# Preliminary Ecological Appraisal & Biodiversity Net Gain Assessment

## Lennox Estate, London

The Ecology Partnership, Thorncroft Manor, Thorncroft Drive, Leatherhead, Surrey KT22 8JB

T +44 (0) 1372 364133 E info@ecologypartnership.com W ecologypartnership.com

## CONTENTS

**1.0 INTRODUCTION ..... 3**
**2.0 METHODOLOGY ..... 5**
**3.0 RESULTS ..... 6**
**4.0 DISCUSSION ..... 13**
**5.0 IMPACT ASSESSMENT ..... 18**
**6.0 CONCLUSION ..... 19**
**7.0 REFERENCES ..... 20**
**APPENDIX 1: HABITAT MAP ..... 22**
**APPENDIX 2: PHOTOS ..... 23**

LIABILITIES:
Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing, and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snapshot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species maybe recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

# 1.0 INTRODUCTION

## Background

1.1 The Ecology Partnership was commissioned by Farrer Huxley to undertake a Preliminary Ecological Appraisal (PEA) and Biodiversity Net Gain (BNG) assessment for Lennox Estate, London, SW15 5LE, hereafter referred to as the 'site' (Figure 1).

1.2 The key objectives of a PEA (CIEEM 2017) are to:

- Identify the likely ecological constraints associated with a project;
- Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (CIEEM 2016; BSI 2013, Clause 5.2);
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
- Identify the opportunities offered by a project to deliver ecological enhancement.

## Site Context

1.3 The site (TQ214753) is a residential estate with areas of amenity grassland, introduced shrubs and trees, and is surrounded by other residential areas. The site also includes Beverley Brook which is surrounded by narrow strips of woodland along its banks.

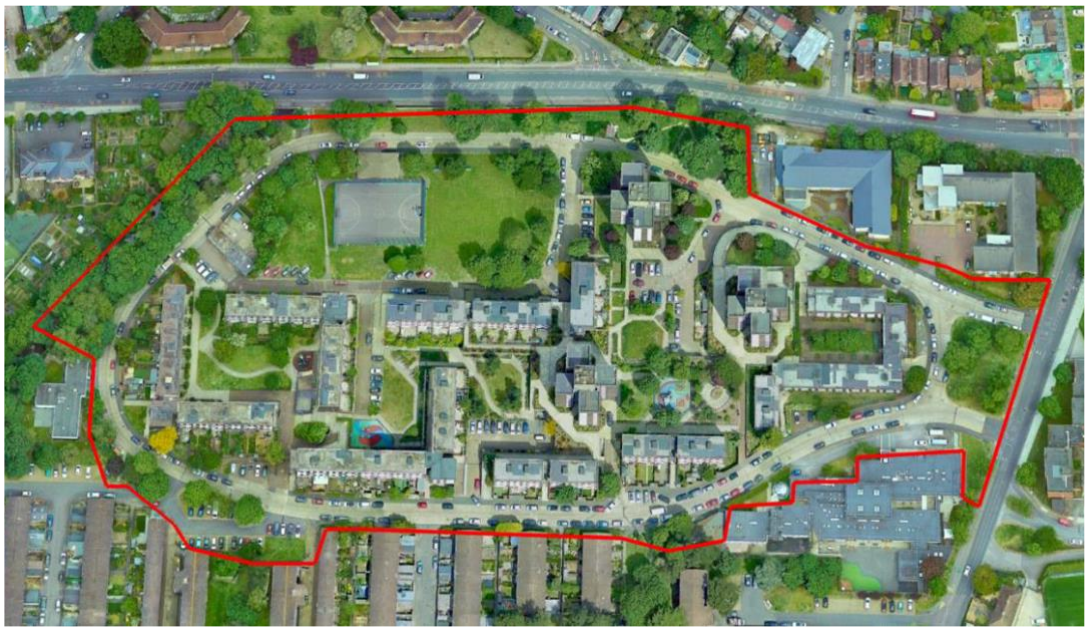


***Figure 1: Site red line boundary.***

**Proposed Development**

1.4 The proposed development includes …

*Figure 2: Development plan.*

**Planning Policies**

1.5 The site was surveyed to assess its ecological value and to ensure the proposals were compliant with relevant planning policy and legislation. Policy guidance is provided by the National Planning Policy Framework (NPPF 2023) as well as policies from the Wandsworth Borough Council. The following policies from Wandsworth Local Plan (2023-2038) that are relevant to ecology, biodiversity and nature conservation include:

- **Policy LP55:** Biodiversity
- **Policy LP56:** Tree Management and Landscaping

1.6 The Environment Bill received Royal Assent on 9th November 2021 and is now enacted as the Environment Act 2021. Part 6 (Nature and Biodiversity) and Schedule 14 of the Environment Act 2021 insert a new section 90A and Schedule 7A into the Town and Country Planning Act 1990 (TCPA), which contain the provisions requiring mandatory biodiversity net gain for development granted planning permission pursuant to the TCPA. These provisions are not yet in force, but once they are enacted through implementing legislation, they will require developments to provide a biodiversity value post-development that exceeds the predevelopment biodiversity value of the onsite habitats by at least 10%. These provisions are not expected to come into force until January 2024 for new planning applications, so do not apply to this proposed development.

1.7 The assessment also takes into consideration nature conservation and wildlife legislation including, but not limited to, the Wildlife and Countryside Act 1981 (as amended), the Natural Environment and Rural Communities (NERC) Act 2006 and the Conservation of Habitats and Species (EU Exit) Regulations 2019.

1.8 The report has been produced with reference to current guidelines for PEA (CIEEM 2017) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development

## 2.0 METHODOLOGY

### Desktop Study

2.1 A desktop study was completed using an internet-based mapping service (www.magic.gov.uk) for statutory designated sites and an internet-based aerial mapping service (maps.google.co.uk) was used to understand the habitats present in and around the site, including identifying habitat linkages and features (ponds, woodlands etc.) within the wider landscape.

2.2 Records of protected/notable species and non-statutory designated sites within 2km of the site were requested from Greenspace Information for Greater London (GiGL) and records were screened for relevance and age and those that could occur on site.

### Phase 1 Habitat Survey, UKHab and BNG Condition Assessment

2.3 The site was surveyed on 19th October 2023 by surveyors Eddie Selwyn BSc (Hons) MSc QCIEEM and Lia Hutchinson BSc. The surveyors identified the habitats present, following the 'Phase 1 habitat survey' auditing method (Joint Nature Conservancy Council (JNCC)) and the UK Habitat Classification System (UKHab V2). The habitats within the site were also subject to the BNG 4.0 Condition Assessment. The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map.

### Protected Species Assessments

2.4 Any evidence of additional protected species was recorded. Standard methods of search and measures of presence, or likely presence based on habitat suitability were used for bats in trees and building (Collins 2023), breeding birds (BTO 2020), hazel dormice *Muscardinus avellanarius* (Bright *et al.* 2006), great crested newts *Triturus cristatus* (ARG 2010), reptiles (Froglife 2015), badgers *Meles meles* (Creswell *et al*. 1990) and water voles *Arvicola amphibius* (Strachan *et al*. 2011).

### Limitations

2.5 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. The site was visited over the period of one site visit, as such seasonal variations cannot be observed and

potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of the potential nature conservation value of the site and does not include a definitive plant species list.

2.6 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on the suitability of the habitat and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group. The assessment is only valid for the time when the survey was carried out. Additional surveys may be recommended if, based on this assessment it is considered reasonably likely that protected species may be present.

## 3.0 RESULTS

### Desktop Study

3.1 Three international statutory designated sites are located within 15km of the site (Figure 3):

- Richmond Park Special Areas of Conservation (SAC) is located approximately 1km southwest of the site.
- Wimbledon Common SAC is located approximately 2.5km southeast of the site.
- South West London Waterbodies Special Protection Areas (SPA), Ramsar, is located approximately 11.5km southwest of the site.

