



**Colnbrook By-Pass
Harmondsworth
West Drayton
UB7 0FX**

51.483918, -0.485311

Preliminary Ecological Appraisal Report

**S25-240/PEA
May 2026**

Revision 2

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1.0 Introduction

Acting upon instructions received from Three Sixty Design Solutions a Preliminary Ecological Appraisal Report has been prepared in connection with a proposed development at Colnbrook By-Pass, West Drayton. The report has been prepared by Principal Ecologist Christopher Canevali, BSc (Hons).

1.1 Scope of Works

This Preliminary Ecological Appraisal has been conducted to fulfil the following requirements:

- Desktop Review of Surrounding Sites of Value
- Undertake a survey to identify Potential Habitats

1.2 Terms of Reference

- CIEEM EcIA Guidelines (2024)
- Methods of Environmental Impact Assessment – (Therivel & Wood, 4th Ed., 2018)
- National Planning Policy Framework – (2025)
- UK Biodiversity Framework (2024)
- Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, BCT, 4th Ed., 2023)
- UK Bat Mitigation Guidelines (CIEEM, 2023)
- Great Crested Newt Survey and Mitigation Guidelines 2025 (GCN SMG 2025)
- Hazel dormice: advice for making planning decisions (Natural England, 2025)
- Hazel Dormouse Conservation Handbook (3rd Ed., 2024)

1.3 Site Location

Site Address	Colnbrook By-Pass Harmondsworth West Drayton UB7 0FX
Grid Reference	51.483918, -0.485311
Site Area	2.44 ha Approx.

1.4 Proposed Development

The proposed development would see the expansion of an existing car park. The site boundary and plans can be seen in **Appendix 1**. Trees and vegetation are anticipated to be affected by this development. However, no demolition of buildings are expected to be conducted.



2.0 Methodology

2.1 Desktop Phase

Searches were made with an online mapping service¹ to ascertain the presence of any statutory sites, local habitats and geo-spatially tagged species. Findings are presented within **Appendix 3**.

2.1.1 Species Potential

Maps for potential species, priority targeting and SSSI designations are included within **Appendix 3**. The area is located outside of established SSSI's, but is located within the SSSI Impact Risk Zones of Influence.

2.1.2 Living England Habitat Map (England)

The Site is categorised as Built-up Areas and Gardens; Broadleaved, Mixed, and Yew Woodland, Acid, Calcareous, Neutral Grassland; and Improved Grassland as shown in **Appendix 3**.

2.1.3 Designations

There are designated sites outside 2000 metres of the Site, but the Site is located within a Zone of Influence for two SSSI's.

2.1.3.1 Wrybury Reservoir - 2800m South South-West

Designated for its importance to wintering waterbirds, supporting nationally significant populations of cormorants, great crested grebe, shovellers and gadwall. The reservoir forms part of the South West London Waterbodies Ramsar site and Special Protection Area, making it of international significance for aquatic fauna and wintering bird assemblages. More information can be found in **Appendix 4**.

2.1.3.2 Staines Moor SSSI - 2950m South

Designated for its extensive alluvial flood meadows representing the largest area of unimproved neutral grassland in Surrey. The site supports nationally important floral communities including small water-pepper, brown sedge, upright chickweed, yellow flag iris and marsh marigold, with exceptional botanical diversity arising from subtle variations in topography and soils. It is internationally important for wintering wildfowl from nearby reservoirs, and supports notable breeding populations of cuckoo and skylark alongside a rich invertebrate fauna including rare beetle species and the oldest anthills in Britain formed by yellow meadow ants.

2.1.4 Granted European Species Applications (England)

The Site has one granted European Species Applications (England) within 1000 metres, listed as Bat (200m NE) as shown in **Appendix 3**, other applications are outside of 2000 metres.

¹ www.magic.com



2.2 Habitat Survey

A Phase 1 habitat survey of the Site was carried out on the 27th October 2025 by Principal Ecologist Christopher Canevali, BSc (Hons). Habitats were described and mapped following standard UK Habitat Classification (UKHab). The weather was 12 degrees Celsius and sunny with patches of cloud.

A second survey was conducted on 30th April 2026 by Project Ecologist Eliza Levitt, MSc. The weather was 18 degrees Celsius and sunny.

A Habitat Survey of the Site is included in **Appendix 2**.

Incidental records of birds and other fauna noted during the course of the habitat survey were also compiled. Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2019) for vascular plant species.

2.3 Preliminary Protected Species Assessment

The potential of the Site to provide habitat for protected species was assessed from field observations carried out at the same time as the habitat survey and combined with the results of the desktop study. The Site was inspected for indications of the presence of protected species as follows:

- Evidence of badger, including setts, runs, snuffle holes and hairs;
- The presence of features such as trees with fissures, holes, loose bark and ivy or buildings with basements, roof voids, soffits, cladding etc. indicating potential for roosting bats and owls;
- Scrub/grassland mosaic and potential hibernation sites for common reptiles;
- The presence of potential nesting sites for birds.
- Dormice nests and signs of foraging.

The likelihood of occurrence is ranked as follows and relies on the current survey and evaluation of existing data.

- Negligible – while presence cannot be absolutely discounted, the Site includes very limited or poor quality habitat for a particular species or species group. No local returns from a data search, surrounding habitat considered unlikely to support wider populations of a species/species group. The Site may also be outside or peripheral to known national range for a species,
- Low – onsite habitat of poor to moderate quality for a given species/species group. Few or no returns from data search, but presence cannot be discounted on the basis of national distribution, nature of surrounding habitats, habitat fragmentation, recent onsite disturbance etc.
- Medium – onsite habitat of moderate quality, providing all of the known key requirements of a given species/species group. Local returns from the data search, within national distribution, suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat severance, and disturbance.



- High – onsite habitat of high quality for given species/species group. Local records provided by desktop study. Site within/peripheral to a national or regional stronghold. Good quality surrounding habitat and good connectivity.
- Present – presence confirmed from the current survey or by recent, confirmed records.

The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species should be recommended.

2.4 Site Evaluation

Habitats and/or species on the Site and within the zone of influence (ZOI) of the Development were evaluated in line with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (2024). These guidelines define the ZOI as:

“the area(s) over which ecological features may be affected by the biophysical changes caused by the proposed project and associated activities, including indirect and cumulative effects” .

The ZOI is determined dynamically based on:

- Impact pathways;
- Species mobility; and
- Project phases.

This requires that judgement should be used to determine the extent of effects of any given development. The following geographic frames of reference were therefore used:

- International;
- National;
- Regional;
- Local; and
- Within the zone of influence.

In accordance with the CIEEM guidelines a range of criteria have been considered in assigning ecological value:

- Presence of sites or features designated for their nature conservation interest. Examples include internationally or nationally designated sites such as candidate Special Areas of Conservation (cSACs) and SSSIs, locally designated sites such as Local Nature Reserves (LNRs) and Sites of Importance for Nature Conservation (SINCs);
- Biodiversity value, for example, habitats or species which are rare or uncommon, species rich assemblages, species which are endemic or on the edge of their range, large populations or concentrations of uncommon or threatened species, and/or plant communities that are typical of valued natural/semi-natural vegetation types;
- Secondary and supporting value, for example, habitats or features which provide a buffer to valued features or which serve to link otherwise isolated features;
- Presence of legally protected species;
- Presence of UK BAP and/or London BAP habitats and species; and



- Criteria recommended by DEFRA for selecting sites of nature conservation importance.

The Site is located outside of designated sites but inside of the ZOI for SSSI's, the area is not currently classified under any biodiversity value.

3.0 Survey Results

3.1 Phase 1 Habitat Survey

Immediately accessible habitats were viewed, and potential and identified species recorded below. A habitat plan is included within **Appendix 2**.

3.1.1 Overview

The Site comprises a tarmac car park where vegetation strips separate the car parking sections, with 33 trees, 11 hedgerows and dense vegetation surrounding the site. In the northern section of the site is a large area of grassland, with scrub and rows of trees along the edge. Currently, there is heavy parking pressure, with vehicles resorting to parking on existing grassland in order to have a space.

