



ECOLOGICAL IMPACT ASSESSMENT
THE PRINCE ALBERT
COPTHORNE BANK
CRAWLEY
RH10 3QX

OCTOBER 2024

ON BEHALF OF WESTCOAST DEVELOPMENTS



The Old Squash Court,
Rempstone Hall,
Rempstone,
Corfe Castle,
Wareham,
Dorset,
BH20 5JQ

www.ecological-services.co.uk

Telephone: 01929 477115
E-mail: enquiries@ecological-services.co.uk

Authorisation

	Name	Date
Report prepared by:	RM	02.10.2024
Report checked and authorised by:	JS	03.10.2024

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1.0 EXECUTIVE SUMMARY

- 1.1 This Ecological Impact Assessment, prepared by LC Ecological Services Limited (LCES), was undertaken to assess the potential ecological impacts and effects of the proposed development of a new supermarket, two dwellings, and associated infrastructure at The Prince Albert, Copthorne Bank, Crawley, RH10 3QX.
- 1.2 The scoping information provided by the ecological appraisal summarises the ecological baseline methods and results; evaluates the Important Ecological Features; and indicates the potential impacts and proposes mitigation for the construction and operational of the proposed development.
- 1.3 This Ecological Impact Assessment identified eight Important Ecological Features (IEF's) which could potentially be impacted by the development proposals, including two sites of national importance, three sites of local importance, and two species of fauna of local importance.
- 1.4 The zone of influence of the project was determined by the sensitivity of the ecological features to environmental change within the site and the surrounding area in accordance with the guidelines for EcIA (CIEEM, 2022).

2.0 INTRODUCTION

- 2.1 This Ecological Impact Assessment, prepared by LC Ecological Services Limited (LCES), was undertaken to assess the potential ecological impacts and effects of the proposed development of a new supermarket, two dwellings, and associated infrastructure at The Prince Albert, Copthorne Bank, Crawley, RH10 3QX. (approximate central Grid Ref: TQ 31318 39404). The site location and survey boundaries are depicted in the plan included in appendix I. The site proposal plan is included in appendix II.
- 2.2 This report summarises the ecological baseline methods and results; evaluates the Important Ecological Features (IEFs); and indicates the potential impacts and proposes mitigation for the construction and operational stages of the proposed development.
- 2.3 The purpose of this report is to outline the following:
- To identify and describe all potentially significant ecological effects associated with the proposed development.
 - To set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects.
 - To identify how mitigation measures will/could be secured.
 - To provide an assessment of the significance of any residual effects.
 - To identify appropriate enhancement measures.
 - To set out the requirements for post-construction monitoring.

3.0 LEGISLATION AND POLICY CONTEXT

Legislation

3.1 Full details of statutory obligations with respect to biodiversity and the planning system can be found in DEFRA Circular 06/2005. Relevant legislation to this application site includes the following:

- **Internationally Designated Sites:** Special Protection Areas (SPA) and Special Areas of Conservation (SAC) are listed as National Site Networks which are designated for supporting habitats or species of high nature conservation importance in the European context. protected under the *Conservation of Habitats and Species (Amendment) Regulations 2017* and Ramsar sites are protected under the *Ramsar Convention (1971)*.
- **Nationally Designated Sites:** Sites of Special Scientific Interest (SSSI) are protected under section 28 of the *Wildlife and Countryside Act (WCA) 1981 (as amended)*.
- **Badgers:** Protection of Badgers Act 1992.
- **Bats:** all species of British bats and their roosts are fully protected under the Wildlife and Countryside Act (WCA) 1981 (as amended) and the Conservation of Habitats and Species (Amendment) Regulations 2017.
- **Birds:** all birds, their nests, eggs and young are protected by the *WCA 1981 (as amended)*.
- **Mammals:** Wild Mammals (Protection) Act 1996.
- **Reptiles:** the adder (*Viper berus*), common lizard (*Zootoca vivipara*), grass snake (*Natrix helvetica*) and slow worm (*Anguis fragilis*) receive protection under the *WCA 1981 (as amended)*.

National Planning Policy

3.2 Chapter 15 of the National Planning Policy Framework (NPPF, 2023) ‘*Conserving and enhancing the natural environment*’ sets out the Government’s planning policies relating to biodiversity, landscape and geological conservation. The relevant paragraphs within this chapter include:

- **Paragraph 185:** Protect and enhance biodiversity and geodiversity by safeguarding wildlife-rich habitats and wider ecological networks; promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and securing biodiversity net gain.
- **Paragraph 186:** Refuse development if found to have significant harm to biodiversity; is on land within or outside a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect; if results in the loss of deterioration of irreplaceable habitats. Developments with the primary objective to conserve or enhance biodiversity will be supported, while opportunities to improve biodiversity

in and around developments should be integrated as part of their design and can secure measurable net gains for biodiversity or enhance public access to nature.

- **Paragraph 187:** Protection to be given to potential SPA and possible SACs, proposed Ramsar sites, and sites identified or required as compensatory measures for impacts to these sites.
- **Paragraph 188:** The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (alone or in combination with other plans), unless an appropriate assessment concludes that the plans will not adversely affect the integrity of the habitats site.

Local Planning Policy

3.3 The Crawley Borough Local Plan 2015-2030 (December 2025) is currently in use for planning applications within the West Sussex area within the Crawley Borough Council jurisdiction.

3.4 Relevant planning policies within this plan include:

- ENV1: Green Infrastructure
- ENV2 – Biodiversity
- ENV3: Local green space

Biodiversity Action Plans

3.5 Biodiversity Action plans (BAPs) which may be of relevance to the site include the following:

- Reptiles (all species) (UKBAP)
- Western barbastelle (*Barbastella barbastellus*) (UKBAP)
- Bechstein's bat (*Myotis bechsteinii*) (UKBAP)
- Noctule (*Nyctalus noctula*) (UKBAP)
- Soprano pipistrelle (*Pipistrellus pygmaeus*) (UK BAP)
- Brown long-eared bat (*Plecotus auritus*) (UK BAP)
- Hedgerows (UKBAP)

4.0 ASSESSMENT METHODOLOGY

Study Area

4.1 The site is located at the approximate central Ordnance Survey (OS) grid reference (TQ 31318 39404) and the study area comprises the site plus the additional surrounding radii detailed below:

- 5 kilometres for any international statutory designated sites for conservation.
- 2 kilometres for any national statutory designated sites for nature conservation.
- 1 kilometre for any non-statutory designated sites for nature conservation.
- 2 kilometres for all records of protected, notable and invasive species.
- 30 metres for badgers (*Meles meles*).

