

Leonora House, Chippenham

Update Preliminary Ecological Appraisal and Biodiversity

Net Gain Assessment

On behalf of Horizon Homes

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1 Executive Summary

Avondale Ecology completed an update Preliminary Ecological Appraisal including a habitat survey, protected species audit and revised Biodiversity Net Gain assessment for a proposed development of five apartment blocks at the site of a former residential care facility in January 2026. Bat roost assessments and surveys have been completed separately. The BNG metric spreadsheet and condition sheets are appended.

The site comprises derelict buildings, hardstanding, gravelled areas, modified grassland, ornamental planting and native and non-native hedgerows. Native hedgerows are Habitats of Principal Importance under the NERC Act 2006. The previous Arboricultural Survey also identified three trees on-site, which have since been removed. The buildings have been identified as small/individual roosts for common and soprano pipistrelle bats in previous surveys. The site is also likely to support nesting birds, foraging/commuting urban bats and hedgehog. There is also a low risk of presence of reptiles such as slow worm.

The site achieves a baseline of 0.64 habitat units and 0.49 hedgerow units. Based on creation of diverse native flowering lawn within communal gardens, planting of 21 small trees, native shrub planting and retention and enhancement of the south-east boundary hedgerow to create a species-rich hedgerow. This will result in 0.71 habitat units (10.63% gain) and 0.66 hedgerow units (34.40% gain), meeting statutory requirements.

Avoidance/Mitigation Measures

- Retain and protect south-east boundary hedgerow with barrier fencing.
- Follow recommendations and requirements for roosting bats as set out in the stand alone IES report, including licensing and update survey requirements.
- Sensitive lighting design.
- Dense vegetation and buildings to be removed during September to February inclusive to avoid the main bird nesting season or immediately after a pre-commencement nesting bird check by an ecologist. Active bird nests plus a buffer to be retained.
- Two-stage clearance of habitats and dismantling of habitat piles by hand to protect reptiles and hedgehog.
- Works to cease immediately and an ecologist contacted for advice if any protected species such as are unexpectedly found or suspected to be present when an ecologist is not present on site. Hedgehog and common toad to be moved to safety if found.

Enhancement Measures

- Maximise benefits of soft landscaping and use of species-mixes to benefit invertebrates in particular.
- Bat and nesting bird provision (25 features) to be incorporated into the new buildings in suitable locations.
- Hedgehog connectivity measures through solid boundaries.
- Three habitat piles to be created around site boundaries.

Please be aware that a survey of this nature can only provide a snapshot of the site's ecological importance. Please note that the survey results and any recommendations contained within this report will remain valid for two years following the date of survey.

2 Introduction

2.1 Introduction and Aims

Avondale Ecology was commissioned by Horizon Homes to complete an update Preliminary Ecological Appraisal and Biodiversity Net Gain Assessment for a development at Leonora House, Chippenham, SN15 3DY (central Ordnance Survey grid reference ST92577265). The proposals are shown in Figure 1 and include demolition of the buildings, clearance of most habitats on-site and construction of five new blocks of apartments with associated access and landscaping.

This assessment is an update of previous surveys and should be read in conjunction with IES Consulting *Bat Inspection & Emergence Survey Report – Leonora House (2024)* and *Preliminary Ecological Appraisal Report – Leonora House (2024)*. Previous bat survey work has not been replicated or updated. The scope of this report only relates to habitats present, the potential for the site to support protected or notable species and a Biodiversity Net Gain assessment based on the final detailed design.

Figure 1 Site Location and Landscaping Proposals



2.2 Objectives

The survey included the following objectives:

1. To reassess whether proposals may have an impact on designated sites for nature conservation;
2. To provide an updated assessment of likelihood of protected or notable species being on or in the vicinity of the site and search for evidence or potential within the site;
3. To reassess, record and map the suitable features for protected species (although a detailed update Preliminary Bat Roost Assessment has not been completed);
4. To reassess any habitats of ecological importance and make a record of any botanical species present and identify if any habitats are Habitats of Principal Importance;
5. To complete an ecological impact assessment based on detailed design and current site conditions;
6. To detail requirements for a mitigation licence(s) or further surveys, if needed;
7. To update requirements for avoidance, mitigation and compensation measures and also suggest working practices to meet legislative and best practice requirements; and
8. To complete an updated biodiversity net gain assessment based on detailed design and to provide additional recommendations for species-specific opportunities.

2.3 Legislation

There are several different Acts of legislation and regulations which refer to the protection of wildlife of relevance to the site. The regulations of direct relevance to the site are summarised below.

