12039: Duckmoor, Billingshurst

Bellway Homes

Construction Ecological Management Plan

Pursuant to Condition 5 of DC/20/2607

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1. Introduction

1.1. Background

1.1.1. Ecology Solutions was commissioned in December 2024 by Bellway Homes to complete a Construction Ecological Management Plan (CEMP) for the site at Duckmoor, Billingshurst (see Plan ECO1).

1.1.2. A suite of survey work was undertaken at the Site in 2019 and 2020 by Ecology Solutions with an Ecological Assessment completed in 2022. This information was submitted as part of the planning application for the Site. An update site visit was completed by Ecology Solutions in March 2024 to determine whether any significant changes had occurred since the previous surveys.

1.1.3. Planning permission for the site was granted by appeal on 18th January 2023 (Reference: **APP/Z3825/W/21/3283823**) for the development of 83 residential units, landscaping, access, parking and associated infrastructure on land at Duckmoor, East Billingshurst with all matters reserved except access. Ecology Solutions was instructed to complete a CEMP: Biodiversity to address Condition 5, which states:

"The development hereby approved shall not commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The CEMP shall include details of the following relevant measures:

i. An introduction consisting of a description of the construction programme definitions and abbreviations and project description and location;

ii. Details of how residents will be advised of site management contact details and responsibilities;

iii. Detailed site logistics arrangements, including location of site compounds, location for the loading and unloading of plant and materials, site offices (including height and scale), and storage of plant and materials (including any stripped topsoil);

iv. Details regarding parking or site operatives and visitors, deliveries, and storage;

v. The method of access to and from the construction site;

vi. The arrangements for public consultation and liaison prior to and during the demolition and construction works – newsletters, fliers etc.;

vii. Details of any floodlighting, including location, height, type and direction of light sources, hours of operation and intensity of illumination

viii. Locations and details for the provision of wheel washing facilities and dust suppression facilities;

ix. Details of measures to manage biodiversity environmental impacts, including:

a. Risk assessment of potentially damaging construction activities;

b. Identification of "biodiversity protection zones".

c. Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).

d. The location and timing of sensitive works to avoid harm to biodiversity features.

e. The times during construction when specialist ecologists need to be present on site to oversee works.

f. Responsible persons and lines of communication.

g. The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.

h. Use of protective fences, exclusion barriers and warning signs.

The construction shall thereafter be carried out in accordance with the details and measures approved in the CEMP.

Site Characteristics

1.1.4. The Site is located to the east of Billingshurst, in the Horsham District of West Sussex. The Site is bordered to the west by Wooddale Lane, beyond which lies open agricultural land and occasional residential development – both of which also extend to the north and south of the Site.

1.2. Purpose of this Report

1.2.1. This report is prepared to address the requirement for a CEMP as part of the planning permission for the site. This report provides details of the proposed mitigation and avoidance measures that shall be employed during the construction phase of the proposed development in respect of ecology and nature conservation. By following these measures, the development will be in line with all relevant legislative and planning policy requirements.

2. Baseline Information

2.1. Designated Sites

2.1.1. **Statutory sites.** There are no statutory designated sites of nature conservation interest located within or immediately adjacent to the Site. The nearest statutory designated for its nature conservation interest is the Upper Arun SSSI located approximately 2.5km west of the Site at its closest point. Upper Arun SSSI is designated on account of the diverse riverine fauna and flora, including a notable assemblage of breeding Dragonflies.

2.1.2. The next closest site is European designated site is The Mens Special Area of Conservation (SAC) and SSSI, located approximately 5.6km west of the Site at its closest point.

2.1.3. The Mens SAC/SSSI is one of the most extensive examples of Wealden Woodland in West Sussex. It is important for its size, structural diversity and for the extremely rich fungal and lichen floras which it supports.

2.1.4. The Mens SAC is designated on account of the presence of the following Annex I (Habitats Directive) habitats, listed as primary reasons for selection:

- 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrub layer (*Quercion robori-petraeae* or *Ilici-Fagenion*)

2.1.5. And the Annex II species present as a qualifying feature, but not a primary reason for site selection:

- 1308 Barbastelle *Barbastella barbastellus*

2.1.6. The citation for the SSSI can be found at Appendix 3. The citation, conservation objectives and Natura 2000 sheet for the Mens SAC can be found at Appendix 4.

2.1.7. Under the Habitats Regulations, competent authorities have a duty to ensure all the activities they regulate have no adverse effect on the integrity of any of the Natura 2000 sites. Regulation 61 of the Habitats Regulations requires:

"63(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project, which: -

(a) is likely to have a significant effect on a European site or a European offshore marine site in Great Britain (either alone or in combination with other plans or projects) and

(b) is not directly connected with or necessary for the management of the site,

Must make an appropriate assessment of the implications for the site in view of that site's conservation objectives.

63(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any

representations made by that body within such reasonable time as the authority may specify.

63(5) In the light of the conclusions of the assessment, and subject to regulation 64, the competent authority may agree to a plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

63(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given."

2.1.8. Regulation 63 of the Habitats Regulations therefore sets out a two-stage process. The first test is to determine whether the plan/project is likely to have a significant effect on the European site, the second test (if applicable) is to determine whether the plan/project will affect the integrity of the European site.

2.1.9. **Non-statutory sites.** There are no non-statutory designated sites located within or immediately adjacent to the Site boundary.

2.1.10. The nearest non-statutory designated site is Wilden's Meadow Local Wildlife Site (LWS), located approximately 0.3km to the south of the Site at its closest point.