Sources of Information

4.2 The following sources of information were used to inform the impact assessment:

Table 1: Summary of survey work and sources of information for The Prince Albert

Survey type	Year(s)	Comment
Desk study - biodiversity records search and details of any local non-statutory designated sites for nature conservation	2024	Information obtained from Sussex Biodiversity Records Centre (SxBRC)
Desk study - information on statutory sites designated for nature conservation, granted protected species mitigation licences.	2024	Information obtained from Natural England's web-based Multi-Agency Geographic Information for the Countryside (MAGIC)
Ecological appraisal	2024	LC Ecological Services on 27 th June 2024
Badger activity survey	2024	LC Ecological Services on 27 th June 2024
Bat roosting suitability assessment	2024	LC Ecological Services on 27 th June 2024
Bat foraging and commuting habitat suitability assessment	2024	LC Ecological Services on 27 th June 2024
Nesting bird habitat suitability assessment	2024	LC Ecological Services on 27 th June 2024
Great crested newt habitat suitability assessment	2024	LC Ecological Services on 27 th June 2024
Hazel dormouse habitat suitability assessment	2024	LC Ecological Services on 27 th June 2024

Survey type	Year(s)	Comment
Reptile habitat suitability assessment	2024	LC Ecological Services on 27 th June 2024

Assessment Process

- 4.3 The EcIA is in accordance with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2022).
- 4.4 The starting point was to determine which features should be subject to detailed assessment, that is, those receptors:
- Of sufficient value that impacts upon them may be significant (in terms of legislation or policy); and
 - Potentially vulnerable to significant impacts arising from the development.
- 4.5 This approach is consistent with the EIA Regulations, which only require investigation of likely significant effects.
- 4.6 The CIEEM guidelines recommend that the value of ecological receptors or features is determined based on a geographic frame of reference that includes the following levels:

Table 2: Level of Value Assigned to each Ecological Feature (adapted from CIEEM, 2022)

Level of Value	Example of Definitions
International	An internationally important site e.g. SPA, SAC, Ramsar (or a site considered worthy of such a designation). A viable area of a habitat type listed in Annex 1 of the Habitats Directive, or smaller areas of such habitats which are essential to maintain the viability of a larger whole. A regularly occurring population of an internationally important species (listed on Annex IV of the Habitats Directive).
UK / National	A nationally designated site e.g. SSSI or a site considered worthy of such designation. A viable area of a priority habitat identified within the UK BAP, or of smaller areas of such habitat which are essential to maintain the larger whole. Any recurring population of a nationally important species e.g. listed on Schedules 5 and 8 of the Wildlife and Countryside Act 1981 (as amended). A feature identified as of critical importance in the UK BAP.
Regional (West Sussex)	A site designated as a Site of Nature Conservation Interest (SNCI), or habitats that meet the designation criteria for SNCIs in West Sussex. Areas of internationally or nationally important habitats which are degraded but are considered readily restored.

Level of Value	Example of Definitions
	A regularly occurring, locally significant population of a species listed as being nationally scarce. A regularly occurring, locally significant number of a regionally important species.
Local (the zone of influence including the site and its immediate vicinity, including habitats within or linked to those on site)	Areas of internationally or nationally important habitats which are degraded and have little or no potential for restoration. A good example of a common or widespread habitat in the region.

Assessment Criteria

Predicting and characterising ecological impacts

- 4.7 The assessment of the magnitude of effect assesses whether an impact will be positive or negative; its extent; duration; reversibility and timing and frequency as well as the cumulative effect. A combination of quantitative information and qualitative assessment based on professional judgment was used whilst considering all of these factors to assign effects on the receptors to one of four categories as detailed in table 3 below.

Table 3: Assessment of the Magnitude of Effects

Category	Definition
High	A permanent or long-term effect on the extent/size or integrity of a site, habitat, species assemblage or community, population or group. If adverse this is likely to threaten its sustainability. If beneficial this is likely to enhance its conservation status.
Medium	A permanent or long-term effect on extent/size or integrity of a site, habitat, species assemblage or community, population or group. If adverse this is unlikely to threaten its sustainability. If beneficial this is likely to be sustainable but is unlikely to enhance its conservation status.
Low	A short-term but reversible effect on the extent/size or integrity of a site, habitat or species assemblage or community, population or group that is within the range of variation normally experienced between years.
Negligible	A short-term but reversible effect on the extent/size or integrity of a site, habitat or species assemblage or community, population or group that is within the normal range or annual variation.

- 4.8 For each ecological feature, the significance of the effects of the proposed development during construction and operation are assessed and the type of impacts are characterised according to their importance and magnitude. Where there is uncertainty over the appropriate level of significance to assign, this will be stated but as a precautionary measure the higher level of significance will be applied. Where impacts will arise, mitigation and enhancement measures are provided.

Direct and Indirect Ecological Impacts

- 4.9 Both direct and indirect impacts are considered within this assessment. A direct impact is a defined action such as the physical loss of a habitat or the immediate mortality of an individual of a particular species. Indirect impacts are attributable to an action, but which affect ecological resources through effects on an intermediary ecosystem, process or receptor e.g. the loss of an important prey species for a predator.

Limitations

- 4.10 An area to the south of The Prince Albert was inaccessible due to safety concerns from the landowner. This area was surveyed from a ladder, with no major limitations encountered as a result.

5.0 BASELINE

- 5.1 The methods and the key findings are summarised in this section to inform the nature conservation evaluation for each of the ecological features identified.

Statutory sites and non-statutory sites

- 5.2 There are five statutory sites for nature conservation located within five kilometres of the site. These include Hedgecourt Site of Special Scientific Interest (SSSI) which is located 3.55 kilometres east of the site, Turners Hill SSSI which is located 4.71 kilometres south-east of the site, Grattons Park Local Nature Reserve LNR which is located 2.56 kilometres south-west of the site, Waterlea Meadows LNR which is located 4.23 kilometres south-west of the site, and Tilgate Forest LNR which is located 4.74 kilometres south-west of the site.
- 5.3 No records of non-statutory sites designated for nature conservation within two kilometres of the site were returned by SxBRC.

Habitats

- 5.4 The habitat types within the site were noted during the surveys undertaken in June 2024 by experienced ecologist Rob McCalman. Dominant plant species were recorded for each habitat present. Habitats were classified using the UK Habitat Classification methodology version 2.0 (UKHab, 2023). The survey included directly searching for legally protected and invasive species of plant and categorising any habitats of ecological value that were encountered. A general description of the vegetation was also noted, listing species encountered and scoring their abundance using the DAFOR scale shown below.