There are 18 species of bats in the UK, all of which are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Wildlife and Countryside Act, the "Habitats Regulations" and the CRoW Act 2000 together make it an offence, among other things, to recklessly, intentionally or deliberately:

- Disturb roosting bats or obstruct access to their roosts;
- Disturb a significant number of bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Kill, injure or capture (or take) bats.

A bat roost is defined as "any structure or place (including trees) which any bat uses for shelter or protection". Because bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bat(s) are present at the time. Great crested newt *Triturus cristatus*, including their terrestrial habitat and breeding ponds are similarly protected

Statutory protection is given to nesting birds in the UK under the Wildlife and Countryside Act (WCA) 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, it is an offence to intentionally or recklessly disturb species listed on Schedule 1 of the Act while they are nest building or at/ near a nest with eggs or young, or to disturb the dependent young of such a bird.

All British reptiles are protected from deliberate killing or injury under the Wildlife and Countryside Act 1981 (as amended).

Badgers are protected from harm and their setts are protected from damage, disturbance or obstruction of access under the Protection of Badgers Act 1992.

Hedgehogs *Erinaceous europaeus* are not protected by law but are afforded due consideration in the planning process as a result of being listed on Section 41 of NERC Act 2006. Other Species of Conservation Concern which have also experienced significant recent declines are also listed on Section 41. This includes common toad *Bufo bufo*.

Non-native invasive species as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) are subject to legal controls.

Habitats of Principal Importance (HPI) (formerly called 'priority habitat' under the UK BAP process) are afforded consideration in the planning process through Section 40 and 41 of the NERC Act 2006, although they are not given statutory protection in their own right. 'Important' hedgerows are defined under the Hedgerow Regulations 1997.

Under the Environment Act 2021, all qualifying sites must achieve at least 10% biodiversity net gain as calculated through habitat, linear or river units in the Defra metric spreadsheet. More information is available at [Biodiversity net gain - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/biodiversity-net-gain).

Local planning policy also incorporates biodiversity considerations – including Wiltshire Local Plan Core Policy 50.

This is a brief summary of the legislation and is not to be regarded as a definitive legal opinion. When dealing with individual cases, the client is advised to consult the full texts of the relevant legislation and obtain further legal advice.

3 Methodology

3.1 Desk Study

The previous desk study including a Wiltshire and Swindon Biodiversity Records Centre (WSBRC) search from 2024 was reviewed as detailed in the IES report. Previous survey findings within the IES reports were also reviewed and taken into consideration within this assessment. For this update, statutory designated sites within 1km were reassessed using the Multi-Agency Geographic Information for the Countryside (magic.defra.gov.uk) mapping. MAGIC mapping was also reassessed for statutory designated sites for highly mobile species such as bats and birds within 10km, and Habitats of Principal Importance as listed under the NERC Act 2006 (also known as 'priority habitats') within 1km. Aerial photographs and Ordnance Survey maps were also reviewed to assess the site in context of surrounding habitats. A search for Natural England protected species licences and eDNA records for great crested newt was completed within 1km using MAGIC maps.

3.2 Update Habitat Survey and Protected Species Audit

An update Extended Phase 1 Habitat survey i.e. habitat survey and protected species audit was completed in accordance with best practice guidance *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2024), *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2019) and *Handbook for Phase 1 Habitat Survey* (JNCC, 2010) on 5 January 2026. The survey was completed by Sarah Dale MCIEEM, an experienced ecologist and Natural England licensed bat, great crested newt and hazel dormouse ecologist with over nineteen years' professional practice. Vegetation type, structure and dominant species were noted. Types of habitat present were also assessed using UK Habitat Code classifications (V2, 2023). The presence of any invasive species subject to legal controls was recorded. Botanical nomenclature in this report follows that laid out by Stace (2010). The habitats were also assessed for their potential, and any evidence, to support legally protected or otherwise notable flora and fauna such as roosting bats, badger, reptiles and nesting birds. Extensive bat surveys of the buildings were completed in 2024. Updating these is outside of the scope of this assessment. The findings have been considered and summarised within this report, including comments on the validity of this information.

3.3 Biodiversity Net Gain Metric

A Biodiversity Net Gain assessment was completed following statutory Defra methodology as set out in *The Statutory Biodiversity Metric: User Guide* (Defra, July 2025). Habitats were assessed using *UK Habitat Classification* methodology (as above). Habitat areas were mapped and then measured. In general, a minimum mappable unit of 25m² was used in accordance with UK Hab guidance. Trees over 7.5cm diameter at breast height are classified as individual trees. As some tree felling had recently been completed during the winter of 2025/26, the previous Arboricultural Report (Silverback

Arboricultural Consultancy, November 2021) and PEA report by IES were reviewed and a baseline assessment of trees present taken from these reports. Aerial photographs and the presence of stumps on site were also reviewed.