2.1.11. Wilden's Meadow LWS is an area of old pasture developed on a former brickwork. The LWS contains a relatively species-rich grassland, a number of ponds and scattered trees and Hawthorn.

2.1.12. Given the spatial separation between this LWS and the Site, in addition to the nature of this designated site and the proposed development, it is not considered the development proposals will result in any significant likely impacts to this LWS.

2.1.13. It is therefore considered that the development proposals would not be likely to lead to any potential adverse effects to non-statutory designated sites.

Habitats

2.1.14. The following main habitat / vegetation types were identified within the site during the surveys undertaken previously:

- Species-Poor Semi-Improved Grassland;
- Mixed Scrub
- Pond; and
- Hedgerows and Tree Lines;

2.1.15. The locations of these habitats are shown on Plan ECO2 with full descriptions of the habitats included within the submitted Ecological Assessment (8745.EcoAss.vf3, dated April 2022).

2.1.16. The habitats within the Site are generally not considered to be of any particular ecological importance being dominated by intensively managed semi-improved grassland fields. These fields appear to be rotationally managed, with the majority of grassland dominated by coarse grasses

2.1.17. Areas within fields F1, F2 and F3 are to be partly lost to the proposed development, although areas of open space including grassland will be created and existing grassland enhanced as part of development proposals.

2.1.18. Hedgerows and treelines provide foraging and commuting opportunities to bats a we l as fora ing and n sting opport nit es fo b rds. Th majority o hedgerow / tre lin s wi hin th Si e are at th boun arie , an as such wi l be r ta ned. Los es to hedge ows and t ee ines are lim ted to hort ections to provide ac ess th oug the Site wit in T3 T4 and N L1.

2.1.19. The pond (**P1**) is to be lost as part of development proposals, no mitigation is considered necessary.

2.2. Species

2.2.1. Full details regarding the results of the protected species surveys conducted at the site are provided in the submitted Ecological Assessment (8745.EcoAss.vf3).

Bats

2.2.2. Ba s re fully p ot cted un er the Conservation of abi ats and Sp cie Regulat ons 2017 (as am nde) an the Wildlife and Cou try id Ac 198 (a amended .

2.2.3. H dgerows T3, T4 nd NTL1 are expected to be partially lost as part of development proposals to facilitate access throughout the site. Trees and hedgerows within these linear features should be subject to a GLTA for nesting birds and features that could support roosting bats prior to their felling and management (the locations of which are shown on Plan ECO2.

2.2.4. **Site Evaluation**. Activity surveys and automated detector surveys undertaken at the Site between June and October 2020 identified limited bat activity, comprising mostly common and widespread species. Data recorded as part of the static monitoring surveys is considered to represent low levels when averaged across each monitoring period.

Birds

2.2.5. Section 1 of the Wildlife & Countryside Act 1981 (as amended) is concerned with the protection of wild birds. With certain exceptions, all wild birds and their eggs are protected from intentional killing, injuring and taking; and their nests, whilst being built or in use, cannot be taken, damaged or destroyed.

2.2.6. **Site Evaluation**. There are some opportunities for nesting birds in the hedgerows, trees and scrub within the Site. During the surveys, specific regard was afforded to Nightingale. During these surveys, a total of two individuals were recorded within the Site, utilising hedgerow and scrub habitat on the north-

eastern boundary of the Site in April 2020. This species was not recorded during any other site visits across 2019 or 2020. Other bird species recorded at the Site during surveys include Greenfinch *Carduelis chloris*, Wren *Troglodytes troglodytes*, Buzzard *Buteo buteo*, Kestrel *Falco tinnunculus*, Blue Tit *Cyanistes caeruleus*, Great Tit *Parus major*, Blackbird *Turdus merula*, and *Magpie Pica pica*.

Amphibians (Great Crested Newts)

2.2.7. Great Crested Newts *Triturus cristatus* are subject to the same level of legislative protection as bats (see above). Common Toad *Bufo bufo* is a Species of Principal Importance under Section 41 of the NERC Act (2006).

2.2.8. **Site Evaluation**. The pond (**P1**) present within the Site (an ephemeral waterbody only holding water after heavy rainfall) was surveyed using eDNA analysis to determine the presence or absence of GCN. The eDNA analysis displayed a negative result indicating GCN are not present within the waterbody.

Invertebrates

2.2.9. Given the habitats present it is likely an assemblage of common invertebrate species would be present within the Site.

Reptiles

2.2.10. Owing to their abundance in Britain, Common Lizard *Zootoca vivipara*, Slow Worm *Anguis fragilis*, Grass Snake *Natrix helvetica* and Adder *Vipera berus* are only 'partially protected' under the Wildlife and Countryside Act 1981 (as amended) and as such only receive protection from:

- Deliberate killing and injuring;
- Being sold or other forms of trading.

2.2.11. The habitat of common reptiles is therefore not directly protected. However, because of their partial protection, disturbing or destroying their habitat while they are present may lead to an offence.

2.2.12. All reptile species are listed as Species of Principal Importance under Section 41 of the NERC Act 2006. The NERC Act places responsibility upon public bodies to have regard for the conservation of biodiversity in England.

2.2.13. **Site Evaluation**. The Site supports low populations of Common Lizard and Slow Worm. All reptiles were recorded within field margins at the Site boundaries, where opportunities for reptiles are more apparent. The vast majority of reptiles were recorded on the northern and western boundaries of the Site.

[redacted] *Hedgehogs*

2.2.14. Hedgehog *Erinaceus europaeus* is listed as a Species of Principal Importance under Section 41 of the NERC Act 2006. The NERC Act places responsibility upon public bodies to have regard for the conservation of biodiversity in England.

