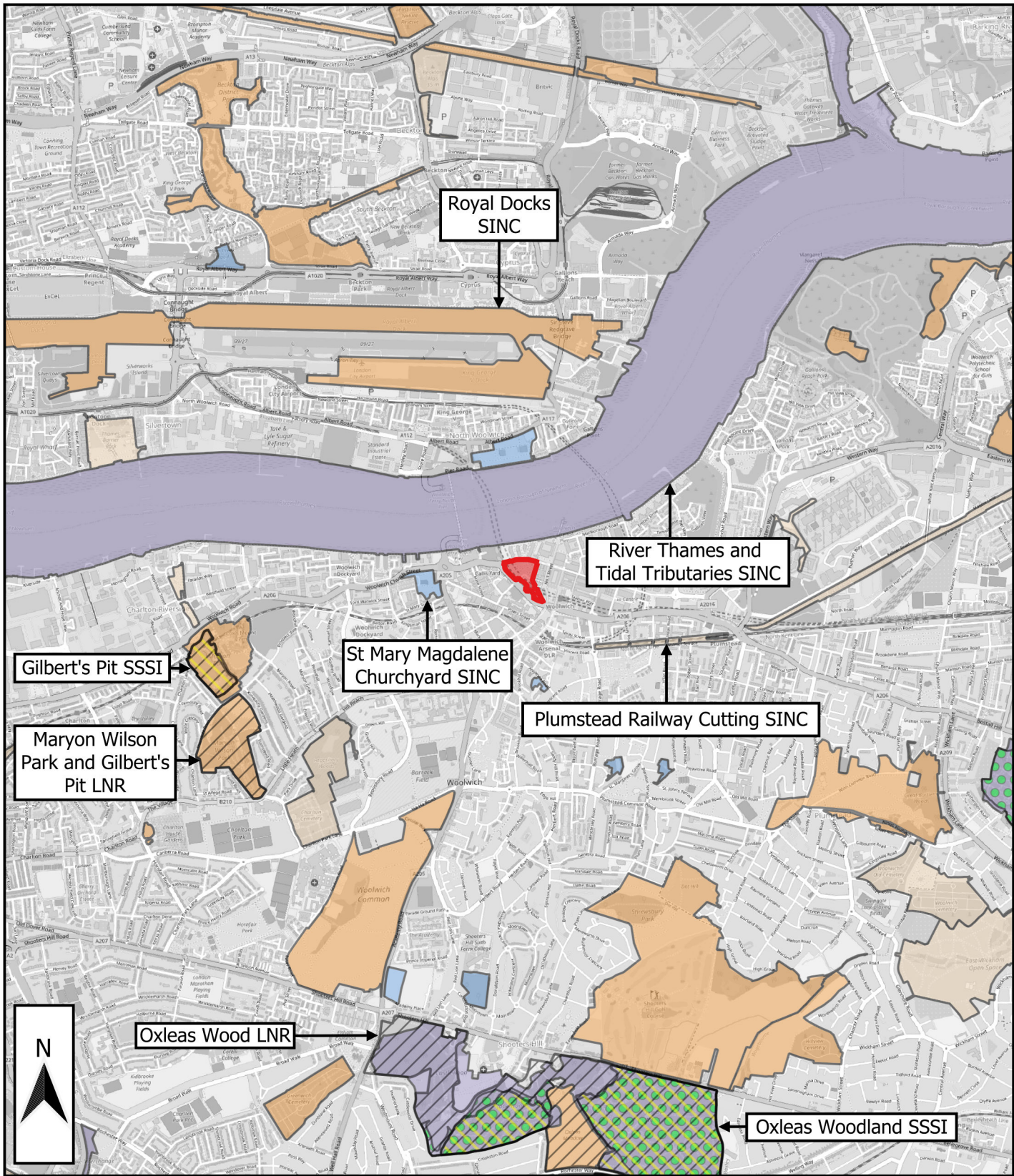
- 7.9. **Badgers.** Owing to the predominance of hardstanding and the sites location in Woolwich town centre, a highly urbanised environment, it is not expected that this species would be present on-site or disperse in from the surrounding area. This is further supported by a lack of background records.
- 7.10. **Bats.** The site has a lack of PRFs in both the on-site trees and buildings, therefore there are negligible opportunities for roosting. There are very limited opportunities for foraging and dispersal, due to the lack of suitable habitats, with this made even more limited due to the site's urban location which is likely to be subject to high levels of light spill.
- 7.11. Appropriate mitigation and enhancements will be incorporated into the development including establishing a suitable new landscaping to promote foraging and commuting opportunities, promoting dark corridors via sensitive lighting and providing new roosting opportunities with the installation of bat boxes within the new buildings.
- 7.12. **Hedgehog.** The site has a limited suitability for Hedgehog due to the introduced shrub and modified grassland, however, the majority of site is hardstanding which provides negligible foraging or dispersal opportunities. No mitigation is required.
- 7.13. **Other Mammals.** There is no reason to suspect the presence of any protected or otherwise notable mammal species on-site, owing to the predominately hardstanding habitat.
- 7.14. **Birds.** No birds were observed on-site during the habitat surveys, however, the site does support limited opportunities for nesting and foraging birds, primarily provided by the trees and denser areas of introduced shrub.
- 7.15. It is recommended that any suitable bird nesting habitat be removed outside of the nesting season (typically March to August inclusive) to avoid a potential offence under the relevant legislation. Where this cannot be achieved a check survey for nesting birds should be undertaken by an ecologist, with any confirmed nests left in situ until the young have fledged.
- 7.16. During construction, measures should be undertaken to minimise the suitability of the site for Black Redstart. This includes avoiding producing suitable rubble piles during the breeding bird season, or if they are created, they should only be cleared once outside the breeding bird season or following a survey by an ecologist.
- 7.17. The landscaping proposals include the provision of new tree, shrub and hedgerow planting to ensure the loss of the current trees and shrub are offset and that foraging opportunities for bird species are enhanced post-development, whilst new green roofs may offer opportunities for species such as Black Redstart. Consideration should be had towards the landscaping to prevent an increased suitability for flocking species and subsequent risk of bird strike owing to the proximity of the site to London City Airport.
- 7.18. To offer further nesting opportunities, a series of bird boxes will be integrated into new buildings across the site, particularly offering opportunities for local priority species such as, Black Redstart.