3.4 Constraints

The whole of the site was accessible. The survey was completed at a sub-optimal time of year for botanical identification, although many plants were readily identifiable in their vegetative form. There had been a light snow fall, although most of the grassland was still visible for survey. The findings were cross-referenced with previous survey reports, and the highest biodiversity value taken. The considerations are set out in detail below.

Wildlife use habitats in a dynamic manner and use may change from year to year or between different seasons. Wildlife can also colonise new areas, and surveys only provide a snapshot of use.

The biodiversity net gain calculations are based on areas calculated within qGIS using a georeferenced base map. This is only an estimate based on best available data. Biodiversity net gain is an iterative process and the calculations will need to be updated if the proposals change.

4 Results

4.1 Desk Study

4.1.1. Designated Sites

There are no statutory designated sites for nature conservation within 1km. The closest site Mortimore's Wood Local Nature Reserve (LNR) lies 1.3km south-west. The LNR includes habitats such as woodland, woodland edge and river bank. The site does not meet Natural England's Site of Special Scientific Interest (SSSI) Impact Risk Zone criteria.

There are two locally designated wildlife sites within 1km;

- River Avon: designated for riparian and associated habitats.
- Baydons Meadow Woodland Trust Reserve: A hay meadow with associated habitats.

The designated wildlife sites are a sufficient distance from the proposals, and separated from the site by existing development, and as such are unlikely to be impacted.

There are no statutory designated sites for highly-mobile species of relevance to the site (e.g. horseshoe bats) within 10km.

The closest Habitat of Principal Importance/priority habitat shown on MAGIC mapping is an area of floodplain grazing marsh approximately 435m east.

4.1.2 Protected and Notable Species Records

There are three recent Natural England bat mitigation licences within 1km for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, lesser horseshoe *Rhinolophus hipposideros* and serotine *Eptesicus serotinus* bats. The closest is 460m from the site. Additional records for brown long-eared *Plecotus auritus*, Daubenton's *Myotis daubentonii*, noctule *Nyctalus noctula*, barbastelle *Barbastella barbastellus* and whiskered bats *Myotis mystacinus* were recorded within 1km.

Other mammals including otter *Lutra lutra*, water vole *Arvicola amphibius*, hedgehog *Erinaceus europaeus* and badger *Meles meles* have also been recorded within 1km.

Reptiles are known to be present in gardens in the area, with records for grass snake *Natrix helvetica* and slow worm *Anguis fragilis* within 1km.

There are no great crested newt *Triturus cristatus* records on MAGIC mapping within 1km of the site on MAGIC or within the previous desk study. There are no ponds shown on Ordnance Survey mapping within 250m, although unmapped garden ponds are likely to be present.

There are numerous nearby records for bird species including Birds of Conservation Concern (RSPB, 2021) within Chippenham. This includes red and amber list species, which have been subject to recent declines, such as house sparrow *Passer domesticus* and starling *Sturnus vulgaris*. There are

swift *Apus apus* records within 1km (as shown on RSPB Swift Mapper swiftmapper.org.uk), including a nearby nesting site along London Road.

4.2 Site Description

The site of approximately 0.3 hectares comprises a series of buildings, hardstanding, a gravelled parking area, modified grassland, bramble scrub, ornamental planting (including non-native shrubs) and three hedgerows. Two of the hedgerows are native and one is ornamental. The site is situated within the urban area of Chippenham surrounded with residential housing, with Charter Primary School to the south. Adjacent sites to the west are also proposed for housing.

4.3 Habitats

Photographs of the site are provided in Appendix A. A pre-development habitat map is provided in Figure 2. Habitats on site are described below.

4.3.1 Developed Land, Sealed Surface including Building (u1b, u1b5)

Most of the site comprises buildings and tarmaced access and parking areas. A detailed description of the buildings is provided with the IES *Bat Inspection and Emergence Survey Report*, which will be submitted with the planning application, and so is not repeated within this report.