[redacted]

[redacted]

2.2.17. Given the habitats present it is considered likely that hedgehogs utilise the Site and are present within the wider landscape.

Dormouse

2.2.18. Legislation. The Hazel or 'Common' Dormouse has the same protection and licensing requirements as for bats. The Common Dormouse is a scarce UK species protected under European and UK law by virtue of its inclusion on:

- Appendix 3 of the Bonn Convention;
- Annex IVa of the EC Habitats Directive;
- Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); and
- Schedule 5 of the Wildlife and Countryside Act 1981 (as Amended).

2.2.19. The legislation prohibits the intentional killing, injuring, taking, the possession of, and trade in Dormice. In addition, places used for shelter and protection are safeguarded against intentional damage, destruction and obstruction and must not be intentionally disturbed whilst Dormice are in occupation, unless by a NE Licence holder for the species.

2.2.20. When dormice habitat needs to be removed to facilitate development, a site-specific EPS mitigation licence must be obtained from Natural England. Licensing protocols stipulate periods in which habitat removal can be carried out, to avoid the most vulnerable periods (e.g. hibernation, during pregnancy and in periods of dependant young).

2.2.21. Hedgerows can be defined as important under the Hedgerow Regulations 1997 if the presence of a Schedule 5 species of the Wildlife and Countryside Act (such as Dormouse) is recorded.

2.2.22. **Site Evaluation**. Six nests considered attributable to Hazel Dormouse were record within the Site. Two were located in the north-west of the Site within H1. A further two nests were located in the north-eastern boundary within T1. Two final nests were located along the western boundary of the site within NLT1. It is therefore considered that Dormice are present within suitable habitats within the Site.

3. Construction Ecological Management Plan

3.1. This section details the methodologies, timings and prevention measures to be used to minimise disturbance and harm to protected species and other wildlife within and adjacent to the site.

3.2. Risk Assessment of Potentially Damaging Construction Activities

3.2.1. Potentially damaging construction activities include vegetation clearance, soil compaction, impact piling, plant, machinery and vehicle operation, general construction works, lighting, and dust and surface run-off pollution.

3.2.2. The likelihood of these impacts arising, and their potential severity, is set out in Table 3.1 below, which also includes the measures to be taken to reduce or avoid the risks identified.

3.2.3. Following the implementation of appropriate actions, as set out in Table 3.1 and discussed further below, it is considered that the likelihood and impact severity of identified risks has been reduced to acceptable levels, and, hence, that significant adverse effects on local wildlife within the site would be avoided.

Table 3.1 Risk Assessment of construction activities

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
Vegetation clearance	Disturbance / harm to reptiles, bats, nesting birds, Dormice, Hedgehogs [redacted]	4	4	**Dormice** Given the presence of Dormice within the Site, a NE licence will be required for the removal of any significant sections of hedgerow. It will be a legal requirement to implement a suitable mitigation strategy. Whilst the recorded nest locations fell within habitat which is to be retailed and losses are to habitat that is less optimal, it is not possible to conclude that Dormice do not use habitat which will be impacted by the proposals. In this light it is considered that losses to H1, T1, NH1, T3, T4, T7, H3.2, H3.1 and NLT1 will be the subject of a Natural England mitigation licence, but this shall be discussed with Natural England. With reference to the proposals, it is clear that there will be a significant enhancement across the site and wider landscape for this species. This is due to the protection and enhancement of the vast majority of known and potential Dormouse habitat as well as the creation of substantial green links across the site, providing connectivity to suitable habitats in the local area. To this end, when considering the proposed losses against the proposed enhancements it is evident that, significant benefits will arise from the development proposals. Although the proposals require the removal of hedgerow and woodland to allow for access to be provided through the site, this will not result in any	1	1

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				habitat fragmentation or isolation as the retained hedgerow network and wider habitat enhancements will continue to provide connectivity through the site and to suitable offsite habitat. Furthermore, new and enhanced hedgerows will provide greater connectivity for this species as part of the proposals. It is considered that a displacement methodology can successfully be employed when clearing vegetation. The clearance of Dormouse habitat will be undertaken either by a two stage or single stage process. Furthermore, a combination of these approaches may be employed across the development site, as necessary, following consultation with Natural England at the licencing stage. A two-stage process would involve works being undertaken over Winter and late Spring, with initial clearance of habitat conducted during the Dormouse hibernation period. Emerging Dormouse will move into retained habitat nearby in late Spring. Subsequent removal of root balls will be undertaken after Dormouse have fully emerged from hibernation and moved to retained habitats. All habitat removed during bird nesting season (March-August) must be subject to a nesting bird check by a suitably qualified ecologist prior to removal. The single stage process involves removal of all habitat at once when Dormouse have emerged from hibernation but no dependant young are present		

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				(typically May or between mid-September and November). If habitat suitable for bird nesting is removed during the bird nesting season (March-August), a nesting bird check by a suitably qualified ecologist is required prior to removal. Areas of retained habitat will be protected throughout construction by the implementation of temporary protective fencing in areas adjacent to construction activities. Once construction is complete, these habitats will be protected through the implementation of a long-term habitat management plan. The proposals will provide new areas of suitable habitat in the provision of new native hedgerow planting that will also deliver additional connectivity through existing habitats, particularly to the eastern aspect of the site. The proposed habitat creation and enhancement to the east shall elevate the existing opportunities for wildlife within the bounds of the site and provide further foraging and traversal opportunities for Dormouse. Furthermore, the establishment and enhancement of the Ancient Woodland buffer along the existing boundary will also deliver significant enhancements for this species in the long term. New planting will incorporate a range of native tree and scrub species of known value to Dormice (as outlined in the Dormouse Conservation Handbook) including Hazel *Corylus avellana* and Honeysuckle *Lonicera periclymenum*.		