- 7.19. **Reptiles.** The on-site habitats offer negligible opportunities for common reptile species and are not considered to be present. No mitigation is required for this group.
- 7.20. **Amphibians.** The site has no ponds and offers no suitable terrestrial habitat for Great Crested Newts due to the lack of tussocky grassland. Given the sites location within Woolwich town centre dispersal is considered unlikely, therefore it is unlikely Great Crested Newts are present and no mitigation for this, or any other amphibian species, is deemed necessary.
- 7.21. **Invertebrates.** The current habitats on-site are unlikely to support any protected or notable species. New extensive and diverse areas of landscaping, including those established at terrace and roof level, will promote the site's use by invertebrates. Furthermore, invertebrate aides, such as bee posts and Stag Beetle loggeries, will be provided within new ground level landscaping to offer additional opportunities for locally present species.
- 7.22. In conclusion, on the basis of the current evidence, there is no overriding ecological reason why the site could not be developed. The proposals, following the recommendations within this report, would be in accordance with all relevant ecological planning policy, and the mitigation and enhancement strategies proposed would compliance with local, regional and national policy and legislation.









PLANS

PLAN ECO1

Site Location and Ecological Designations



KEY:

-  SITE BOUNDARY
-  SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)
-  LOCAL NATURE RESERVE (LNR)
-  SINC METROPOLITAN IMPORTANCE
-  SINC BOROUGH GRADE I
-  SINC BOROUGH GRADE II
-  SINC LOCAL
-  ANCIENT WOODLAND



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10995: THE ROPEYARDS,
ROYAL ARSENAL RIVERSIDE, PLOTS D & K
(BUILDINGS D1, D2, D3, D4, D5 AND K3 K4, K5)

**PLAN ECO1: SITE LOCATION AND
ECOLOGICAL DESIGNATIONS**








Rev: B
Feb 2024

PLAN ECO2

Ecological Features



KEY:

-  SITE BOUNDARY
-  BUILDING
-  HARDSTANDING
-  MODIFIED GRASSLAND
-  INTRODUCED SHRUB
-  HEDGEROW
-  TREE



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ROYAL ARSENAL RIVERSIDE, PLOTS D & K
(BUILDINGS D1, D2, D3, D4, D5 AND K3 K4, K5)