D	Dominant
A	Abundant
F	Frequent
O	Occasional
R	Rare
L	Local (used as a prefix to any of the above)

- 5.5 The site encompassed areas of land belonging to The Prince Albert public house, including gardens, a car park, and the public house.
- 5.6 The following habitats were recorded on site and are described below. A baseline habitat map is provided as appendix IV.
- Developed land, sealed surface (u1b)
 - Modified grassland with scattered trees (g4, 32)

- Other native hedgerow (h2a6)
- Buildings (u1b5)

Developed land, sealed surface (Target note 1, appendix VI)

- 5.7 A tarmac car park is located adjacent to the northern site boundary with various paving and footpaths found throughout the site, with little vegetation colonising these areas. This habitat holds negligible ecological value and as such no further action is required.

Modified grassland with scattered trees (Target note 2, appendix VI)

- 5.8 The majority of the site comprises modified grassland, in the form of a garden associated with the public house. The garden contains various seating benches and play equipment. A series of scattered trees are located in this habitat in the east of the site, adjacent to the eastern boundary and car park. The scattered trees consist of a single pedunculate oak (*Quercus robur*), a single silver birch (*Betula pendula*), a single cherry (*Prunus avium*), a single crab apple (*Malus sylvestris*) and several leylandii (*Lleylandii sp*) trees. An area that was formerly ruderal/ephemeral habitat was present within this habitat adjacent to the southern boundary of the site; however, it had been recently cut to ground level. Species recorded included dominant perennial rye-grass (*Lolium perenne*), abundant and locally dominant Yorkshire-fog (*Holcus lanatus*), occasional false oat-grass (*Arrhenatherum elatius*), and rare wall barley (*Hordium murinum*), with occasional ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*), dandelion (*Taraxacum officinale agg.*), and abundant white clover (*Trifolium repens*). An additional area of modified grassland is located adjacent to the southern and western site boundaries and is separated from the main garden by wooden panel fencing. This area has a similar species composition to the main garden area, with a higher sward due to the area being unmanaged for some time.

Other native hedgerow (Target note 3, appendix VI)

- 5.9 A single other native hedgerow forms the southern boundary of the site and runs parallel to the modified grassland areas. The hedgerow measures approximately two metres in height and one metre in width. Species include abundant amounts of bramble (*Rubus fruticosus*) and honeysuckle (*Lonicera sp*), occasional amounts of hawthorn (*Crataegus monogyna*), and rare amounts of holly (*Ilex aquifolium*), and dog rose (*Rosa canina*). The understory comprises a continuation of species found in the adjacent modified grassland however, occasional amounts of cleavers (*Galium aparine*) is also present.

Building (Target note 4, appendix VI)

- 5.10 The site contains a single building within the redline boundary, the Prince Albert public house. This structure will remain unaffected by the current proposals.

Assessment of habitats

5.11 The level of value of these habitats is summarised in table 4 below.

Table 4: Level of value of habitats recorded within the site.

Receptor	Evaluation rationale	Value of receptor
Modified grassland	Two areas of modified grassland are present in the southern half of the site, consisting of a pub garden and a separated fenced garden. This is a common habitat at local, county, and national levels with limited ecological value.	Local
Other native hedgerow	A single other native hedgerow is located on the site's southern boundary. This habitat is a common habitat at local, county and national levels which can support a range of flora and fauna.	Local
Developed land, sealed surface	Sections of paving and tarmac are located within the redline boundary and do not provide substantial ecological value.	N/A
Building	A building is present within the redline boundary of the site and does not provide substantial ecological value.	N/A

Habitats and features in the surrounding area

5.12 The site is surrounded by residential housing and road infrastructure in all directions. Scattered urban trees and areas of shrub are located within gardens surrounding the site, with patches of broadleaved woodland and arable fields located approximately 140 metres north, and approximately 590 metres south. Copthorne Brook is located approximately 180 metres to the south of the site. **The surrounding habitats will be unaffected by the proposals and have therefore been excluded from this assessment.**

Protected, notable and invasive species

5.13 SxBRC was contacted for records of protected and notable species within a two-kilometre radius of the site. Full results are provided in appendix III however, records of eight species of bat, five records of great crested newt (*Triturus cristatus*), seven records of hazel dormouse (*Muscardinus avellanarius*) and eighteen records of hedgehog (*Erinaceus europaeus*) were returned.

5.14 Based on the habitat suitability on the site, site knowledge and records returned by SxBRC, protected species surveys were subsequently completed in order to inform the EcIA and include:

- Badger activity survey
- Bat roosting suitability assessment
- Bat foraging and commuting habitat suitability assessment
- Nesting bird habitat suitability assessment
- Great crested newt habitat suitability assessment
- Hazel dormouse habitat suitability assessment

- Reptile habitat suitability assessment

5.15 The results of the protected/notable species data search and surveys together with an evaluation of each species, are referred to by their common and scientific names.

Badger

5.16 The site, its boundaries and a 30-metre buffer zone around the site (where access was possible), were surveyed for badger evidence such as setts, latrines, pathways, footprints, snuffle holes and badger fur (English Nature, 2002). The survey was undertaken by ecologist Rob McCalman on 27th June 2024.

5.17 The desk study returned no records of badger within two kilometres of the site. Furthermore, no evidence of badger activity, including latrines or footprints were recorded on site during the survey.

5.18 The majority of the site provides suboptimal foraging and commuting habitat for badger. However, the area of modified grassland with a long sward, along with the hedgerow base, offer some limited foraging potential for the species.

5.19 Based on the reasons outlined above, it is concluded that badgers are not currently using the site. However, they are a mobile species and could potentially move into the site at any time.

Bats: Roosting

5.20 Eight species of bat were returned by SxBRC, including western barbastelle, whiskered (*Myotis mystacinus*), Daubenton's bat (*Myotis daubentonii*), natterer's bat (*Myotis nattereri*), noctule, common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle, and brown long-eared within two kilometres of the site. No European protected species (EPS) licenses for bats were granted within a kilometre of the site.

5.21 A ground-level tree assessment (GLTA) was conducted on the scattered trees by Rob McCalman on 27th June 2024 in accordance with the Bat Conservation Trust survey guidelines (Collins, 2023). The assessment involved a search for bats, evidence of bats, and potential roost features (PRF) such as woodpecker holes, knot holes, pruning cuts, tear outs, wounds, butt rots, lifting bark, and ivy.

5.22 No potential roosting features were identified on any of the scattered trees during the assessment. The scattered trees on site were therefore, assessed as holding **negligible** potential to support roosting bats. The condition of trees is liable to change, and roosting opportunities could become available for bats in the future.

