Former Sipson Garden Centre

Preliminary Ecological Appraisal

VIRTUS Data Centres

Project number: 60749800

October 2026

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Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
V1	17/07/2026	First Issue	KT	Kach Theeprawat	TDL
V2	18/09/2026	Second issue including updates on NPPF 2026 and minor amendments for consistency with other reports	KT	Kach Theeprawat	TDL
V3	08/10/2026	Third issue including minor consistency amendments after comments received	KT	Kach Theeprawat	TDL

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Table of Contents

1. Executive Summary 1
2. Introduction 2
3. Ecological Baseline, Constraints and Recommendations 4
4. Habitat Condition Assessment 17
5. Opportunities for Enhancement 18
6. Conclusion 20
Appendix A Figures 22
Appendix B Relevant Legislation and Planning Policy 27
Appendix C Methods 39
Appendix D Photographs and Target Notes 43

Figures

Figure 1: Site Masterplan 23
Figure 2: UK Habitats Map 25

Tables

Table 1. International and National Statutory Designated Sites and Non-Statutory Designated Sites for Nature Conservation 4
Table 2. List of habitats on Site in descending order of area 8
Table 3. Notable Bird Species listed within 2km of the Survey Area over the last 10 years 11
Table 4. Invasive Non-native Species listed within 2km of the Survey Area over the last 10 years 15
Table 5. Habitat Classification Conversion (Baseline) 17
Table 6. Summary of Recommendations 20
Table 7. Summary of Relevant Regional Planning Policy 36
Table 8. Summary of Local Planning Policy 38
Table 9. Guidelines for assessing potential bat flight-paths and foraging habitats 41

1. Executive Summary

Site Details	The Site is the former Sipson Garden Centre site and land to the south, located at Sipson Road, Sipson, in West Drayton (UB7 0HP). The site is strategically positioned approximately 2km north of Heathrow Airport. The Site is approximately 6.9ha.
Proposed Development Details	The Proposed Development comprises the demolition of existing structures and the construction of a new data centre facility with an anticipated operational capacity of approximately 54MW. The development would provide approximately up to 54,000 sqm of gross internal floorspace, including data halls, administration block, plant, and associated ancillary infrastructure.
Ecological Features that may be affected by the Proposed Development	The closest designated site is Stockley Road Rough Site of Borough Importance located 800m north of the Site. The Site consists of grassland, hardstanding, buildings, lines of trees and small areas of young plantation. One building was assessed as having high suitability for roosting bats (B4). Other buildings and trees were assessed as none or negligible suitable for roosting bats. Low suitable fly-path lines and foraging habitats is present on Site for bats. There are habitats within the Site that are suitable for nesting birds including trees and buildings. Reptile and great crested newt terrestrial habitat is present on Site, mainly along the boundaries of the Site. Due to the regular mowing regimen on Site, the likelihood of its presence is low. Buddleia (*Buddleija davidii*) listed on the London Invasive Species Initiative (LISI)[1] list is present along the boundaries of the Site.
Recommendations for further survey and assessment	A Biodiversity Net Gain Assessment has been carried out for the Proposed Development to determine how it delivers a 10% net gain in biodiversity units. The loss of habitats should be compensated for like to like habitats on Site, as far as possible. Further bat emergence surveys of one building assessed with high suitability to support roosting bats (B4) has been completed between May and September to determine the use of the building by bats. The results are reported in a separate Bat Survey report. Bat activity surveys, comprising a nighttime walked transect once per season in spring (April/May), summer (June to August) and autumn (September/October), supplemented by automated static detector survey for five nights per each season between April and October have been conducted to determine the use of the Site by foraging and commuting bats. The results are reported in a separate Bat Survey report.
Mitigation Measures	A Construction and Environment Management Plan should be prepared to outline standard best practice construction measures to avoid impacts on designated sites, nearby habitats and protected or notable species. The lighting scheme of the Proposed Development should be designed in line with Section 4.29 of the Bat Conservation Trust (BCT) and Institution of Lighting Professionals (ILP) best practice guidance (2023[2]), avoiding spills on suitable habitat for bats. During the works, lighting should also avoid spills on commuting and foraging habitats. Clerance works should be scheduled outside the breeding season for birds, outside the period March to August, both inclusive. Any clearance should be done in two phases approach, under a Precautionary Method of Works and under the supervision of an ecologist to ensure no impacts on reptiles or amphibians, if present. A badger check should be conducted prior to vegetation clearance and works. Buddleia should be removed from Site to avoid its spread within the Proposed Development landscaping. The existing mowing management of the grassland on Site should be maintained until the construction of the Proposed Development to avoid an increase of their value for wildlife.
Opportunities for and Enhancements	Native, near native or wildlife-friendly species will be planted on Site to increase biodiversity. Boxes suitable for birds and bats will be installed on the trees present along the boundary of the Site. Green roofs will be created within the Proposed Development to maximise enhancements on Site.

[1] Greenspace Information for Greater London (GiGL). (n.d.). London Invasive Species Initiative (LISI). Retrieved 26 June 2026, from https://www.gigl.org.uk/our-data-holdings/species-data/london-invasive-species/

[2] Institution of Lighting Professionals (2023). Guidance Note 08/23: Bats and Artificial Lighting at Night.

2. Introduction

The Preliminary Ecological Appraisal report (PEAR) has been prepared by AECOM on behalf of VIRTUS Data Centres (hereafter referred to as 'the Applicant') to assess the ecological constraints in connection with the delivery of a data centre campus on the Site of the Former Sipson Garden Centre and land to the south, Sipson Road, Sipson (hereafter referred to as the 'Proposed Development') at the former Sipson Garden Centre site in West Drayton (UB7 0HP) (hereafter referred to as the 'Site'). The Site is shown in Figure 1 in Appendix A.

The assessment of ecological constraints has been undertaken with reference to current good practice[3] and forms part of the technical information commissioned by the Applicant in connection with the Proposed Development. The PEAR addresses relevant wildlife legislation and planning policy as summarised in Appendix B and is consistent with the requirements of *British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development*.

The Applicant is preparing an outline planning application that will be submitted to the London Borough of Hillingdon (LBH / the Council).

2.1 The Site

The Site is the former Sipson Garden Centre with associate land, located to the northeast of Sipson village, within the administrative area of the London Borough of Hillingdon. It primarily consists of grassland, hardstanding, buildings, lines of trees and small areas of young plantation.

The northern part of the site contains the former garden centre buildings, areas of hardstanding, a car park, and external areas previously used for the display and storage of goods associated with the garden centre use. The southern part of the site comprises an undeveloped field. The southern part of the Site is a field with regularly mown grassland habitat and patches of immature woodland running along the eastern site boundary.

In 2025, a full planning permission was granted on 7 March 2025 (LPA Ref. 67666/APP/2023/3721) for the redevelopment of the site to provide a Centre of Excellence for the servicing and repair of Airside Support Vehicles (Use Class B2). The approved scheme comprises a service building containing seven service bays and one storage bay, an ancillary two-storey office building, together with associated hardstanding, parking, and other supporting infrastructure. It mainly serves as a car park for trucks and general storage area.

The north and western boundaries are predominantly delineated by trees and shrubs with the rear of residential gardens to the west. An established tree belt is present along the southern boundary, near Sipson Lane.

The site is bounded to the east by a section of the M4 motorway in the vicinity of Heathrow Airport. A further section of the M4 motorway runs immediately to the north of the site. The western boundary is formed by the A408 (Sipson Road), from which the site gains vehicular access. A small number of residential properties are located to the south-west of the site, fronting the A408.

The Holiday Inn Hotel, which is currently being refurbished, is situated immediately north of the site, while The Plough public house occupies the north-western corner of the site boundary. The Plough is designated as a locally listed building. To the south of the site are residential properties forming part of the settlement of Sipson and a secondary school.

2.2 The Proposed Development

The description of the proposals, shown in Figure 1 in Appendix A, is as follows:

'*Outline planning application (with all matters reserved except for access) for the redevelopment of the former Sipson Garden Centre site to provide a data centre facility, including associated energy infrastructure, security measures, landscaping, and access arrangements*.'

The Proposed Development will comprise the erection of a data centre facility, including associated energy infrastructure, security measures, access arrangements and new landscaping. The key elements considered are:

[3] CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition.* Chartered Institute of Ecology and Environmental Management, Winchester.

- Demolition of existing structures on the Site;
- Maximum floor area of 25,810sqm Data Centre Building (54MW capacity) with a maximum height of 20m;
- Administration area (6,260sqm) with a maximum height of 10m.
- Plant Equipment including generators within a dedicated yard area and substation, with a maximum height of 15m for the external plant and 7m for the substation.
- Ancillary office use, car parking and associated works. The Proposed Development will be accessed from the existing access off the A408 with a north to south estate road providing access to the building and generator yard. The Site will be served by dedicated car parking.
- Security Measures: Security fencing of 3m in height will be erected around the Proposed Development with secure access arrangements.

The building proposed for the Site is aligned along the Eastern boundary. Primary access is via an existing access road to the North-West of the Site. The proposed development comprises a single data centre building with two wings of data halls. The data centre building is supported by a suite of ancillary structures, including a substation, water tanks, bike storage and a bin store, ensuring full operational capability.

The proposed design aim to retain the majority of existing trees and shrubs and incorporates landscape buffers along all site boundaries, preserving the natural character of the area and providing effective visual screening. The enhanced planting will establish a continuous green perimeter, offering comprehensive screening from surrounding viewpoints and reinforcing the Site's integration with the wider landscape. Additional landscape zones are proposed within the designated green space areas of the Site, providing enhanced planting that strengthens visual screening.

2.3 Purpose of the Preliminary Ecological Appraisal

This PEAR presents ecological information obtained during the following:

- A desk-study undertaken in June 2026 to obtain records of internationally statutory designated sites within 10km, nationally statutory designated sites within 2km of the Site, as well as notable habitats[4] and protected and notable species within 2km of the Site (the area covered by the desk study is hereafter referred to as the 'Study Area'); and,
- A walkover survey of accessible land within and adjacent to the Proposed Development within and up to a 30m buffer (the area covered by the survey is hereafter referred to as the Survey Area) on 15th April 2026, with access to the northeastern corner of the Site on 15th May 2026.

The purpose of the PEAR is to provide a high-level ecological appraisal of the Proposed Development, specifically to:

- establish baseline conditions and determine the presence of important ecological features[5] (or those that could be present), as far as is possible;
- to identify potential ecological constraints to the Proposed Development and make initial recommendations to avoid impacts on important ecological features, where possible;
- to identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final scheme design);
- to establish any requirements for more detailed surveys; and,
- to identify any opportunities offered by the Proposed Development to deliver biodiversity enhancements.

The methodology followed for undertaking the desk study and field surveys is detailed in Appendix C including any limitations to the assessment.

[4]Notable habitats are taken as habitats of principal importance listed under Section 41 of the *Natural Environment and Rural Communities Act 2006*; hedgerows identified as being 'important' under the wildlife criteria of the *Hedgerow Regulations 1997*, ancient woodlands and veteran trees.
[5] Important ecological features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme.

3. Ecological Baseline, Constraints and Recommendations

3.1 Introduction

The following sections detail the results of the desk and field-based studies undertaken to inform this PEAR. Where necessary, recommendations for mitigation measures to protect known important ecological features, or further surveys to determine the presence or likely absence of likely important ecological features, are provided.

With regard to background data, 'recent' records are considered to be those no older than 10 years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records for a feature do not exist. Exceptions to this are detailed in the appropriate sections below.

3.2 Designated Sites

3.2.1 Desk Study

The desk study includes a search for the following:

- International statutory designated sites within 10km such as Special Area of Conservation (SAC), Special Protected Areas (SPAs) and Ramsar sites.
- National statutory designated sites within 2km, including Sites of Special Scientific Interest (SSSIs) and Local and National Nature Reserves (LNR and NNRs, respectively).
- Non-statutory designations within 2km such as Local Wildlife Sites (LWS), Sites of Nature Conservation Importance (SNCIs) or Sites of Importance for Nature Conservation (SINCs). SINCs are also classified by the Greater London Authority and London borough councils in:
  - Sites of Metropolitan Importance (SMINC);
  - Sites of Borough Importance (borough Grade I and borough Grade II) (SBINC); and
  - Sites of Local Importance (SLINC).

Table 1 shows a summary of designated sites within the Study Area.

There are two sites with an international designation for their biodiversity significance within 10km of the Site, both related to the South West London Waterbodies SPA and Ramsar, located 4.7km to the southwest of the Site.

No local or national statutory designated sites were located within 2km of Site.

There are nine non-statutory designated sites within 2km of the Site, being the closest Stockley Road Rough SBINC 800m to the north of Site.