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				Overall, it is considered that any compensatory planting would easily exceed losses resulting from the development proposals. As is likely to be required by Natural England, an element of this planting will be delivered upfront to ensure replacement habitat is in place prior to any clearance. Furthermore, the proposals will include the installation of 20 Dormouse nest boxes, which would serve to increase the potential species carrying capacity within the site. These will be installed within existing retained and enhanced habitat. **Bats** A total of 9no. trees are expected to be removed as part of development proposals, currently these trees do not present any bat roosting features. A pre-felling nesting bird and roosting bat check shall take place by a suitably qualified ecologist, if any evidence of roosting bats is found, a licence will be sought from NE prior to removal. **Nesting Birds** Any clearance of suitable nesting habitat will be completed outside of the main nesting bird season (typically March – August). However, should clearance be required during the nesting season a pre-commencement checks will be completed by a		

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				suitably experienced ecologist. If any evidence of nesting birds is discovered during the pre-commencement nesting bird check, a minimum 5m buffer zone shall be erected around the nest in question and no works shall take place within this buffer zone until nesting activities have ceased, confirmed by a suitably qualified ecologist. **Hedgehog** Any vegetation clearance should be carried out in a systematic and controlled manner to allow hedgehogs to disperse. Suitable nesting habitat for hedgehogs will be checked by an ecologist prior to clearance / removal to ensure no harm to hedgehogs occurs. [redacted] [redacted] Any work within the area would be prohibited until a Natural England licence is in place or approval is granted from an ECoW. No vehicles and heavy plant machinery will be permitted in the biodiversity protection zones. Any vegetation clearance within the biodiversity		

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				protection zones will be carried out using hand tools only and will only be permissible upon agreement with the project ecologist and / or once in receipt of a Natural England licence.  An ECoW will conduct regular visits to ensure retained habitats are in favourable condition. Access on foot and the use of hand tools will be permissible in all biodiversity protection zones, subject to discussion with the project ecologist. Root protection zones of retained trees will also be protected throughout the duration of the construction works (as advised by a qualified arboriculturist).		
Loss of Grassland	Loss of habitat and injury/death of reptiles	3	4	The proposals will result in some direct impacts upon reptile habitat during Site clearance and construction operations. However, given that reptiles were recorded in very low numbers, it considered any losses to these habitats would be of little significance to the local reptile population. Notwithstanding the above, and to ensure no adverse impacts of the local reptile population, it is	1	1

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				recommended that a suitably designed mitigation scheme is implemented prior to the construction phase. Given reptiles have only been recorded adjacent to existing hedgerows, it is considered that sensitive removal of suitable habitat including grassland will be sufficient to avoid adverse impacts to the local reptile population. At any rate, hedgerows across the Site are being retained and protected during the development phase and especially so to the eastern site aspect, the associated grassland - thus providing continued opportunities during and post development. Habitat manipulation will comprise a two-stage cutting exercise during the active reptile season (May to September), whereby the first cut will be to 150-200mm, with all arisings removed. The second cut to 50mm will be carried out 24-48 hours after the first cut. All arisings will be removed from the Site. The proposals will deliver significant enhancements for reptiles over the existing situation, with new species-rich meadow grassland and wetland habitats, in addition to new eco-tone habitats associated with new scrub and woodland provision.		
Vegetation / soil compaction	Compaction of retained habitat of identified value (on and off-site)	3	3	Retained habitats near to those scheduled for remediation and / or removal will be safeguarded throughout the construction phase with Heras fencing delineating the biodiversity protection zones.	1	1

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				Appropriate signage will inform personnel of protected habitat and that no vehicle and heavy plant machinery is to be permitted in the zones. Access on foot and the use of hand tools will be permissible, subject to discussion with the project ecologist. Any clearance of suitable nesting habitat will be carried out in accordance with that detailed above (outside of the bird nesting season or post a nesting bird check). Fingertip search for reptiles/amphibians		
Impact piling	Noise disturbance to wildlife within or adjacent to the site.	5	3	If required, piling activities will avoid the sensitive winter period [redacted] and will be subject to consultation / ECoW oversight at other times.	1	2
Plant, machinery and vehicle operation	Noise disturbance to wildlife within and adjacent to the site.	4	3	All plant machinery and vehicles are to be fitted with effective exhaust silencers, be maintained in good condition and operated in such a way as to minimise noise emissions. Plant noise emissions shall not exceed that set out in legislation; if any item is suspected of breach, it shall be tested and replaced as necessary. The plant will be maintained so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum. Ancillary pneumatic percussive tools are to be fitted with mufflers or silencers of the type recommended by the manufacturers.	1	2

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				Machines in intermittent use are to be switched off or throttled down to minimum in intermittent periods. Any machinery / plant will be shut down when not in use. Plant engine covers will be kept in place at all times. All compressors and generators are to be of a super silenced type. Compressors will be fitted with properly lined and sealed acoustic covers and kept closed whenever in use.		
General construction works activities	Noise and visual disturbance to wildlife within or adjacent to the site.	2	1	All reasonable practical means shall be employed to keep noise to a minimum. Care shall be taken when loading or unloading vehicles, dismantling scaffolding or moving materials to keep noise to a minimum. No part of the works or maintenance of the plant will be carried out in such a way as to cause unnecessary noise or vibration.	1	1
Construction lighting installation	Disturbance to [redacted] bats, birds and other wildlife adjacent to the site.	4	3	Personnel will ensure all unnecessary lights are switched off each night and there will be no construction lighting outside of working hours. There will be no lighting towards the boundary vegetation. The Lighting Strategy for the development will be designed with due regard for bats, particularly light-sensitive species such as Barbastelle which have been recorded on-site in extremely low numbers.	1	1