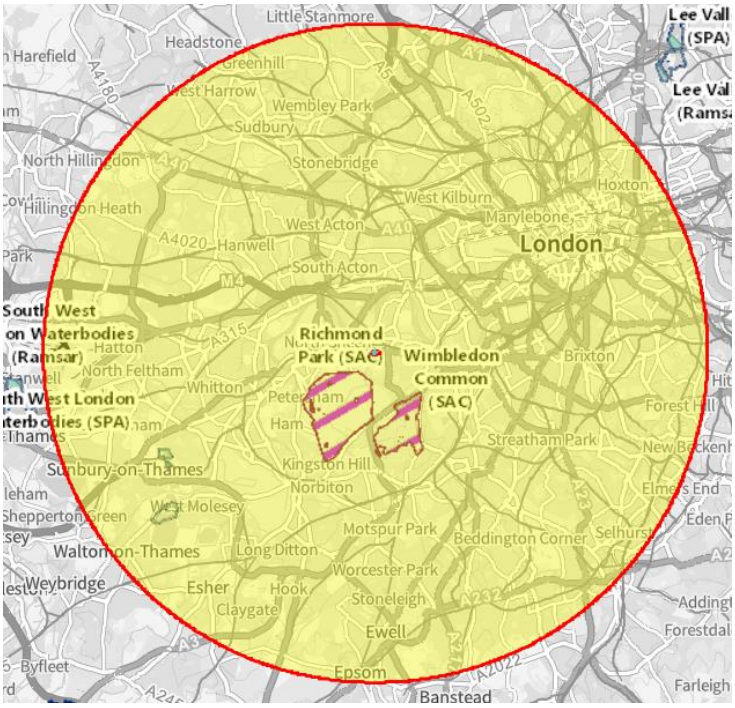



***Figure 3: International designated sites within 15km (red circle) of the site.***

3.2 Two national statutory designated sites are located within 2km of the site (Figure 4):

- Richmond Park National Nature Reserve (NNR) and Sites of Special Scientific Interest (SSSI) is located approximately 1km southwest of the site.
- Barn Elms Wetland Centre SSSI is located approximately 1.7km northeast of the site.

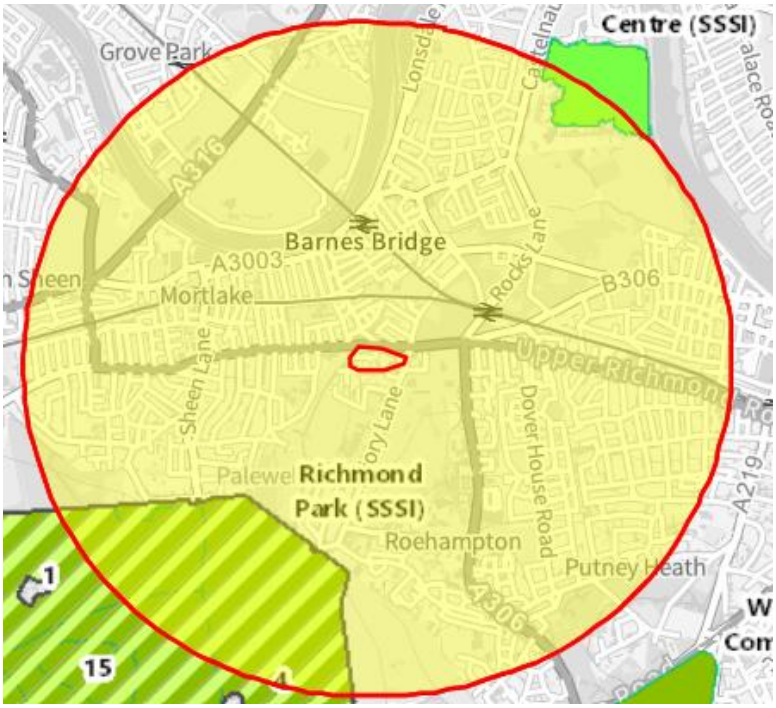



*Figure 4: National designated sites within 2km (red circle) of the site.*

3.3 22 non-statutory designated sites are located within 2km of the site and the closest is Barnes Common Sites of Importance for Nature Conservation (SINC) located approximately 120m northeast of the site. Barnes Common is a large common with some fine grassland and several rare plants in the clearings in the woodland and scrub.

3.4 Several priority habitats are located within 1km of the site (Figure 5) and the closest of each type are:

- Deciduous woodland located approximately 90m northeast of the site.
- Woodpasture and Parkland located approximately 290m northeast of the site.
- Lowland dry acid grassland located approximately 970m northeast of the site.


***Figure 5: Priority habitats within 1km of the site. Habitats present included: deciduous woodland (dark green), woodpasture and parkland (light green with tree symbols), and lowland dry acid grassland (light pink).***

3.5 OS mapping and aerial images indicate no ponds are located within 250m of the site.

3.6 The closest past European Protected Species (EPS) licenses for each species is:

- **Bat** – located *c.* 200m west of the site, 2009-2011 license for the destruction of a resting place for soprano pipistrelle *Pipistrellus pygmaeus.*
- **Great Crested Newt** – located *c.* 8.8m southeast of the site, 2012-2016 license for the destruction of a resting place.
- **Dormouse** – located *c.* 19km southeast, 2020-2025 license for the destruction of a breeding site and resting place.

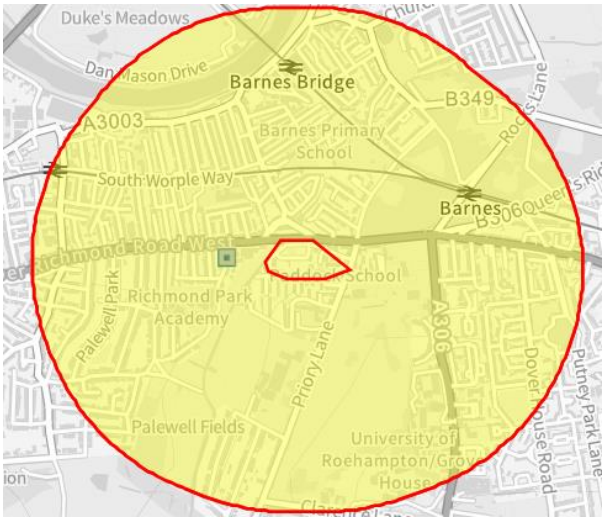



***Figure 6: EPS Licences granted for bats (blue squares) within 1km of the site.***

3.7 The closest great crested newt class survey licence return with great crested newts present is 2km south of the site.

3.8 A 2km records search was requested from GiGL. Some species have not been included due to the age of the record and likelihood of presence on site due to habitat types (Table 1).