Adjacent Land Use	Adjacent		Proximal
	North	Grassland and Waterways	Grassland, Waterways, Woodland and Residential
	East	Urban, Grassland	Urban and Agricultural
	South	Road Network, Urban, and Scrub	Road Network, Urban, and Scrub
Ground Cover	West	Woodland, Grassland and Waterways.	Grassland and Urban
	Urban, Grassland and Scrub		
Boundaries	North	Metal fence	
	East	Buildings, No physical boundary	
	South	Line of Trees	
	West	Mixed Woodland	

3.1.2 Urban - u1b - Developed land sealed surface

The majority of the Site area (12,485m²) is hardstanding tarmac for car parking.

3.1.3 Grassland - g4 - Modified Grassland

The site has poor quality Modified Grassland onsite (5,205m²). It is maintained, with a consistent low cut sward height. Cars currently park on the grass verges, leaving tire marks within the grass. Species observed included; Grasses *Poaceae*, Red Campion *Silene dioica*, Common Yarrow *Achillea millefolium*, Dandelion *Taraxacum officinale*, Creeping Thistle *Cirsium arvense*, Ribwort Plantain *Plantago lanceolata*.

3.1.4 Heathland and Shrub - h3h - Mixed Scrub



The Mixed Scrub (4,916m²) on the Southern, Western, and Northeastern boundaries contains the following species; Hawthorn *Crataegus* spp., Blackthorn *Prunus spinosa*, Buddlejia *Buddleja davidii*, Hazel *Corylus avellana*, Dogwood *Cornus sanguinea*, Bramble *Rubus fruticosus*, Ivy *Hedera helix*, Nettle *Urtica dioica*, Abraham Isaac and Jacob *Trachystemon orientalis*, Common Snowberry *Symphoricarpos albus*, Oregon Grape *Mahonia aquifolium*, and Tropical Horseweed *Conyza sumatrensis*.

3.1.5 Linear - h2b - Other Hedgerow

Hedgerow onsite consists of Other Hedgerow due to the species composition. The Hedgerows contain limited species, mostly of non-native origin. Tree species are young saplings, roughly 2 or 3 years old. The hedgerows are summarised below;

H1 - h2b - Other Hedgerow. Species Composition; Common Snowberry *Symphoricarpos albus*, Dogwood *Cornus sanguinea*, Privet *Ligustrum vulgare*, Oregon Grape *Mahonia aquifolium*, Red Campion *Silene dioica* and Bramble *Rubus fruticosus*.

H2 - h2b - Other Hedgerow. Species Composition; Purple Willow *Salix purpurea*, Privet *Ligustrum vulgare*, Ivy *Hedera helix*, Dandelion *Taraxacum officinale* and Bay Willow *Salix pentandra*.

H3 - h2b - Other Hedgerow. Species Composition; Dogwood *Cornus sanguinea*, Privet *Ligustrum vulgare*, Ivy *Hedera helix* and Oak *Quercus robur*.

H4 - h2b - Other Hedgerow. Species Composition; Snowberry *Symphoricarpos albus*, Bay Willow *Salix pentandra*, and Common Yarrow *Achillea millefolium*

H5 - h2b - Other Hedgerow. Species Composition; Ivy *Hedera helix*, Privet *Ligustrum vulgare*, Oak *Quercus robur*, Holm Oak *Quercus ilex*, Hazel *Corylus avellana*, Bay Willow *Salix pentandra*, Oregon Grape *Mahonia aquifolium*, Creeping Thistle *Cirsium arvense*, Ribwort Plantain *Plantago lanceolata*, Chickweed *Stellaria media*, Herb-Robert *Geranium robertianum*, Cranesbill *Geranium sanguineum* and Daisy *Bellis perennis*.

H6 - h2b - Other Hedgerow. Species Composition; Oregon Grape *Mahonia aquifolium*, Dogwood *Cornus sanguinea*, Hazel *Corylus avellana*, Bay Willow *Salix pentandra* and Ivy *Hedera helix*

H7 - h2b - Other Hedgerow. Species Composition; Oleaster *Elaeagnus angustifolia*, Sycamore *Acer pseudoplatanus*, Bay Willow *Salix pentandra*, Ivy *Hedera helix* and Bramble *Rubus fruticosus*.

H8 - h2b - Other Hedgerow. Species Composition; Buddlejia *Buddleja davidii*, Hazel *Corylus avellana*, Dogwood *Cornus sanguinea*, Bramble *Rubus fruticosus*, Ivy *Hedera helix*, Nettle *Urtica dioica*, Abraham Isaac and Jacob *Trachystemon orientalis*.

H9 - h2b - Other Hedgerow. Species Composition; Purple Willow *Salix purpurea*, Field Maple *Acer campestre*, Dogwood *Cornus sanguinea*, Hazel *Corylus avellana*, Ash *Fraxinus excelsior*.

H10 - h2b - Other Hedgerow. Species Composition; Bay Willow *Salix pentandra*, Dogwood *Cornus sanguinea* and Privet *Ligustrum vulgare*.



H11 - h2b - Other Hedgerow. Species Composition; Aspen *Populus tremula*, Old Mans Beard *Clematis vitalba*, Tropical Horseweed *Conyza sumatrensis*,

3.1.6 Linear - w1g6 - Line of Trees

The Line of Trees along the Southern boundary of the site contains an unusually high number of dead trees. Species included; Hawthorn *Crataegus spp.*, Willows *Salix spp.*, Buddleja *Buddleja davidii*, Birch *Betula spp.* and Sycamore *Acer pseudoplatanus*.

There are also Lines of Trees in the northern section of the Site. These trees are in better condition, with few dead trees.

3.1.7 Trees

T1 - Silver Birch (DBH - 23cm) Small	T2 - Silver Birch (DBH - 16cm) Small
T3 - Silver Birch (DBH - 11cm) Small	T4 - Silver Birch Coppiced - Small
T5 - Silver Birch (DBH - 11cm) Small	T6 - Silver Birch (DBH - 29cm) Small
T7 - Silver Birch (DBH - 13cm) Small	T8 - Silver Birch (DBH - 14cm) Small
T9 - Silver Birch (DBH - 16cm) Small	T10 - Silver Birch (DBH - 19cm) Small
T11 - Silver Birch (DBH - 22cm) Small	T12 - Silver Birch (DBH - 28cm) Small
T13 - Silver Birch (DBH - 28cm) Small	T14 - Silver Birch (DBH - 16cm) Small
T15 - Silver Birch (DBH - 14cm) Small	T16 - Silver Birch (DBH - 39cm) Medium
T17 - Silver Birch (DBH - 29cm) Small	T18 - Silver Birch (DBH - 28cm) Small
T19 - European Beech (DBH - 27cm) Small	T20 - Silver Birch (DBH - 23cm) Small
T21 - Silver Birch (DBH - 26cm) Small	T22 - Silver Birch (DBH - 32cm) Medium
T23 - Silver Birch (DBH - 31cm) Medium	T24 - Silver Birch (DBH - 23cm) Small
T25 - Silver Birch (DBH - 32cm) Medium	T27 - Silver Birch (DBH - 29cm) Small
T28 - Silver Birch (DBH - 29cm) Small	T29 - Goat Willow (DBH - 28cm) Small
T30 - Goat Willow (DBH - 27cm) Small	T31 - Goat Willow (DBH - 32cm) Medium
T32 - Rowan (DBH - 24cm) Small	T33 - Rowan (DBH - 32cm) Medium

Total Trees: **Small - 27 and Medium - 6**

3.1.9 Boundaries

The boundaries of the Site consist of a variety of the following:

North Boundary - Metal Fence - Mixed Scrub



East Boundary (North) - Metal Fence - Mixed Scrub

East Boundary (Central North) - European Beech hedgerow

East Boundary (Central) - Building

East Boundary (Central South) - Building

East Boundary (South) - Line of Trees

South Boundary - Line of Trees.

West Boundary (North) - Mixed Woodland - Mixed Scrub

West Boundary (Central North) - Mixed Woodland

West Boundary (Central) - Metal Fence

West Boundary (Central South) - Mixed Woodland

West Boundary (South) - Mixed Scrub - Mixed Woodland

3.2 Protected Species Assessment

The habitats at the Site were evaluated as to their likelihood to provide sheltering, roosting, nesting and foraging habitat for the following animals:

- Bats
- Breeding Birds
- Reptiles
- Mammals
- Invertebrates
- Amphibians

These protected species were selected for further consideration given the presence of potentially suitable habitat is present on Site. The results of the field survey, combined with information from the desktop study, are presented below.