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				Where lighting is required in the wider landscape, there will be no ultraviolet lighting. In addition, there will be no building uplighters. Finally, lighting across the development will utilise warm white LEDs, low pressure or sodium spectrum lights, in conjunction with directional downlights, to minimise light pollution.		
Dust	Pollution deposits on vegetation and watercourses within and adjacent to the site (On-site ditches)	3	3	Best standard practice guidelines in respect to pollution will be followed, including dampening the ground before clearing on dry days and dampening methods for dust producing activities. Vehicles will keep to the site speed limit to prevent dust becoming airborne. Wheel washing will be used by all construction vehicles entering and leaving the site. Textile dust barriers will be fitted to all site fencing that protects a biodiversity protection zone. This will absorb the majority of dust from adjacent construction work as well as providing visual screening of retained habitats. These barriers will remain in place throughout the construction period except by agreement of an ecologist.	1	1
Surface run-off	Pollution of habitats nearby or connecting with the site (On-site ditches)	2	5	Appropriate refuelling and fuel storage areas will be established, in addition to a perimeter from the boundaries within which these areas shall not be established.	1	1

Activity	Risk	Risk Likelihood (1 highly unlikely to 5 highly likely)	Risk Impact Severity (1 minor to 5 very severe)	Action Taken	Risk Likelihood after action	Risk Impact Severity after action
				Standard spill prevention measures will be used throughout the pre-construction and construction, including safe storage of all chemicals in a designated area well away from retained habitats. Spill kits on-site are to be used as required with substrate (sand). Once used, they are to be disposed of in accordance with best practice guidelines. Silt traps will be placed across the site to address potential surface run-off and laden silt within these checked and replaced regularly. Any contaminated waste, including hazardous waste, will be dealt with in accordance with the current regulations, and a specialist contractor with the required waste licences will be used for removal. Biodiversity protection zones will be established in accordance with Plan ECO3.		

3.3. Identification of Biodiversity Protection Zones

3.3.1. Biodiversity protection zones will be established around retained habitats throughout the site (see Plan ECO3). These are designed to safeguard retained ecological interest within and adjacent to the site.

3.3.2. No vehicle movements or storage of materials will be permitted in these areas without further discussion and agreement with the project ecologist. The biodiversity protection zones will remain in place for the duration of the construction works.

3.3.3. Activities within the protection zones will be permitted only after agreement with an ECoW.

3.4. Measures to Avoid / Reduce Impacts during Construction

3.4.1. These measures may be both physical measures and sensitive working practices.

3.4.2. The potential exists for [redacted] and Hedgehogs to roam into areas where construction is underway and become trapped in trenches and / or excavate new setts in piles of soil or disturb chemicals that may be being used for development. The following measures should be followed throughout the construction phase of the development.

- All site personnel will be made aware of the appropriate steps required [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- No fires or chemicals will be left unsupervised anywhere on the site;

- Any open pipework greater than 100mm outside diameter will be blanked off at the end of each working day to prevent [redacted] hedgehogs from entering;
- Driven piling work (if required) will be undertaken only following consultation with the project ecologist; and
- [redacted] No movement of vehicles or storage of materials will be permitted in these zones, unless agreed by a SQE.

[redacted]

3.4.4. The measures set out above will also avoid potential adverse effects on hedgehogs.

3.4.5. Where necessary, bird nesting habitat, including trees, scrub and hedgerows, will be cleared outside of the nesting bird season (March to August inclusive) or within this time only following a nesting bird check undertaken by an ECoW.

3.4.6. The biodiversity protection zones will be delineated by suitable fencing and warning signs placed along the edge of the zones. Further notices will be posted to reiterate precautions that will be taken to limit noise and light spill, which are applicable within the whole site and laid out in the above risk assessment table. Additional precautions to be taken in respect of dust and surface runoff, to avoid any impact on sensitive features will also be posted on the notices.

3.4.7. The lighting strategy will ensure that construction lights will be orientated away from site boundaries. No lighting past construction activity hours within the biodiversity protection zones.

3.4.8. The lighting strategy for the development will be designed with due regard for bats, particularly light-sensitive species such as. As part of the lighting design, consideration will be given to the lighting of linear features such as hedgerows. Specifically, the lighting design will incorporate lighting types and designs to limit any light spillage allowing commuting corridors to remain in darkness.

3.4.9. Artificial lighting should be directed away from retained linear features such as hedgerows and treelines and below the horizontal plane, with lighting levels limited to a maximum of 1 lux at suitable habitats. Where necessary, additional attachments such as cowls and hoods, or screening (temporary fencing or similar) will be installed to further minimise light spill on sensitive areas and reduce any negative impacts on bat species present. However, it is considered that this will largely be achieved using tree protection fencing / site hoarding. These measures are deemed suitable to reduce any negative impacts derived from the construction phase of the development.

3.4.10. Where lighting is required in the wider landscape, there will be no ultraviolet lighting. In addition, there will be no building uplighters. Finally, lighting across the development will utilise warm white LEDs, low pressure or sodium

spectrum lights, in conjunction with directional downlights, to minimise light pollution.

3.4.11. Noise levels will be kept to a strict minimum using the precautions set out in the risk assessment above and any activities producing sudden loud noise bursts, such as impact piling, will be subject to discussion with the ECoW to ensure that potential effects on wildlife are taken into consideration.