4.3.2 Ornamental Planting and Shrubs (u1, 1160)

There are pockets of ornamental shrub planting, especially to the north and east of the northern building. Species include ornamental dogwood *Cornus* sp., pampas grass *Cortaderia selloana*, laurel *Laurus* sp., buddleia *Buddleja davidii*, firethorn *Pyracantha* sp., Japanese spindle tree *Euonymus japonicus*, Mexican orange *Choisya ternate*, Cypress sp. (*Cupressus* sp.), red valerian *Centranthus ruber* and willow *Salix* sp. Species previously recorded in these areas also included grape hyacinth *Muscari armeniacum*, primrose *Primula vulgaris*, borage *Borago officinalis* and field madder *Sherardia arvensis*.

4.3.3 Modified Grassland (g4)

There is a pocket of modified grassland towards the south of the site. This had not been cut for some time and had formed tussocks in places. The sward was mostly approximately 20cm in height, but some sections had grown up to 80cm. Three 1 metre x 1 metre quadrat samples were taken with a species diversity of between four and seven species. Based on previous survey findings, it is assumed likely that there are between 6-8 species in most of the grassland in the summer months, so Good condition has been assigned in the Defra metric. Grass species recorded included Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris*, false oat grass *Arrhenatherum elatius*, cock's-foot *Dactylis glomerata*, fescue *Festuca* sp., brome *Bromopsis* sp. and Timothy *Phleum pratense*. Herbaceous species include yarrow *Achillea millefolium*, ragwort *Senecio jacobaea*, red clover *Trifolium pratense*, white clover *Trifolium repens*, self-heal *Prunella vulgaris*, ribwort plantain *Plantago lanceolata*, round-leaved cranesbill *Geranium rotundifolium*, creeping buttercup *Ranunculus repens*,

dandelion *Taraxacum* agg., daisy *Bellis perennis* and occasional garden species including cosmos *Cosmos bipinnatus* and lungwort *Pulmonaria officinalis*. Species previously recorded also include forget-me-not *Myosotis sylvatica*, teasel *Dipsacus fullonum*, celandine *Ficaria verna*, cleavers *Galium aparine*, Alexander's *Smyrnium olusatrum*, daffodil *Narcissus* sp., and red deadnettle *Lamium purpureum*.

4.3.4 Ornamental Hedge (h2b) and Native Hedgerow (h2a)

There are three hedgerows within the site:

- H1 native hedgerow: This runs along most of the south-east boundary and comprises a mixture of non-native/ornamental and native species. For the purposes of the BNG metric, it has been classified as a species-poor native hedgerow, with less than five native species per 30m section. Species present include beech *Fagus sylvatica* (planted in an ornamental form), willow, ivy *Hedera helix*, dogrose *Rosa canina*, bramble *Rubus fruticosus* agg., elder *Sambucus nigra*, cherry *Prunus avium*, ornamental holly *Ilex* sp. and laurel. It is unmanaged and outgrown to 3-4m in height. It is approximately 1.5m wide. It is in Good condition within the Defra metric assessment. This hedgerow will be retained.
- H2 non-native hedgerow: This was not included within the previous IES assessment but has become outgrown, and now falls partially within the site. Species include ornamental dogwood, bramble, firethorn, holly *Ilex aquifolium* and beech. The hedgerow is outgrown to 4m in height and is 1.5m wide. A condition assessment is not required for non-native hedgerow. This hedgerow will be removed.
- H3: native hedgerow: This runs along the southern boundary of the site, between the grassland and gravelled parking area. Species include native dogwood *Cornus sanguinea*, hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, and beech. There is also bramble, red valerian, buddleia and non-native privet *Ligustrum ovalifolium*. The hedgerow is species-poor and meets Good condition in the Defra metric. This hedgerow will be removed.

4.3.5 Artificial, Unvegetated Unsealed Surface (u1c)

There is a gravelled area off Wood Lane in the south of the site, currently used for parking.

4.3.6 Bramble Scrub (h3d)

There is an area of bramble scrub with occasional colonising buddleia in the south-west corner. The previous survey also found orchid sp. *Orchidaceae* sp., broadleaf dock *Rumex obtusifolius*, pendulous sedge *Carex pendula*, lesser celandine, stonecrop *Sedum* sp., common field speedwell *Veronica officinalis*, cleavers *Galium aparine*, and bristly ox-tongue *Helminthotheca echioides*, but the density of bramble was such that these species were not visible in the update survey.