3.2.1 Bats

3.2.1.1 Legislative Drivers

Wildlife and Countryside Act 1981 (as amended). Conservation of Habitats and Species Regulations 2017 (as amended).

3.2.1.2 Areas to be considered

The trees onsite, particularly mature trees with ivy.

3.2.1.3 Likelihood

The assessment of bat potential was based on a preliminary visual inspection of roosting suitability only, consistent with standard PEA methodology. This is not a full bat roost



assessment or activity survey. There are no buildings on site, therefore, providing no roosting areas.

The individual trees in the centre of the site were inspected from ground level. The trees had limited roosting features, none of the trees had any splits, cankers, or dense ivy. The majority of the trees are small and provide little roosting potential. These trees are predicted to be removed. The trees must be thoroughly inspected prior to removal to ensure no sudden presence of bats.

The trees within the woodland were inspected from ground level. Various trees observed had roosting features, such as splits and dense old-growth ivy. The trees provide potential roosting potential given the age and structure of the stems. There was no evidence of bat occupation, however.

The site itself is likely to provide low-value foraging and commuting habitat due to the open, wind-exposed nature of the modified grassland from the east, the open, adjacent land from the west, the busy road network, and limited connectivity to known bat foraging corridors. Given the roosting potential of on-site features, it is possible that bats are resident within the woodland, although there is limited presence of bat populations in the local area (as indicated by desk study data). Currently, there are no plans to fell or remove trees from the woodland. Should any design changes arise that involve felling of trees or introduction of artificial lighting that may affect retained boundary features or commuting routes, further bat survey effort (emergence/re-entry surveys or activity transects) may be required and should be discussed with the LPA ecologist.

The likelihood of bats on Site is moderate. The likelihood of bats feeding on Site is low.

3.2.2 Breeding Birds

3.2.2.1 Legislative Drivers

Wildlife and Countryside Act 1981 (as amended). Natural Environment and Rural Communities (NERC) Act 2006. European Birds Directive (2009/147/EC).

3.2.2.2 Areas to be considered

The trees.

3.2.2.3 Likelihood

There are many suitable areas providing ideal conditions in terms of cover and foraging for common bird species such as Black Bird *Turdus merula* and the Common Wood Pigeon *Columba palumbus*. However, no present or past bird nests were observed with the site visit with the Site survey area, there were however, bird nests observed in adjacent trees to the Site area.

The woodland and mixed scrub on site provide abundant suitable nesting habitat for common and widespread bird species, including hedge and scrub nesting species (e.g. dunnock, wren, blackbird, robin) and canopy nesters (e.g. woodpigeon, thrush species). Various nests were observed in trees throughout the woodland. None of the individual trees



had bird nests. The mixed scrub may also support ground-nesting species, though the disturbance from the cars may reduce suitability for more sensitive species.

All wild birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended) during the nesting season (typically March–August inclusive, though some species nest earlier or later). Any vegetation clearance, tree felling or scrub removal must be undertaken outside the bird breeding season, or preceded by a nesting bird check by a suitably qualified ecologist if works are required during the breeding period.

The likelihood of breeding birds is high, in appropriate seasons.

3.2.3 Reptiles

3.2.3.1 Legislative Drivers

Wildlife and Countryside Act, 1981 (as amended). Conservation of Habitats and Species Regulations 2017 (as amended).

3.2.3.2 Areas to be considered

The Site.

3.2.3.3 Likelihood

The habitats to the North and West of the Site's vicinity make it likely for the potential of reptile species in the area; however, due to the poor habitat connectivity on all sides of the site and the species potential given by the Site's habitat availability, it is unlikely reptiles will be onsite, or use the site as a habitat pathway. The site also has low cut and regularly maintained vegetation. The scrub provides cover, but is often disturbed by cars. Therefore the site provides limited, if any, micro habitats.

The likelihood of reptiles on site is low.

3.2.4 Mammals

3.2.4.1 Legislative Drivers

Wildlife and Countryside Act, 1981 (as amended). Conservation of Habitats and Species Regulations 2017 (as amended). Protection of Badgers Act 1992. Wild Mammals (Protection) Act 1996 & The Environment Act 2021.

3.2.4.2 Areas to be Considered

The Site.

3.2.4.3 Likelihood

The site provides suitable foraging, sheltering and commuting habitat for a range of common mammals, including hedgehog *Erinaceus europaeus* (a Priority Species under Section 41 of the NERC Act 2006), rabbit *Oryctolagus cuniculus*, and small mammals such as field vole *Microtus agrestis*, wood mouse *Apodemus sylvaticus*, and common shrew *Sorex araneus*.



The combination of scrub cover and some connectivity to other sites supports this conclusion. There was no evidence of larger mammals onsite.

The likelihood of Mammals on site is moderate.

3.2.5 Invertebrates

3.2.5.1 Legislative Drivers

Natural Environment and Rural Communities (NERC) Act 2006. UK Biodiversity Framework 2024.

3.2.5.2 Areas to be Considered

The Site's vegetation.

3.2.5.3 Likelihood

The modified grassland, bramble scrub, mixed scrub and line of trees provide suitable habitat for a diverse range of common and widespread invertebrate species. The habitat is of local value for common invertebrates but is unlikely to support rare or specialist species given the modified nature of the grassland and lack of priority habitat features.

The likelihood of invertebrates on site is high, in appropriate seasons.

3.2.6 Amphibians

3.2.5.1 Legislative Drivers

Wildlife and Countryside Act 1981 (as amended) & Conservation of Habitats and Species Regulations 2017 (as amended).

3.2.5.2 Areas to be Considered

The Site.

3.2.5.3 Likelihood

The waterways to the North and West of the Site's vicinity make it likely for the potential of amphibian species in the area. The modified grassland and scrub may provide suitable terrestrial habitat for common amphibian species such as common toad *Bufo bufo* and common frog *Rana temporaria*. However, the poor connectivity to off-site waterbodies significantly reduces the likelihood of amphibians being present in meaningful numbers. It is unlikely amphibians will be onsite or use the site as a habitat pathway.

No great crested newt *Triturus cristatus* records were returned from the desk study within 500 m of the site, and the site is not considered to provide suitable terrestrial habitat for this species given its isolation from breeding ponds and sub-optimal habitat structure.

The likelihood of amphibians on site is low in appropriate seasons.



4.0 Site Evaluation

Habitats and species on the Site and within the zone of influence of the development were evaluated following standard guidance on ecological impact assessment published by the Chartered Institute of Ecology and Environmental Management in 2024. Ecological features of value on the Site and adjacent land, possibly within the zone of influence of the development, are evaluated according to the geographic scale provided by the above guidance.

4.1 Features of international importance

Features of international importance are primarily those sites protected under international legislation or conventions. In the UK, the principal legislative mechanism for securing the conservation of such sites is the Conservation of Habitats and Species Regulations 2017 (as amended), which transposes the requirements of the EU Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) into domestic law. These Regulations provide for the designation and protection of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), collectively known as European sites, which are identified for their significance to habitats and species of European importance. However, they also give protection to certain species of flora and fauna including bats and great crested newts.

The Site itself doesn't hold any features of international importance but is located within the zone of influence of nearby SSSI's. Due to the nature of the site being majority urban, and the other habitats having poor quality and non-native species it does not offer a value, if any, to the local area and SSSI. As such, any changes to features or habitats will cause negligible effects on the SSSI's.

4.2 Features of national importance

Features of national importance include SSSIs which are designated under the Wildlife and Countryside Act 1981 (as amended) as well as species such as common reptile species which are subject to national legislation rather than international legislation.

There are SSSI zones of influence located within the Site's boundaries as seen in **Appendix 3**. It is considered unlikely that the Site has the potential to support common reptile species.

4.3 Features of Regional Value

The Site is considered to be of low regional value, as it has a suboptimal potential to act as habitat pathway for mammals, invertebrates, amphibians and reptiles due to the nature of the site and the boundaries. Current evidence shows no indication of bats but potential for birds onsite, with a moderate habitat availability, few roosting opportunities but plenty of nesting habitat.