3.4.12. Standard best practice measures in regard to pollution, particularly dust and surface run-off and current government guidance for England, will be adhered to at all times across the site.

3.4.13. Waste arising from the proposed works will be disposed of, as per standard construction practice. The amount of waste material on-site should be reduced as far as reasonably practical through waste minimisation, reuse and recycling. No waste will be burned on-site. Special or hazardous wastes will not be mixed with general site waste and will be kept in a secure location away from sensitive environmental receptors. Care should be taken to ensure that stored liquid waste does not permeate into the ground. Refuelling shall be carried out in a designated area with a spill kit nearby. The local Environmental Agency regulator shall be notified of pollution incidents on or around the site.

3.4.14. Full skips are to be covered with a protective mesh to prevent spillage. Wheel washers for vehicles accessing any highways from an unmade surface are to be utilised, to prevent contamination of public and private highways and to reduce dust.

3.4.15. All staff working on-site will be briefed on the ecological issues associated with the site and appropriate noise and lighting levels as part of their induction process and will be instructed on the best use of plant machinery as appropriate to produce minimum noise levels, whether through vibration, squeaking or creaking. A reminder will also be given during the induction to promptly switch off any machinery and lights when not in use.

3.4.16. Signs will be installed in appropriate locations with a reminder to switch off all machinery and lights when not in use, and to ensure noise is overall kept to a minimum.

3.4.17. Should works be necessary within the protection zones then discussions with the appointed ecologists and project manager shall be completed to ensure any permitted works are sensitive to the adjacent habitats and species. Only following an agreed strategy for the work to be done shall they be completed.

3.5. Location and Timing of Sensitive Works to Avoid Harm to Biodiversity Features

3.5.1. Any clearance of log/debris piles or other habitat suitable for dormouse or hedgehog /reptile shelter features will be subject to inspection by the ECoW to ensure that dormouse, hedgehogs and reptiles are absent (see Table 3.1 – vegetation clearance). In the event that an individual is encountered, it will be carefully placed in an appropriate lidded box and immediately removed to an area of suitable habitat at the margins of the site away from working areas and

roads. No dormouse suitable habitat may be removed until a licence is in place for the development site.

3.5.2. In order to avoid a possible offence, any bird nesting habitat, including trees, hedgerows and scrub, will be cleared outside the nesting bird season (March to August inclusive) or within this time only following a nesting bird check undertaken by an ECoW.

3.5.3. If, during the construction works, any further evidence of protected species (including, but not limited to, bats, [redacted] Dormouse, Hedgehogs, reptiles, amphibians and nesting birds) are found on-site, work must stop, and Ecology Solutions be contacted immediately.

3.5.4. Should works be necessary within the biodiversity protection zones then discussions with the appointed ecologists and project manager shall be completed to ensure any permitted works are sensitive to the adjacent habitats and species. Only following an agreed strategy for the work to be done shall they be completed.

3.6. Requirements for Ecologists During Construction

3.6.1. An ecologist will be present on-site during any habitat clearance exercise where protected species may be present. An ecologist would also be required during removal of bird nesting habitat during the nesting season. There is no requirement for a daily presence on-site however, Ecology Solutions will be available to the site manager and other Client Company personnel for advice as and when necessary.

3.7. Emergency Management Plan

3.7.1. Throughout the course of works a protected species is identified onsite, or an accident involving the construction activities causes a spill or airborne pollution event, the project ecologist will be contacted immediately for advice. The site manager is responsible for ensuring this is done and preventing works from continuing until the suitably qualified ecologist has laid out an appropriate contingency. Should the need for emergency services be required all works shall cease immediately whilst the emergency services are contacted. Should it be necessary, all persons present within the site will assemble on adjacent land within the wider Oakley Green site area and a check will be made to ensure no one is left on site whilst the emergency services are contacted. The site manager is responsible for ensuring all contractors are aware of these contingencies.

3.8. Responsible Persons and Lines of Communication

3.8.1. The site manager will be responsible for the implementation of this CEMP throughout the remediation stage. The site manager appointed by Bellway Homes prior to construction works commencing will be responsible throughout the construction stage. Ecology Solutions, or another appointed professional ecologist, will have responsibility for the delivery of mitigation measures as set out in this document, under instruction Bellway Homes during remediation and

construction. The project manager will be able to contact Ecology Solutions for advice at any time. If instructed Ecology Solutions' staff will attend the site to discuss matters as and when required to do so. A copy of this document will be kept on-site and form part of the site induction.

3.9. Role and responsibilities of Ecological Clerk of Works

3.9.1. As noted above, there will not be a requirement for an ECoW to be present on a daily basis.

3.9.2. An ECoW will be present to oversee:

- checks of undergrowth, log piles etc. for dormouse, hedgehog or reptiles as part of the site clearance works;
- any necessary removal of bird nesting habitat; and
- other matters as discussed and agreed between the site manager and Ecology Solutions.

3.10. Protective Fences, Exclusion Barriers and Warning Signs

3.10.1. Protective fencing will align with the biodiversity protection zones (see Plan ECO3). Warning signs and notices will be posted on the fencing to reiterate precautions that will be taken to limit noise and light spill, which are applicable within the whole site and laid out in the above risk assessment table.

3.10.2. Tree root protection areas will be safeguarded through fencing complying with the British Standard. Currently there are no trees on site with bat potential, however if any trees are identified as supporting roosting features for bats, they will be fenced off and safeguarded from further works.

3.10.3. Signs will be installed in appropriate locations with a reminder to switch off all machinery and lights when not in use and to ensure noise is overall kept to a minimum.