5.23 The plans do not impact the main pub building; however, an external examination of the building was conducted due to its proximity to the site, with the building being assessed as holding **low** potential to support roosting bats. In the eventuality that the building will

be impacted by these or additional proposals, an internal inspection and a single dusk emergence survey would be required to rule out the presence of roosting bats.

Bats: Foraging and Commuting

- 5.24 The habitats on site and the habitats they connect to were assessed for their suitability to support foraging and commuting bats in accordance with the Bat Conservation Trust guidelines (Collins, 2023). The scattered trees and hedgerows provide some limited foraging and commuting habitat on site. The wider landscape comprises networks of treelines and hedgerows which connect to parcels of woodland, providing good quality foraging and commuting habitat off-site. However, the site is not well-connected to these features. The site has therefore been assessed as holding low suitability for foraging bats.

Bird nesting and foraging

- 5.25 The habitats on site were assessed for their potential to support nesting birds. The building was considered to hold potential to support nesting birds such as swallow (*Hirundo rustica*) and house martin (*Delichon Urbica*). Furthermore, the hedgerow and scattered trees provide nesting habitat for species such as dunnock (*Prunella modularis*) and song thrush (*Turdus philomelos*). However, no bird's nests were recorded during the survey.

Great crested newt

- 5.26 SxBRC returned five records of great crested newt within a two-kilometre radius of the site. According to MAGIC one European Protected Species Mitigation (EPSM) licence for great crested newts has been granted within two kilometres of the site. This licence was granted 1.46 kilometres to the west and permitted the damage and destruction of a great crested newt breeding and resting place.
- 5.27 The site provides some limited terrestrial habitat for great crested newt. The base of the hedgerow provides a suitable resting habitat and the area of modified grassland with a long sward provides suitable foraging habitat. However, most of the site is considered to be suboptimal habitat due to the grassland having a short sward and much of the site comprising developed land and sealed surface.
- 5.28 There is one pond located within 500 metres of the site. This pond is situated 400 metres south-west of the site. The matrix between the site and the pond consists of numerous residential properties and several roads, forming a substantial barrier that would prevent great crested newts from accessing the site.
- 5.29 Suitable breeding ponds are crucial for supporting great crested newt populations. The lack of appropriate water bodies and the fact that most of the site comprises suboptimal terrestrial habitat for this species means that it is highly unlikely that great crested newts are present. **Great crested newts have therefore been screened out of this assessment.**

Hazel dormouse

- 5.30 SxBRC returned seven records of hazel dormouse within a two-kilometre radius of the site. According to MAGIC there have been ten EPSM licences for hazel dormouse granted within two kilometres of the site. These licences were granted 1.31 kilometres west of the site, 1.44 kilometres west of the site, and 1.95 kilometres south-west of the site.
- 5.31 The habitats on site were assessed for their potential to support the hazel dormouse. The hedgerow is considered to be suboptimal habitat for this species. Furthermore, it is not connected to any suitable dormouse habitat off-site. Therefore, there is no means of colonisation or dispersal. **Hazel dormouse have therefore been screened out of this assessment.**

Reptiles

- 5.32 The habitats on site were assessed for their potential to support foraging and commuting reptiles. The base of the hedgerow and area of modified grassland with a long sward provide foraging habitat. However, due to the lack of connectivity to the suitable commuting and foraging habitat present off-site to the north and east, and the presence of substantial barriers such as the road systems, it is highly unlikely that reptiles are supported on site. **Reptiles have therefore been screened out of this assessment.**

Assessment of the site's value for key fauna

- 5.33 The level of value that the site provides for the identified key fauna species and groups is summarised in table 5 below.

Table 5: Site value for the identified key fauna

Key fauna	Evaluation rationale	Value of the site
Badger	The modified grassland with a long sward and the hedgerow base, offer some limited foraging habitat.	Local
Bat foraging and commuting habitat	Areas of low suitability for foraging and commuting are available on site, with higher quality habitat situated beyond the site boundary.	Local
Nesting and foraging birds	The site holds suitable foraging and nesting habitat within the hedgerow and scattered trees.	Local

6.0 ASSESSMENT OF POTENTIAL IMPACTS

- 6.1 The impacts have been assessed against the development proposals including the inherent mitigation measures described below. Impacts during the construction phase and the operational phase once the new supermarket, two dwellings, and associated infrastructure are completed are considered below.
- 6.2 Impacts of the proposed development are discussed for the IEFs that are of at least local value or subject to legal consideration. The IEFs included from this point on are therefore limited to:
- Hedgecourt SSSI (National value)
 - Turners Hill SSSI (National value)
 - Grattons Park LNR (Local value)
 - Waterlea Meadows LNR (Local value)
 - Tilgate Forest LNR (Local value)
 - Modified grassland
 - Other native hedgerow
 - Badger (Local value)
 - Bats: foraging and commuting habitat (Local value)
 - Nesting birds (Local value)

Construction Phase Impacts

Statutory sites

Hedgecourt SSSI and Turners Hill SSSI

- 6.3 The development site is located approximately 3.55 kilometres west of Hedgecourt SSSI and 4.71 kilometres north-west of Turners Hill SSSI. Due to the type of the proposed development, it is considered that there will be no direct or indirect impacts on these designated sites. Dust and noise are unlikely to travel the intervening distances with sufficient intensity to cause adverse impacts to the flora and fauna of these statutory designated sites. The IEF is of **national** value, the magnitude of effect **negligible** and therefore **not significant**.

Grattons Park LNR, Waterlea Meadows LNR, and Tilgate Forest LNR

- 6.4 The development site is located 2.56 kilometres north-east of Grattons Park Local Nature Reserve LNR, 4.23 kilometres north-east of Waterlea Meadows LNR, and 4.74 kilometres north-east of Tilgate Forest LNR. Due to the nature of the proposals and the intervening distances from these designated sites, adverse impacts from habitat loss, degradation or disturbance are not anticipated. These IEFs are of **local value**, the magnitude of effect is **negligible** and therefore **not significant**.

Habitats

Modified grassland

- 6.5 In the absence of mitigation, areas of modified grassland could be impacted and/or destroyed. The habitat could also be degraded through dust pollution and disturbance. The receptor is of **local** importance, the magnitude of the effect would be **low** which is **not significant**.

Other native hedgerow

- 6.6 In the absence of mitigation, areas of other native hedgerow could be impacted and/or destroyed. The habitat could also be degraded through dust pollution and disturbance. The receptor is of **local** importance, the magnitude of the effect would be **low** which is **not significant**.