4.3.7 Scattered Trees (32)

There were several logs and stumps on the site identified during the survey, particularly in the south-east corner. Based on the 2021 Tree Survey, the following trees have been included within BNG calculations:

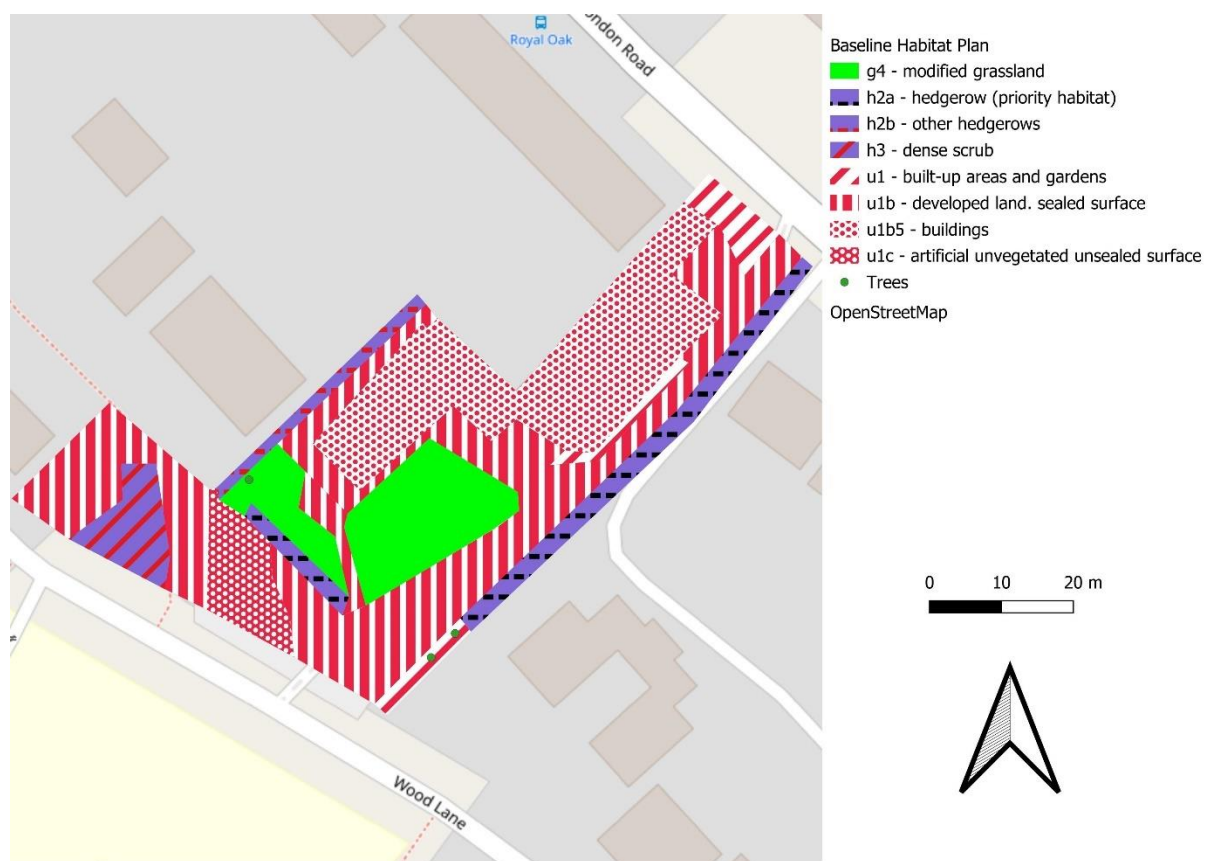
Preliminary Ecological Appraisal and Biodiversity Net Gain Assessment

- T01: A silver birch *Betula pendula* of 38cm diameter in good arboricultural condition. Based on details provided, this is likely to have been in Good condition.
- G02 (two conjoined tree stems, counted as one tree): A Lawson cypress *Chamaecyparis lawsoniana* of 25cm diameter in good arboricultural condition. Based on details provided, this is likely to have been in Moderate condition.
- T03: A cherry plum *Prunus cerasifera* of 20cm diameter in good arboricultural condition. Based on details provided, this is likely to have been in Moderate condition.

4.3.8 Other Habitats

There are close boarded fences and railings around the site boundaries. No non-native invasive plant species or otherwise notable plant species were recorded.

Figure 2 Pre-Development Habitat Plan



4.4 Protected and Notable Species

4.4.1 Bat Species

A Preliminary Bat Roost Assessment completed by IES in 2024 identified a dead common pipistrelle bat within one of the roof voids. No bat droppings were found. Three emergence surveys completed during May and June 2024 identified an individual roost for a single soprano pipistrelle bat emerging from the south-east elevation of the buildings. Common pipistrelle were also recorded foraging over the grassland in the south of the site. No other bat species were recorded. This indicates that the site is used by relatively low numbers of roosting, foraging and commuting pipistrelle bat species, which are typical of urban areas. None of the trees were previously identified as having potential roost features, and they appear likely to be of low value to bats, based on the description in the Arboricultural report.