Table 1. International and National Statutory Designated Sites and Non-Statutory Designated Sites for Nature Conservation

Designated Sites	Reason for Designation	Location of Designated Sites
Internationally Designated Site within 10km of Site		
South West London Waterbodies SPA (830.26ha)	South West London Waterbodies, SPA comprises of a number of reservoirs and former gravel pits in the Thames Valley adjacent to Heathrow Airport between Windsor and Hampton Court which support internationally important numbers of gadwall (*Anas strepera*) and shoveler (*Anas clypeata*). The Site also contains nationally significant populations of pochard (*Aythya ferina*), coot (*Fulica arta*) and great-crested grebe (*Podiceps cristatus*).	4.7km to the southwest
South West London Ramsar (830.26ha)		
National or Local Statutory Designated Site within 2km of Site		
None		
Non-Statutory Designated Site within 2km of Site		
Stockley Road Rough SBINC	This site is a mixture of scrub, tall herbs and grasses. The scrub consists of osier (*Salix viminalis*), grey willow (*S. cinerea*) and hawthorn (*Crataegus*	Site is located 800m north of Site

Designated Sites	Reason for Designation	Location of Designated Sites
(5.16ha)	*monogyna*), plus dense patches of bramble (*Rubus fruticosus agg.*). Tall herbs include yarrow (*Achillea millefolium*), hemlock (*Conium maculatum*), mugwort (Artemesia vulgaris) and goat's-rue (Galega officinalis), with extensive stands of common nettle (*Urtica dioica*). There are large patches of rank grasses, including couch (*Elytrigia repens*) and false oat-grass (*Arrenatherum elatius*).	
Field Close Open Space Roughs (1.5ha)	The rough grassland is dominated by false oat-grass (*Arrhenatherum elatius*) with scattered native scrub and trees. A footpath with seating runs through the roughs, connecting the two open spaces. The grassland is rich in common wildflowers, including red clover (*Trifolium pratense*), scarlet pimpernel (*Lysimachia arvensis*), cut-leaved cranesbill (*Geranium dissectum*), common knapweed (*Centaurea nigra*) and dog rose (*Rosa canina*). Trees and scrub provide wildlife refuges, and the roughland is a visually attractive feature.	Site is located 980m southeast of Site
Carp Ponds and Broads Dock SMINC (3.61ha)	This site consists of three waterbodies and a length of canal dock which support a diverse assemblage of aquatic and emergent plants, including great yellow-cress (*Rorippa amphibia*), lesser water-parsnip (*Berula erecta*) and lesser reedmace (*Typha angustifolia*), flowering-rush (*Butomus umbellatus*), marsh marigold (*Caltha palustris*), frogbit (*Hydrocharis morsus-ranae*) and great spearwort (*Ranunculus lingua*). Their presence is indicative of high water quality, and suggests the invertebrate fauna may also be rich. The avifauna includes breeding kingfisher (*Alcedo atthis*).	Site is located 1.1km north of Site
Lower Colne SBINC (94.61ha)	No citation provided	1.3km to the west of the Site
St George Meadows at Southlands Arts Centre SBINC (2.04ha)	This small site near West Drayton comprises a range of habitats including grassland and a small pond linked to a wet area in the west of the site by a narrow channel. The central area has flower-rich grassland with abundant common knapweed (*Centaurea nigra*), yarrow (*Achillea millefolium*) and ribwort plantain (*Plantago lanceolata*). Meadow crane's-bill (*Geranium pratense*), a scarce species in London, also grows here. The damper soil and wet hollows in the western part of the site support different plant communities, with floating sweet-grass (*Glyceria fluitans*), yellow iris (*Iris pseudacorus*), brooklime (*Veronica beccabunga*) and scattered crack willows (*Salix x fragilis*).	Site is located 1.5km northwest of Site
London's Canals SMINC (187.5ha)	London's canals provide a home for many fish and aquatic plants and are a great way to enjoy the natural world in some of the city's most built-up areas. London's canals support a wide range of aquatic flora, amongst which are found a number of locally uncommon species. These include narrow-leaved water plantain (*Alisma lanceolatum*), shining pondweed (*Potamogeton lucens*) and small pondweed (*Potamogeton pusillus*), which are all species of clean, clear waters. Many waterside plants, including several London rarities, also grow on the brickwork and banks of the canal and on specially provided gabions and rafts. The linear waterways also play an important role in supporting foraging and commuting bats. London's network of canals fulfil an important function in allowing nature into heavily built-up environments. The towpath and associated areas of waste ground, especially in East London, support a number of uncommon species of disturbed ground.	Site is located 1.7km north of Site
Lower Colne SMINC (54.60ha)	This site includes sections of the rivers Colne, Wraysbury and Frays (related sites include Mid Colne Valley and Little Britain), making it one of the finest river systems in London. These are spring fed from the underlying chalk and together support a diverse collection of aquatic and bankside plants, including several with a restricted distribution in London. Associated wet meadows, flooded gravel pits, ponds, alder-willow woodland and an old orchard are included within the site and provide further botanical interest. Among the water plant species in the site are the declining river water-dropwort (*Oenanthe fluviatilis*), bladder-sedge (*Carex vesicaria*), narrow-leaved water-plantain (*Alisma lanceolatum*) and common water-crowfoot (*Ranunculus aquatilis*). A field at the edge of the site supports London's only native population of the now very rare wild herb, pennyroyal (*Carex vesicaria*).	Site is located 1.6km west of Site
Stockley Lakes and Meadows SBINC (11.61ha)	This site consists of well-managed habitats in the grounds of a business park, with extensive areas of patchwork-cut meadow, soft-margined lakes with emergent vegetation and tall belts of scrub. The grassland is dominated by false oat-grass (*Arrhenatherum elatius*) and red fescue (*Festuca rubra*), and contains a good diversity of wild flowers, including red clover (*Trifolium arvense*), wild carrot (*Daucus carota*), narrow-leaved ragwort (*Senecio inaeqidens*) and small-flowered cranesbill	Site is located 1.7km north of Site

Designated Sites	Reason for Designation	Location of Designated Sites
	(*Geranium pusillum*). The undulating terrain provides shelter for invertebrates under breezy conditions. Scattered trees include aspen (*Populus tremula*) and crack willow (*Salix fragilis*). Birds regularly seen in the grassland include green woodpecker (*Picus viridis*) and linnet (*Linaria cannabina*). Swamp cypresses (*Taxodium distichum*), growing in one of the lakes, are likely to provide valuable invertebrate habitats. The wetland flora includes lesser reedmace (Typha angustifolia), hard rush (*Juncus inflexus*), common reed (*Phragmites australis*) and least duckweed (*Lemna minuta*). The water extends northwards between office buildings, where emergent vegetation provides refuge for wildfowl such as mallard, coot and moorhen, as well as further habitat for invertebrates.	
Archie and Emden Close SBINC (2.39ha)	The site is on an area of railway lineside that used to be grazed. The lack of grazing has resulted in the development of dense scrub. Bramble (*Rubus fruticosus agg.*) and common hawthorn (*Crataegus monogyna*) dominate, along with elder (*Sambucus nigra*) and extensive ivy (*Hedera helix*) cover. Dog rose (*Rosa canina*), common nettles (*Urtica dioica*) and common ragwort (*Senecio jacobaea*) are interspersed. Trees planted near the northern roadside fence-line include young field maples (*Acer campestre*) and false acacias (*Robinia pseudoacacia*).	Site is located 1.5km north of Site

3.2.2 Constraints and Recommendations

The closest internationally designated site is South West London Waterbodies SPA and Ramsar which is located 4.7km to the southwest of the Site. The South West London Waterbodies SPA and Ramsar consists of a series of storage reservoirs and flooded gravel pits supporting internationally important populations of wintering gadwall and shoveler. Neither gadwall and shoveler are affected directly or indirectly by atmospheric pollution.

Due to the distance from the Site (more than 2km, that would be considered the zone of influence for impacts due to generators), the location of the Site nearby Heathrow airport zone of influence and lack of waterbodies on Site for birds supported by the SPA, impacts from the Proposed Development are not expected on the SPA and Ramsar site and the birds supported by them. It is not expected that noise or air pollution from the Proposed Development would affect the international designated sites.

No SINCs were present on or in close proximity of the Site, with the closest 800 from the Site. It is not expected likely directly or indirectly impacts by the Proposed Development.

3.3 Habitats

3.3.1 Desk Study

3.3.1.1 Ancient Woodland and Notable Habitats

No habitats were listed as ancient woodland a 500m radius of the Site. Five habitat parcels listed on Section 41 of the Natural Environment and Rural Communities Act were identified within 500m from Site. These comprised three deciduous woodland parcels (TQ 07198 78484, TQ 07181 78611 and TQ 06314 78455) with the closest to 120m north of the Site, one traditional orchard 130m west of the Site (TQ 07090 78057) and one Open Mosaic Habitats on Previously Developed Land 230m northwest of the Site (TQ 06908 78392).

3.3.2 Field Survey

Summary descriptions of the habitats within the Survey Area are provided below in Table 2 and shown on Figure 2 in Appendix A with specific features highlighted by Target Notes (TN). TN descriptions and photographs are provided in Appendix D.

The Site comprises of large areas of modified grassland that are regularly mowed and maintained. The southern grassland (Grassland 1) has a high number of plant species potentially linked to the Site's previous land use as a garden centre. Developed land and buildings are located within the northern part of the Site and are used for vehicle parking and storage. Some buildings are temporary structures used as offices and for other commercial purposes and some appear to be disused and leftover from when the Site was a garden centre. Smaller habitats around the Site are made up of varying trees species in different habitat formations. There are three small areas of young deciduous trees within the eastern boundary of Grassland 1, likely planted as a natural buffer to the M4 adjacent to the Site boundary. Two lines of trees are associated with the northern boundary of the Site and are

made up of varying species of deciduous fruit trees. Four non-native individual trees are located within Grassland 1 in the northwest corner of the Site adjacent to the access road.

The Site is surrounded by roads and commercial and residual buildings. The wider landscape is a mixture of urban habitats associated with Heathrow airport and rural habitats including arable fields.

Table 2. List of habitats on Site in descending order of area

Habitat Reference	UKHab Primary Code	UKHab Secondary Code	Description	Central Grid Reference	Area (ha)	Percentage cover of Site (%)
Grassland 1	Modified Grassland (g4)	N/A	A highly species diverse and regularly mown (not recently at time of UK Habitat survey, but seen mowed on 20th May 2026 during a bat survey) area of modified grassland within the southern side of the Site. 26 plant species are represented, potentially due to in part the previous land use as a garden centre with plants such as buddleia *Buddleja davidii* (TN1) and hybrid bluebell *Hyacinthoides* x *massartiana*. Other species within habitat include: perennial ryegrass *Lolium perenne*, annual meadow grass *Poa annua*, red fescue *Festuca rubra*, cleavers *Galium aparine*, bramble *Rubus fruticosus*, stinging nettle *Urtica dioica*, common daisy *Bellis perennis*, dandelion *Taraxacum officinale*, meadow vetchling *Lathyrus pratensis*, hairy yellow vetch *Vicia hybrida*, ribwort plantain *Plantago lanceolata*, red dead nettle *Lamium purpureum*, white clover *Trifolium repens*, broad-leaved dock *Rumex obtusifolius*, greater periwinkle *Vinca major*, green alkanet *Pentaglottis sempervirens*, chickweed *Stellaria media*, creeping thistle *Cirsium arvense*, doves foot cranesbill *Geranium molle*, creeping speedwell *Veronica repens*, wooly mullein *Verbascum thapsus*, colt's-foot *Tussilago farfara*, white comfrey *Symphytum orientale*, caper spurge *Euphorbia lathyris* and tansy *Tanacetum vulgare*. Within this grassland is also a fenced off phone tower (TN2) that has become encroached by bramble and buddleia (TN1).	TQ 07329 78100	5.20	74%
Grassland 2	Modified Grassland (g4)	N/A	Recently and regularly mown area of modified grassland within the northwestern corner of the Site. The majority of the sward height is short with the edges left taller. Species within this habitat included: annual meadow grass, broad-leaved dock *Rumex obtusifolius*, dandelion, red fescue, ribwort plantain, creeping buttercup *Ranunculus repens*, white clover and green alkanet.	TQ 07201 78262		
Developed land; sealed surface (u1b)	N/A	N/A	On the northern side of the Site is an area of hardstanding with buildings and structures. Main current use is for parking of large vehicles and storage. Most buildings are temporary or associated with the previous land use as a garden centre.	TQ 07306 78237	1.56	23%
Elm Plantation	W1f7 Other Lowland mixed deciduous woodland	29 Plantation	Three areas of young elm tree species *Ulmus* sp. plantation. Located along the eastern edge of the Site and Grassland 1. Likely planted as buffers of the M4 to the east of the Site.	TQ 07416 78173, TQ 07423 78088 and TQ 07422 78020	0.11	2%
Line of Trees 1	Woodland and forest (W)	33 Line of trees	Row of multiple early mature to mature trees including hybrid black poplar (*Populus x canadensis*), sycamore (*Acer pseudoplatanus*), Scots pine (*Pinus sylvestris*), wild cherry (*Prunus avium*), elder (*Sambucus nigra*) along the northern and northeastern boundary of the Site, with youngers sycamore, hawthorn and elder trees in the northeast corner.	TQ 07301 78289	N/A	N/A
Line of Trees 2	Woodland and forest (W)	33 Line of trees	Row of approximately 16 trees along the northern and northwest boundary of the Site. Species within this line of trees included: elder, purple leafed plum (*Prunus cerasifera 'Pissardii'*), wild cherry (*Prunus avium*), apple (*Malus* sp), rowan (*Sorbus aucuparia*), Poplar (Populus sp), common lime (*Tilia X europaea*) and goat willow (*Salix caprea*).	TQ 07197 78277	N/A	N/A
Individual Trees 1-4	Woodland and forest (W)	200 Tree	Four individual trees, two of them lawson cypress (*Chamaecyparis lawsoniana)* trees were, located within Grassland 1 in the northwest side of the Site, south of the access road.	TQ 07219 78211	N/A	N/A

3.3.3 Constraints and Recommendations

The Proposed Development indicative masterplan is shown in Figure 1 in Appendix A. Plantation areas, tree lines and grassland within the edges of the Site are aimed to be retained, minimising the loss of vegetation as far as possible. However, grassland habitat away from the edges will be cleared to allow the Proposed Development. Where possible, as much vegetation including trees should be retained.