Protected and notable species

Bats: foraging and commuting

- 6.7 In the absence of mitigation, external lighting used by contractors during the construction phase has the potential to impact foraging and commuting bats. Bat foraging habitat is a receptor of **local** importance, the magnitude of the effect of lighting would be **low** which is **not significant**.

Nesting birds

- 6.8 There will be a loss of nesting habitat as a result of the proposed works. Without mitigation this would have a low risk of damaging or destroying active nests. Noise and visual disturbance associated with construction activity may impact on species nesting close to the development site. The IEF is of **local** importance and the magnitude of effect is considered to be **low** and is **not significant**.

Operational Phase Impacts

Statutory and non-statutory designated sites

Hedgecourt SSSI, Turners Hill SSSI,

- 6.9 The proposed development is considered to be sufficiently isolated from these designated sites that there will be no direct impacts anticipated from effects such as noise, lighting, and dust, or introductions of invasive plant species, given the type of the development, and distance and location in relation to the designated sites. Turners Hill SSSI is a private estate, and offers no public access, however the development site is

close enough to Hedgecourt SSSI that it will likely experience an increase in recreational activity, such as dog walking. As the IEF is of **national** value, the magnitude of effect is **low** and therefore **not significant**.

Grattons Park, Waterlea Meadows, and Tilgate Forest LNR's

- 6.10 The proposed development is considered to be sufficiently isolated from these designated sites that there will be no direct impacts anticipated from effects such as noise, lighting, and dust, or introductions of invasive plant species, given the type of the development, and distance and location in relation to the designated sites. The development site is close enough to these designated sites that they will likely experience an increase in recreational activity, such as dog walking. As the IEF is of **local** value, the magnitude of effect is **low** and therefore **not significant**.

Protected and Notable Species

Bats (Foraging and Commuting)

- 6.11 In the absence of mitigation, an increase in external lighting on the property once operational, could reduce the quality of the site as foraging habitat for bats. Bat foraging habitat is a receptor of **local** importance, the effect of increased lighting would be **low** which is **not significant**.

Ecological enhancements

- 6.12 A minimum of one bee brick will be installed on the western elevations of the proposed residential buildings. A minimum of two bee bricks will also be installed on the southern elevation of the proposed retail building, to provide refuge for invertebrate species.
- 6.13 Where any shrub or tree planting is proposed, all species will be native and of UK origin. Suitable tree species and shrubs would include hazel (*Corylus avellana*), field maple (*Acer campestre*), oak, goat willow (*Salix caprea*), dogwood (*Cornus sanguinea*), spindle (*Euonymus europaeus*), blackthorn (*Prunus spinosa*) and hawthorn.
- 6.14 Grassland seed mixes from a supplier of seeds of local provenance will be used to seed any new grassland area within the design of the development, including lawns. Such grassland provides better nectar sources for invertebrates and hence is of greater value for foraging birds and mammals.
- 6.15 A single bat box is to be placed on the southern elevation of The Prince Albert public house, to provide roosting provision for bat species within the locality. The box should be placed at a minimum height of four metres, and away from artificial light sources as much as possible. A Schwegler or Beaumaris woodcrete box, or box of similar construction should be used.

- 6.16 A single bird box is to be placed on the southern elevation of the proposed supermarket building, to provide nesting provision for bird species. The box should be placed at a minimum height of three metres and be sheltered from weather as much as possible. A woodstone style box or box of similar construction should be used.

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7.0 MITIGATION

- 7.1 While the impacts identified in section 6 are not all significant, legislation must be adhered to and therefore, the following mitigation outlined in this section is required.

Construction Phase

Habitats

Other native hedgerow

- 7.3 To ensure that the other native hedgerow on the southern boundary remains intact, Heras fencing will be erected during the construction phase to protect the hedgerow from damage by plant and other machinery.

Protected and Notable Fauna

Badger

- 7.4 Although no evidence of badger was recorded on site, the site is connected to suitable badger habitat and there are records of badger in the wider landscape. As a measure of best practice, the following safeguarding measures for badger during construction will be implemented:
- Install Heras fencing in areas where it is important to exclude badgers for safety reasons e.g. fuel storage areas.
 - These will be regularly inspected to ensure they are not being used by badger.
 - If excavations are left open at night, wooden boards or planks will be provided as a means of escape for any animals that fall in.
 - Any pipework will be capped over-night to avoid animals becoming trapped.
- 7.5 Prior to clearance commencing, a site walkover will be undertaken to ensure conditions of the site have not altered and no sett entrances are present close to the works. In the event that a badger sett is encountered, a mitigation strategy will be required to ensure no harm is caused to the sett an/or individual badgers which may be occupying them. This may include installing 'no work zones' within 20 metres of the sett or obtaining a licence from Natural England to close the sett.

Bats (Foraging and Commuting)

- 7.6 Although the development is considered to have a negligible impact on foraging and commuting bats, there is a legal duty to ensure that bats do not suffer a reduction in natural range.

- 7.7 The development works will include measures to limit lighting impacts during the construction phase as a measure of best practice. To ensure that light-sensitive foraging and commuting bats are not subjected to disturbance impacts during the construction phase, works during the summer months will be restricted to daylight hours, with no works to start until an hour after sunrise, before sunset, and no works to be conducted during hours of darkness. No external lighting systems will be used.

Nesting and foraging birds

- 7.8 The removal of any suitable habitat should be undertaken outside the breeding season to reduce direct impacts on nesting birds. It should be noted that some species will breed early in mild winters and others, such as wood pigeon (*Columba palumbus*), can breed all year round. Vegetation removal timed to occur between September and the end of February would minimise impacts on nesting birds.
- 7.9 Should vegetation removal be planned during the breeding season (taken to run from March to August inclusive) a suitably qualified ecologist will need to check for evidence of nesting birds before vegetation removal commences. Any nest present will be left, and a five-metre buffer zone will be placed around the nest, excluding any works until the young have fledged.
- 7.10 Two bird boxes are to be placed on the eastern elevations of the proposed housing, to provide nesting provision for bird species. The boxes should be placed at a minimum height of three metres and be sheltered from weather as much as possible. Woodstone style box or box of similar construction should be used.

Operational Phase

Statutory and non-statutory designated sites

Hedgecourt SSSI, Grattons Park, Waterlea Meadows, and Tilgate Forest LNR's

- 7.11 There will be increased recreational pressures on the referenced designated sites within the locality of the site, due to increased footfall, and increased activity including dog walking.
- 7.12 The development will follow the mitigation strategy for statutory and non-statutory sites as outlined by the local authority.