4.4 Features of Local Importance

The Site is considered to be of low local importance. There are four categorised habitats with the following classifications located on the Site as seen in **Appendix 3**.

- Built-up Areas and Gardens



- Broadleaved, Mixed, and Yew Woodland
- Acid, Calcareous, Neutral Grassland
- Improved Grassland

5.0 Conclusions

Results of the habitat survey and preliminary assessment indicate that the site is considered to be of low nature conservation value at a county or district level. The trees and woodland provide habitat for breeding birds, as well as supporting a limited habitat for invertebrates. The site however provides a sub-optimal, if any, habitat for other species.

The development as planned will encroach or disturb areas with very low biodiversity and as such will have a minimal impact. It can, however, be an opportunity to enhance the biodiversity on Site. Implementation of local pollinator plant species, bat and bird boxes should be a priority of the Site plan. Consideration has been given for the habitats available onsite and the existing building with its potential to support species.

No further Phase 2 surveys are recommended.



6.0 Certification

It should be noted that whilst every effort has been made to provide a comprehensive description of the Site, no investigation can ensure the complete characterisation and prediction of the natural environment. This report represents findings from Site visit 27th October 2025.

This Phase 1 habitat survey does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species.

The protected species and habitats assessment provides a preliminary view of the likelihood of protected species occurring on the Site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the Site. It should not be taken as providing a full and definitive survey of any protected species group. It is only valid at the time the survey was carried out. Additional surveys may be recommended if, on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that other protected species may be present.

Any development where changes are to be made to the site it is imperative to check with the associated ecologist first, especially if changes are to be made prior to planning permission or prior to the county ecologist's response. Always consult Natural England's standing advice before commencing works.

7.0 References

Bruce-White & Shardlow (2011), *Artificial Light on Invertebrates*.

JNCC (2010), *Phase 1 Habitat Survey Handbook*. 2016 corrections.

NBN Trust (2023), *The National Biodiversity Network (NBN) Atlas*.

Stace (2019), *New Flora of the British Isles*, 4th ed. 2024 reprint.

Institution of Lighting Professionals (ILP) and Bat Conservation Trust (BCT) (2023), *Bats and Artificial Lighting at Night: Guidance Note*, GN08/23.



8.0 Legislation and Planning Policy (2025)

8.1 National and European Legislation Afforded to Habitats

The Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) form the basis of habitat protection across the UK, requiring Member States to designate Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) as part of the Natura 2000 network. Under the Conservation of Habitats and Species Regulations 2017 (as amended in 2025), Ramsar sites now receive equivalent legal protection to SACs/SPAs in England and Wales.

National Statutory Designations

- Sites of Special Scientific Interest (SSSI's): Protected under the Wildlife & Countryside Act 1981 (as amended). Development affecting SSSI's requires consultation with Natural England.
- National Nature Reserves (NNRs): Managed for biodiversity under the National Parks and Access to the Countryside Act 1949.

Local Statutory Designations

- Local Nature Reserves (LNRs): Designated by local authorities under the National Parks and Access to the Countryside Act 1949 for education and conservation.

Non-Statutory Designations

- Local Wildlife Sites (LWS) and Regionally Important Geological Sites (RIGS): Material considerations in planning decisions under the National Planning Policy Framework (2025).

The Hedgerow Regulations 1997

- Prohibit removal of hedgerows over 30 years old or meeting ecological criteria, except with local authority permission.
- Applies to hedgerows adjacent to agricultural land, commons, or protected sites.

The Conservation of Habitats and Species Regulations 2017 (as amended)

- Implements the Habitats and Birds Directives.
- Prohibits deliberate harm to European Protected Species (e.g., bats, dormice) and damage to their breeding/resting sites.
- Licences for development impacts require demonstration of "*no satisfactory alternative*" and "*no adverse effect on population viability*".

The Wildlife and Countryside Act 1981 (as amended)

- Protects all wild birds, their nests, and eggs (Sections 1–8). Schedule 1 species (e.g., barn owls) receive enhanced protection against disturbance.



- Prohibits intentional harm to native reptiles (e.g., adders, slow-worms) and water voles.

8.2 Species-Specific Protections

Birds

All wild birds, nests, and eggs are protected under the Wildlife and Countryside Act 1981.

You cannot:

- Harm birds or destroy active nests (Breeding season: March–August).
- Disturb rare Schedule 1 species during nesting.

Bats

All species are strictly protected under the Habitats Regulations 2017.

You cannot:

- Damage roosts (attics, cracks in buildings, tree cavities) or disturb bats.

Badgers

Protected under the Protection of Badgers Act 1992.

You cannot:

- Block, damage, or destroy setts (underground burrows).
- Disturb badgers in or near setts.

Hazel Dormice

Protected under the Habitats Regulations 2017.

You cannot:

- Damage hedgerows, woodlands, or scrub habitats they use.

Great Crested Newts

Protected under the Habitats Regulations 2017.

You cannot:

- Harm newts, destroy ponds, or damage terrestrial habitats (e.g., rough grassland).

Otters

Protected under the Habitats Regulations 2017.

You cannot:

- Damage holts (riverbank dens) or disturb otters.

Reptiles

Common species are protected under the Wildlife and Countryside Act 1981.

You cannot:

- Deliberately harm or kill them.

Water Voles

Fully protected under the Wildlife and Countryside Act 1981.



You cannot:

- Damage burrows or disturb colonies along waterways.

8.3 Other Protections

Wild Mammals (Protection) Act 1996

- Prohibits intentional cruelty to all wild mammals (e.g., mutilation, asphyxiation).

Legislation Afforded to Plants

- Wild plants: Protected from uprooting under WCA 1981.
- Schedule 8 species (e.g., orchids): Require EPS licences for disturbance.

Legislation Afforded to Invertebrates

- Annex IV species (e.g., freshwater pearl mussel): Protected under Habitats Regulations 2017.

Invasive Species

- Japanese knotweed, giant hogweed: Controlled under WCA 1981 (Schedule 9). Developers must prevent spread during works.
- Signal crayfish: Subject to trapping restrictions under the Prohibition of Keeping of Live Fish (Crayfish) Order 1996.

Injurious Weeds

- Common ragwort: Managed under the Weeds Act 1959 and Ragwort Control Act 2003. Landowners must prevent spread to agricultural land.



Appendix 1

Site Boundary

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All dimensions to be checked on site prior to commencement of any construction works.

It is the contractor's responsibility to check all dimensions and quantities on site prior to submitting its tender for the works.

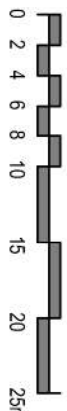
To Building regulation and British Standard Requirements in all respects. To fire Officer requirements in all respects. The Building Contractor must include for all works required by the MBE Contractors.

The Building Contractor must include for all works required by the MBE Contractors.

Refer to Designers Risk Assessment and PDI documentation.

Refer to Designers Risk Assessment and PDI documentation.

STATUS:	PRELIMINARY ISSUE
STAGE:	RIBA 2



— Land Ownership Boundary

- Green Belt Boundary
- Existing Tarmac
- Proposed Tarmac
- Proposed Parking Space
- Adjusted Existing Parking Space

P01	PRELIMINARY ISSUE	FHW	04/12/25
REC'D	DESCRIPTION	BY	DATE
			CH

CLIENT			
Knightsbridge PS			
PROJECT			
Heathrow IMM Center Car Park			
PROJECT:			
DRAWING BY:			
FHW		DATE:	CHECKED:
		26/11/2025	MF
DRAWING TITLE			
SCALE: 1:500 @ A3			
DRAWING TITLE			
Proposed Plan - Site Access			
PROJECT NO:			
300776		ORDINANCE	LEVEL
		360DS	CP
DRAWING TITLE: DEPARTMENT		DRAWING NO:	REVISION
DR		A	
1104		S03	P01