Habitat compensation has been sought to obtain biodiversity net gains. A Biodiversity Net Gain[6] assessment has been prepared to inform the change in biodiversity units and support the planning application. This determines the total number of habitat credits lost and the credits provided by the Proposed Development once is complete to meet the 10% minimum Biodiversity Net Gain. The new landscape proposals seek to create new habitats of same or highest distinctiveness to the habitat lost. The Proposed Development include attenuation ponds to the north and west of the Site, a green roof and tree and shrub planting along all the boundary of the Site, maximising green infrastructure on Site.

Indirect impacts during construction on retained habitats and nearby Habitats of Principal Importance include earth disturbance for the instalment of new cables, removal of vegetation, increases in noise, air and dust pollution and the potential for the spread of invasive non-native species. To mitigate impacts, it is recommended that a Construction and Environment Management Plan (CEMP) is drafted to minimise direct and indirect impacts due to potential increase in dust, noise, pollution and lighting. The CEMP should include (but not be limited to):

- Minimise the work footprint to reduce areas of vegetation clearance.
- Implement measures to reduce vehicle and plant noise (as required based on existing noise levels).
- Minimise light spill onto adjacent habitats such as rivers and trees.
- Switch off plant and machinery when not in use.
- Enclose and sheet material stockpiles.
- Store materials in sheltered locations.
- Use wheel washes to reduce tracking of soil onto adjacent highways and clear any deposited material promptly.
- Use a water bowser on site during extended dry periods to damp down dust.
- Sheet vehicles carrying spoil.
- Apply dust suppression measures.
- Bund fuel stores and material stockpiles to prevent pollution.
- Implement measures to reduce increases in suspended particles/sediment in water bodies..

3.4 Protected and Notable Species

3.4.1 Bats

3.4.1.1 Desk Study

A single European Protected Species Mitigation Licence regarding the damage and destruction of a soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus* roost, was located 1.5km to the west of the Site.

The data search returned 47 records for confirmed species of bat and one record of unconfirmed species within 2km of the Site over the last ten years as follows:

- One record of a myotis bat species (*Myotis* sp.) from 2021, 1.8km northwest of the Site;
- Seven records of Daubenton's bat (*Myotis daubentonii*), the most recent from 2019;
- Four records of noctule (*Nyctalus noctula*), the closest of which was 1.2km northwest of the Site;
- 14 records of common pipistrelle (*Pipistrellus pipistrellus*), the closest of which was 478m south of the Site and the most recent from 2019;

[6] AECOM (2026). VIRTUS Data Centre. Biodiversity Net Gain Assessment.

- 15 records of soprano pipistrelle, the closest of which was 478m south of the Site and the most recent from 2019.
- Seven records of brown long-eared bat the closest of which was 478m south of the Site and the most recent from 2019.

3.4.1.2 Field Survey

The Site contains one building (B4 at TQ 07278 78220) which was assessed to be of high suitability for roosting bats. The building had several holes in the roof and walls allowing access to the interior. There were potential access points to space inside the walls of the building. Buildings B1, B2, B3 and B5 were assessed as having no suitability and B6 as negligible.

All other trees and structures within the Survey Area were assessed as having no features suitable for roosting bats. Full details of these results are provided in a separate Bat Survey report[7].

The mosaic of developed land, grassland and line of trees is suitable for commuting and foraging bats. However, part of the Site is lit at night, and the eastern edge of the Site comprises the M4, with also lighting spills at night. Therefore, the Site is assessed as having low suitability as fly-path lines and foraging habitat.

3.4.1.3 Constraints and Recommendations

All native bats, and their roosting sites are protected from harm, killing and disturbance by the Conservation of Habitats and Species Regulations 2017 (as amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

Further surveys have been carried out to determine the potential value of the Site to bats and to fully inform the proposals. These surveys were completed in accordance with The Bat Conservation Trust (BCT) Good Practice Guidelines (Collins et al, 2023) and took place during the bat active season (April to September). These surveys include:

- Bat emergence surveys of the high suitable building (B4) based on the results of the Preliminary Roost Assessment (PRA); and
- Bat activity surveys comprising nighttime bat walkover (NBW) surveys completed once per season in spring (April/May), summer (June to August) and autumn (September/ October), and automated static detector survey collected data for five nights a month from April to October.

The results of these surveys are reported on a standalone Bat Survey report that include proposed mitigation, if needed. The emergence surveys on the building did not record any bat emerging or re-entry to the building.

Bat flight-lines along the edge of the Site will be mostly retained and will be enhanced by the planting strategy of the Proposed Development.

When developing the lighting proposals for both construction and operation at the Site, the design should consider avoiding light spill onto suitable habitat for roosting, foraging and commuting bats. Lighting should be designed in line with Section 4.29 of the Bat Conservation Trust (BCT) and Institution of Lighting Professionals (ILP) best practice guidance (2023)[8], which recommends that all luminaires lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LEDs should be used where possible with a warm white light source (2700Kelvin or lower) to reduce blue light component. Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone et al., 2015). Only luminaires with a negligible or zero upward light ratio should be considered, and column heights should be considered to minimise light spill. Luminaires will be mounted on the horizontal, with no upward tilt. Where external security lighting is required, this should be set on a motion sensor and set to as short a possible a timer as the risk assessment will allow.

3.4.2 Breeding Birds

3.4.2.1 Desk Study

There are recent records for 17 notable[9] bird species within the Study Area shown in Table 3. These include five species listed on Annex I of the EC Birds Directive, four species listed on Schedule 1 of the Wildlife and

[7] AECOM (2026). Project Fingers Data Centre. Bat Surveys Report

[8] Institution of Lighting Professionals (2023). Guidance Note 08/23: Bats and Artificial Lighting at Night.

[9] Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006 (as amended); as Red or Amber in the Birds of Conservation Concern (BoCC) 5.

Countryside Act 1981 (as amended), four Species of Principal Importance (SPI), and nine species on the Birds of Conservation Concern (BoCC5) Red or Amber list[10]. The records also include 11 species of bird that are priority species in London, listed in the London Priority Species List[11].

Table 3. Notable Bird Species listed within 2km of the Survey Area over the last 10 years

Bird species	Legislation & Policy	Distance from the Survey Area
Bittern (*Botaurus stellaris*)	Birds Directive Annex 1, Wildlife & Countryside Act Schedule 1 Part 1, NERC Act Section 41, London Priority Species, Local Species of Conservation Concern	Closest record is 542m from the Site
Cetti's Warbler (*Cettia cetti*)	Wildlife & Countryside Act Schedule 1 Part 1	Within 2km
Common Sandpiper (*Actitis hypoleucos*)	London Priority Species	Closest record is 1308m from the Site
Corn Bunting (*Emberiza calandra*)	London Priority Species, Local Species of Conservation Concern, Birds of Conservation Concern –– Red List	Within 2km
Gadwall (*Mareca strepera*)	London Priority Species	Closest record is 1308m from the Site
Greenfinch (*Chloris chloris*)	Birds of Conservation Concern – Red List	Closest record is 1055m from the Site
Herring Gull (*Larus argentatus*)	Birds of Conservation Concern – Red List	Closest record is 35m from the Site
Hobby (*Falco subbuteo*)	Wildlife & Countryside Act Schedule 1 Part 1	Within 2km
House Martin (*Delichon urbicum*)	London Priority Species, Birds of Conservation Concern –– Red List	Closest record is 723m from the Site
House Sparrow (*Passer domesticus*)	NERC Act Section 41, London Priority Species, Local Species of Conservation Concern, Birds of Conservation Concern –– Red List	Closest record is 328m from the Site
Kingfisher (*Alcedo atthis*)	Birds Directive Annex 1, Wildlife & Countryside Act Schedule 1 Part 1, London Priority Species	Closest record is 1175m from the Site
Linnet (*Linaria cannabina*)	London Priority Species, Local Species of Conservation Concern, Birds of Conservation Concern –– Red List	Closest record is 221m from the Site
Little Egret (*Egretta garzetta*)	Birds Directive Annex 1	Within 2km
Little Ringed Plover (*Charadrius dubius*)	W&CA Sch1 Part 1. London Priority Species	Within 2km
Marsh Harrier (*Circus aeruginosus*)	Birds Directive Annex 1, Wildlife & Countryside Act Schedule 1 Part 1	Closest record is 283m from the Site
Nightjar (*Caprimulgus europaeus*)	Birds Directive Annex 1, NERC Act Section 41	Within 2km
Peregrine (*Falco peregrinus*)	Birds Directive Annex 1, Wildlife & Countryside Act Schedule 1 Part 1, London Priority Species	Within 2km
Pochard (*Aythya ferina*)	London Priority Species, Local Species of Conservation Concern, Birds of Conservation Concern –– Red List	Within 2km
Quail (*Coturnix coturnix*)	Wildlife & Countryside Act Schedule 1 Part 1	Within 2km
Red Kite (*Milvus milvus*)	Birds Directive Annex 1, Wildlife & Countryside Act Schedule 1 Part 1	Closest record is 1444m from the Site
Reed Bunting (*Emberiza schoeniclus*)	NERC Act Section 41, Local Species of Conservation Concern	Closest record is 1055m from the Site

[10] Stanbury, A. et al. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747

[11] London Priority Species List. Available at: https://www.london.gov.uk/sites/default/files/final_london_priority_species_list_2019_0.xlsx

Bird species	Legislation & Policy	Distance from the Survey Area
Skylark (*Alauda arvensis*)	NERC Act Section 41, London Priority Species, Local Species of Conservation Concern, Birds of Conservation Concern –– Red List	Closest record is 283m from the Site
Starling (*Sturnus vulgaris*)	London Priority Species, Local Species of Conservation Concern, Birds of Conservation Concern –– Red List	Closest record is 1104m from the Site
Swift (*Apus apus*)	London Priority Species, Birds of Conservation Concern –– Red List	Closest record is 362m from the Site

3.4.2.2 Field Survey

No bird nests or notable bird species were observed during the Site visit.

There are habitats within the Site that are suitable for foraging and nesting birds including trees and buildings.

In consideration of the habitats on Site (which are not diverse and attractive to large assemblages of birds), the size of the Site (which is relatively small), the proposals for the Site (which would retain the majority of peripheral habitat (e.g. lines of trees) used by breeding birds and the low numbers of species and numbers of birds recorded in April 2026, further surveys of breeding birds are not required.

3.4.2.3 Constraints and Recommendations

Breeding birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). Schedule 1 species are afforded additional protection which makes it an offence to disturb individuals of these species when ‘at or near’ an active nest.

Any proposals on the Site will retain the existing boundary habitat, such as scrub and trees, used by the majority of breeding birds on Site. However, development within the grassland areas of the Site will result in loss of this habitat although this area is managed grassland, with regular disturbance and is unsuitable for ground-nesting birds. This was further evidenced in April 2026 as no ground-nesting birds (e.g. skylark) were recorded within the Site.

New planting within the Proposed Development includes a mix of native species of local provenance. These habitats will provide breeding habitat for birds in the summer months and foraging and roosting habitat in the winter months.

Where retention is not possible, demolition, clearance or trimming should be scheduled to take place outside the bird nesting season (usually considered to be March to September inclusive) to reduce the risk of breeding birds being disturbed. This should be programmed into and prior to any construction schedules from an early stage in the schemes planning.

Clearance carried out in the breeding bird season should be considered a ‘plan of works oversight’. This is because the presence of a nest or nests could result in construction delays of several months. Delays due to nesting birds can largely be avoided with a pre-planned programmer of vegetation clearance.

If any clearance of suitable habitat is due to take place between March and September, an ecologist will be required to confirm the absence of active bird nests immediately prior to works commencing to avoid a breach of legislation. If a nest is discovered, clearance or other construction works should be stopped immediately within an exclusion zone to be determined by an ecologist (generally 5m radius but depending upon species) with Schedule 1 birds needing a wider buffer if found to be nesting on Site. The exclusion zone will be demarcated appropriately. The nest will subsequently be monitored, typically on a weekly basis, by a suitably qualified ecologist. Once it is confirmed that all fledglings have flown and ceased to return to the nest, and that no other nests are in use within the exclusion zone, the vegetation can be removed.