Bats (Foraging and Commuting)

- 7.13 The predicted impact on bat foraging and commuting post-construction was not significant, however, as a method of best practice, mitigation will be implemented to minimise any potential adverse impacts. In accordance with Bats and Artificial Lighting

in the UK (BCT, 2023), any new lighting to be installed as part of the development should incorporate the following measures to minimise impacts on nocturnal species such as bats:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used. LED luminaires should be used where possible.
- Direct lighting to be used only where it is needed and away from linear features by using accessories such as cowls or hoods on the luminaries. Luminaries should be placed at a suitable distance from the retained habitats (or dark corridors around them) to ensure that additional light spill dissipates. Retained habitats used by commuting and foraging bats (e.g., hedgerows and woodland fringe) should not be subject to additional lighting above the predevelopment baseline.
- Keep the height of lighting columns as short as possible, ideally three metres or less.
- Use of motion sensor activated or Central Management System (CMS) controlled security lighting triggered only when necessary.
- Light sources should emit minimal ultra-violet light, peak higher than 550nm and be of a warm/neutral colour <2,700 kelvin.
- Only luminaires with a negligible or zero Upward Light Ratio (ULR), and with good optical control, should be considered. Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Bollard or low-level downward-directional luminaires should not be used within the developmental design.
- Internal lighting of new structures should be recessed where possible to prevent external light spill. Where Supporting Habitat is present, glazing treatments such as tinted, frosted or low transmission glazing treatments are not considered suitable ways of fully mitigating light spill.
- Lighting of a resting place or roost is considered an obstruction under the legislation protecting bats. No additional light levels above the predevelopment baseline can be directed at bat roosting locations or potential roosting features in trees.

8.0 RESIDUAL EFFECTS

- 8.1 No significant negative impacts from the proposed works were identified during the assessment, assuming all mitigation measures are implemented. The proposed enhancements outlined above will result in a **minor positive impact** overall.

9.0 IN-COMBINATION EFFECTS

- 9.1 A search of the recent planning applications on the West Sussex Council website using the search term ‘Copthorne Bank’ was undertaken to identify any development proposals or works within the immediate locality that could potentially have significant adverse ecological effects in-combination with the site proposals.
- 9.2 There are no other developments identified within the locality that could potentially have significant adverse ecological effects in-combination with the site proposals.
- 9.3 Taking into account the small number of ecological receptors affected and nature of the development proposals, the ecological mitigation and enhancement measures to be incorporated into the scheme, it **is considered that there will not be any significant adverse in-combination effects on identified ecological features within the zone of influence.**

10.0 CONCLUSIONS

- 10.1 The proposed development will result in a large-scale residual loss of modified grassland vegetation, and loss of a non-native hedgerow and scattered trees, as a consequence of the land-take required, however this will be adequately off-set by the ecological enhancement measures to be incorporated into the new layout of the scheme, outlined in section 6 above. Therefore, the proposed development and associated ecological mitigation and enhancement measures is expected to result in an overall long-term **minor positive effect** overall.
- 10.2 This survey is valid for 18 months and should the works be delayed past this time then an updated survey will be required.

11.0 REFERENCES

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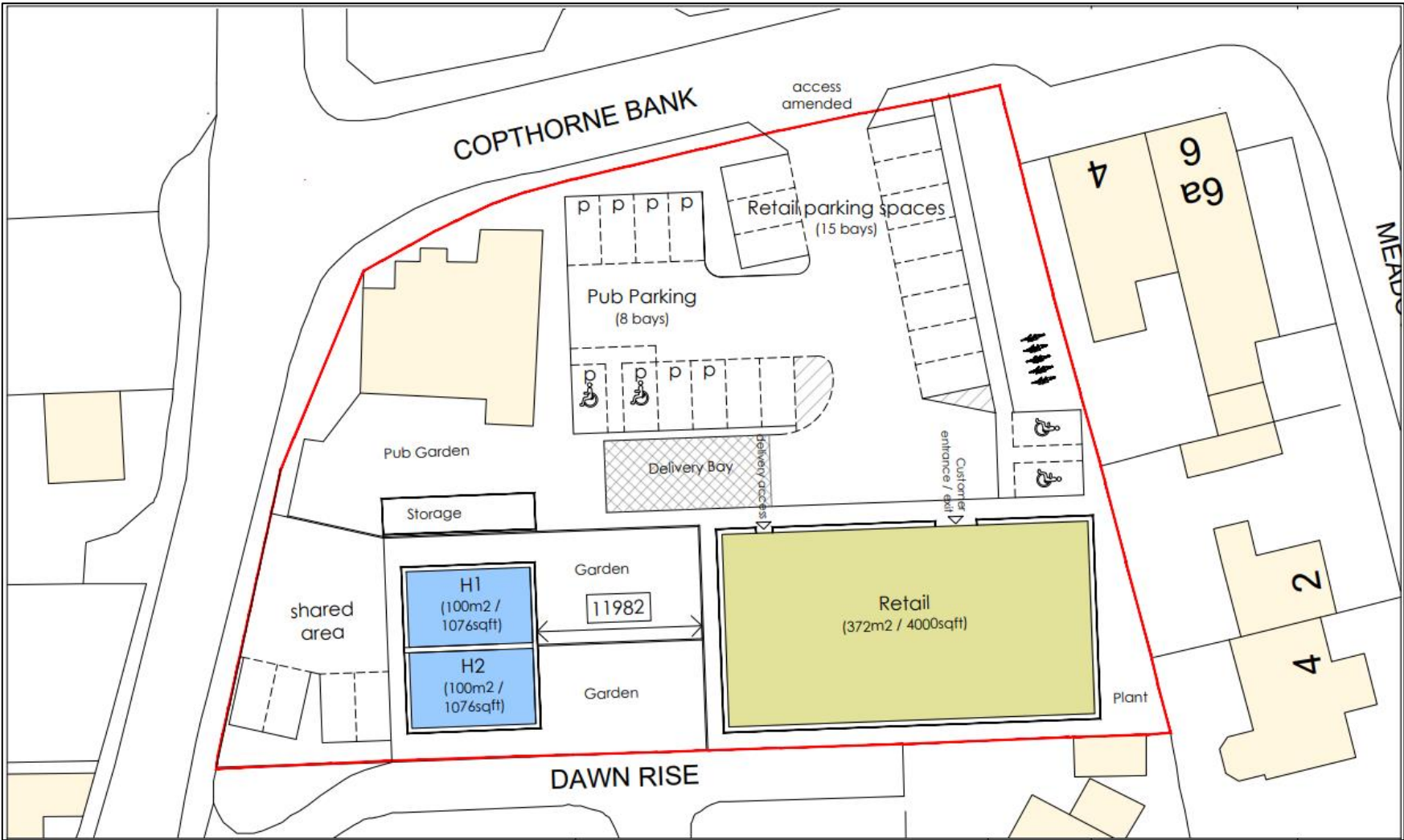
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APPENDIX I: SITE LOCATION PLAN



APPENDIX II: SITE PROPOSALS



APPENDIX III: DESK STUDY INFORMATION

Table 1: Statutory and non-statutory designated sites within five kilometres of The Prince Albert.