4.4.2 Other Mammals

No evidence of sett building or use of the site by badgers was observed. Although not all of the dense bramble could be inspected, there were no mammal trails leading into or out of the bramble. There is negligible potential for hazel dormouse *Muscardinus avellanarius* to be present and impacted due to lack of nearby records and no connectivity to suitable habitat for the species. Hedgehog may be present, especially sheltering within dense shrubs, bramble scrub or hedgerows. There is no habitat on site for other protected or notable mammal species.

4.4.3 Nesting Birds

The dense vegetation including trees, shrubs and hedgerows is highly likely to be used by nesting birds, particularly during the peak nesting season of March to August. The buildings appear to be accessible to nesting birds and may be used during the nesting season.

4.4.4 Reptile Species

The site is suitable for use by individual or low numbers of slow worm and grass snake within the grassland and sheltering under scattered piles of logs, rubble or dense vegetation. Given the limited extent of habitats within the site, only low numbers or individual reptiles are likely to be present. Habitat on-site appears to have become more suitable for reptiles since the previous survey in 2024 due to relaxation of grassland management.

4.4.5 Amphibian Species

There are no ponds shown on Ordnance Survey mapping within 250m, although unmapped garden ponds may be present. Habitat on site is suitable for sheltering amphibians. Great crested newt are considered likely to be absent given lack of nearby records and potential breeding ponds. Other amphibian species, including the notable species common toad, may be present.

4.4.6 Invertebrate Species

Some invertebrate species are likely to use the site, but there are no habitats which would be likely to support notable invertebrate species.

4.4.7 Other Protected and Notable Species

There is no habitat likely to be suitable for other protected or notable species.

4.5 Biodiversity Net Gain Assessment

The site qualifies under the Environment Act 2021 for requirements for at least 10% measurable biodiversity net gain to be demonstrated. An assessment has been completed based on the mapped habitats within qGIS. The pre-development habitat areas are shown in Figure 2 and the BNG metric spreadsheet and condition sheets are appended. The BNG calculations will need to be revised if soft landscaping plans and specifications are revised.

The calculations are based on Proposed Site Plan Drawing 25.016 - 010 D, Drawing 25.016 - 006C BNG Site Layout, As Proposed and areas of habitat as shown in Figure 2. As stated in Section 3.4, areas on the GIS plan are estimates. The site achieves a baseline of 0.64 habitat units and 0.49 hedgerow units.

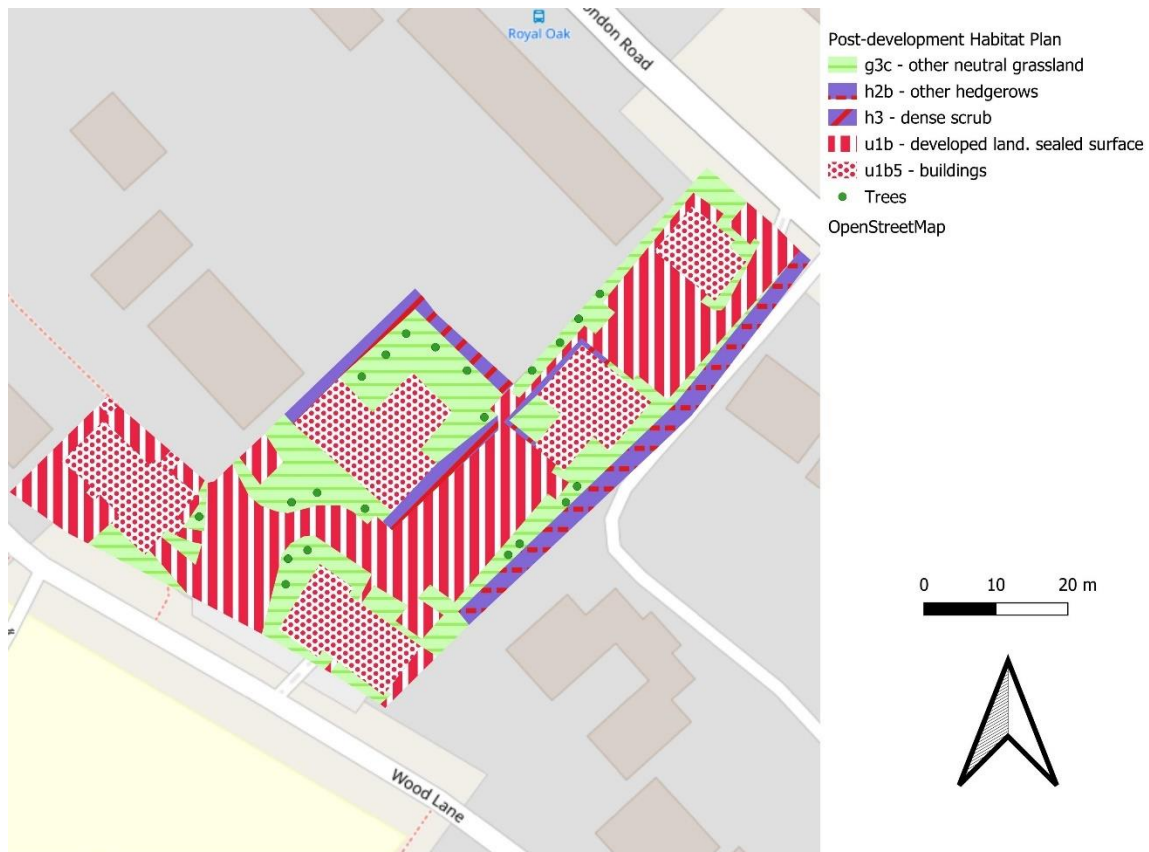
The original proposals would not have achieved 10% gain on-site. Avondale Ecology have worked with the Design Team. To achieve 10%+ gain in both habitat and hedgerow units, the following is proposed:

- All grassland areas are to be within communal (shared) garden spaces and not within private gardens. All of these areas shall be seeded with a native flowering lawn mixture such as Emorsgate seeds EL1 mixture or Meadowmania Flowering Lawn. This will enable a more diverse sward of benefit to pollinators. Manufacturer's instructions will need to be followed during establishment. Once established, cutting should be relaxed between May and June to enable wildflowers to seed. Monthly cutting to no less than 50mm above ground level can then be implemented outside of this period. This area is allocated as other neutral grassland in 'Poor' Condition (see appended condition sheets) which is a realistic and achievable assessment, given likely relatively low soil fertility for an urban site based on existing grassland condition.. Habitat condition will need to be achieved during the 30 year BNG period.
- Planting of 21 small native or fruit trees around parking areas and the communal gardens. The trees will be in 'Moderate' condition. The trees needs to be able to grow to at least 7.5cm diameter at breast height during the 30 year BNG period.
- Planting of 132m² bands of native shrubs around the site margins and parking areas. At least five native species will be planted such as hazel, hawthorn, elder, holly, willow, spindle *Euonymus europaeus* and/or field maple *Acer campestre*. To be allowed to mature and managed into 'Moderate' condition over the BNG period as demonstrated in the appended condition sheets.
- Thinning of non-native and ornamental species within H1, native hedgerow along the south-east boundary. Gapping up with at least 4-5 native species whips, such as the shrub species detailed above and additional hedgerow species such as English elm *Ulmus glabra* and

blackthorn *Prunus spinosa*. To continue to be cut infrequently, following best practice measures (including management outside of the main bird nesting season), to be maintained in 'Good' condition.

These proposals will achieve 0.71 habitat units (10.63% net gain) and 0.66 hedgerow units (34.40% net gain). Habitat retention and creation measures will need to be retained for at least a 30-year period.

Figure 3 Post-Development Habitat Plan



5 Impacts and Recommendations

The impact assessment is based on Proposed Site Plan Drawing 25.016 - 010 D. This includes demolition of the building and site clearance to facilitate construction of five blocks of apartments with associated access and landscaping. If proposals change or if additional enabling works are required, an updated ecological impact assessment will need to be completed.

5.1 Avoidance and Mitigation Measures

5.1.1 Designated Sites and Habitats

There are no anticipated direct negative impacts on designated sites for nature conservation due to the distance from these sites and small scale of the proposed development. There will be loss of 17m length of species-poor native hedgerow, a Habitat of Principal Importance under Section 41 of the NERC Act 2006. Compensation for this loss is provided within the proposals to enhance the south-eastern boundary hedgerow to create a species-rich native hedgerow under the Biodiversity Net Gain obligations. The south-eastern boundary hedgerow will need to be retained and protected during works, including installation of barrier fencing (such as Heras panels) before works commence.

5.1.2 Bat Species

Bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 (as amended).