Construction materials and equipment, left undisturbed for long periods of time during the breeding bird season, have the potential to be used by nesting birds. Therefore, care should be taken when moving materials and equipment during the breeding season, particularly if they have been in situ for several days.

3.4.3 Reptiles

3.4.3.1 Desk Study

The desk study returned no records of reptile species within 2km of the Study Area in the last ten years.

3.4.3.2 Field Survey

There are habitats within the Site that are suitable to support low incidental numbers of widespread reptile species. These habitats include grassland and plantation woodland suitable to support foraging and basking reptiles. Due to the regular mowing of the grassland habitats, the used of the northern areas by frequent trucks, the major barriers to movement between the Site and other suitable habitats outside the Site and the lack of hibernacula at the Site, reptiles are not considered to be established at the Site in high numbers and, if present, to be along the retained edges of the Site.

The Site is not considered suitable to support smooth snake *Coronella austriaca* or sand lizard *Lacerta agilis*.

3.4.3.3 Constraints and Recommendations

All native UK reptile species, adder *Vipera berus*, common lizard *Zootoca vivipara*, grass snake *Natrix helvetica*, sand lizard, smooth snake and slowworm *Anguis fragilis*, are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), making it an offence to kill or injure them.

In addition, all native reptiles are listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).

The Site is considered unlikely to support an established population of common and widespread reptile species, and, as such, they are not considered to represent a constraint to works as long as any clearance of tall vegetation (above 150mm) is done in two phases under supervision by a suitably experienced ecologist for any incidental occurrences of reptile individuals using the Site. Any vegetation clearance should follow a Precautionary Method of Working (PMoW) to be drafted in advance of the works. The PMoW should include the two phased clearance and the supervision by a suitably experienced ecologist.

It is recommended to continue the mowing regimen on Site to avoid encouraging the colonisation of the field by reptiles before the implementation of the Proposed Development.

3.4.4 Great Crested Newts

3.4.4.1 Desk Study

The desk study returned seven records of great crested newt *Triturus cristatus* within 2km of the Study Area in the last ten years, the closest one being 1861m northwest of the Site.

No European Protected Species Mitigation Licences regarding great crested newts were present within a 2km radius of the Site.

3.4.4.2 Field Survey

No waterbodies were identified within the Site or within 250m of the Site without major barriers to movement. Two waterbodies are present 220m northwest of the Site but there are two roads that would act as barriers for potential great crested newt, if present.

The grassland and plantation woodland habitat within the Site are suitable for the terrestrial phase of great crested newt, but as mentioned for reptiles, the grassland is regular mowed, making the Site less suitable for this species. No signs of great crested newt, amphibians or potential hibernaculum were identified during the walkover survey.

3.4.4.3 Constraints and Recommendations

Great crested newts are a European Protected Species, protected under the Habitats Regulations 2017 (as amended), and they and the habitat that they use for breeding and resting are fully protected by Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

As with reptiles, and considering closest waterbodies were amphibians could breed, have barriers to the Site, it is considered unlikely to support an established population of great crested newt and, as such, they are not considered to represent a constraint to works as long as any clearance of tall vegetation (above 150mm) is done in two phases under supervision by a suitably experienced ecologist for any incidental occurrences of great crested newt individuals using the Site. The PMoW recommended for reptiles is also applicable for great crested newt.

3.4.5 Badgers

3.4.5.1 Desk Study

The desk study returned no records of badger within 2km of the Study Area in the last ten years.

3.4.5.2 Field Survey

No badger setts or signs of badger were identified during the badger walkover survey although grassland within the Survey Area provides suitable habitat for both foraging and sett building.

3.4.5.3 Constraints and Recommendations

Badgers and their setts are protected from disturbance and destruction by the Protection of Badgers Act (1992)[12].

Under this act, it is an offence to:

- Wilfully kill, injure or take a badger (or attempt to do so)
- Cruelly ill-treat a badger
- Dig for a badger
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett
- Cause a dog to enter a badger sett
- Disturb a badger when it is occupying a sett

No evidence of badger was found during the walkover survey; however, the habitats within the Site are suitable to support badger. Badgers are a highly mobile species and readily excavate new setts, therefore it is recommended that a check for badger is carried out prior to construction to confirm the status of badgers at the Site and standard best practice precautionary measures to protect badgers and their habitat are included in a CEMP or equivalent.

Measures should include:

- Ensuring fencing/hoarding allows gaps so badgers can enter and exit the site safely while foraging at night;
- Storing chemicals in a secure lock-up each night to prevent badgers from exposure to poisons;
- Covering any open excavations overnight so badgers do not fall in and injure themselves, or installing an exit ramp to prevent a badger from becoming trapped;
- Nominating a member of Site staff to check excavations each morning prior to starting works, to confirm the absence of any trapped animals;
- Fencing off spoil mounds to reduce the risk of sett creation;
- Minimising the construction footprint so as not to encroach onto the woodland/grassland;
- Minimising lighting at nigh so low-level security lighting does not disturb badgers; and
- After development is complete, ensuring badgers are not cut off from the surrounding suitable habitat and landscaping contains wildlife friendly planting, providing shelter and berries.

Works must cease if setts are found, or if signs of recent activity are recorded, and a licence from Natural England may be required for sett interference or closure.

3.4.6 Other Notable Species

3.4.6.1 Desk Study

The desk study returned 21 records of hedgehog *Erinaceus europaeus* from within 2km of Site from the last 10 years, the closest one being 195m southwest of the Site.

The data search produced by GiGL returned records for stag beetle (*Lucanus cervus*) all beyond 700m from Site.

[12]HMSO (1992). Protection of Badgers Act.

3.4.6.2 Field Survey

No evidence of other notable species was recorded on site during the Site visit.

The habitats on Site such as grassland and lines of trees may be suitable to support the presence of notable mammals such as hedgehog.

The habitat on Site is of negligible quality for breeding stag beetles as it is unlikely that dead wood accrued through works on Site would be retained. Due to the mowing regimen, it is not expected a notable invertebrate assemblage on Site.

3.4.6.3 Constraints and Recommendations

Hedgehogs are listed on Section 41 of the Natural Environment and Rural Communities Act 2006. (as amended). Hedgehogs are protected from killing and injury from certain methods.

Hedgehogs as well as all other UK mammals are protected by the Wild Mammals (Protection) Act 1996.

The Wild Mammals Protection Act 1996 lists several actions against wild mammals, including but not limited to: "*mutilates…beats, nails or otherwise impales…burns, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering he shall be guilty of an offence*".

Any excavations on Site are recommended to be covered at night, or to have an access ramp created or fitted to allow wildlife (such as hedgehogs) to escape, with a daily morning check of the excavations by a nominated site worker prior to works commencing to ensure that no animals are trapped on Site.

Any hedgehogs found during works should be allowed to make their way to retained vegetation, or, if hibernating within the Proposed Development area, be taken to a local hedgehog charity.

3.4.7 Invasive Non-Native Species

3.4.7.1 Desk Study

The desk study returned records of 10 notable non-native invasive species, twelve plant species and two animal species, within a 2km radius of the Site from over the last 10 years. Table 4 below lists the records with their London Invasive Species Initiative (LISI) category[13].

Table 4. Invasive Non-native Species listed within 2km of the Survey Area over the last 10 years

Species	Legislation/Guidance	Distance from the Survey Area
Tree-of-heaven (*Ailanthus altissima*)	LISI Category 3	0.5 km north of Site
Butterfly-bush (*Buddleja davidii*)	LISI Category 3	0.1 km south of Site
A Flowering Plant (*Cotoneaster*)	LISI Category 2	0.6 km east of Site
Floating Pennywort (*Hydrocotyle ranunculoides*)	LISI Category 3	1.8 km north-east of Site
Himalayan Balsam (*Impatiens glandulifera*)	LISI Category 3	1.9 km west of Site
Green Alkanet (*Pentaglottis sempervirens*)	LISI Category 6	0.4 km north of Site
Cherry Laurel (*Prunus laurocerasus*)	LISI Category 3	0.7 km north-east of Site
Turkey Oak	LISI Category 5	1.3 km south of Site

[13] Definition of LISI Categories: *Category 1: Species not currently present in London but found nearby or considered high risk. These species are of concern due to the potential negative impact they could cause if they arrive in the city. Category 2: Species of high impact or concern present at specific sites, requiring localised attention, such as control, management, or eradication efforts. Category 3: Species of high impact or concern that are widespread in London and require concerted, coordinated, and extensive action to control or eradicate them. Category 4: Species that are widespread, but eradication is not feasible. Management focuses on preventing the spread to new sites, rather than complete removal. Category 5: Species for which insufficient data or evidence exists to prioritise them. These species might require further research before management decisions can be made. Category 6: Species that are not currently considered a threat or have a low potential to cause problems in London. Minimal or no management action is generally required at present*

Species	Legislation/Guidance	Distance from the Survey Area
(*Quercus cerris*)		
Evergreen Oak (*Quercus ilex*)	LISI Category 5	0.4 km south of Site
False-Acacia (*Robinia pseudoacacia*)	LISI Category 4	0.6 km east of Site

3.4.7.2 Field Survey

No INNS listed on relevant legislation were identified within the Survey Area.

Buddleia (TN1 in Figure 2), an invasive non-native species not listed in relevant legislation, but that is nonetheless noteworthy, was identified within the Site with some stands along the western and southern boundary and also next to the phone tower (TN1) within grassland in the southern side of the Site. Furthermore, buddleia is also present to the north of the Site, just adjacent to the Site.

3.4.7.3 Constraints and Recommendations

Buddleia, which is an INNS not listed on relevant legislation but considered invasive in the London Invasive Species Initiative (LISI), was identified within the boundary of the Site. Buddleia is listed as Category 3 on LISI. This means is a *species of high impact or concern that are widespread in London and require concerted, coordinated, and extensive action to control or eradicate.*

As it is not on legislation there is no requirement for specific action. Regardless, this species could cause issues by colonise the Site, disrupting landscape management, reducing biodiversity by outcompeting native species, and/or alter the chemistry of the soils. It is recommended that this species (and any other INNS discovered before, during or after works) is specifically assessed and targeted as part of standard vegetation management plans for the Proposed Development.

It is recommended to be cleared using typical mechanical and hand cutting means, with excavation of the root ball, or the application of contact herbicide to prevent regrowth. Buddleia can be disposed of alongside regular green waste.

Contractors should maintain vigilance for invasive non-native species. If an invasive non-native species is suspected, works should cease, and an ecologist contacted for advice. Standard procedures for the prevention of spread of invasive species should be included within the CEMP.

4. Habitat Condition Assessment

A habitat condition assessment of the habitats found on Site was prepared based on the results of the Site visit. This informed the baseline of the separate Biodiversity Net Gain assessment prepared for the Proposed Development. The below does not confirm the results of the separate Biodiversity Net Gain Assessment.

Table 5. Habitat Classification Conversion (Baseline)

Habitat Reference	UK Habitat Classification Primary Code	UK Habitat Classification Secondary Code	Habitat Condition Assessment Notes	Habitat Condition Assessment Sheet	Habitat Condition Assessment Criteria Passed	Final Condition Assessment Score
Grassland 1	Modified Grassland (g4)	N/A	At time of the survey the grassland had not been mown and had been left to grow wild with a lot of species diversity meaning a high condition score based on the condition assessment metrics.	Grassland Habitat Type (low distinctiveness)	All (A-G)	Good (3)
Grassland 2	Modified Grassland (g4)	N/A	Low species diversity grassland meaning it could not pass A and is assessed as of poor condition.	Grassland Habitat Type (low distinctiveness)	6 (B, C, D, E, F, G)	Poor (1)
Elm Plantation	W1f7 Other Lowland mixed deciduous woodland	29 Plantation	Trees too young to get a high score within the condition assessment metrics.	Woodland Habitat Type	6 (B, C, E, F, H and M)	Poor (1)
Line of Trees 1	Woodland and forest (W)	33 Line of trees	Line of trees native and healthy however it is gappy and surrounded by fencing and hardstanding	Line of Trees Habitat Type	2 (A and E)	Poor (1)
Line of Trees 2	Woodland and forest (W)	33 Line of trees	Line of trees native, healthy and predominantly continuous. Naturally vegetated strip only on one side and no trees with veteran features or natural ecological niches.	Line of Trees Habitat Type	3 (A, B and E)	Moderate (2)
Individual Trees 1-4	Woodland and forest (W)	200 Tree	Trees non-native however they are mature and in good physical health.	Individual Trees	4 (B, C, D and F)	Moderate (2)

5. Opportunities for Enhancement

5.1 Introduction

This section highlights opportunities for providing ecological enhancement for the Site, based on the current Proposed Development details. These are high level opportunities and would need to be developed in greater detail and integrated into the Proposed Development proposals.

The ecological enhancements have been developed in accordance with the National Planning Policy Framework (NPPF, 2026) as well as the appropriate regional and local planning policy outlined in Appendix B, including the London Local Nature Recovery Strategy (2026)[14]. However, enhancement opportunities would need to be cognisant of biodiversity net gain targets and would need to be agreed with landowners and may not be feasible. Therefore, the below should be taken as a guide, if such opportunities arise.