***Table 1: Notable species records within 2km of the site.***

| Species | Status | Closest record to site |
|---|---|---|
| Great crested newt *Triturus cristatus* | Hab Dir A2 NP, Hab Dir A4, Hab Reg Sch2, WCA, Sch5 s9.4b/s9.4c/s9.5a, NERC S41, UK BAP Priority | 1089m N 23/05/2021 |
| Grass snake *Natrix helvetica* | WCA Sch5 s9.1/s9.1 kill/s9.5a, NERC S41, UK BAP Priority | 831m SW 19/04/2021 |
| Daubenton's bat *Myotis Daubentoniid* | Hab Dir A4, Hab Reg Sch2, WCA Sch5 s9.4b/s9.4c/s9.5a | 0m 05/10/2022 |
| Nathusius's Pipistrelle *Pipistrellus nathusii* | Hab&Spp Dir Anx 4, Cons Regs 2010 Sch2, W&CA Sch5 s9.4b/ s9.4c, LPS, Local Spp of Cons Conc, RedList_GB-Lr(NT) | 0m 05/10/2022 |
| Common pipistrelle *Pipistrellus pipistrellus* | Hab Dir A4, Hab Reg Sch2, NERC S41, WCA Sch5 s9.4b/s9.4c/s9.5a, UK BAP Priority | 0m 05/10/2022 |
| Soprano pipistrelle *Pipistrellus pygmaeus* | Hab Dir A4, Hab Reg Sch2, WCA, Sch5 s9.4b/s9.4c/s9.5a, NERC S41, UK BAP Priority | 0m 05/10/2022 |
| Noctule Bat *Nyctalus noctula* | Hab&Spp Dir Anx 4, Cons Regs 2010 Sch2, W&CA Sch5 s9.4b/ s9.4c, NERC Act Section 41, LPS, Local Spp of Cons Conc | 51m W 05/07/2016 |
| Swift *Apus apus* | LPS Bird-Red | 0m 27/06/2012 |
| House sparrow *Passer domesticus* | NERC Act Section 41, LPS Local Spp of Cons Conc Bird-Red | 0m 2002 |
| Stag Beetle *Lucanus cervus* | Hab&Spp Dir Anx 2 NERC Act Section 41 LPS | 0m 10/06/2020 |
| Bluebell *Hyacinthoides non-scripta* | W&CA Sch8 | 255m E 19/05/1999 |
| West European Hedgehog *Erinaceus europaeus* | NERC Act Section 41, LPS, Local Spp of Cons Conc, RedList_GB-VU | 15m NE 2022 |
| European Water Vole *Arvicola amphibius* | W&CA Sch5 s9.4a/ s9.4b/ s9.4c, NERC Act Section 41, LPS, Local Spp of Cons Conc RedList_GB-EN | 1562m NE 30/08/2009 |

**Phase 1 Habitat Survey and UKHab**

3.9 The habitat map is presented in Appendix 1 and the site photos are in Appendix 2.

***Introduced shrub***

3.10 The site has multiple areas of introduced shrubs scattered around the buildings Species included oregon grape *Mahonia aquifoliu*m, spotted laurel *Aucuba japonica*, silver birch *Betula pendula*, garden privet *Ligustrum ovalifolium*, pampas grass Cortaderia selloana, cypress *cypressus sp*, portuguese laurel *Prunus lusitanica*, rose *Rosa* sp., firethorn *pyracantha* sp. and *Cotoneaster* sp.

***Modified grassland***

3.11 There are multiple amenity grassland areas around the site, all of which support a short sward and are managed. The grassland was dominated by red fescue *Festuca rubra*, wall barley *Hordeum murinum* and perennial ryegrass *Lolium perenne.* Other species found include daisy *Bellis perennis,* cocksfoot *Dactylis glomerata,* white clover *Trifolium repens,* dandelion *Taraxacum officinale,* yarrow *Achillea millefolium,* annual meadow grass *Poa annua,* greater plantain *Plantago major,* creeping buttercup *Ranunculus repens,* creeping cinquefoil *Potentilla reptans,* chickweed *Stellaria media*, dove's foot cranesbill *Geranium molle,* lady's bedstraw *Galium verum,* fool's parsley *Aethusa cynapium*, wood avens *Geum urbanus*, knotgrass *Polygonum aviculare*, hedge woundwort *Stachys sylvatica* and musk mallow *Malva moschata.*

***Other woodland***

3.12 There is an area of woodland in the northwest area of the site adjacent to the brook and it is dominated by sycamore *Acer pseudoplatanus.*

3.13 Species included: elder *Sambucus nigra*, ash *Fraxinus excelsior*, holm oak *Quercus ilex*, nettle *Urtica dioica*, bramble *Rubus fruticosus*, wild privet *Ligustrum vulgare*, white valerian *Centranthus ruber*, ivy *Hedera helix*, hawthorn *Crataegus monogyna*, scots pine *Pinus sylvestris*, whitebeam *Sorbus aria*, blackthorn *Prunus spinosa* and spruce *Picea* sp.

***Trees***

3.14 There are multiple trees across the site with species including, but not limited to, sycamore *Acer pseudoplatanus*, norway maple *Acer platanoides*, common lime *Tilia x vulgaris*, horse chestnut *Aesculus hippocastanum*, claret ash *Fraxinus angustifolia*, small leaved lime *Tilia cordata*, elder *Sambucus nigra* and sweet chestnut *Castanea sativa*.

***Hedgerows***

3.15 There are two hedgerows within the site, one located in the northeast corner of the site (H1) and the other located near the southern boundary of the site (H2).

3.16 Hedgerow H1 is box cut and dominated by hawthorn, hazel *Corylus avellana* and blackthorn, with occasional rose and sycamore.

3.17 Hedgerow H2 is heavily managed and dominated by cypress sp.

***Buildings and hardstanding.***


***Figure 8: Buildings within the site.***

3.18 The majority of the buildings within the site are residential flats constructed of brick with flat roofs. The buildings were not subject to an internal inspection, although given the design it is considered that these buildings do not support loft voids.

3.19 B1 is a single-storey youth club constructed of brick with concrete tiles (Figure 8). The building supported wooden soffit boards.

3.20 B2 is a metal container on a modified grassland area in the north of the site.

***Protected Species***

***Bats***

3.21 The trees and woodland are suitable for foraging and commuting bats, although this is limited due to the surrounding urban and lit environment.

3.22 The majority of the trees on the site are early mature/semi-mature and do not support Potential Roosting Features (PRFs). Three trees did support PRFs (Figure 9), including

tree T49 with a single rot hole (photograph 16), T59 which has two root holes, albeit one is located close to the ground (photographs 3 and 4) and T69 with a single rot hole (photograph 15).


***Figure 9: Trees with PRFs.***

3.23 Building B1 supports soffit boards with ventilation holes and these are considered to be PRFs. As such, based on the surrounding urban environment and the limited PRF, the building is considered to have '**low**' suitability for roosting bats.

3.24 The remaining buildings within the site include residential blocks of flats with flat roofing that are generally well sealed and a metal container on the amenity grassland area. Given the heavily urban environment and the limited adjacent suitable habitat, it is considered unlikely that bats would utilise the limited features identified. As such, the remaining buildings are considered to have '**negligible**' suitability for roosting bats.

***Badgers***

3.25 No evidence of badgers was recorded within the site and based on the surrounding habitat, it is considered that badgers would not be present. No further surveys are recommended, and the species will not be discussed further within this report.

***Birds***

3.26 The trees, introduced shrubs, woodland and hedgerows have the potential to support nesting birds.

***Great Crested Newts***

3.27 The closest record of great crested newts to the site was located 1089m north on 23/05/2021. The closest past EPS licence is located approximately 8.8km southeast of

the site. The closest great crested newt class survey licence return with great crested newts present is 2km south of the site.

3.28 No ponds are located within 250m of the site and the habitat within the site is generally not considered suitable for great crested newts. As such, given the lack of ponds, local records and suitable habitat, great crested newts are not considered present within the site. No further surveys are recommended, and the species will not be discussed further within this report.

***Reptiles***

3.29 There is limited suitable habitat within the site for reptiles as the majority of the site is hardstanding and managed grassland. The closest reptile recorded returned was grass snake located 831m southwest of the site in 2021. Therefore, it is considered unlikely that reptiles are present within the site and surrounding local area. As such, no further surveys are recommended, and this species group will not be discussed further within this report.

***Other Species***

3.30 Due to a lack of suitable habitat, the site is not considered suitable for other protected species such as dormice. Beverley Brook could not be accessed during the site visit, although given no records of otter were returned and the distance of the closest water vole record (1562m NE in 2009), it is considered unlikely that Beverley Brook supports these species. As such, no further surveys are recommended, and these species will not be discussed further within this report.

## 4.0 DISCUSSION

4.1 The following paragraphs consider the effects of the development on designated sites, priority habitats and protected and priority species. Where the desk study and Phase 1 survey provide sufficient evidence for an assessment of effects on any of these groups to be taken through planning, these are detailed below, the need for additional surveys and when and how these should be completed are summarised, if required.