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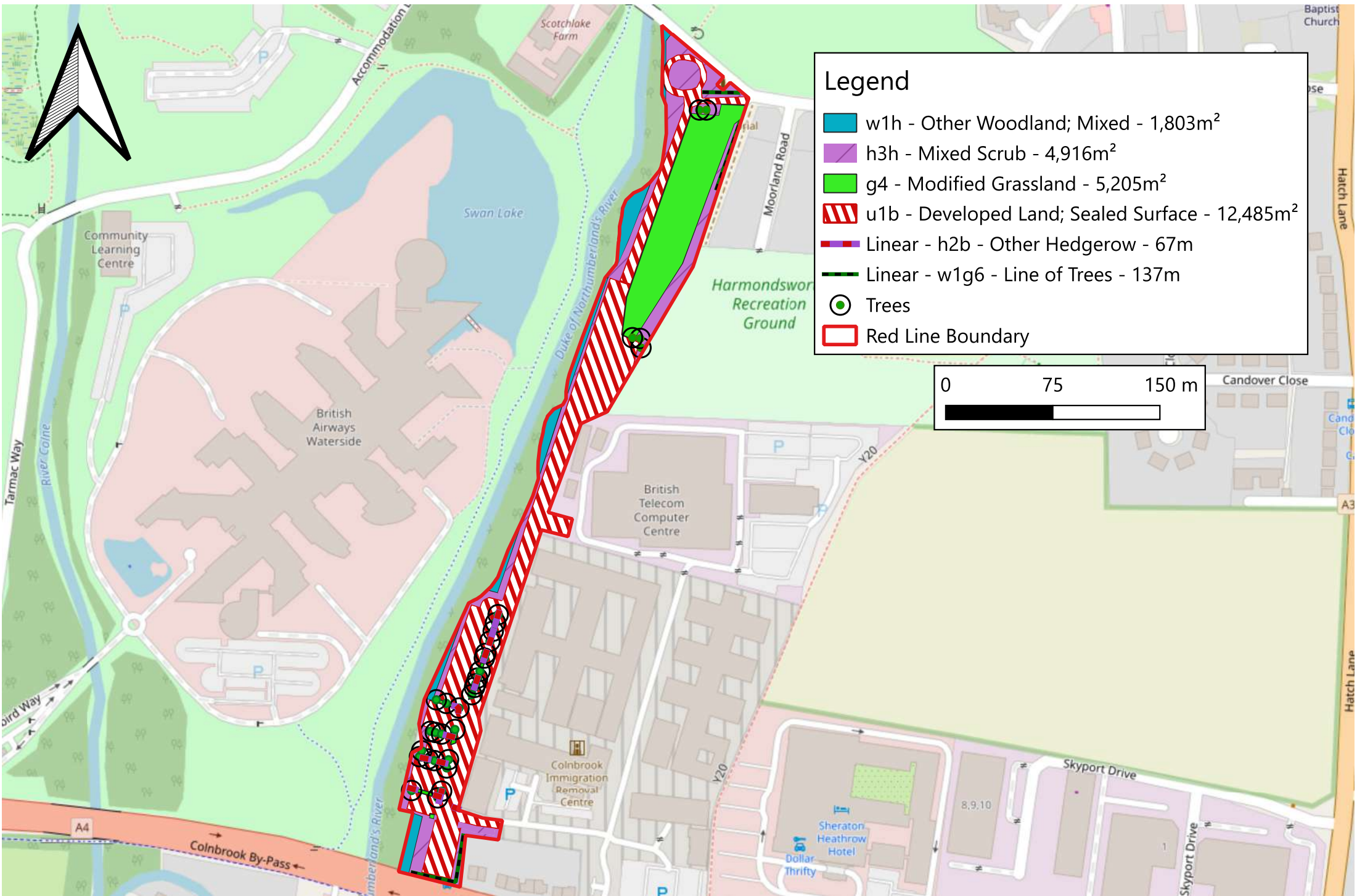
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DEFINE. DESIGN. DELIVER.



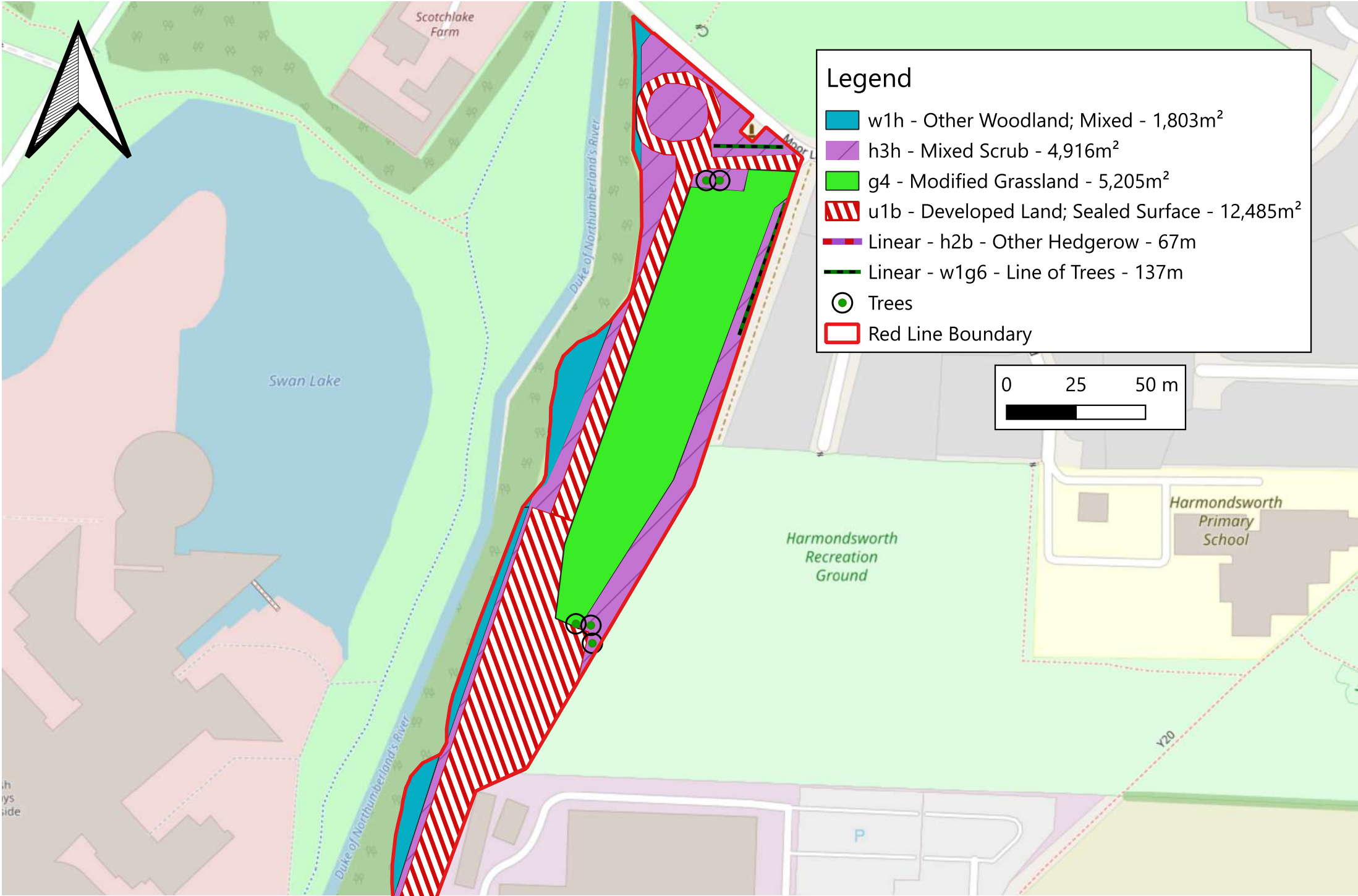
Appendix 2

Baseline Habitat Survey



Legend

- w1h - Other Woodland; Mixed - 1,803m²
- h3h - Mixed Scrub - 4,916m²
- g4 - Modified Grassland - 5,205m²
- u1b - Developed Land; Sealed Surface - 12,485m²
- Linear - h2b - Other Hedgerow - 67m
- Linear - w1g6 - Line of Trees - 137m
- Trees
- Red Line Boundary





Legend

w1h - Other Woodland; Mixed - 1,803m²

h3h - Mixed Scrub - 4,916m²

g4 - Modified Grassland - 5,205m²

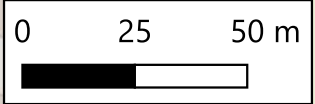
u1b - Developed Land; Sealed Surface - 12,485m²