5.2 Native or Wildlife Friendly Planting

Native and near native (and wildlife friendly for urban areas) planting is included in the soft landscaping plans for the Proposed Development.

Invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981, or the Invasive Alien Species (Enforcement and Permitting) Order 2019 (as amended) should not be planted.

Species could include flowers that have high pollen and nectar yields for pollinating insects. Examples of planting with benefits for birds can be found on the Royal Horticultural Society (RHS) website where a list of plants for birds are provided[15]. Species for the planting schedule could incorporate common alder (*Alnus glutinosa*), silver birch (*Betula pendula*), rowan (*Sorbus aria*), dog rose (*Rosa canina*), hornbeam (*Carpinus betulus),* common teasel (*Dipsacus fullonum*), devil's bit scabious (*Succisa pratensis*), among others.

Due to proximity to Heathrow airport to the south, no larger numbers of fruit/berry trees or shrubs should be incorporated into the plant schedule to avoid encouraging the presence of flock birds such as starlings (*Sturnus vulgaris*) that can create bird strikes in airport environments.

The soft landscaping could also include species that benefit bats such as those which provide night scented native plants beneficial for moths (and by extension bats) or provide larva resources for moths. Examples of planting with benefits for bats can be found in the Appendix of the BCT guidelines *Landscape and urban design for bats and biodiversity*[16]. Species examples include honeysuckle (*Lonicera periclymenum*), hazel (*Corylus avellana*), beech (*Fagus sylvatica*), guelder rose (*Viburnus opulus*), goat willow (*Salix caprea*), old's man beard (*Clematis vitalba*) and ivy (*Hedera helix*), among others.

All plants should ideally be of local provenance to avoid importing invasive species, plant pests and plant diseases. Any tree planting on the Site should link up areas of existing woodland on the Site where possible.

5.3 Bat/ Bird Boxes and Refugia

Log/vegetation piles could be implemented within retained habitat, outside any areas prone to flooding, for use by invertebrates. It is recommended that at least four are created on the perimeter of the Site within landscaped areas. These piles will provide opportunities for small mammal such as hedgehog but also resources for invertebrates.

Bat boxes (e.g. Schwegler 2F or similar) will be installed onto the retained woodland and newly planted trees, once trees are at a sufficient maturity. If implemented, these boxes should be installed in line with the manufacturer's guidelines. We recommend the installation of at least four boxes along the edges of the Site, away from lighting spills and, if possible, with some hours of sun (southeastern to southwestern elevations of the tree). Boxes should have clear fly-path for bats entering the box.

[14] Greater London Authority (2026). London Local Nature Recovery Strategy (LNRS) – Statement of Biodiversity Priorities (PDF). Retrieved 26 June 2026, from https://www.london.gov.uk/sites/default/files/2026-03/MoL_LNR_Strategy_FA.pdf
[15] *Wildlife Gardening / RHS Gardening / RHS*
[16] *BCT, 2012. Landscape_and_urban_design_for_bats_and_biodiversity.pdf*

Six bird boxes will be mounted on mature/semi-mature trees. Example of box is the 1B Schwegler Nest Box (or similar). They come with different size holes. To diversify the bird opportunities, it is recommended to include a variety of them, 2 boxes of each type. They should be located in shade areas or northern/eastern elevations:

- 32mm entrance hole, suitable for: great, blue, marsh, coal and crested tit, redstart, nuthatch, collared and pied flycatcher, wryneck, tree and house sparrow (and bats).
- 26mm: blue, marsh, coal and crested tit and possibly wren. All other species are prevented from using the nest box due to the smaller entrance hole.
- Oval (29 x 55mm): redstarts (because more light enters the brood chamber) and it is suitable for all other species which nest in the 32mm boxes.

6. Conclusion

This PEAR is based on a desk study and ecological surveys undertaken in April-May 2026, to assess the ecological constraints to the Proposed Development and to provide advice in respect of Proposed Development design, site layout and / or site investigation.

The following further surveys and actions are recommended to support the Proposed Development.

Table 6. Summary of Recommendations

Feature	Recommendation	Timing
CEMP / PMoW / Toolbox talks	CEMP to be prepared and implemented during construction to prevent adverse impacts to habitats and protected species.	Before works and implemented during the works
Bats	Bat emergence surveys of one building (B4) with high suitability to support roosting bats. These three surveys can be completed between May and September inclusive.	Before works to support a planning application. Bat surveys can be completed between April and October inclusive as stated in recommendations.
	Bat activity surveys, comprising a nighttime walked transect once per season in spring (April/May), summer (June to August) and autumn (September/October), supplemented by automated static detector survey for five nights per each season between April and October.	
	The results of these surveys will inform any further survey, mitigation or licensing requirements that may be necessary.	
	Lighting scheme to follow BCT and ILP best practice guidance (2023[17])	To be considered during the design stage and implement during the works.
	Installation of bat boxes on Site.	To be considered during the design stage and implement during the works.
Birds	Retention of vegetation. Planning of works outside the breeding bird season. If any vegetation clearance is due to take place within breeding bird season, an ecologist will be required to confirm the absence of active bird nests immediately prior to works commencing to avoid a breach of legislation.	Work outside of breeding bird season, to be schedule during the period October to February Or checks to be completed within 48 hours prior to clearance
Reptiles & Great Crested Newt	Any clearance to be done under a PMoW: tall vegetation (above 150mm) is done in two phases under supervision by a suitably experienced ecologist for any incidental occurrences of reptiles or great crested newt individuals using the Site.	PMoW to be prepared in advance of the works and implemented during vegetation clearance
Badgers	A badger check should be conducted prior to vegetation clearance and works. This requirement should be included in a PMoW or CEMP. Working methods within the CEMP in relation badgers (i.e. covering excavations) to be followed.	Before works on Site.
	Works must cease if setts are found, or if signs of recent activity are recorded, and a licence from Natural England may be required for sett interference or closure.	Throughout works
Other Notable Species	Vegetation clearance should cease if species such as hedgehog or other species are identified, and animals allowed to move to safety. If small mammal burrows or tunnels are to be impacted excavation should be with hand tools and care taken not to harm wildlife.	Throughout works
INNS	Removal of buddleia from Site. Contractors should maintain vigilance for invasive non-native species. If invasive non-native species are found, works should cease an ecologist contacted for advice.	Throughout works

[17] Institution of Lighting Professionals (2023). Guidance Note 08/23: Bats and Artificial Lighting at Night.

6.1 Re-Survey of Site

Due to the mobility of animals and the potential for colonisation of the Site, if works start or a planning application is made 18 months or more after the site visit, it is recommended that an ecologist is consulted to confirm whether an update survey is required. This follows guidance from the Chartered Institute of Ecology and Environment Management (2019)[18].

[18] CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys. April 2019

Appendix A Figures

Figure 1: Proposed Masterplan (PGF-ACM-00-XX-DR-AR-051100)

ISO A0 841mm x 1189mm
Drawn by: FR
Approved: TY
Checked: PK
Project Management Initials: Designer: FR



Outline Planning - Proposed Masterplan

SCALE: 1 : 500

SITE DESIGN PARAMETERS	
PLOT ID	V 001(Virtus to confirm)
PLOT USE	INDUSTRIAL
PLOT AREA (M2)	69,900
PLOT AREA (SQ FT)	752,397
BUILDING GFA (M2)	c.27,820m2 (excl. plant, substations & ancillaries) c.47,135m2 (incl. plant, substation & ancillaries)
URBAN GREENING	0.3 REQUIRED - 0.4 PROVIDED (approximate - exact figure TBC)
ACHIEVED SITE (MW) TOTAL	54MW

STAFF CAR PARKING CALCULATION				
	*OWNER	PROPOSED	ACCESSIBLE	GREEN VEHICLES
	TBD	84	8	4

STANDARD SPACE: 2.5 M X 5 M
ACCESSIBLE SPACE: 3.6 M X 6 M

PROPOSED CAR PARKING (CLIENT TO CONFIRM REQUIREMENT):
TO BE BASED ON 75% OF BUILDING OCCUPANCY OF 102 PLUS 10% VISITOR PARKING = 84 SPACES

ACCESSIBLE PARKING:
ALLOW 10% OF THE TOTAL SPACES - 10% OF 84 SPACES = 8No. PROVIDED.

PARKING FOR ELECTRIC VEHICLES:
GREEN VEHICLES (5%) - 5% OF 84 SPACES = 4No.

BUILDING DATA	AHJ REQUIREMENT	PROVIDED	NOTES
BUILDING FOOTPRINT AREA (m²)		c.13,910	ONE STOREY MEASURED / BUILD.
MAXIMUM BUILDING HEIGHT (M)	TBD	19.7M	TO TOP OF PLANT AT ROOF LEVEL
NUMBER OF FLOORS		2 OFFICE - 3 PLANT	
OCCUPANCY	N/A	102	

0 12500 25000 mm
SCALE: 1:500

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Notes

Legend
- Plot Boundary
- Impact Rated Fence - Palladin RCS ISO 22343 (Vehicle Rated 7.5 Tonne / 30MPH) Fence 3.0m
- Impact Rated Gate or Barrier - ISO 22343 (Vehicle Rated 7.5 Tonne / 30MPH)
- Attenuation Pond
- Proposed Asphalt Road / Concrete Hardstand
- Proposed Paving (as per Landscape Architect)
- Proposed Grass and Wildflowers (as per Landscape Architect)
- Proposed Hedgerow Mix (as per Landscape Architect) with Incorporated Acoustic Fencing where required
- Proposed Shrubs Mix (as per Landscape Architect) with Incorporated Acoustic Fencing where required
- Proposed Spring Bulb Mix (as per Landscape Architect)
- Proposed Wet Wildflower Mix (as per Landscape Architect)

Issue/Revision

Rev	Date	Description	Drn/ChkApr
P1	02/10/26	Outline Planning Application	TF/GO/TY

Key Plan

Suitability Status
S2 - Suitable For Information

Project Number
60749800

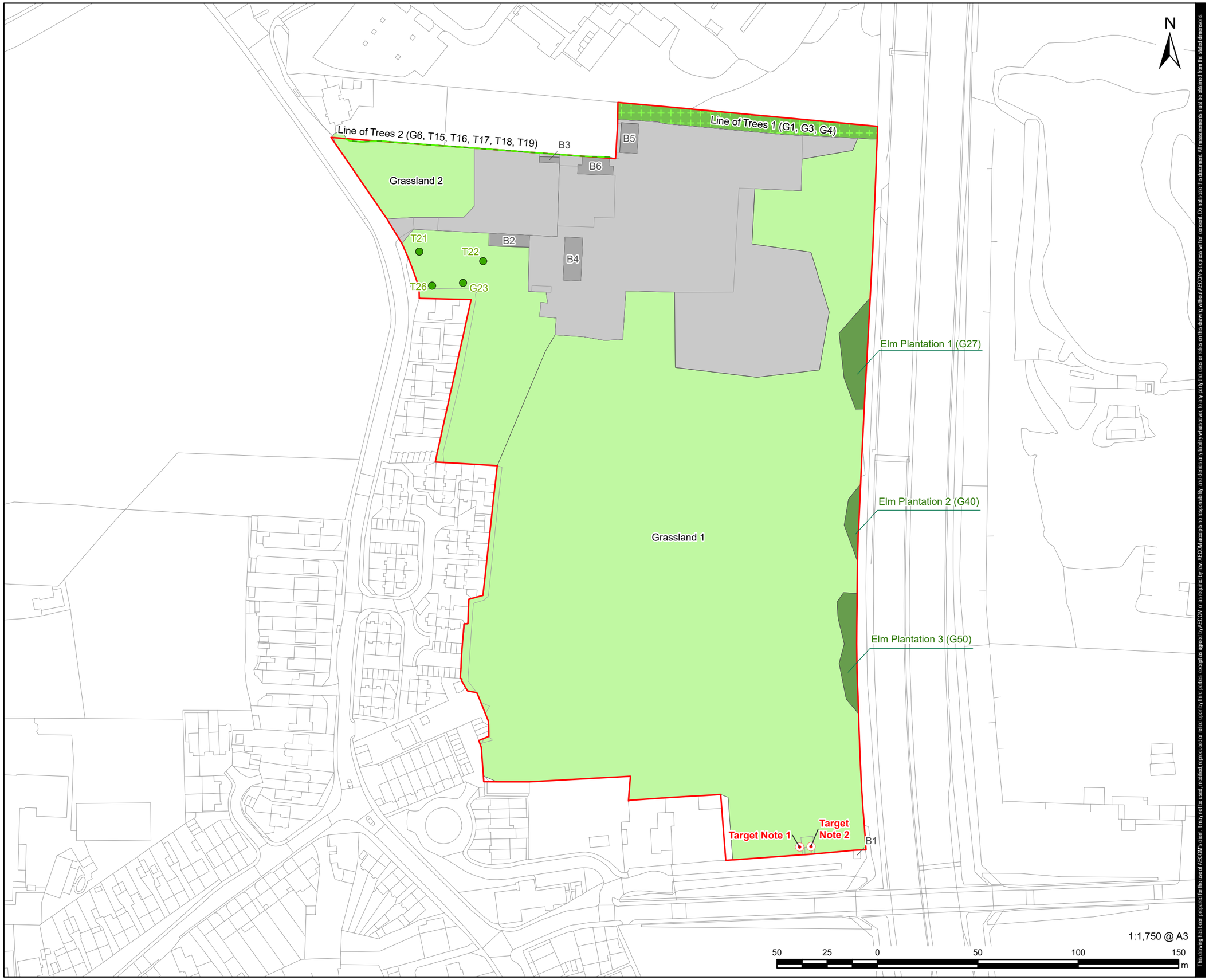
Sheet Title
Outline Planning - Proposed Masterplan