4.2 Provisional recommendations are also given for means to enhance biodiversity net gain, following the principle (CIEEM et al. 2016) of following the mitigation hierarchy of; avoidance, minimisation of loss, compensation on site and biodiversity offset.

**Effects on Designated Sites**

4.3 The site does not fall within or adjacent to any statutory and non-statutory sites and the Impact Risk Zones indicate the development will have any likely impact on SSSIs/SACs/SPAs and Ramsar sites.

4.4 As such, given the distance of the site from any designated sites, it is considered the proposed development will have no direct or indirect impact on any designated sites.

**Effects on Priority Habitats**

4.5 The closest priority habitat is deciduous woodland located approximately 90m northeast of the site. Due to the distance of the site from any priority habitats, it is considered that the proposed development will have no direct or indirect impact on any priority habitats.

**Effect on On-site Habitats and Biodiversity Net Gain Assessment**

4.6 A BNG assessment has been undertaken for the proposed development with the Biodiversity Metric 4.0. The habitat baseline is detailed in Figure 10 and habitat creation is in Figure 11.

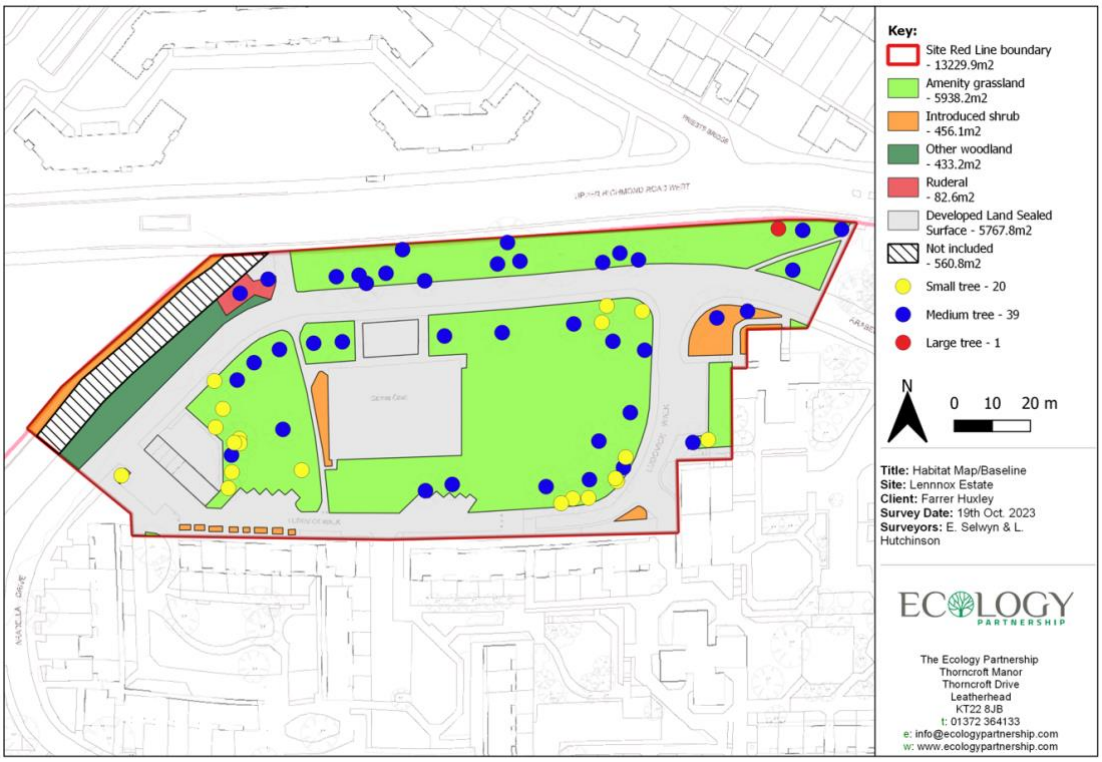



*Figure 10: Habitat Baseline.*

*Figure 11: Proposed habitat creation.*

4.7 Based on the recommended habitat creation detailed in Figure 11, this would result in a +% biodiversity net gain in habitat units, and a % biodiversity net gain in hedgerow units and will satisfy the trading rule.

*Figure 12: Headline results.*

**Effects on Protected Species**

***Bats***

4.8 The trees could provide foraging and commuting opportunities for bats, although this is limited due to the surrounding urban environment.

4.9 Trees T49, T59 and T69 support PRFs and therefore if these trees are to be removed they will need to be subject to a further assessment to determine the suitability of the PRFs. To determine the suitability of the PRFs, the trees should be subject to an aerial tree-climbing survey. If these PRFs are suitable, the tree will need to be subject to emergence surveys between May and August to determine if roosting bats are present.

4.10 Building B1 has a '**low'** suitability for roosting bats due to the holes in the soffit board. Therefore, a single emergence survey will need to be undertaken between May and August. If roosting bats are recorded, further emergence surveys will be required and the building will need to be removed under a mitigation licence from Natural England.

4.11 Any proposed lighting scheme as part of the development should consider bats in the surrounding area as well as the site. All bat species are nocturnal, resting in dark conditions during the day and emerging at night to feed. Bats are known to be affected by light levels, which can affect both their roosting and foraging behaviour. Recommendations include:

- Installing lighting only if there is a significant need;
- Using sodium lamps instead of mercury or metal halide lamps where glass glazing is preferred due to its UV filtration characteristics;
- Directing lighting to where it is needed and avoiding light spillage;
- Using baffled lighting where light is directed towards the ground and

- Avoid putting lighting near trees or hedgerows and angling light away from these linear features which are used by commuting and foraging bats.

***Birds***

4.12 The trees, introduced shrub, other woodland and hedgerows have the potential to support nesting birds. The removal of suitable vegetation and the buildings should be undertaken outside of the breeding bird season (March-September inclusive) or immediately after a nesting bird check by a suitably qualified ecologist. If active nests are identified, works in the vicinity of the nest must cease until the birds have fledged the nest.

**Ecological Enhancements**

4.13 Several enhancements can be made to the final development to further opportunities for wildlife.

4.14 Bird boxes can be hung on mature trees within the site or integrated of the new development to increase the number of breeding opportunities (Figure 13). Bird boxes hung on trees should be woodcrete (or similar) as they provide better thermal properties, are longer lasting and more durable than wooden boxes. The box should be positioned on a north or east facing aspect and at least 2m above the ground if possible.

***Figure 13: Habibat Small Bird Nest Box.***

4.15 To enhance the local bat population and provide additional roosting opportunities within the site, bat boxes can be hung on trees within the site or installed onto the brickwork of the new development (Figure 14). These provide good opportunities for crevice-dwelling species such as pipistrelles. The opening of the bat box/tube will be the only section visible, and they are designed so that they require little to no

maintenance. Several of these tubes can be established in a row together providing a good-sized roost space. The bat tubes should be inserted in the brickwork at least 4m from ground level in a location not illuminated by artificial lighting. Habibat, in association with the Bat Conservation Trust, provides a range of boxes which are unfaced for render or designed to match the brickwork of the building.

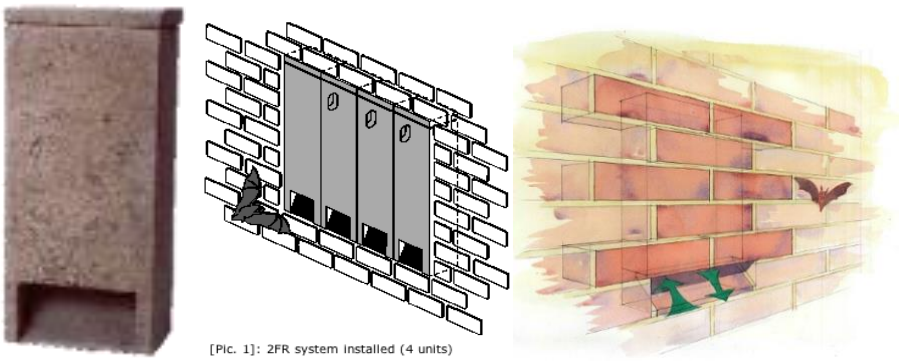



***Figure 14: Bat tubes incorporated into the wall of a building to provide roosting space.***

4.16 To support the invertebrates and bees attracted to the site by the surrounding vegetation and new planting, Bee Bricks (Figure 15) can be incorporated into the buildings. The Bee Brick can be used in place of a standard brick or block in construction to create a habitat for solitary bees. Bee Bricks need to be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. No cleaning or management of the Bee Bricks is required.