Linear - h2b - Other Hedgerow - 67m

Linear - w1g6 - Line of Trees - 137m

Trees

Red Line Boundary

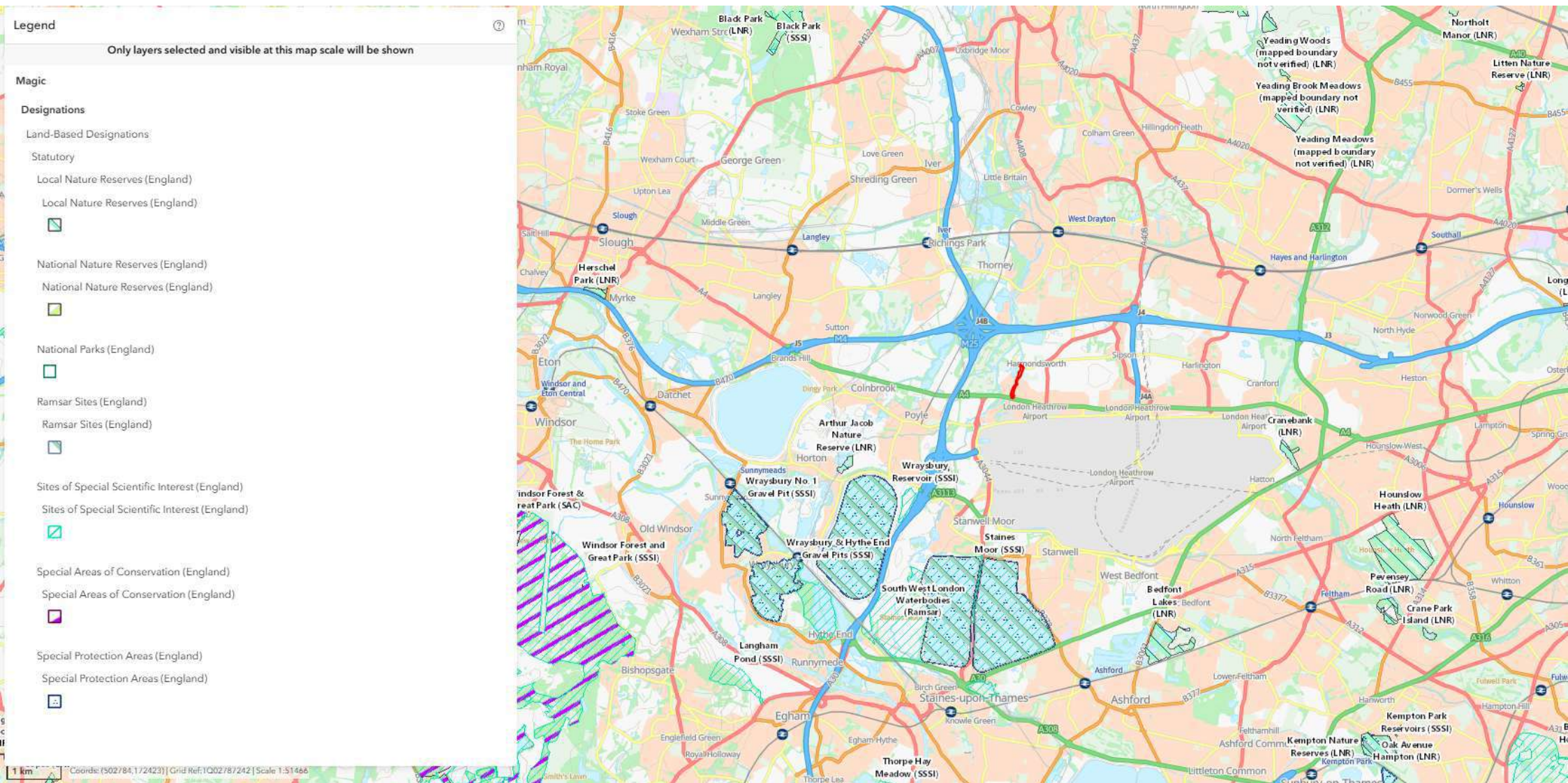




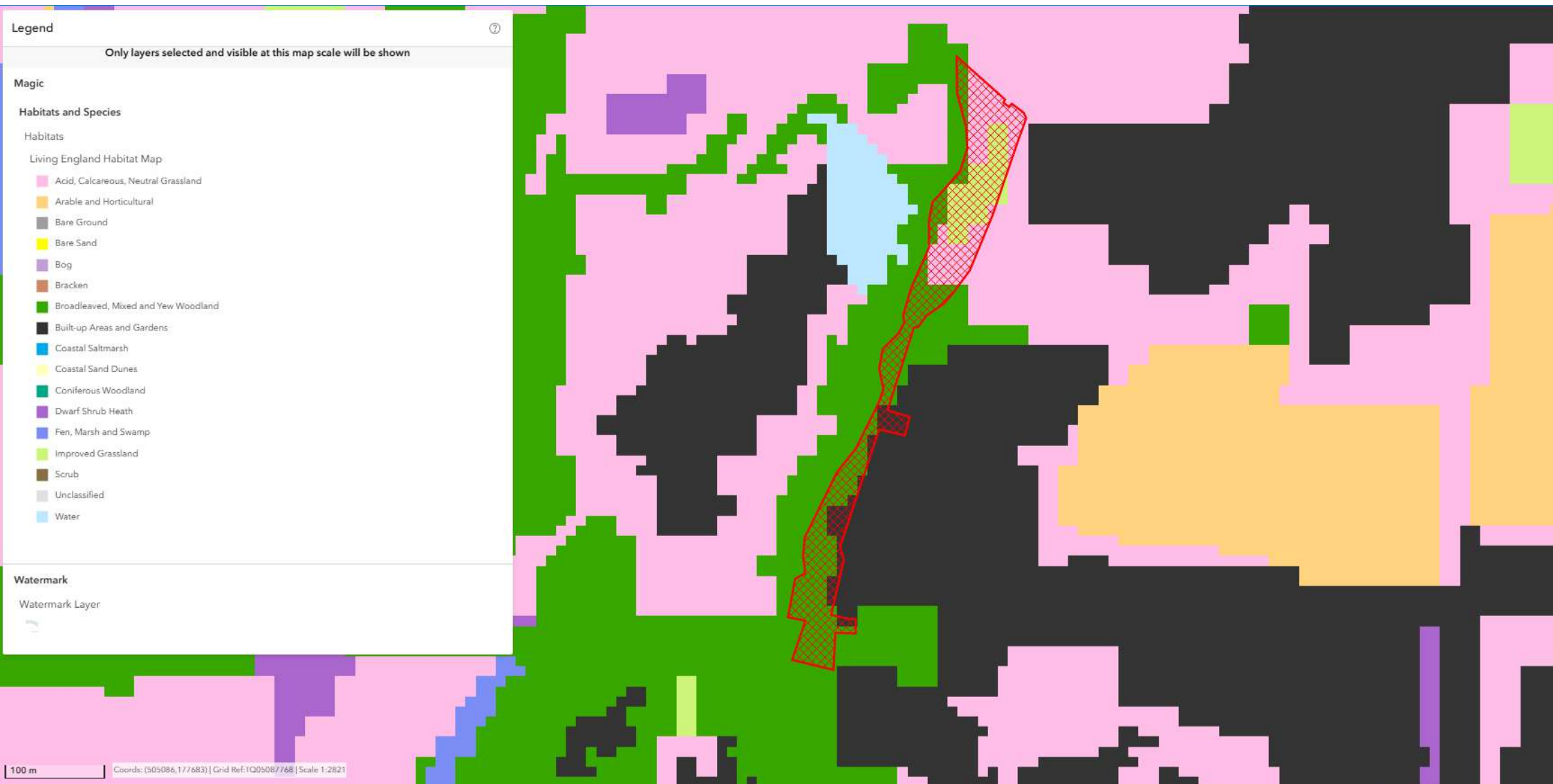
Appendix 3

MAGIC Maps

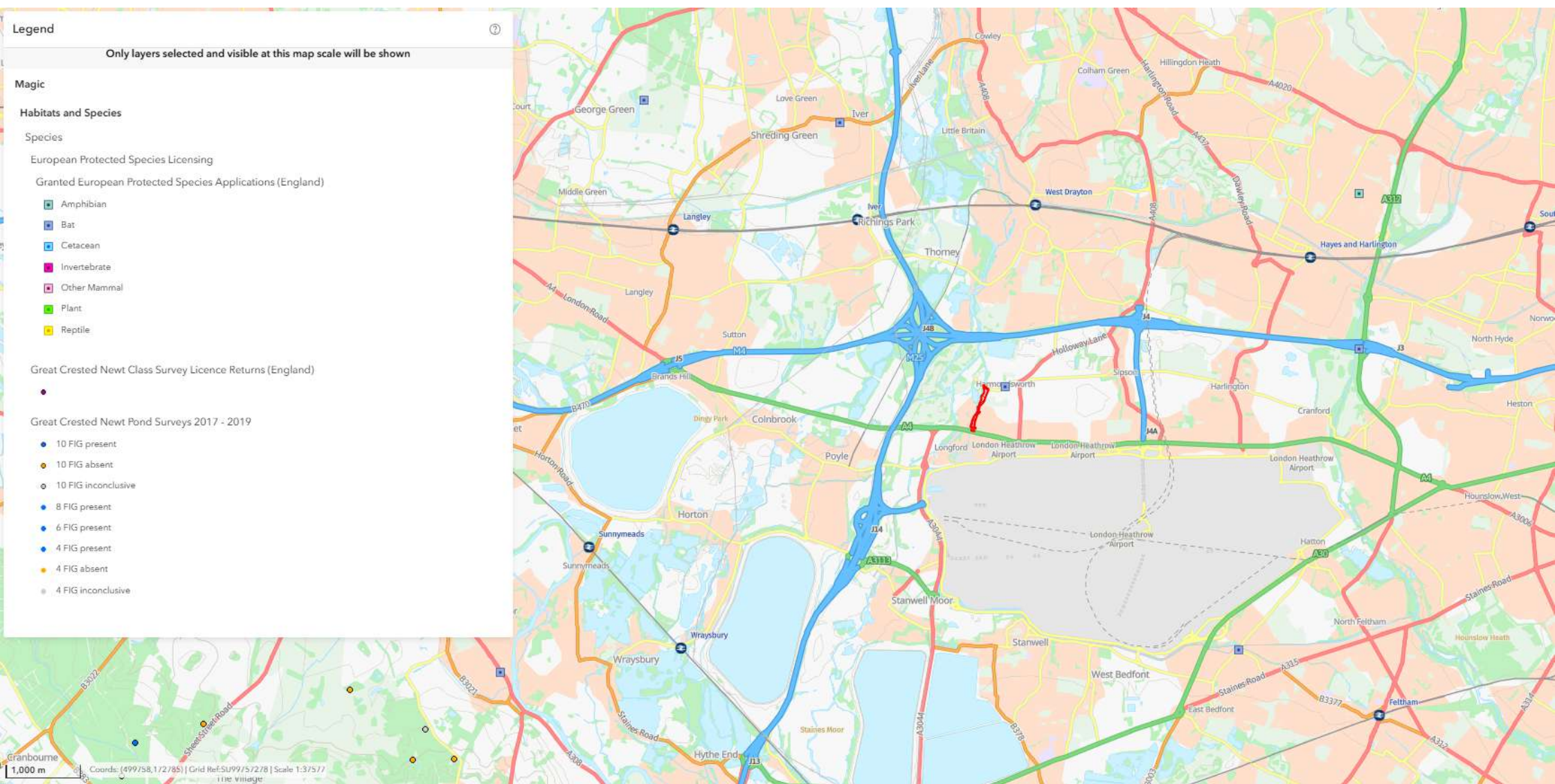
Land Based Designations



Living England Habitat Map



Granted European Protected Species Applications





Appendix 4

SSSI Details

COUNTY: SURREY

SITE NAME: WRAYSBURY RESERVOIR

DISTRICT: SPELTHORNE DISTRICT

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

Local Planning Authority: Spelthorne District Council

National Grid Reference: TQ 025745

Area: 205.03 (ha.)

Ordnance Survey Sheet 1:50,000: 176

1:10,000: TQ 07 NW

Date Notified (Under 1949 Act): –

Date of Last Revision: –

Date Notified (Under 1981 Act): 26 October 1999

Date of Last Revision: –

Reasons for Notification:

Wraysbury reservoir regularly supports nationally important numbers of wintering cormorant *Phalacrocorax carbo*, great crested grebe *Podiceps cristatus* and shoveler *Anas clypeata*.

Description:

Wraysbury Reservoir is an artificially embanked reservoir constructed around 1970. The reservoir also support notable numbers of wintering gadwall *Anas strepera*.

County: Surrey

Site Name: Staines Moor

District: Spelthorne

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: Spelthorne Borough Council

National Grid Reference: TQ 040730 **Area:** 513.6 (Ha) 1269.1 (Acres)

Ordnance Survey Sheet: 1:50,000 : 176 1:10,000: TQ 07 SW, NW, SE

Date Notified (Under 1949 Act): 1955 **Date of last Revision:** 1975

Date Notified (Under 1981 Act): 1984 **Date of last Revision:** -

Reasons for Notification:

The site chiefly consists of Staines Moor, a semi-natural stretch of the River Colne which flows through it, and three adjacent reservoirs. Staines Moor represents the largest area of alluvial meadows in Surrey and supports a rich flora while the reservoirs hold nationally important populations of wintering wildfowl. A pond at the site carries an aquatic flora which is of national importance; this flora includes one plant which is extremely rare in Britain.