PLAN ECO2:
ECOLOGICAL FEATURES

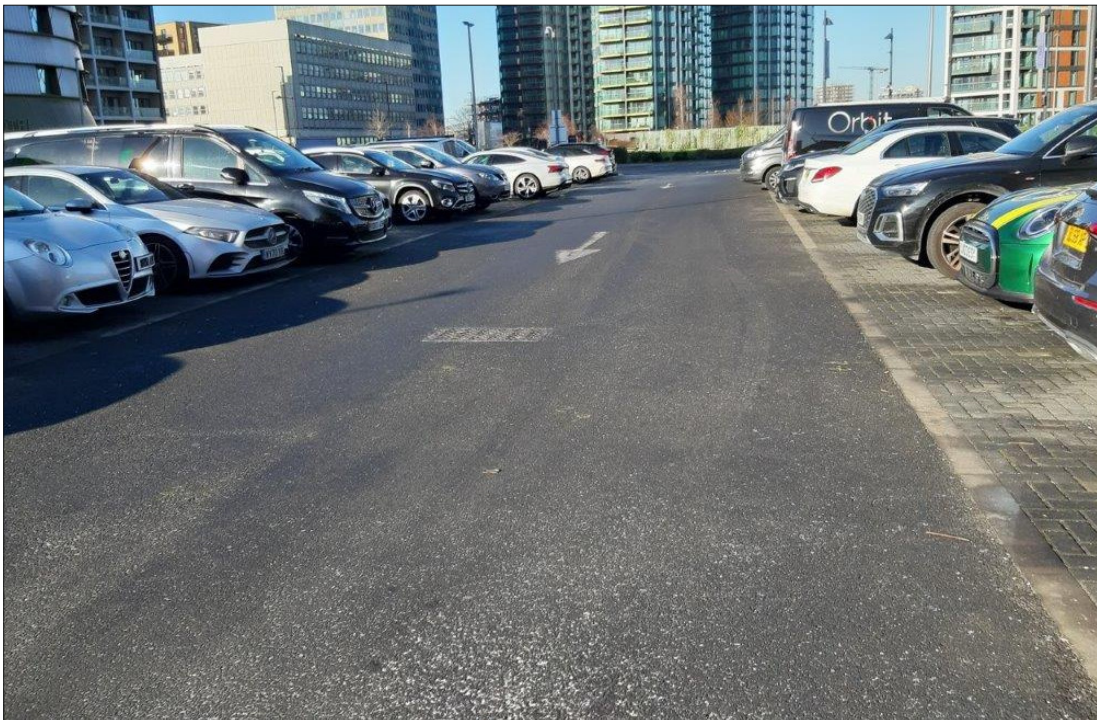
Rev. C
Mar 2024

PHOTOGRAPHS

PHOTOGRAPH 1: Building B1 southern elevation



PHOTOGRAPH 2: Hardstanding



PHOTOGRAPH 3: Modified grassland



PHOTOGRAPH 4: Introduced shrub



PHOTOGRAPH 5: Individual trees



PHOTOGRAPH 6: Hedgerow H1













APPENDICES

APPENDIX 1



Information downloaded from Multi-Agency
Geographic Information for the Countryside (MAGIC)



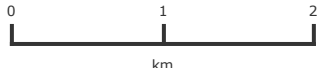
Legend

-  Local Nature Reserves (England)
-  National Nature Reserves (England)
-  Ramsar Sites (England)
-  Proposed Ramsar Sites (England)
-  Sites of Special Scientific Interest (England)
-  SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
-  Special Areas of Conservation (England)
-  Possible Special Areas of Conservation (England)
-  Special Protection Areas (England)
-  Potential Special Protection Areas (England)

Ancient Woodland (England)

-  Ancient and Semi-Natural Woodland
-  Ancient Replanted Woodland

Projection = OSGB36
 xmin = 530900
 ymin = 172900
 xmax = 556300
 ymax = 185400



Map produced by MAGIC on 12 January, 2024.
 Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

APPENDIX 2

Bat Box Examples

Bat Boxes

Bird Brick Houses provides a series of bat and bird boxes that can be integrated into the outside skin of 75mm and most 3" brickwork courses. They provide a brick matching service which includes the collection of bricks from the site.



Bat Box by Bird Brick Houses

These bat boxes can be supplied in brick fronted, half bond and quarter bond brickwork or, alternatively, with a stainless steel mesh fitted to the front. This mesh is designed for optimum adhesion in render and stonework applications. A basic version can also be fitted directly behind weatherboarding or into studwork.

The box is of a self cleaning design, due to the presence of an internal tilt board at the base, which diverts droppings out of the entrance hole. The back of each box is lined with wood, in front of which sits a removable untreated sawn fibre baffle board which divides the main area in two, giving increased roosting space.

APPENDIX 3

Bird Box Examples

Bird Boxes

Schwegler bird boxes are designed to mimic natural nest sites and provide a stable environment with the right thermal properties for chick rearing and winter roosting. They are made from 'Woodcrete', a 75% wood sawdust, clay and concrete mixture that is both breathable and very durable, making these bird boxes extremely long lasting.

1MR Bird Box from Schwegler

These stylish Woodcrete nest boxes are designed to be placed on house and garage walls and balconies. They have a removable front panel for inspection or cleaning and are available in olive green, brown and soft red.