***Figure 15: Bee bricks to be incorporated into the development.***

## 5.0 IMPACT ASSESSMENT

5.1 This section of the report forms an Ecological Impact Assessment (EcIA) and is designed to quantify and evaluate the potential impacts of the development on habitats and species present on site or within the local area.

5.2 The approach to this assessment accords with guidance presented within the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM 2018). In essence, an EcIA assesses the activities associated with a proposed scheme that are likely to generate changes within the identified zone of influences, on identified ecological features and receptors. The proposals are subsequently reviewed, and mitigation and compensation measures are outlined which help to reduce negative impacts.

5.3 Table 2 below summarises the impacts and required mitigation for each receptor as previously detailed in the discussion.

***Table 2: Assessment of effects from the proposal after mitigation and compensation***

| Feature | Scale of Importance | Mitigation/Compensation Required | Residual Effect |
|---|---|---|---|
| Designated Sites | National | None required – considerable distance from the site. | Not significant |
| Priority Habitats | National | None required – considerable distance from the site. | Not significant |
| On site habitats and BNG | Local | | |
| Bat (roosting) | Site | Emergency surveys required for the building B1 to determine bat presence. Some trees within the site may be suitable to support roosting bats.<br><br>Mitigation/Enhancement in the form of the installation of bat boxes. | Undetermined |
| Bats (commuting and foraging) | Local | The trees could provide foraging and commuting opportunities for bats, although this is limited due to the surrounding urban environment.<br><br>Sensitive lighting should be implemented to avoid impacts on habitat. | Not significant |

| | | | |
|---|---|---|---|
| Nesting Birds | Site | Mitigating direct harm to nests by removal of any suitable nesting habitat outside of nesting bird season or after a check by a suitably qualified ecologist.<br><br>Mitigation/Enhancement in the form of the installation of bird boxes. | Not significant |
| Badgers, Reptiles, Great Crested Newts, Dormice, Water Voles and Otters | N/A | Considered unlikely to be present on site. | Not significant |

## 6.0 CONCLUSION

6.1 The site does not fall within or adjacent to any statutory and non-statutory sites and the Impact Risk Zones do not indicate the development will have any likely impact on statutory designated sites. As such, given the distance of the site from any designated sites, it is considered the proposed development will have no direct or indirect impact on any designated sites.

6.2 The trees could provide foraging and commuting opportunities for bats, although this is limited due to the surrounding urban environment. Sensitive lighting should be utilised throughout the development and enhancements and the installation of bat boxes will increase roosting opportunities.

6.3 Trees T49, T59 and T69 support PRFs and therefore if these trees are to be removed they will need to be subject to a further assessment to determine the suitability of the PRFs. To determine the suitability of the PRFs, the trees should be subject to an aerial tree-climbing survey. If these PRFs are suitable, the tree will need to be subject to emergence surveys between May and August to determine if roosting bats are present.

6.4 Building B1 has a 'low' suitability for roosting bats due to the holes in the soffit board. Therefore, a single emergence survey will need to be undertaken between May and August. If roosting bats are recorded, further emergence surveys will be required and the building will need to be removed under a mitigation licence from Natural England.

6.5 The remaining buildings within the site include residential blocks of flats with flat roofing that are generally well sealed and a metal container on the amenity grassland area. Given the heavily urban environment and the limited adjacent suitable habitat,

it is considered unlikely that bats would utilise the limited features identified. As such, the remaining buildings are considered to have '**negligible**' suitability for roosting bats.

6.6 The trees, introduced shrub, other woodland and hedgerows have the potential to support nesting birds. The removal of suitable vegetation and the buildings should be undertaken outside of the breeding bird season (March-September inclusive) or immediately after a nesting bird check by a suitably qualified ecologist. If active nests are identified, works in the vicinity of the nest must cease until the birds have fledged the nest.

6.7 Enhancements for the site have been included within this report including bat and bird boxes, and bee bricks.

## 7.0 REFERENCES

ARG., (2010) *UK Advice Note 5: Great crested newt habitat suitability index.* Amphibian and Reptile Groups of the United Kingdom.

Bright, P., Morris, P. & Mitchell-Jones, T., (2006)., *The Dormouse Conservation Handbook.* 2nd edition. English Nature.

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

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

Chapman, C., & Tyldesley, D. (2016). *Small-scale effects: How the scale of effects has been considered in respect of plans and projects affecting European sites-a review of authoritative decisions*. Natural England Commissioned Reports, (205).

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

Creswell, P., Harris, S. & Jeffies, D.J. (1990)., *The history, distribution status and habitat requirements of the badger in Britain.* Nature Conservancy Council, Peterborough.

English Nature., (2004)., *Reptiles: guidelines for developers.* English Nature, Peterborough.

Froglife., (2015)., *Surveying for Reptiles*. Froglife, Peterborough.

Franklin, J. F. (1993)., 'Preserving Biodiversity: Species, Ecosystems, or Landscapes?', *Ecological Applications*, 3: 202-205.

Joint Nature Conservation Committee., (2010)., *Handbook for Phase 1 habitat survey – a techniques for environmental audit.* JNCC, Peterborough.

Langton, T.E.S., Beckett, C.L. & Foster, J.P. (2001)., *Great Crested Newt Handbook.* Froglife, Halesworth.

Mitchell-Jones, A.J. (2004)., *Bat Mitigation Guidelines.* English Nature, Peterborough.

Natural England., (2011)., *Badgers and Development: A guide to best practice and licensing*. Natural England, Bristol.

Neal, E. & Cheeseman, C. (1996)., *Badgers*. T & A D Poyser Ltd. London.

Wilson, G.J., Harris, S. & McLaren, G. (1997)., *Changes in British badger population, 1988-1997.* People's Trust for Endangered Species, London.