The alluvial deposits of Staines Moor Poyle meadows (TQ 033753) and Shortwood Common (TQ 048717) lie above river sands and gravels. There is great variation in terrain and drainage and the alluvial meadows are consequently an intricate juxtaposition of a wide range of grassland types. Several plant species which have a restricted distribution in Surrey are present in the meadows. In addition to the River Colne and the reservoirs open water habitats are represented by a small stretch of the River Wraysbury and by open ditches and ponds. A belt of scrub, flanked by rough grassland lines the old railway embankment in the west of the site and woodland is present in places. Wintering wildfowl and wading birds use Staines Moor as an alternative ground to the reservoirs and a number of birds breed on the moor.

The alluvial meadows have not been subject to intensive agricultural use in recent years; this factor, combined with the large size of the meadows and the richness diversity of their flora, is responsible for the importance of these grasslands to wildlife. The plant communities of the alluvial meadows are complex but range from dry grassland dominated by red fescue *Festuca rubra*, sweet vernal grass *Anthoxanthum odoratum*, bent grass *Agrostis capillaris* an sheep's sorrel *Rumex acetosella* to wet communities with marsh fox-tail *Alopecurus geniculatus*, tussock grass *Deschampsia cespitosa*, hard rush *Juncus inflexus* and floating sweet-grass *Glyceria fluitans*. Depressions with a permanently high water table occur throughout the meadows and support a fen-type flora with reed sweet-grass *Glyceria maxima*, reed canary-grass *Phalaris arundinacea* and yellow flag *Iris pseudacorus*. These alluvial meadows support one plant which is uncommon in Britain: small water-pepper *Polygonum minus*. Several other plants which occur are uncommon in the County, these include brown sedge *Carex disticha*, southern marsh orchid *Dactylorhiza praetermissa*, marsh stitchwort *Stellaria*

palustris, strawberry clover *Trifolium fragiferum*, marsh arrowgrass *Triglochin palustris*, meadow rue *Thalictrum flavum* and upright chickweed *Moenchia erecta*. Three other plants which are scarce in Surrey occur on Shortwood Common, these are wormwood *Artemisia absinthium* wild clary *Salvia verbenaca* and Bermuda grass *Cynodon dactylon*.

Scrub on the old railway embankments consists of hawthorn *Crataegus monogyna*, willow *Salix cinerea*, birch *Betula pendula* and pedunculate oak *Quercus robur*. The adjacent rough grassland is dominated by cocksfoot *Dactylis glomerata*, tall fescue *Festuca arundinacea*, tussock grass *Deschampsia cespitosa* and thistles.