Suitable for Tits, Redstarts, Nuthatches, Pied Flycatchers and Tree and House Sparrows.

Dimensions:
27cm (height) x 19cm (width) x 23cm (depth)



No 16 Swift Box from Schwegler

The design of this box mimics bell tower louvres. It has a removable panel for easy inspection of the nest chamber.

Designed for fixing on or within walls (not suitable for fences or sheds).

Dimensions:
460mm (height) x 430mm (width) x 225mm (depth)



Sparrow Terrace 1SP from Schwegler

House Sparrows are gregarious and prefer to nest close to each other, so this woodcrete box provides room for three families under one roof. Made from long-lasting, breathable woodcrete. No maintenance required.

Colour: stone or brown
Dimensions: 245 x 430 x 200 mm
Weight: 15kg
Designed for fixing to walls
(not suitable for fences or sheds
due to the weight of the box).



Bird Boxes

These Vivara Pro nest boxes are manufactured from WoodStone, a mix of concrete and FSC certified wood fibres. Unlike a traditional wooden nest box, these boxes will not rot away or deteriorate and are guaranteed for 10 years. This robust material safeguards against attacks from predators such as woodpeckers, cats and squirrels, whilst also providing a well insulated interior with a more consistent internal temperature than an ordinary wooden box.



WoodStone Sparrow Nest Box from Vivara Pro

These nest boxes are strong, highly insulating, and can be integrated into the masonry of a new building or fixed onto an external wall.

Dimensions:
290mm (height) x 220mm (width) x 165mm (depth)

Madrid Swift Nest Box from Vivara Pro

Nest boxes should be placed near the eaves at least 5 metres high in a spot that is sheltered from direct sunlight and has a clear flight path.

This nest box has an opening at the back of the box for easy cleaning.

Dimensions:
290mm (height) x 220mm (width) x 165mm (depth)



APPENDIX 4

Invertebrate Aid Examples

Insect Boxes

Green&Blue Bee Post

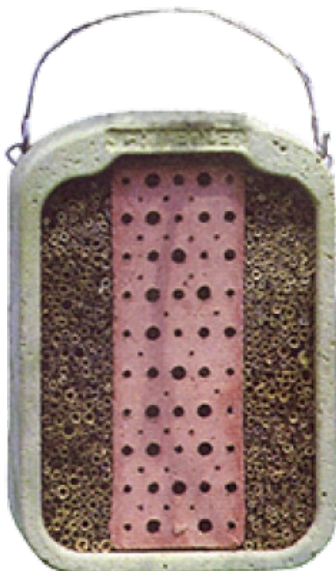
A free standing bee post made from Cornish granite aggregate and will provide a permanent nesting site for bees.

Designed to be set approximately 300mm into the ground and set into a concrete base.

Height: 2300mm

Width: 120mm

Depth: 120mm



Schwegler Clay and Reed Insect Nest

An attractive insect nest which can be hung in any sunny, sheltered spot. Reeds on either side of a clay central section provide a range of environments to suit different insects (designed to attract only harmless insects).

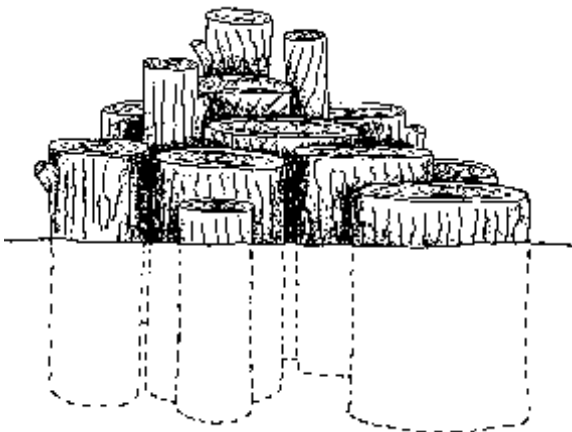
Dimensions: 290 x 225 x 205 mm

Weight: 5.7 kg

Schwegler woodcrete, clay, and reeds

Stag Beetle Loggery

Stag Beetles require dead wood to complete their life cycle, laying eggs underground by logs or stumps of dead trees. The larvae will then spend up to seven years slowly growing in size. A wide range of woods are used, especially Oak, but also Ash, Elm, Sycamore, Lime, Hornbeam, Apple and Cherry. Coniferous species are generally avoided. Adults emerge from the soil beneath logs or stumps from mid-May until July.



Loggery

Large logs (10-50cm diameter) of hardwood (e.g. Oak, Beech, Sycamore, Ash) with bark still attached sunk c. 60cm into the ground, in partially shaded areas. Treated wood should not be used.



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