Sheet Number
PGF-ACM-00-XX-DR-AR-051100

Scale: As indicated@A0 **Rev:** P1

Figure 2: UK Habitats Map

Revision: 0 Drawn: CT Checked: AD Approved: EG Date: 2026-10-08



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PROJECT

Former Sipson Garden Centre

CLIENT

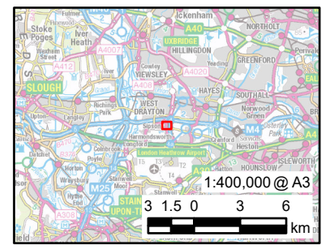
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LEGEND

- Site Boundary
- Target Note
- Individual tree
- 33 Line of trees
- g4 - Modified Grassland
- u1b - Developed Land; Sealed Surface
- u1b5 - Buildings
- w1g - Other Broadleaved Woodland
- w33 - Line of trees



NOTES

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ISSUE PURPOSE

For Information

PROJECT NUMBER

60749800

FIGURE TITLE

UK Habitat Classification

FIGURE NUMBER

Figure 1

Filename:C:\Users\TogoeC\AECOM\Virtus - 920_929_(GIS_Graphics)\02_Maps\01_Ecology\PGF_Ecology_20261008_R0.aprx

Appendix B Relevant Legislation and Planning Policy

B.1 Legislation

The UK is no longer a member of the European Union (EU). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 11.00 p.m. on 31 December 2020 has been retained in UK law as a form of domestic legislation known as 'retained EU legislation'.

The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the *Conservation of Habitats and Species Regulations 2017* (referred to as the 2017 Regulations*)* so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. They are known as the *Conservation of Habitats and Species Regulations 2017* (as amended).

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

The Habitats Regulations consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The Regulations came into force on 30th October 1994. In Scotland the Habitats Directive is transposed through a combination of the Habitats Regulations 2010 (in relation to reserved matters) and the 1994 Regulations. The Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) transpose the Habitats Directive in relation to Northern Ireland.

The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.

Under the Regulations, competent authorities i.e. any Minister, Government department, public body, or person holding public office, have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.

The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I and II of the Habitats Directive respectively) to the European Commission. Once the Commission and EU Member States have agreed that the sites submitted are worthy of designation, they are identified as Sites of Community Importance (SCIs). The EU Member States must then designate these sites as Special Areas of Conservation (SACs) within six years. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs) classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites form a network termed Natura 2000.

The Regulations enable the country agencies to enter into management agreements on land within or adjacent to a European site, in order to secure its conservation. If the agency is unable to conclude such an agreement, or if an agreement is breached, it may acquire the interest in the land compulsorily. The agency may also use its powers to make byelaws to protect European sites. The Regulations also provide for the control of potentially damaging operations, whereby consent from the country agency may only be granted once it has been shown through Appropriate Assessment that the proposed operation will not adversely affect the integrity of the site. When considering potentially damaging operations, the country agencies apply the precautionary principle' i.e. consent cannot be given unless it is ascertained that there will be no adverse effect on the integrity of the site.

In instances where damage could occur, the appropriate Minister may, if necessary, make special nature conservation orders, prohibiting any person from carrying out the operation. However, an operation may proceed where it is or forms part of a plan or project with no alternative solutions, which must be carried out for reasons of overriding public interest. In such instances the Secretary of State must secure compensation to ensure the overall integrity of the Natura 2000 system. The country agencies are required to review consents previously granted under the Wildlife and Countryside Act 1981 for land within a European site and may modify or withdraw those that are incompatible with the conservation objectives of the site.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2 (species relevant to this Proposed Development include all bat species, hazel

dormouse, great crested newt and otter), or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Regulations make special provisions for the protection of European marine sites, requiring the country agencies to advise other authorities of the conservation objectives for a site, and of the operations which may affect its integrity. The Regulations also enable the establishment of management schemes and byelaws by the relevant authorities and country agencies respectively, for the management and protection of European marine sites.

6.1.2 Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 is the major domestic legal instrument for wildlife protection in the UK, and is the primary means by which the following are implemented:

- The Convention on the Conservation of European Wildlife and Natural Habitats ('the Bern Convention'); and
- The Council Directive 79/409/EEC on the Conservation of Wild birds (the 'Bird Directive')

Wild Birds

The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the NERC Act (2006) (as amended)), or
- take or destroy an egg of any wild bird.

Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young. The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds. The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

Other Animals

The Act makes it an offence (subject to exceptions) to intentionally kill, injure or take any wild animal listed on Schedule 5 (species relevant to this Proposed Development include all bat species, hazel dormouse, great crested newt, otter, water vole, grass snake, adder and slow-worm), and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Flora, Fungi and Lichens

The Act makes it an offence (subject to exceptions) to intentionally) pick, uproot or destroy:

- any wild plant listed in Schedule 8, or
- unless an authorised person, to intentionally uproot any wild plant not included in Schedule 8,
- to sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Non-native Species

The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 in England and Wales. It also provides a mechanism making any of the above offences legal through the granting of licences by the appropriate authorities.

6.1.3 Countryside and Rights of Way (CRoW) Act 2000

The Countryside and Rights of Way Act 2000 applies to England and Wales only. Part III of the Act deals specifically with wildlife protection and nature conservation.

The Act places a duty on Government Departments and the National Assembly for Wales to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

Schedule 9 of the Act amends the SSSI provisions of the Wildlife and Countryside Act 1981, including increased powers for their protection and management of SSSIs. The provisions extend powers for entering into management agreements; place a duty on public bodies to further the conservation and enhancement of SSSIs; increase penalties on conviction where the provisions are breached; and include an offence whereby third parties can be convicted for damaging SSSIs.

Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', include an offence of reckless disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

6.1.4 The Environment Act 2021

The Environment Act 2021, published by the UK Government as the Environment Bill in October 2019 (Environment Bill, 2019), includes proposals to make biodiversity net gain (BNG) a mandatory requirement within the planning system in England. The Bill was given Royal Assent on 10th November 2021 and the biodiversity elements of the Act include:

- Strengthened biodiversity duty;
- Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures;
- Conservation Covenants;
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature;
- Prohibit larger UK businesses from using commodities associated with wide-scale deforestation; and
- Requires regulated businesses to establish a system of due diligence for each regulated commodity used in their supply chain, requires regulated businesses to report on their due diligence, introduces a due diligence enforcement system.

6.1.5 Natural Environment and Rural Communities (NERC) Act 2006 (as amended)

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act required the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list was drawn up in consultation with Natural England, as required by the Act.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act (2006) (as amended) to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the (now withdrawn) UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the (now withdrawn) UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the hen harrier has also

been included on the list because without continued conservation action it is unlikely that the hen harrier population will increase from its current very low levels in England.

6.1.6 Protection of Badgers Act 1992

Badgers and their setts (burrows) are protected under the Act. This makes it an offence to kill or take a badger, to cruelly ill-treat a badger, or to interfere with a badger sett, including disturbing a badger while it is occupying a sett.

Licences to permit otherwise prohibited actions can be granted under Section 10 of the Act for various purposes. This includes licences to interfere with a badger sett for the purpose of development as defined by Section 55(1) of the Town and Country Planning Act 1990.

Licences may be granted in order to close down setts, or parts of setts, prior to development or to permit activities close to a badger sett that might result in disturbance. A licence will be required if a sett is likely to be damaged or destroyed in the course of development or if the badger(s) occupying the sett will be disturbed.

Licences can be applied for at any time, but a licence for development will not normally be issued unless full planning permission has been granted. The closure of setts under licence is normally only permitted during July to November, inclusive.

6.1.7 The Hedgerow Regulations 1997

The intention of the Act is to protect important countryside hedges from destruction or damage. The Act does not apply where planning permission has been granted. There are various other exemptions under the Act, including:

- To make a new opening in substitution for an existing one that gives access to land. For example, a gate. However, the old opening must be filled in within 8 months;
- To obtain access to land where other means are not available or are only available at disproportionate cost;
- For the proper management of the hedgerow. This means real management, such as coppicing. But if the hedgerow is deliberately 'over-managed' this might qualify as removal.

If the Proposed Development is not exempt or subject to a current planning permission, then the landowner must serve a Hedgerow Removal Notice in writing on their local planning authority. The authority then has 42 days (which period can be extended if the applicant agrees) to determine whether or not the hedge is considered 'important' under the regulations, and if so, whether or not to issue a Hedgerow Retention Notice. The local authority does not have to issue a Retention Notice, even if the hedgerow counts as important. If they do not issue a notice for an important hedge this is often on condition that certain things are done, e.g. reinstatement or replanting to a certain standard, or creation of an equivalent boundary elsewhere.

B.2 Designated Sites

These sites in the UK no longer form part of the EU's Natura 2000 ecological network. The *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* (referred to as the 2019 Regulations) have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:

- existing SACs and SPAs
- new SACs and SPAs designated under these Regulations

Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.

Formal Appropriate Assessment is required to be undertaken by the competent authority before undertaking, or giving consent, permission or other authorisation for any work which are likely to have a significant effect on such a site.

6.1.8 Wetland of International Importance (Ramsar site)

Designated under the *Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971* (the Ramsar Convention), in the UK, these sites are treated as having the same level of protection as SPA's and SAC's.

6.1.9 Sites of Special Scientific Interest

Under the *Wildlife and Countryside Act 1981* (as amended), it is an offence to carry out or permit to be carried out any operations likely to damage the Site of Special Scientific Interest (SSSI). These operations are listed in the SSSI notification.

Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the *Wildlife and Countryside Act 1981* (as amended), before undertaking operations likely to damage a SSSI.

6.1.10 National Nature Reserve

National Nature Reserves (NNR) are established under the National Parks and Access to the Countryside Act 1949. Most NNRs are also underpinned by SSSIs and are therefore protected by the measures detailed above. For NNRs not underpinned by SSSIs it is still an offence to carry out or permit to be carried out any potentially damaging operation.

NNRs are given protection through policies in a local development plan.

6.1.11 Local Nature Reserve

A Local Nature Reserve (LNR) is a statutory designation made under National Parks and Access to the Countryside Act 1949, by principal local authorities (district, borough or unitary councils).

The local authority must control the LNR land - either through ownership, a lease or an agreement with the owner.

LNRs are given protection through policies in a local development plan.

6.1.12 Locally Designated Sites

Local Wildlife Sites (LWS), which may also be known as Sites of Importance for Nature Conservation (SINCs), or Site of Local Importance for Nature Conservation (SLINCs) are sites with ‘substantive nature conservation value’. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a region.

They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.

The LWS selection panel, select all sites that meet the assigned criteria, unlike SSSIs, which for some habitats are a representative sample of sites that meet the national standard. Consequently, many sites of SSSI quality are not designated and instead are selected as LWSs. Consequently, LWSs can be amongst the best sites for biodiversity.

B.3 Protected Species

6.1.13 Bats / Hazel Dormouse / Otter / Great Crested Newt / Smooth Snake / Sand Lizard / Natterjack Toad

These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.

Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.

These species are also protected under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

Lower levels of disturbance not covered by the *Conservation of Habitats and Species Regulations 2017* (as amended) remain an offence under the *Wildlife and Countryside Act 1981* (as amended) although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

6.1.14 Water Vole

Water voles are protected under the *Wildlife and Countryside Act 1981* (as amended). There are no licensing purposes that explicitly cover development or other construction activities which could have an impact on water voles.

When development work is proposed in or near an area which is either known to or likely to contain water voles, then the developer will need to implement suitable mitigation to prevent impacts to water voles. The preferred mitigation option is to leave water voles *in situ*, with the development works adopting avoidance measures through redesign of the proposals.

Where impacts cannot be avoided, operations aimed at displacing water voles from a development site are now no longer covered by the "*incidental result of an otherwise lawful action*" defence in the *Wildlife and Countryside Act 1981* (as amended). Displacement of water voles now needs to be undertaken under a licence.

In England, small scale (limited to continuous lengths of bank not exceeding 50 m) displacement of water voles can be carried out at certain times of the year (February to April) for the purposes of conservation under a Class Licence by a registered person. For larger scale displacements or displacements outside of this period, displacement can be undertaken under a site-specific conservation licence.

Where it is considered that the best outcome for water voles is capture and translocation to a different location then this action is considered by Natural England to be outside the scope of the defence as the intentional capture of water voles is unlikely to be considered 'incidental'. In these circumstances there may be genuine grounds for issuing a conservation licence for the purpose of translocating the water vole population to suitable alternative habitat.

6.1.15 Nesting Birds

All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended), with some species afforded greater protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). In addition to the protection from killing or taking that all birds receive; Schedule 1 birds and their young must not be disturbed at the nest.