3.10.4. The above procedures will be followed according to the guidance set out and an ecologist consulted on any issues.

3.11. Monitoring and Auditing

3.11.1. A project contact register will be produced and provided to the LPA by the Project / Site Manager, to include a list of all relevant persons and identify lines of communication, including telephone numbers and email addresses. The auditing monitoring and schedule for the inspection of biodiversity protection measures is laid out in Table No. 02 below:

Table No.02 – Auditing, Monitoring and Inspection Schedule

Inspection Activity	Responsible Person	Frequency	Auditing
Check of Tree Protection Barrier to ensure all is connected, upright and secure and that no works have taken place behind the barriers, and that the barriers have not moved.	Site Manager	Daily	Record in the site logbook and follow up with remedial measures as required.
Check that all external lighting is in accordance with the lighting section of this report.	Site Manager	Immediately prior to the use of external lighting at night.	Record in the site logbook and follow up with remedial measures as required
Overseeing vegetation clearance, to check for signs of birds, bats, reptiles and dormice (as required).	Site Manager and ECOW	Prior to and during the work.	A record of this work will be kept by the Site Manager after completion, suitable for submission to the LPA.
Checks to ensure that spill kits can be found in the correct location and contain all their respective parts. And ensure it is replaced following any spill.	Site Manager	Every evening prior to the closing of the site and subsequent to a spill	Record in the site logbook and follow up with remedial measures as required
Confirming that appropriate dust mitigation measures (misting / damping down at the source) are being implemented.	Site Manager	When dust creating activities are taking place	Record in the site logbook and follow up with remedial measures as required
Confirming that dust has not excessively built-up on site vegetation.	Site Manager	Every evening prior to the closing of the site	Mist spraying of any vegetated surfaces covered in dust.
Removal of tree protection fencing.	Site Manager	On completion of development	Record in the site logbook and follow up

			with remedial measures as required

4. Summary and Conclusions

4.1. Ecology Solutions was commissioned in May 2024 by Bellway Homes to complete a Construction Ecological Management Plan (CEMP: ECOLOGY) for the site at Duckmoor, Billingshurst (Planning Application Reference DC/20/2607). This CEMP addresses the ecology element of Condition 5 and is to be considered as part of the planning application.

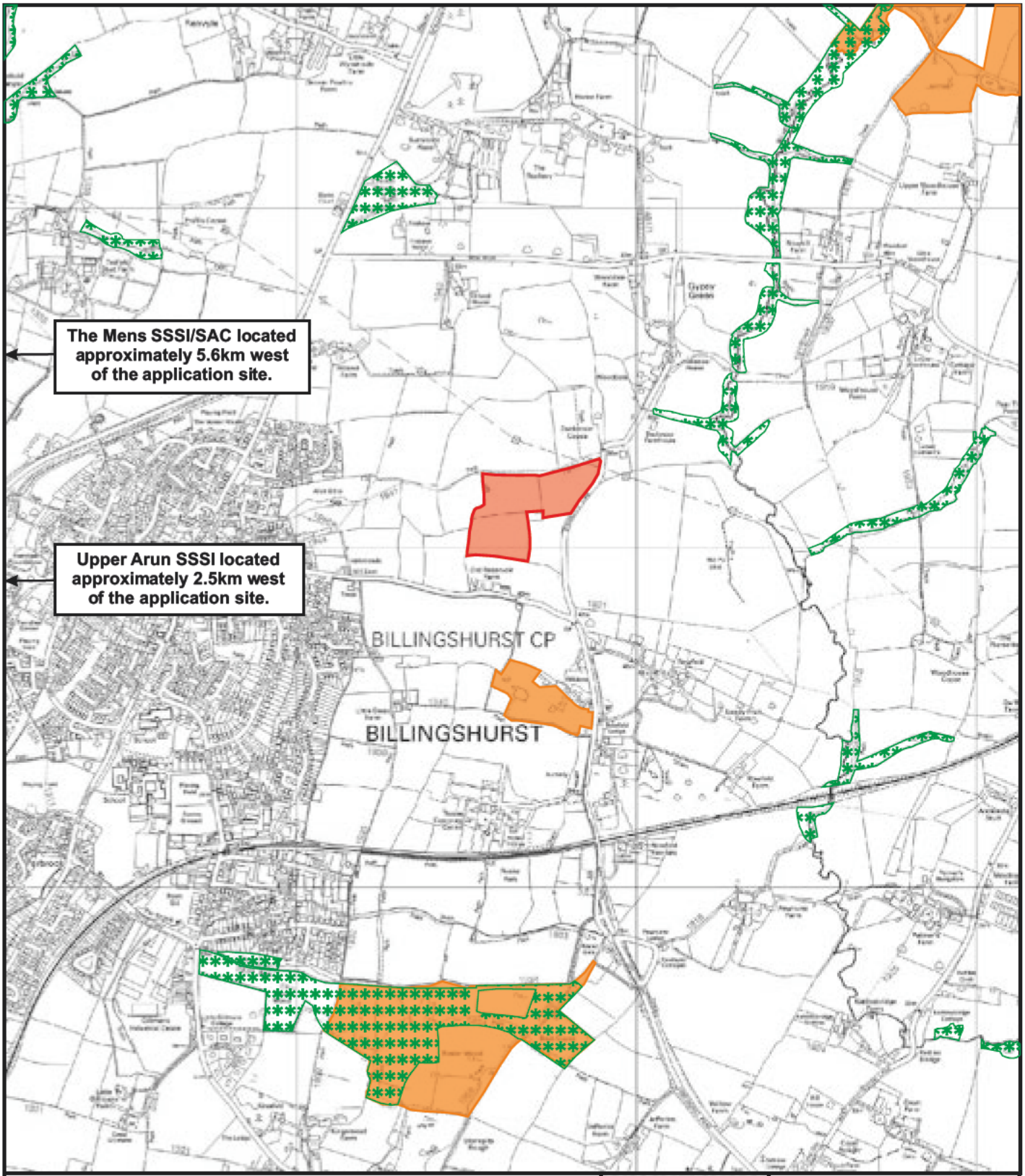
4.2. The measures detailed in this report specify the means by which significant disturbance on the ecological interest of the site and its environs would be avoided or reduced to acceptable levels.