Woodland is present along Bonehead ditch and at the southern end of the old railway; these woodlands consist of crack willow *Salix fragilis*, sycamore *Acer pseudoplatanus*, birch and pedunculate oak. Mature hedgerows of hawthorn, oak and crack willow line the drains south of Lower Mill Farm (TQ 035741) and are present in Poyle meadows.

The areas of open water support a rich and varied flora. The rivers carry stands of tall fen vegetation with common reed *Phragmites australis*, rushes *Juncus* species and yellow flag *Iris pseudacorus*. Water crowfoot *Ranunculus peltatus*, an uncommon plant in Surrey, occurs in this stretch of the River Colne. The ditch flora includes stands of tall fen vegetation and small aquatic plants such as arrowhead *Sagittaria sagittifolia*, water-cress *Rorippa nasturtium-aquaticum* and thread-leaved water-crowfoot *Ranunculus trichophyllus*. The ponds carry a tall fen flora which includes common reed, rushes, yellow flag, trifid bur-marigold *Bidens tripartita* and great reed-mace *Typha latifolia*; plants of open water which are present include white waterlily *Nymphaea alba*, water fern *Azolla filiculoides* and water-starworts *Callitriche* species. A number of uncommon plants occur in the ponds at this site including one of only three known British localities of the brown galingale *Cyperus fuscus*.

Other plants which have a restricted distribution nationally are orange foxtail grass *Alopecurus aequalis*, needle spike-rush *Eleocharis acicularis* and sharp-leaved pondweed *Potamogeton acutifolius*. Several other aquatic plants are scarce in Surrey including sweet flag *Acorus calamus*, alternate-flowered water-milfoil *Myriophyllum alterniflorum* and greater bladderwort *Utricularia vulgaris*. Although the flora of the reservoirs is of limited interest their large expanse of open water and the bare muds on their margins provide the ideal habitat for some birds, particularly wildfowl and waders.

The reservoirs carry over 1% of the total British wintering populations of tufted duck, pochard, goosander and shoveler; the numbers of shoveler are also internationally significant. Other birds which winter on the reservoirs in large numbers include wigeon, teal, garganey, goldeneye and great crested grebe. Staines Moor regularly supports a large flock of wintering golden plover and redshank, ruff, snipe and dunlin are other wading birds which travel between the moor and the reservoirs in winter. In recent years Staines Moor has carried up to six wintering short-eared owls and other raptors, such as buzzard and hen harrier, have been recorded on passage. Birds which regularly breed on Staines Moor include yellow wagtail, lapwing and meadow pipit. In all 130 species of bird have been recorded from the site in recent years.

Although Staines Moor has not been well studied for invertebrates it does support the oldest known anthills of *Lasius flavus* in Britain; some of these anthills are estimated to be 180 years old and they have considerable research value. In addition over sixty species of

mollusc have been recorded from the meadows and ditches while the areas of open water and fen support several species of dragonfly.



Appendix 5

Photos



1 - South of the Site facing South, depicting the line of trees - LT1.



2 - South of the Site facing East.



3 - Southern section of the Site facing West.



4 - Southern section of the Site facing West.



5 - South of the Site facing East.



6 -South of the Site facing North, depicting H11 and H9.



7 - South Central of the Site facing North-West, depicting H9.



8 - South Central of the Site facing North-West, depicting H10.



9 - A closer view of H10.



10 - Hedgerow H11 in the South of the Site.



11 - The Eastern section of the Site facing North.



12 - Central western section of the Site facing North.



13 - Central western section of the Site facing North.



14 - Central western section of the Site facing South.



15 - Central western section of the Site facing South West.



16 - Central western section of the Site facing South West. Showing H6.



17 - Central western section of the Site facing West. Showing H5.



18 - Central section of the site facing North. Showing H4.



19 - Central section of the site facing West.



20 - Central section of the site facing North.



21 - Central section of the site facing North-East. Showing H3.



22 - Central section of the site facing North.



23 - Central section of the site facing South-East.



24 - Central Northern section of the site facing West.



25 - Central Northern section of the site facing North-West.



26 - Central Northern section of the site facing South. Showing H1



27 - Central section of the site facing South-East.



28 - Northern section of the site facing South-West.



29 - Northern section of the site facing South-West.



30 - Northern section of the site facing East.



31 - Northern section of the site facing South-West.



32 - Northern section of the site facing East.



33 - Northern section of the site facing South-West.



34 - Northern section of the site facing South-West.



35 - Northern section of the site facing South.



36 - Northern section of the site facing South-West.



37 - Northern section of the site facing South-East.



38 - Northern section of the site facing South-East.



39 - Northern section of the site facing South-West.



40 - Northern section of the site facing West.



41 - Northern section of the site facing South.



42 - Northern section of the site facing East.



43 - Northern section of the site facing South-West.



44 - Northern section of the site facing West.



45 - Northern section of the site facing North-West.



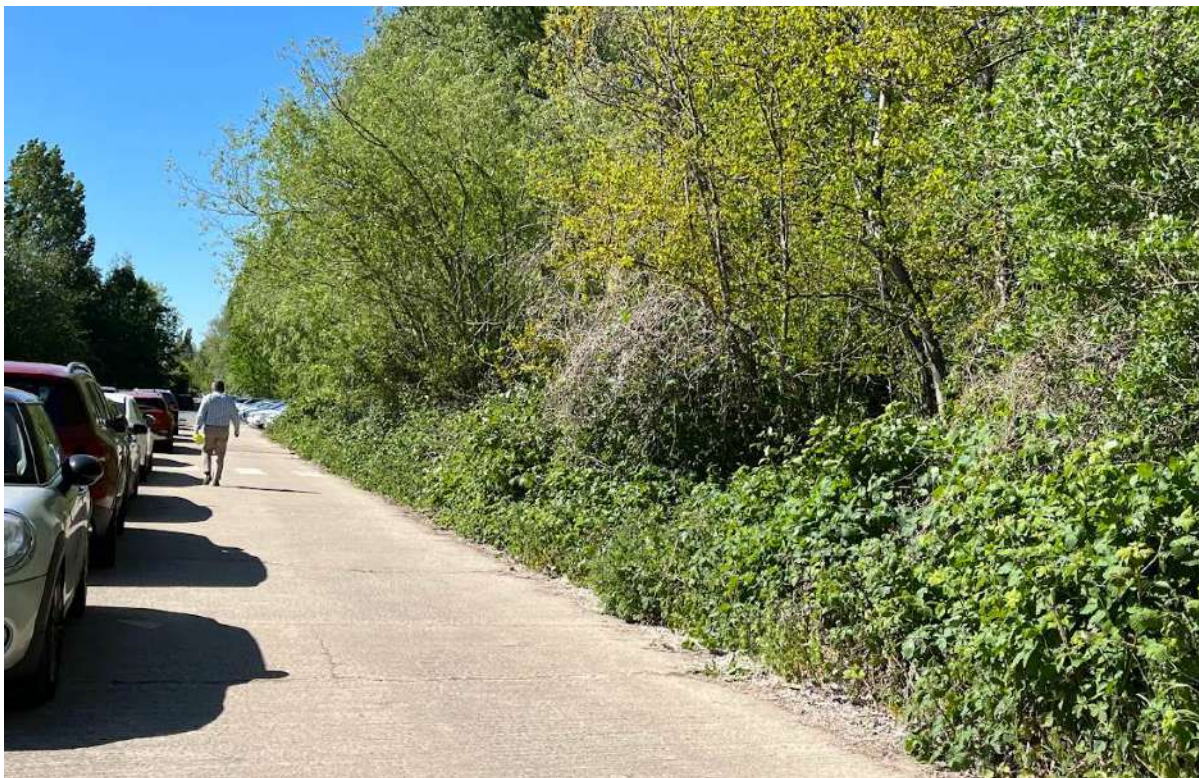
46 - Northern section of the site facing North.



47 - Northern section of the site facing North.



48 - Northern section of the site facing North



49 - Northern section of the site facing Southwest



50 - Northern section of the site facing East



51 - Northern section of the site facing south



52 - Northern section of the site facing North



53 - Northern section of the site facing North



54 - Northern section of the site facing Southeast



55 - Northern section of the site facing East



56 - Northern section of the site, at turning circle, facing Northwest



57 - Northern section of the site facing Northwest