There are no licensing purposes that explicitly cover development activities affecting wild birds.

6.1.16 Common Species of Reptile (common lizard, slow worm, grass snake and adder)

Common species of reptile are protected against intentional killing and injury under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). There is no requirement for a licence where development works affect common species of reptiles. Instead, Natural England advise[19] that where reptiles are present, they should be protected from any harm that might arise during the development works through appropriate mitigation.

6.1.17 Badger

Badgers and their setts are protected under the *Protection of Badgers Act 1992* (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.

It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.

Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.

When assessing the requirement for a licence in respect of development, Natural England[20] state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level

[19]Reptiles: guidelines for developers, English Nature 2004
[20] Interpretation of 'Disturbance' in relation to badgers occupying a sett, Natural England (2009)

of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.

Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

B.4 Species and Habitats of Principal Importance for the Conservation of Biodiversity

Section 40 of the NERC Act (2006) (as amended) sets out the duty for public authorities to conserve biodiversity in England.

Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the 'England Biodiversity List', of habitats and species can be found on the Natural England web site.

The 'England Biodiversity List' is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions.

B.5 Hedgerows

Under the Hedgerows Regulations 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20 metres in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

B.6 Invasive Non-native Plant Species

There are several legislative instruments within the UK and England which relate to INNS, with the aim of preventing or reducing their negative economic and environmental impacts. Essentially, this legislation makes it an offence to plant, or otherwise cause to grow (including allowing to spread), listed species in the wild (as per the Wildlife and Countryside Act 1981 (as amended) and the Invasive Alien Species (Enforcement and Permitting) Order 2019 (as amended). If transported off-site, there is a duty of care with regards to the disposal of any part of the plant that may facilitate establishment in the wild and cause environmental harm (as per the Environmental Protection Act 1990)[21].

B.7 National Planning Policy Framework, 2026

The National Planning Policy Framework (NPPF) sets out the government's policies for plan making and for making decisions on development proposals in England. It is a material consideration of critical importance in both contexts. Last version published in August 2026 replaces the previous one published in December 2024.

The objectives of the policies in Chapter 19 of the NPPF '*Conserving and enhancing the natural environment*' aim to guide the design and location of new development to support nature's recovery, safeguard important habitats, species, and landscapes, and recognise the role of natural capital in sustainable growth.

Plan-making policies

N1: Identifying environmental opportunities and safeguards

1. Development plans should safeguard and enhance the natural environment, and reflect the wider benefits from natural capital and ecosystem services, by using strategic evidence (e.g., Local Nature Recovery Strategies (LNRS) , Protected Landscape Management Plans, River Basin Management Plans, National/Community Forest strategies) to:

a. Set out the hierarchy of international, national and local designations and identify features needing special consideration (e.g., chalk streams);

[21] Environment Agency (2016) Treatment and disposal of invasive non-native plants: Regulatory Position Statement 178

b. Identify opportunities for conservation, enhancement and recovery of landscapes, waterbodies, habitats and priority/threatened species, including resilient ecological networks at catchment/landscape scale across boundaries;

c. Steer development to land of least environmental value where consistent with other policies; limit scale/extent in Protected Landscapes; avoid higher quality agricultural land where poorer quality is available; avoid and minimise harm to designated nature sites; treat LNRS opportunity areas as integration opportunities (not automatic constraints);

d. Set local green infrastructure standards, complementing recreational standards (policy HC1), drawing on Natural England's Green Infrastructure Standards[22] and tailoring to local context.

2. Development plans should only set local standards for biodiversity net gain which are in excess of the statutory net gain requirement where this is for specific site allocations, and is fully justified and deliverable. Local standards should not extend to categories of development which are exempt from statutory biodiversity net gain.

National decision-making policies

N2: Improving the natural environment

1. To contribute positively to the natural environment, and support nature's recovery, development proposals should:

   a. Assess land's environmental qualities (habitats, landscape character, natural beauty) and identify opportunities to conserve/enhance, including via BNG where applicable.

   b. Take into account the quality and grade of agricultural land, prioritising the use of poorer quality land for significant development and protecting the best and most versatile land where possible.

   c. Strengthen ecological networks beyond the site, drawing on LNRS, National Forest Strategies, Community Forest Plans, and other relevant assessments.

   d. Conserve/enhance established natural features (trees, hedgerows), and use appropriate landscaping to integrate with surroundings.

   e. Use green infrastructure and nature-based solutions to secure multiple benefits (biodiversity, water quantity/quality and pollution control, climate mitigation/adaptation, recreation).

   f. Minimise adverse impacts on biodiversity and include features that support priority or threatened species (such as swifts, bats, and hedgehogs). Integrated nest boxes (swift bricks) should be incorporated unless there are compelling technical reasons not to.

   g. Design and locate green infrastructure and nature-supporting features to minimise the risk of future failure, with appropriate long-term management measures in place.

2. If a development would cause significant harm to biodiversity that cannot be avoided, sufficiently mitigated, or compensated for, planning permission should be refused.

3. Development proposals can include biodiversity enhancements beyond the legal requirements, but such higher standards should only be mandatory if specified in up-to-date development plan policies for specific site allocations. Decision makers should not apply or give weight to broader policies that require biodiversity gains exceeding the statutory framework, especially for developments that are exempt.

N3: Trees in new development

1. Recognising the important role delivered by trees in supporting biodiversity, addressing climate change, and enhancing the character and quality of the built environment, development proposals should:

   a. Make new streets tree-lined, unless there are strong reasons against it, and also include trees in other suitable places like parks and community orchards;

   b. Ensure tree species and their placement is compatible with infrastructure and user needs, support climate adaptation, and provide environmental benefits. Expert advice and consultation with relevant officers should ensure the right trees are planted in the right places; and

[22] Natural England's Green Infrastructure Standards for England published in: https://designatedsites.naturalengland.org.uk/GreenInfrastructure/GIStandards.aspx

c. plan for the long-term care and maintenance of both existing and newly planted trees within the development.

N4: Protected Landscapes

1. Development in Protected Landscapes should be limited, well-located, and sensitively designed to avoid harm, with strong emphasis on conserving natural beauty, wildlife, and cultural heritage, especially in National Parks and the Broads.
2. Major development[23] in Protected Landscapes should be refused unless there are exceptional circumstances and clear public interest, based on assessment of:
    a. The need for the development and its local and national impacts;
    b. Alternatives outside the Protected Landscape; and
    c. Environmental, landscape, and recreational harm and how it can be reduced.
3. If major development is exceptionally approved in Protected Landscapes, measures must mitigate impacts on their special qualities and statutory purposes[24], including tranquillity and dark skies.
4. Development near these areas should also be sensitively designed to avoid or reduce harm.

N5: Maintaining the character of the coast

1. Development should preserve the character of undeveloped coastal areas and support public access, without hindering the coastal path.
2. In Heritage Coast areas, development must respect the area's special character, and major development should only occur if compatible.
3. Proposals in Coastal Change Management Areas must also meet policy F9.

N6: Areas of particular importance for biodiversity and geodiversity

1. To support the conservation of important habitats, species and sites of geodiversity value, development proposals affecting:
    a. A site of international importance (habitats site), should be refused unless:
        i. An appropriate assessment shows the proposal won't harm the site's integrity (individually or with other developments), or it meets the derogation tests[25]; and/or
        ii. The development's impact on protected features is managed through an Environmental Delivery Plan, with the developer committed to the nature restoration levy.
    b. A site of national importance (Site of Special Scientific Interest, SSSI), should only be supported if:
        i. There are no adverse effects on its special scientific features, alone or with other schemes; or
        ii. The development's benefits clearly outweigh impacts on those features and the wider SSSI network; or
        iii. Impacts are managed through an approved Environmental Delivery Plan and a committed nature-restoration levy.
    c. A site of local importance (designated as a Local Nature Reserve or identified as a local wildlife site, local geological site or equivalent in the development plan) should only be supported if:
        i. No major harm to the site's integrity, or
        ii. The development's clear benefits outweigh its impact on the site's conservation value

[23] For the purpose of this policy and policy N5 only, whether a proposal is 'major development' is a matter for the decision-maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the statutory purposes for which the area has been designated or defined.
[24] Where significant harm cannot be mitigated, it may be appropriate to consider whether suitable compensation would be acceptable.
[25] These being that there are no feasible alternative solutions to the proposal which are less damaging, there are imperative reasons of overriding public interest for it to proceed, and compensatory measures are secured to ensure that the overall coherence of the network of habitats sites is maintained.

2. Development that would cause loss or deterioration of irreplaceable habitats (e.g., ancient woodland or ancient/veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy.

3. This applies to land inside or outside designated areas where a proposal would affect identified biodiversity or geodiversity value.

B.8 Regional Planning Policy

Regional planning policies for the Proposed Development are handled by Greater London and encompass the following documents;

- London Environment Strategy (2018)[26];
- London Plan. The Spatial Development Strategy for Greater London (March 2021)27; and
- London Local Nature Recovery Strategy (2026)[28].

For the precise wording of each specific policy please refer to the source document. This planning policy has been considered when assessing potential ecological constraints and opportunities identified by the desk study and field surveys and when addressing requirements for further survey, design option and ecological mitigation.

Table 7. Summary of Relevant Regional Planning Policy

Document	Planning Policy	Purpose
London Environment Strategy (2018) (sets out the Mayor's vision for London's environment to 2050, and includes a number of policies, aspirations, and guidance	Policy 5.1.1	Protect, enhance, and increase green areas in the city, to provide green infrastructure services and benefits that London needs now and, in the future.
	Policy 5.1.2	Protect, conserve, and enhance the landscape and cultural value of London's green infrastructure.
	Policy 5.2.1	Protect a core network of nature conservation sites and ensure a net gain in biodiversity
	Policy 5.3.1	Address underinvestment, and improve the management of London's green infrastructure, by developing new business models and improving the awareness of the benefits of London's green infrastructure.
London Plan. The Spatial Development Strategy for Greater London (March 2021)	Policy G1 Green Infrastructure	London's network of green and open spaces, and green features in the built environment should be protected and enhanced. Green infrastructure should be planned, designed, and managed in an integrated way to achieve multiple benefits. Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network
	Policy G2 London's Green Belt	The Green Belt should be protected from inappropriate developments. The enhancement of the Green Belt to provide appropriate multi-functional beneficial uses for Londoners should be supported
	Policy G4 Open Space	Development Plans should promote the creation of new areas of publicly accessible open space particularly green space should not result in the loss of protected open space.
	Policy G5 Urban Greening	Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls, and nature-based sustainable drainage. In the interim, the Mayor recommends a target Urban Greening Factor (UGF) score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).
	Policy G6	Sites of Importance for Nature Conservation (SINCs) should be protected.

[26] Greater London Authority (2018). London Environment Strategy. Retrieved 26 June 2026, from https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/london-environment-strategy
[27] Greater London Authority (2021). The London Plan: The Spatial Development Strategy for Greater London (2021). Retrieved 26 June 2026, from https://www.london.gov.uk/programmes-strategies/planning/london-plan/london-plan-2021
[28] Greater London Authority (2026). London Local Nature Recovery Strategy (LNRS) – Statement of Biodiversity Priorities (PDF). Retrieved 26 June 2026, from https://www.london.gov.uk/sites/default/files/2026-03/MoL_LNR_Strategy_FA.pdf

Document	Planning Policy	Purpose
	Biodiversity and access to nature	Development Plans should support the protection and conservation of priority species and habitats that sit outside the SINC network and promote opportunities for enhancing these sites using Biodiversity Action Plans and seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context. Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.
	Policy G7 Trees and woodlands	London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest. 'Veteran' trees and ancient woodland should be protected and opportunities for tree planting in strategic locations identified. Development proposals should ensure that, wherever possible, existing trees of value are retained. If trees are removed there should be adequate replacement based on the existing value of the benefits of the trees removed
London Local Nature Recovery Strategy (2026)	The LNRS comprises two main parts: •The Statement of Biodiversity Priorities of the LNRS presents the 'what' (biodiversity priorities) and 'how' (measures) for nature recovery activity in London. The Statement of Biodiversity Priorities is a document that introduces the strategy, describes London's wildlife, sets out clear priorities for nature in London and the steps needed to achieve these. It explains the overarching nature recovery principles for any project in London, priorities to help improve and recover nature, along with actions (called 'measures') that landowners and others can take to make this happen. The six overarching principles are: – A. Help people enjoy nature – B. Bigger, better, more connected, and more habitats – C. Boost wildlife populations – D. Help pollinators and minibeasts thrive – E. Support healthy soils – F. Protect wildlife from invasive species and disease •The Local Habitat Map sets out the 'where', by showing where measures could be carried out to deliver biodiversity priorities.	
	30 biodiversity priorities have been included in the LNRS that set out specific habitats and other areas in London where nature needs our support. They are grouped into eight similar habitats: •Urban nature: improve nature in built-up areas, for example by putting nest boxes on buildings and making parks better for wildlife. •Rewilding and reintroduction: create large areas for nature and bring back animals and plants that used to live in London. •Green corridors: connect nature spaces across London to help wildlife move through the city. •Trees and woodland: plant more trees and look after our woodlands, orchards, and parklands. •Waterbodies and waterways: help nature thrive in rivers, streams, canals, ponds, and lakes. •Wetland: improve other 'wet' habitats, like marshland and reedbeds. •Grassland, heathland, scrub, and farmland: make more of, and look after, nature in grassy and shrubby areas, and on farms. •Micro-habitats: increase areas of deadwood and sand. These are important for wildlife like beetles and bees. Each biodiversity priority has a range of measures related to it, which have been specifically chosen to benefit that habitat or associated key species.	