4.3. As such, it is considered that Condition 5 can be discharged.

PLANS

PLAN ECO1

Site Location Plan



KEY:

- APPLICATION SITE LOCATION
- ANCIENT SEMI-NATURAL WOODLAND
- LOCAL WILDLIFE SITE (LWS)

N

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PLAN ECO1: SITE LOCATION AND ECOLOGICAL DESIGNATIONS

DEC 2020

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PLAN ECO2

Baseline Habitats



APPLICATION SITE BOUNDARY

SEMI-IMPROVED GRASSLAND

SCRUB

TREELINES

HEDGEROWS

WATERBODY

N

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PLAN ECO2: ECOLOGICAL FEATURES

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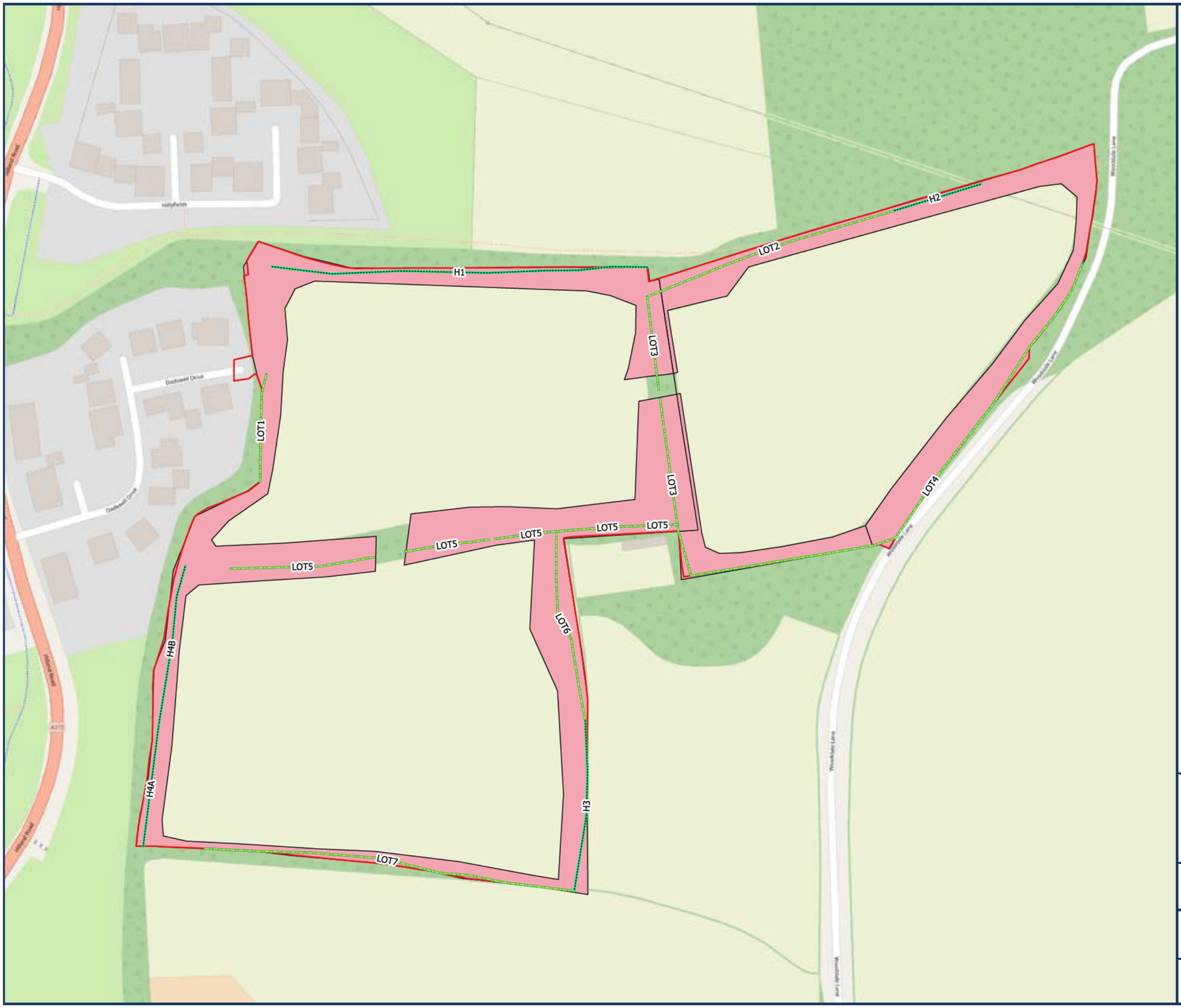
PLA ECO3

Biodiversit Protectio Zones



KEY:

- Site Boundary
- Biodiversity Protection Zones
- Site Hedgerows
- Line of Trees

N

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12039: Duckmoor, Billingshurst

PLAN ECO3: Biodiversity Protection Zones

Rev: A
Jan 2025

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