The recommendations set out in *Bat Inspection & Emergence Survey Report* (IES, 2024) need to be followed. This includes update surveys during summer 2026 for licensing purposes. An appropriate Natural England bat mitigation licence will need to be in place before works commence as set out in the report. An agreed Method Statement will need to be followed. Even though the condition of the buildings has deteriorated due to vandalism since the previous survey, the conclusions of the surveys are unlikely to change significantly, given that relatively low levels of pipistrelle bats were recorded on-site previously.

Wherever possible, best practice should be followed including designing external lighting sensitively in accordance with *Bats and Artificial Lighting at Night* (ILP, 2023) to reduce light spill. Measures include:

- Only using external lighting where necessary for safety reasons;
- External lighting to be fitted with PIR sensors and short-duration timers where this is practical;
- Avoiding indiscriminate floodlighting and choosing downward-facing, wall-mounted directional fittings where possible or directional pole mounted fittings with hoods, baffles or shields; and
- Warmer light colours below 2700K to be used.

5.1.3 Nesting Birds

It is an offence to kill a wild bird or damage or destroy their nests or eggs under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Buildings should be demolished (under a bat mitigation licence) and dense habitats should be cleared during September to February inclusive to avoid the main bird nesting season. If this is not possible and demolition and clearance works are timed during March to August inclusive, a suitably qualified ecologist will need to complete a nesting bird check within 48 hours of removal or demolition. If any evidence of active bird's nests is found or suspected to be present, all activities must cease within 5m of the nest. Active bird's nests plus the buffer would need to be retained and protected until chicks have fledged which can take up to six weeks. As it is highly likely that active nests will be present during the nesting season, seasonal timing of clearance is strongly recommended.

5.1.4 Reptiles

Reptiles are protected from deliberate killing or injury under the Wildlife and Countryside Act 1981 (as amended). There is a risk of small numbers or individual reptiles being present on-site. To avoid potential harm to reptiles, the following methodology will be required:

- All vegetation to be cleared to no less than 10cm above ground level using hand tools including chainsaws and strimmers.
- A second stage cut to ground level to be completed during the reptile active season of late March to October inclusive with the site also cleared of any piles of debris and compost (by hand rather than by machinery) at the same time. The clearance will be completed sequentially from one end of the site to another to flush reptiles out of the area of works.
- If any reptiles/slow worms are found, the ecologist will be contacted for advice and a mitigation strategy devised. This may require additional ecological supervision and a receptor area to be set up.
- No vehicle access into the site under the site has been made unsuitable for reptiles.

5.1.5 Other Protected and Notable Species

If notable species such as hedgehog or common toad are discovered during works, they must be moved to safety into nearby suitable habitat. All trenches should be covered overnight or fitted with a mammal escape ramp (e.g. a scaffold board). If other protected species are unexpectedly found, an ecologist must be contacted for advice.

5.2 Enhancement Measures

5.2.1 Habitats

The quality of created habitats can vary widely. The exact planting specifications should be carefully considered to benefit a wide range of wildlife e.g. night-flying invertebrate prey of bat species.

5.2.2 Species-Specific Measures

To meet British Standard BS42021: Integral Nest Boxes, a ratio of one habitat feature per residential unit is recommended. Measures to benefit particular species of wildlife including the following have been incorporated into the scheme:

- Hedgehog connectivity measures (13cm x 13cm) gaps to be installed in solid boundary features – as detailed in [Link your garden with a hedgehog highway](#).
- A row of three universal bird bricks (15 total) to be integrated within the walls of each apartment block to provide habitat for species such as house sparrow and swift ([universal_swift_nest_brick02.pdf](#)). Swift nesting features must be sited at 4-5m+ above ground level with an unrestricted drop zone. All boxes should be sited in a location where it is unlikely to be disturbed or accessible to predators and ideally on a north facing elevation or out of direct sunlight as much as possible.
- Two bat tubes to be integrated into the walls of each apartment block (10 total) on the south and south-east elevations, such as Schwegler 1FR bat tubes. Bat roost features are usually installed at least 3-4m in height to maximise their chance of use.
- Three habitat piles (1m x 0.5m) log, brash or stone piles to be created around the site margins to provide habitat for reptiles, small mammals, invertebrates and hedgehog.

The indicative location of bat and bird boxes has been provided in the BNG Plan, as shown in Figure 1.

References

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Appendices

Appendix A Site Photographs

	
A1 Site facing north	A2 Ornamental shrubs in north-west corner
	
A3 Modified grassland	A4 Typical sward in modified grassland
	
A5 Native hedgerow (H3) and grassland	A6 Gravelled parking area and debris

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A7 Native hedgerow (H3)	A8 South-eastern area of site, including felled trees
	
A9 North-west boundary with ornamental hedgerow (H2)	