Site name	Conservation status	Distance from site (km)	Size (Ha)	Habitat description
Hedgecourt	SSSI ¹	3.55 km East	33.56	Hedgecourt is the most important wetland site remaining in south-east Surrey. Situated in the upper Eden Brook Valley on alluvial soils overlying Tunbridge Wells sandstones, the site incorporates a range of habitats including woodland, grassland and fen-marginated open water. Hedgecourt lake itself is an ancient mill pond resulting from the damming of the river. These habitats support a wide variety of animal life including several locally distributed beetles (<i>Coleoptera</i>) and a large breeding-bird fauna.
Turner's Hill	SSSI	4.71 km South-east	0.16	At Turner's Hill a disused quarry exposes the Ardingly Sandstone Member of the upper Lower Tunbridge Wells Formation (upper Hastings Beds Group), Wealden Series. The near vertical plane-cut walls and floor of this site provide excellent three-dimensional sections through the sandstone. These sections display trough cross-bedding (also known as festoon bedding) with cross-bedded units up to 1m across and 30cm deep as well as large scale ripples known as megaripples.
Gratton's Park	LNR	2.56 km South-west	7.72	The main habitats found on this site are broad-leaved woodland, stream, and meadows.
Waterlea Meadows	LNR	4.23 km South-west	3.56	A meandering stream flows through the site with flower rich meadows on either side.

¹ SSSI – Site of Specific Scientific Interest

Site name	Conservation status	Distance from site (km)	Size (Ha)	Habitat description
Tilgate Forest	LNR	4.75 km South-west	6.9	Habitats included on this site are broadleaved woodland, coniferous woodland, lowland heathland, and tall herb and fern.

Protected Species

Records were provided by SxBRC from the last 15 years for most species. A full copy of the data search can be provided on request however a summary is provided below.

Amphibians and reptiles

Records of nine species of amphibian and reptile including common toad (*Bufo bufo*), common frog (*Rana temporaria*), palmate newt (*Lissotriton helveticus*), smooth newt (*Lissotriton vulgaris*), great crested newt (*Triturus cristatus*), slow-worm (*Anguis fragilis*), grass snake (*Natrix natrix*), adder (*Vipera berus*), and common lizard (*Zootoca vivipara*) were provided from SxBRC within two kilometres of the site.

Birds

Records of one hundred and twenty-eight bird species were provided by SxBRC within two kilometres of the site, including lapwing (*Vanellus vanellus*), cuckoo (*Cuculus canorus*), bullfinch (*Pyrrhula pyrrhula*), sand martin (*Riparia riparia*), and Wheatear (*Oenanthe Oenanthe*).

Higher plants

SxBRC returned previous records of sixty-one species of higher plant, including pignut (*Conopodium majus*), bluebell (*Hyacinthoides non-scripta*), green-winged orchid (*Anacamptis morio*), corn buttercup (*Ranunculus arvensis*), and pale dog-violet (*Viola lactea*).

Invertebrates

SxBRC returned eighty-two records of notable or protected species within two kilometres of the site, including wasp spider (*Argiope bruennichi*), scarce four-dot pin-palp (*Bembidion quadripustulatum*), small heath (*Coenonympha pamphilus*) and marsh grey (*Eudonia pallida*).

Mammals

Bat records returned from SxBRC included western barbastelle, whiskered bat, Daubenton's bat, Natterer's bat, noctule, common pipistrelle, soprano pipistrelle, brown long-eared bat, bat species (*Chiroptera sp.*), myotis species (*Myotis sp.*), pipistrelle species (*Pipistellus sp*) and long-eared species (*Plecotus sp.*).

SxBRC returned eighteen records of hedgehog, one record of brown hare (*Lepus europaeus*), seven records of hazel dormouse, and twenty-two records of European rabbit (*Oryctolagus cuniculus*).

These records of protected and notable species in the vicinity of the site increase the likelihood of them being present where suitable habitat is identified in the field survey.

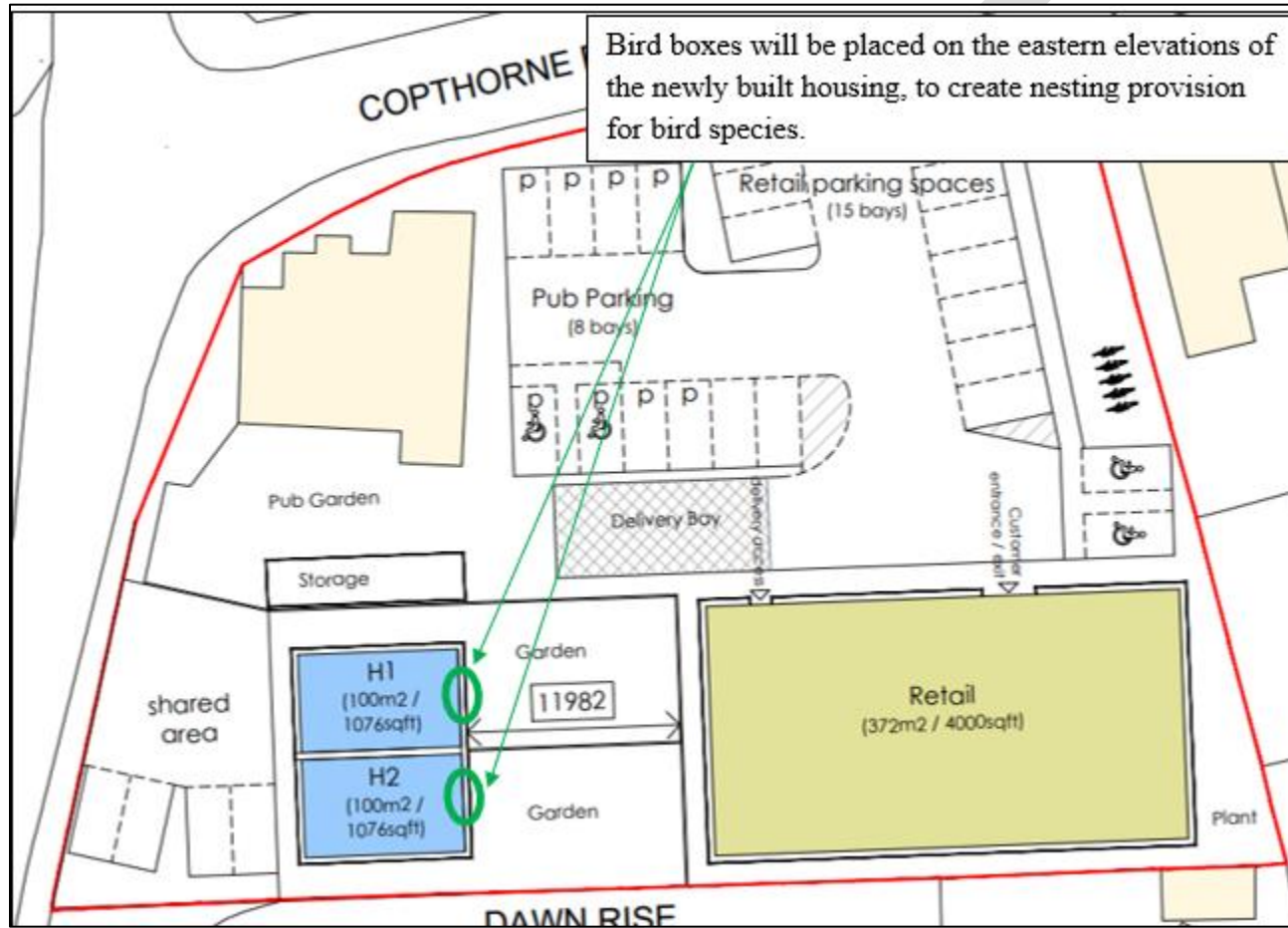
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APPENDIX IV: BASELINE HABITAT MAP