B.9 Local Planning Policy

Relevant local planning policies produced by London Borough of Hillingdon are detailed in the following documents.

- London Borough of Hillingdon. A Vision for 2026: Local Plan Part 1 Strategic Policies (2012); and
- London Borough of Hillingdon. Local Plan Part 2: Development Management Policies (2020)

A summary of the relevant local planning policies is provided in Policy below. For the precise wording of each specific policy please refer to the source document. This planning policy has been considered when assessing potential ecological constraints and opportunities identified by the desk study and field surveys and when addressing requirements for further survey, design option and ecological mitigation.

Table 8. Summary of Local Planning Policy

Document	Planning Policy	Purpose
A Vision for 2026: Local Plan Part 1 Strategic Policies (2012)	EM3 Blue Ribbon Network	The Council will continue to promote and contribute to the positive enhancement of the strategic river and canal corridors and the associated wildlife and habitats through the Biodiversity Action Plan and the Thames River Basin Management Plan, and developer contributions where appropriate
	EM4 Open Space and Informal Recreation	The Council will seek to protect existing tree and landscape features and enhance open spaces with new areas of vegetation cover (including the linking of existing fragmented areas) including front and back gardens for the benefit of wildlife and a healthier lifestyle, mitigating climate change.
	Policy EM7: Biodiversity and Geological Conservation	The protection and enhancement of all Sites of Importance for Nature Conservation. Sites with Metropolitan and Borough Grade 1 importance will be protected from any adverse impacts and loss. Borough Grade 2 and Sites of Local Importance will be protected from loss with harmful impacts mitigated through appropriate compensation. 3. The protection and enhancement of populations of protected species as well as priority species and habitats identified within the UK, London and the Hillingdon Biodiversity Action Plans. Appropriate contributions from developers to help enhance Sites of Importance for Nature Conservation in close proximity to development and to deliver/ assist in the delivery of actions within the Biodiversity Action Plan. The provision of biodiversity improvements from all development, where feasible. The provision of green roofs and living walls which contribute to biodiversity and help tackle climate change. The use of sustainable drainage systems that promote ecological connectivity and natural habitats.
London Borough of Hillingdon Local Plan Part 2: Development Management Policies (2020)	DMHB 11: Design of New Development	All new developments must include landscaping and tree planting to protect and enhance amenity, biodiversity and green infrastructure.
	DMHB 14: Trees and Landscaping	All developments will be expected to retain or enhance existing landscaping, trees, biodiversity or other natural features of merit. Development proposals will be required to provide a landscape scheme that includes hard and soft landscaping appropriate to the character of the area, which supports and enhances biodiversity, particularly in areas deficient of green infrastructure. Where space for ground level planting is limited, such as high rise buildings, the inclusion of living walls and roofs will be expected where feasible. Where trees are to be removed, proposals for replanting of new trees on-site must be provided or include contributions to offsite provision.
	DMEI 1: Living walls and Roofs and on-site vegetation	All development proposals are required to comply with the following: All major development should incorporate living roofs and/or walls into the development. Suitable justification should be provided where living walls and roofs cannot be provided; Major development in Air Quality Management Areas must provide onsite provision of living roofs and/or walls. A suitable offsite contribution may be required where onsite provision is not appropriate.
	DMEI 5: Green Chains	Development in Green Chains will only be supported if it conserves and enhances the visual amenity and nature conservation value of the landscape, improve biodiversity in and around the area.
	DMEI 7: Biodiversity Protection and Enhancement	The design and layout of new development should retain and enhance any existing features of biodiversity or geological value within the site. Where loss of a significant existing feature of biodiversity is unavoidable, replacement features of equivalent biodiversity value should be provided on-site. Where development is constrained and cannot provide high quality biodiversity enhancements on-site, then appropriate contributions will be sought to deliver off-site improvements through a legal agreement. If development is proposed on or near to a site considered to have features of ecological or geological value, applicants must submit appropriate surveys and assessments to demonstrate that the proposed development will not have unacceptable effects. The development must provide a positive contribution to the protection and enhancement of the site or feature of ecological value. Proposals that result in significant harm to biodiversity which cannot be avoided, mitigated, or, as a last resort, compensated for, will normally be refused.

Appendix C Methods

C.1 Desk Study

Backgrounds Records Search

This PEAR includes a desk study to obtain background records relevant to a Site and the Proposed Development. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.

The Study Area is dependent upon the nature, timing and scale of the Proposed Development, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (ZoI) of the Proposed Development, which is the area over which ecological features may be affected by biophysical changes because of the Proposed Development and associated activities.

In June 2026 GiGL provided the following ecological data:

- Records of non-statutory designated sites from GiGL within 2km of the Site boundary;
- Records of legally protected and notable species (fauna and flora) within 2km of the Site boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List[29]; and
- Records of Invasive Non-native Species within 2km.

The Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk) was reviewed for the following information:

- Designated sites of nature conservation importance (statutory sites only) within 2km of the Site. This was extended to 10km for internationally designated sites: Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar sites) and Special Areas of Conservation (SACs); and,
- Notable habitats within 500m of the Site, these being areas of ancient woodland and 'Habitats of Principal Importance for the Conservation of Biodiversity' included in the England Biodiversity List[29].

Great Crested Newt Pond Search

Ordnance Survey maps and the *Where's the Path* website (https://wtp2.appspot.com/wheresthepath.htm) have been used to identify the presence of water bodies within 250m of the Site boundary, in order to help establish if the land within and immediately surrounding the Site could be used by great crested newts. This species can use suitable terrestrial habitat up to 500 m from a breeding pond[30], though there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond[31].

C.2 Field Survey

6.2 Extended UK Habitats Classification

The PEAR includes a walkover survey of the Survey Area (all land within the Site red line boundary), following the habitat classifications set out by UKHab V2.0 (2023)[32]. This survey method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow Stace (2019)[33].

During the walkover survey, the following protected or notable species are considered:

[29] Section 40 of the Natural Environment & Rural Communities Act 2006 requires that The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the *England Biodiversity List*
[30] Great Crested Newt Mitigation Guidelines (English Nature, 2001).
[31] Natural England. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576) http://publications.naturalengland.org.uk/publication/134002.
[32] UKHab Ltd. (2023) *UK Habitat Classification Version 2.0* at http://www.ukhab.org/
[33] Stace, C E (2019) *New Flora of the British Isles, 4th edition*. Cambridge University Press.

- **Badger:** the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in Scottish Badgers (2018)[34] and Harris et al (1989)[35] as summarised in The Badger Trust (2023)[36];
- **Bats**: the initial daytime bat walkover survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the potential of those trees or structures to support roosting bats (negligible to high, or confirmed roost), in accordance with Bat Conservation Trust (BCT) guidance (2023)[37];
- **Hazel dormouse**: the survey involves assessing the potential of habitats within the Survey Area to support hazel dormouse, following English Nature guidance (2006)[38];
- **Otter**: the survey involves assessing the potential of watercourses and water bodies, and adjacent terrestrial habitat within the Survey Area to support otter, following RSPB (1994)[39] and Chanin, P. (2003)[40] guidance;
- **European beaver**: the survey involves assessing the potential of watercourses and water bodies within the Survey Area to support beavers;
- **Water vole**: the survey involves assessing the potential of watercourses and water bodies within the Survey Area to support water vole, following The Mammal Society (2016)[41] guidance;
- **Birds**: the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species;
- **Great crested newt**: the survey involves assessing the potential of habitats within the Survey Area to support great crested newt, following English Nature (2001)[42] and Froglife (2001)[43] guidance;
- **Reptiles:** the survey involves assessing the potential of habitats within the Survey Area to support reptiles (typically adder, grass snake, common lizard and slow worm only, though in some locations and habitat types (most notably heathland) may also include smooth snake and sand lizard), following Froglife (1999)[44] and JNCC (2003)[45] guidance;
- **Notable species of invertebrate**: the survey involves assessing the potential of habitats within the Survey Area to support notable species of invertebrates, both terrestrial and aquatic (including white-clawed crayfish);
- **Protected or Notable species of plants**: the survey involves recording protected or notable plant species;
- **Other notable species**: the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad;
- **Non-native invasive plant species**: the survey involves recording evidence of the presence of invasive plants listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) and subject to strict legal control.

[34] Scottish Badgers (2018). *Surveying for Badgers: Good Practice Guidelines*. Version 1.
[35] Harris, S. Cresswell, P. and Jefferies, D. (1989). *Surveying Badgers*.
[36] Badger Trust (2023) Badger Protection: Best Practice Guidance for Developers, Ecologists and Planners (England).
[37] Collins, J.(ed) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition). The Bat Conversation Trust. London.
[38] English Nature (2006). *The Dormouse Conservation Handbook*, 2nd edition.
[39] Ward, D. Holmes, N. Jose, P. (1994). *The New Rivers and Wildlife Handbook*. Royal Society for the Protection of Birds. Bedfordshire.
[40] Chanin, P (2003b). *Monitoring the Otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. English Nature, Peterborough.
[41] Dean, M. Strachan, R. Gow, D. Andrews, R. (2016). *The Water Vole Mitigation Handbook (The Mammal Society Guidance Series)*. Eds Fiona Mathews and Paul Chanin. The Mammal Society. London.
[42] English Nature (2001). *The Great Crested Newt Mitigation Guidelines*.
[43] Froglife (2001). *The Great Crested Newt Conservation Handbook*.
[44] Froglife (1999). *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.
[45] Joint Nature Conservation Committee (2003). *Herpetofauna Workers Manual*.

6.3 Bat Flight-paths and Foraging Areas

The assessment of bat flight-paths and foraging areas is outlined in Table 9.

Table 9. Guidelines for assessing potential bat flight-paths and foraging habitats

Potential Suitability	Description
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat this is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e., no habitats that provide continuous lines of shade / protection for flight-lines or generate/ shelter insect populations available to foraging bats).

Source: Adapted from Table 4.1 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023)

C.3 Limitations and Assurance

The aim of a desk study is to help characterise the baseline context of a Proposed Development and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitat or species does not necessarily mean that the habitats or species do not occur in the study area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Proposed Development.

Where habitat boundaries coincide with physical boundaries recorded on OS maps the resolution is as determined by the scale of mapping. Elsewhere, habitat mapping is as estimated in the field and/or recorded by hand-held GPS. Where areas of habitat are given, they are approximate and should be verified by measurement where required for design or construction.

Populations of annual plant species may fluctuate markedly between years depending on the growing conditions present in any given season. However, the survey recorded all habitat types within the Proposed Development to an appropriate level of botanical detail to inform this report.

No other limitation is considered significant enough to affect the baseline, impact assessment and resulting mitigation or enhancement referenced in this report.

C.4 Quality Assurance

This survey and subsequent report were undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2015 and 14001:2015 and BS ISO 45001 2018. In addition, our IMS requires careful selection and monitoring of the performance of all sub consultants and contractors.

All AECOM Ecologists are members, at the appropriate level, of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct when undertaking ecological work.

Appendix D Photographs and Target Notes

TN Number	Target Note
TN1	Buddleia identified adjacent to the phone tower (TN2) in the southern side of the Site
TN2	A phone tower within the southern side of the Site. Fenced off with species encroaching from grassland area.

Central and southern grassland area



Plate 1. Photograph of central and southwestern grassland taken from the south of the buildings (facing southwest)



Plate 2. Photograph of central and southeastern grassland taken from the south of the buildings (facing east)



Plate 3. Close-up photograph of the vegetation represented within central grassland area

Grassland located to the northwest of the Site, north of access road



Plate 4. Photograph of northwestern grassland, facing east



Plate 5. Close-up photograph of the vegetation represented within northwestern grassland.

Developed land, sealed surface (u1b) to the north of the Site



Plate 6. Photograph of hardstanding with parked up vehicles



Plate 7. Photograph of hardstanding facing east with buildings and parked up vehicles

Elm Plantation to the east of the Site



Plate 8. One of the areas of elm plantation along the eastern boundary of the Site

Line of trees north of the buildings area



Plate 9. Line of trees along the northern boundary of the Site adjacent to hardstanding, next to the buildings

Line of trees northwest of the Site, north of access road



Plate 10. Line of trees along the northern boundary of the Site, north of access road and northwestern grassland area

Individual Trees to the northwest of the Site, south of access road



Plate 11. One of four individual trees south of access road (northwest side of the Site)



Plate 12. Two of four individual trees south of access road (northwest side of the Site)



Plate 13. Three of four individual trees south of access road (northwest side of the Site)



Plate 14. Four of four individual trees south of access road (northwest side of the Site)

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