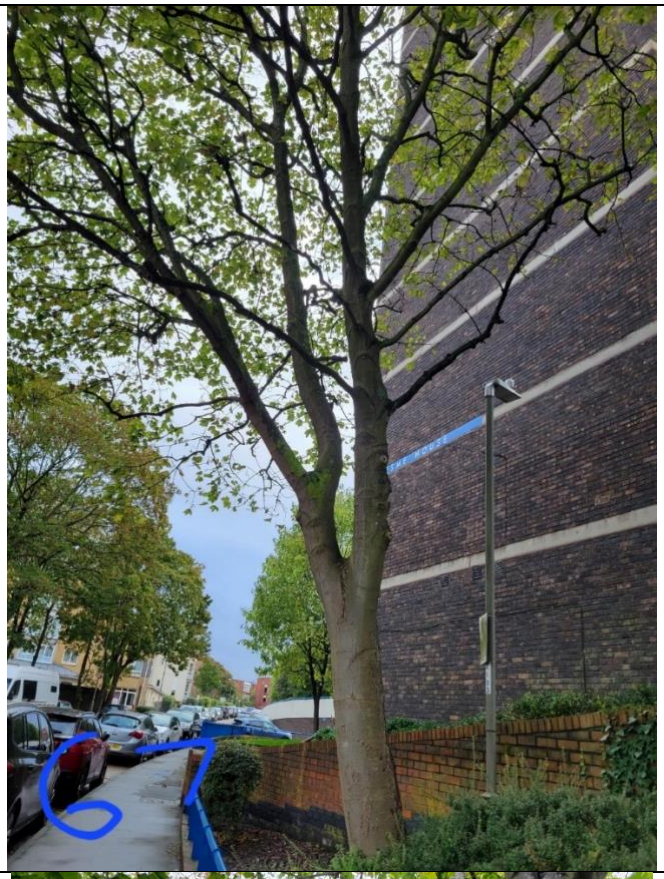
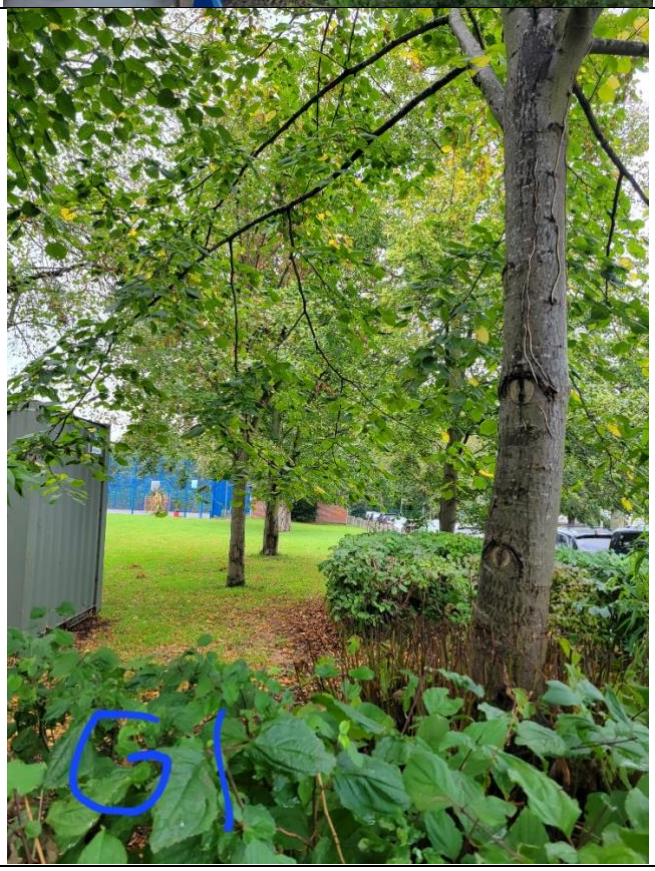
***Internet resources:***

Google Maps: www.google.co.uk/maps

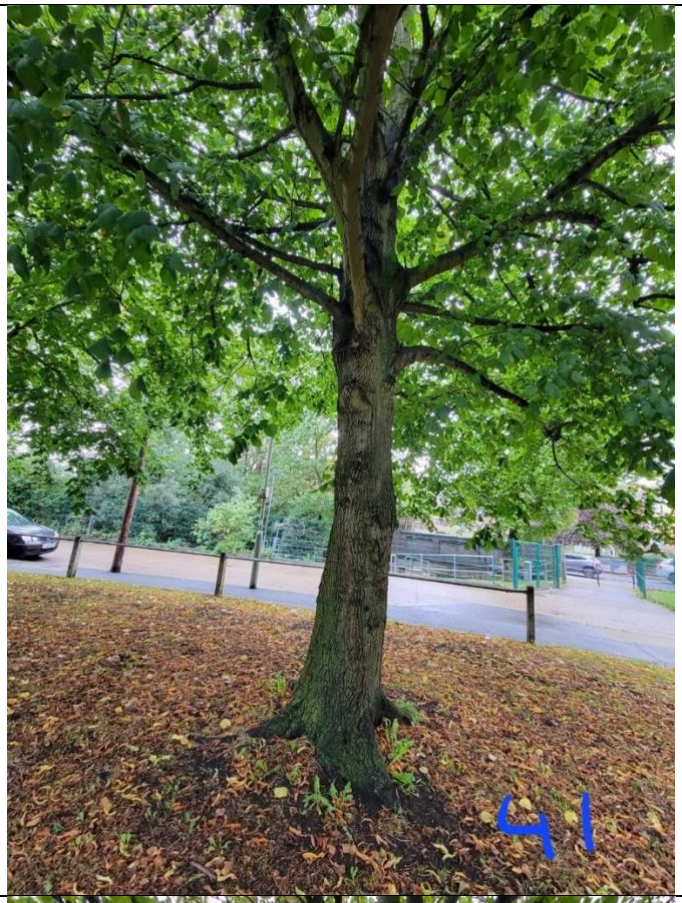
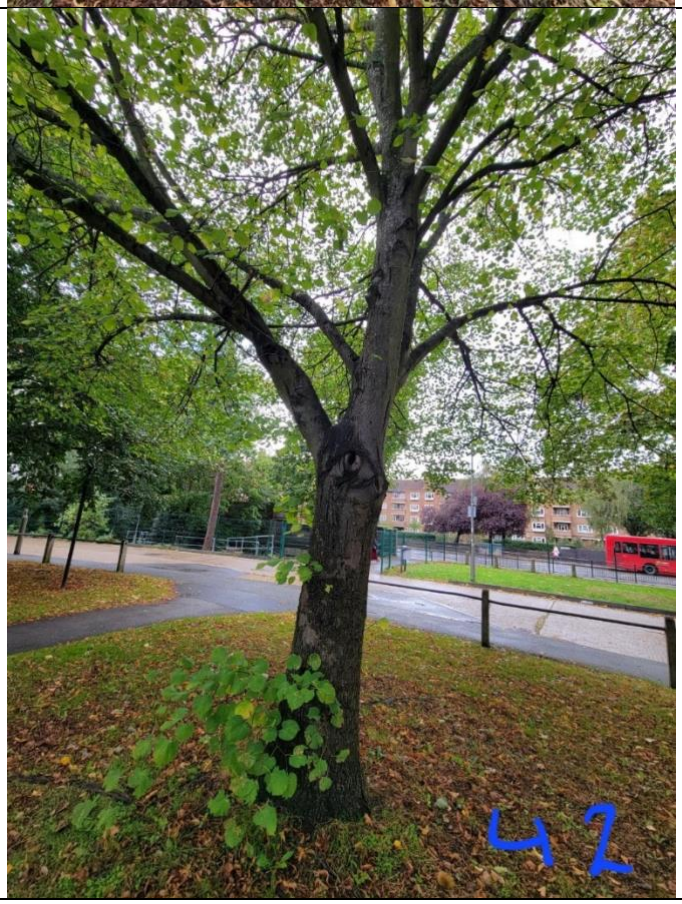
Magic Interactive Map: www.magic.gov.uk