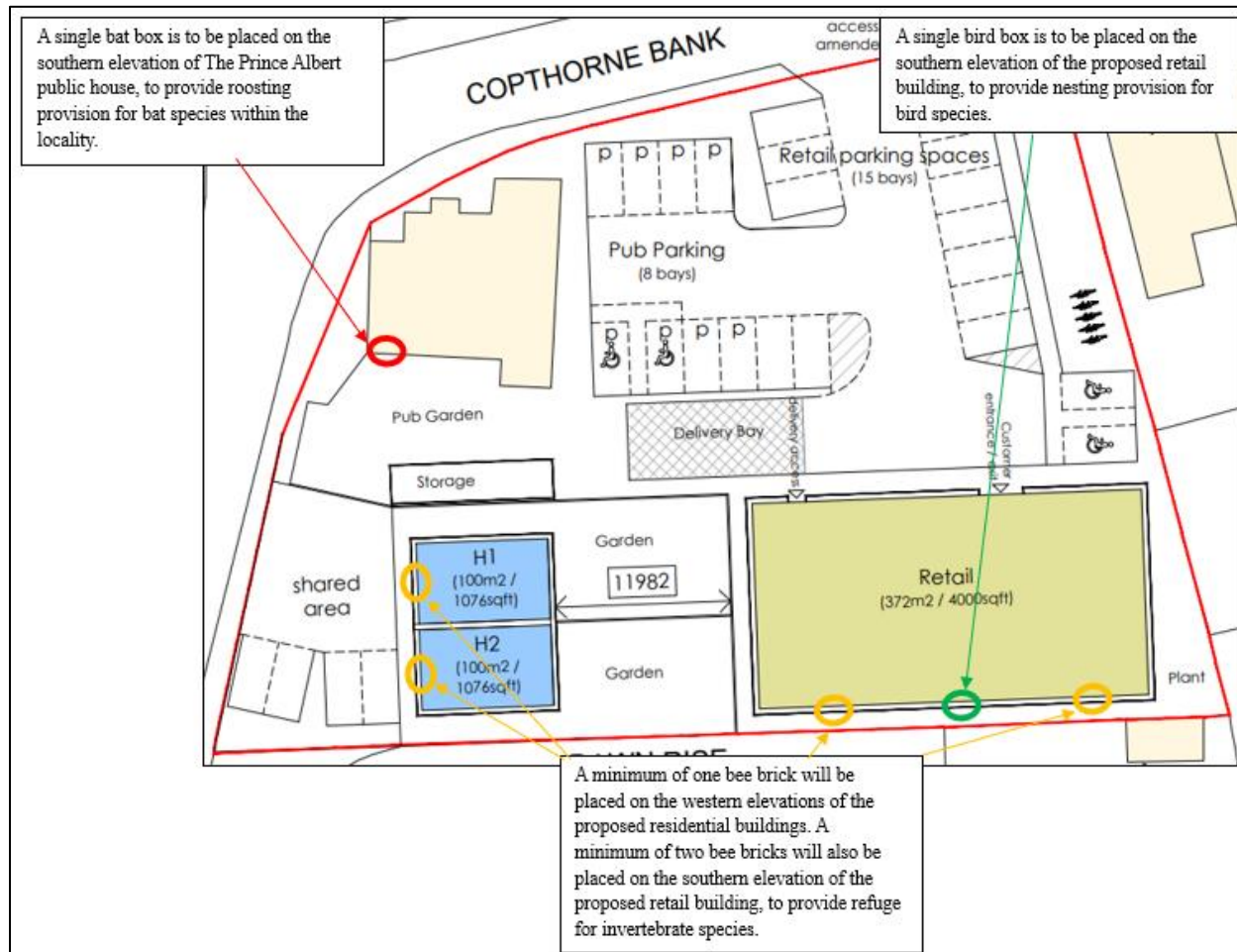


APPENDIX V: MITIGATION AND ENHANCEMENT MEASURES

Mitigation



Enhancement



APPENDIX VI: SITE PHOTOGRAPHS

All photographs taken June 2024.

	
Photograph 1: Cherry tree adjacent to pub car park.	Photograph 2: Oak tree adjacent to pub car park.
	
Photograph 3: Leylandii trees present on eastern site boundary.	Photograph 4: Area of ruderal/ephemeral habitat within modified grassland, recently cut.



Photograph 5: Area of ruderal/ephemeral habitat within modified grassland. Silver birch tree present.



Photograph 6: Native hedgerow on southern boundary of the site.



Photograph 7: Native hedgerow on southern boundary of the site, by dividing wooden fencing between grasslands.



Photograph 8: Modified grassland, viewing east.



Photograph 11: Area of longer sward modified grassland within enclosed area, viewing west.



Photograph 12: Area of longer sward modified grassland within enclosed area, viewing east.



Photograph 13: Modified grassland, eastern site area.



Photograph 14: Modified grassland, central area.



Photograph 15: Sealed surface paving and brickwork, with ornamental plantation.



Photograph 16: Pub car park, viewing east.