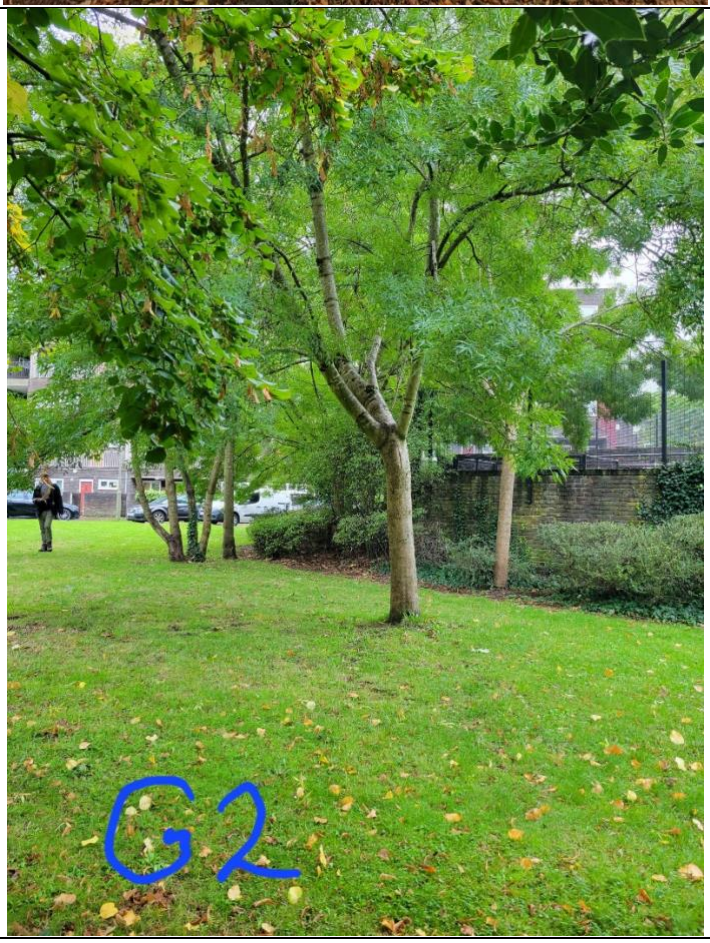
**Appendix 1: Habitat Map**

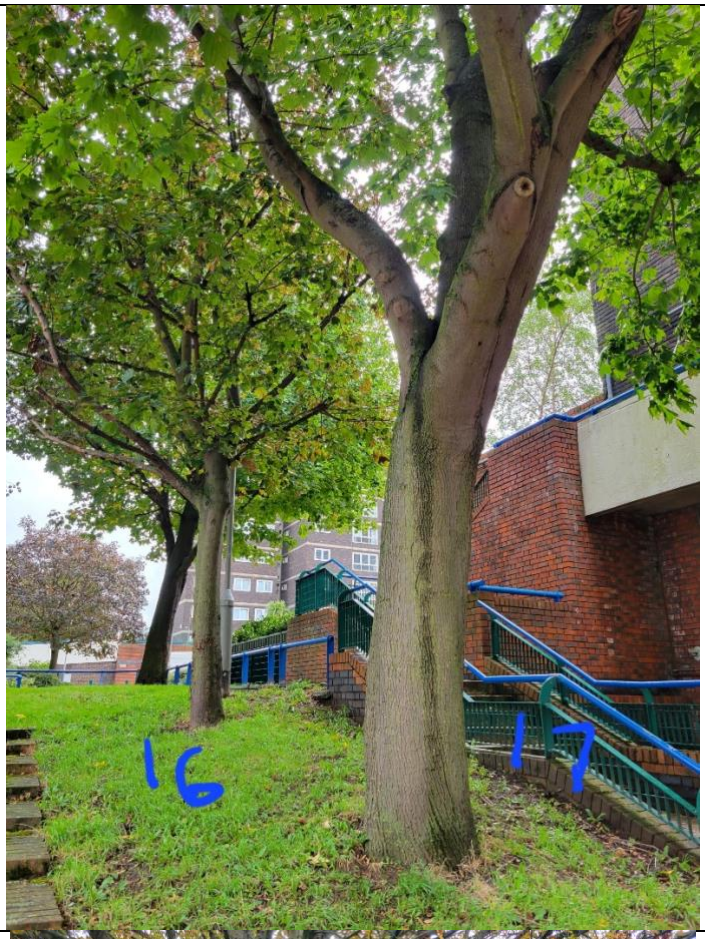
## Appendix 2: Photos

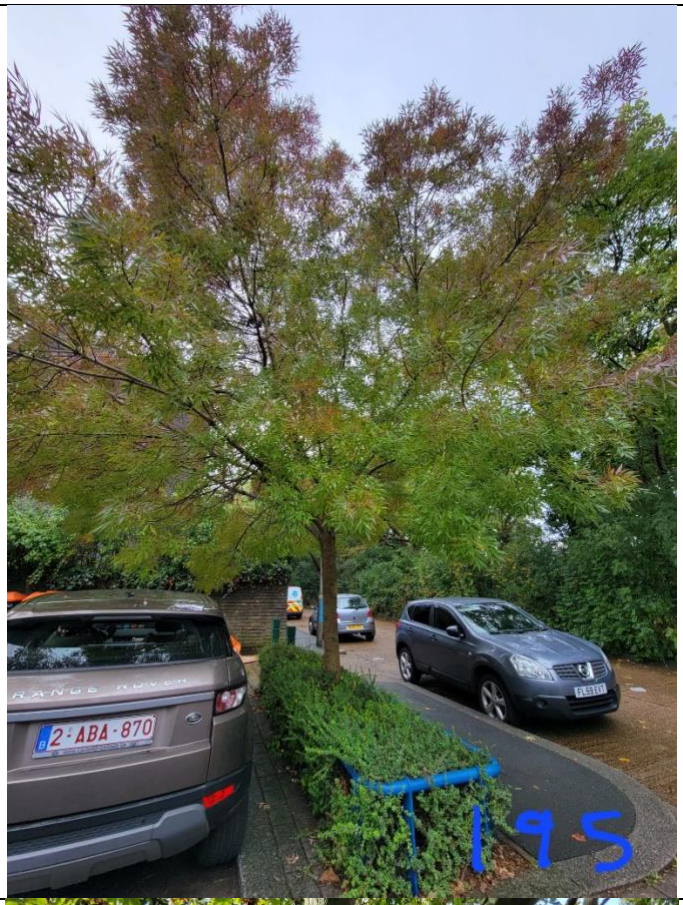
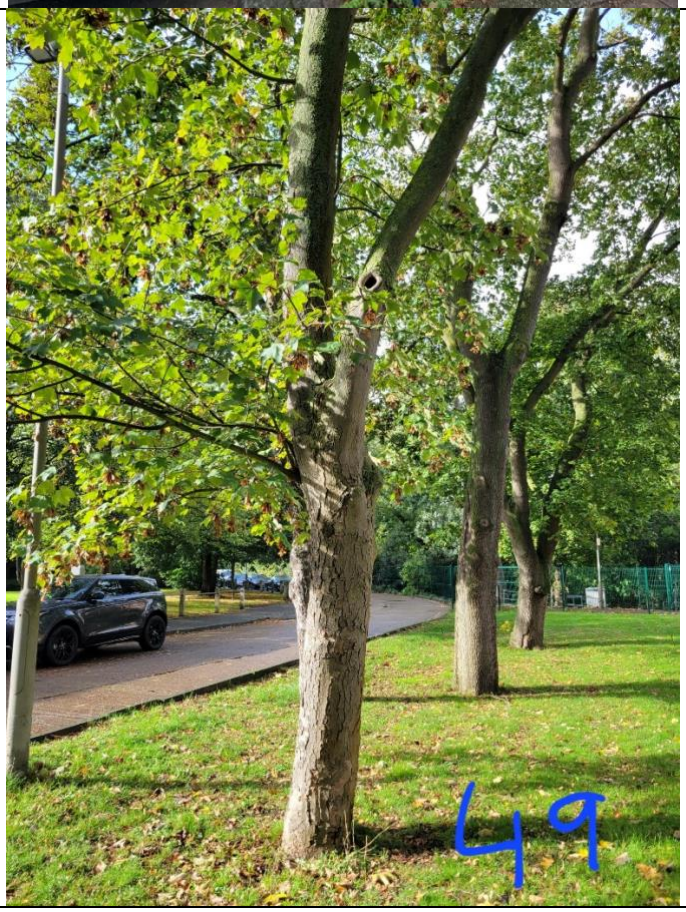
| | |
|---|---|
| **Photograph 1:** Tree 67 (medium sycamore) |   |
| **Photograph 2:** Trees 60 (large leaved lime), 62 and 64 (common limes) |   |

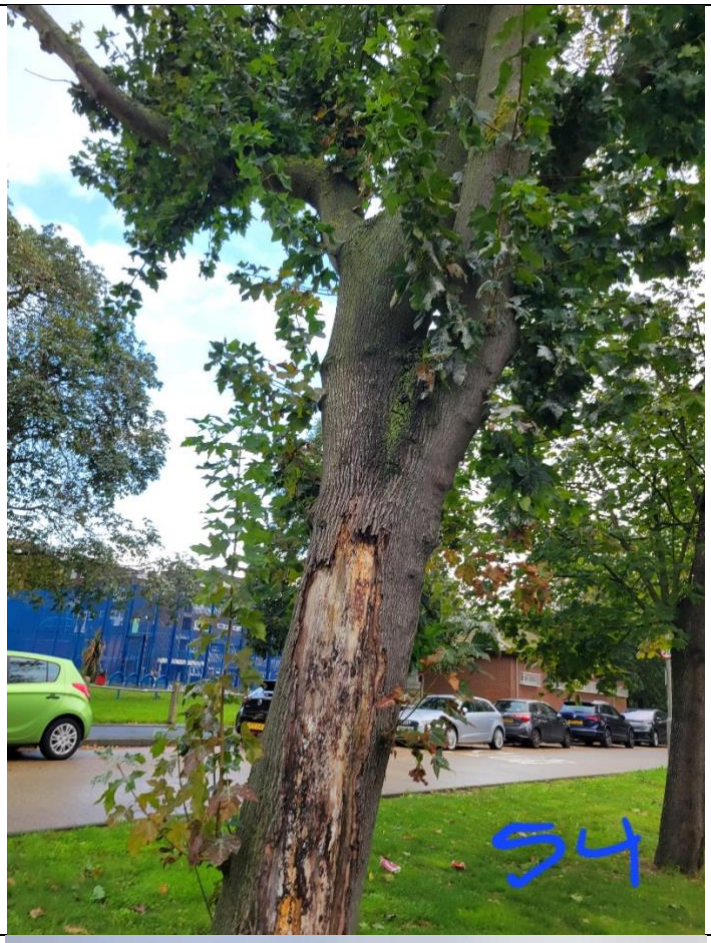
| | |
|---|---|
| **Photograph 3:** Tree 59 (red horse chestnut) |   |
| **Photograph 4:** Tree 59 featuring a potential roosting feature. |   |

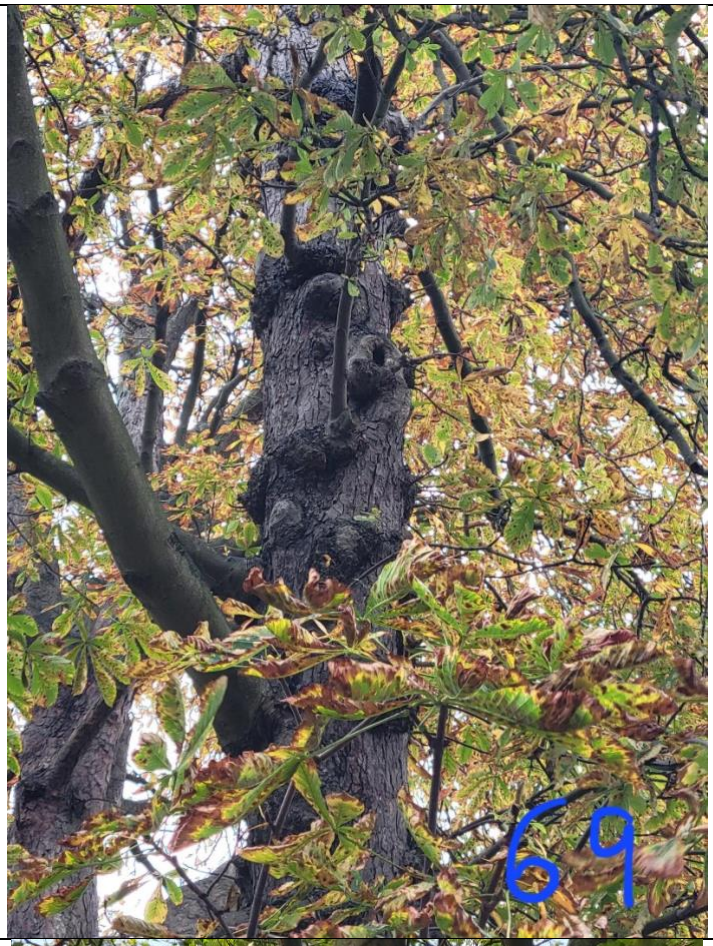
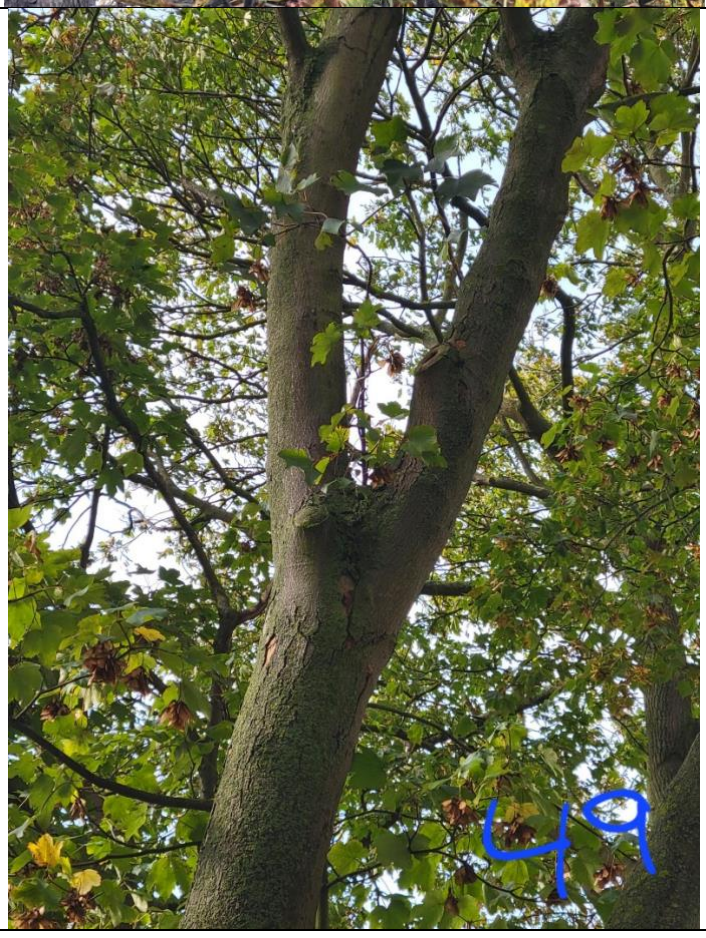
| | |
|---|---|
| **Photograph 5:** Tree 41 (common lime) |   |
| **Photograph 6:** Tree 42 (small leaved lime lime) |   |

| | |
|---|---|
| **Photograph 7:** Tree 43 (small leaved lime lime) |   |
| **Photograph 8:** Group of trees (G2) including trees 30-32 (claret ash) |   |

| | |
|---|---|
| **Photograph 9:** Tree 16 (red norway maple) and tree 17 (norway maple) |  |
| **Photograph 10:** Group of trees (G3) including trees 20-25 (consisting of horse chestnut, small leaved lime, sweet chestnut, common lime, sycamore, dogwood, sycamore and white willow). |  |

| | |
|---|---|
| **Photograph 11:** Tree 195 (claret ash) |   |
| **Photograph 12:** Tree 49 (sycamore) with potential roosting feature. |   |

| | |
|---|---|
| **Photograph 13:** Tree 54 (Norway maple). |   |
| **Photograph 14:** Tree 54 showing over management of branches. |   |

| | |
|---|---|
| **Photograph 15:** Tree 69 (horse chestnut) showing potential roost feature. |   |
| **Photograph 16:** Tree 49 (sycamore) showing potential roost feature. |   |

The Ecology Partnership Ltd

Thorncroft Manor

Thorncroft Drive

Leatherhead

KT22 8JB

Tel: 01372 364 133

www.ecologypartnership.com

Approved: Eddie Selwyn BSc (Hons) MSc QCIEEM

Principal Ecologist

Date: 08/11/2023