

Land between 26 & 32 Padnell Road Cowplain, Hampshire

Ecological Assessment

July 2021



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Executive Summary

4Woods Ecology Ltd was commissioned by the landowner to complete an ecological assessment of proposed residential development site on land between nos. 26 & 32 Padnell Road, Cowplain, Hampshire. The assessment involved a walk-over survey and desktop study, completed during September 2020 by Su Forster BSc PGDip MCIEEM CEnv.

The plot was found to comprise flat ground which has recently been cleared, with patches of re-growth of various tree/shrub species and ruderal 'weedy' species amongst a layer of woodchippings and piles of stored building materials/debris. A strip along the western side of the site was dominated by species-poor improved grassland.

Mature Oak trees exist to the rear, just beyond the fenced site boundary, which extend along the rear of neighbouring properties and further into a small 'parkland'/wooded area. This adjacent wooded habitat is likely to be of local value to a range of bird species, foraging bats and invertebrates.

In addition, the possibility of Hedgehog being found beneath the various piles of debris/building materials stored on site cannot be ruled out.

Otherwise, no habitats, features or species of nature conservation value were discovered at the site, or are considered likely to occur. Consequently, no further ecological surveys are considered necessary to inform an Ecological Impact Assessment (EclA).

Mitigation measures will therefore include avoiding illumination of the trees beyond the rear boundary of the site, and taking care to avoid harm to any Hedgehogs that may be present when removing the debris/materials on the site.

As is the case for all residential developments in the Havant Borough, it will be necessary to demonstrate that the proposed development will have nutrient neutrality in terms of water drainage from the site into the Solent, as part of a Habitats Regulations Assessment (HRA) considering impacts on designated SPA/SAC/Ramsar sites. A financial contribution towards management of an off-site mitigation site is likely to be required in order to achieve nutrient neutrality and consequently pass the HRA test.

Planning policy requires that ecological enhancement measures are also included within planning applications. Ecological enhancement measures have been proposed within the new development, including bat and bird nest boxes, a mix of native hedgerow planting and other planting of benefit to wildlife, and provision of wildlife access gaps beneath the boundary fencing.

1.0 Introduction

1.1 Background

A planning application is to be submitted for the development of x4 semi-detached dwellings on an area of land located between the existing residential properties nos. 26 & 32 Padnell Road, Cowplain, Hampshire (SU694 111) (**Map 1 & 2**).

In order to determine potential ecological impacts of the proposed development a preliminary ecological assessment (PEA) was required. 4Woods Ecology Ltd, was subsequently commissioned by the landowner to complete a PEA of the site in order to determine likely ecological impacts, the need for any further investigations and proposals for mitigation and enhancement opportunities.

1.2 Overview of Legislation & Policy

1.2.1 Protected Species Legislation

In the UK, varying levels of legal protection are afforded to a number of rare, declining or vulnerable species in the UK, principally via The Wildlife & Countryside Act, 1981 (as amended).

Species which are at threat in a European context are afforded additional legal protection in the UK via *The Conservation of Habitats and Species Regulations 2017*, which updates and consolidates all amendments to The Conservation (Natural Habitats, & c) Regulations 2010 (*'The Habitats Regulations'*), and which implements requirements of the EC Directive 92/43 (*'Habitats Directive'*) into UK law.

Species protected under the former or both legislative instruments (with varying levels of protection) include: Bats, birds and their nests/eggs, Dormice, Great Crested Newt, all native reptile species, etc.

Badgers and their setts are also afforded legal protection in the UK via the Protection of Badgers Act, 1992.

1.2.2 Biodiversity Action Plans

Following UK devolution, the UK Post-2010 Biodiversity Framework was set up in 2012, and succeeds the previous UK BAP. This sets out the aims and activities required to achieve identified targets to halt the decline in biodiversity across the various countries that make up the UK.

Lists of Priority species and habitats were devised for the purposes of the previous UK BAP, which were identified as most threatened in the UK and required action plans to aid their recovery. These lists remain an important reference source and have been used to revise the statutory lists of priorities for England and the other countries of the UK, to allow for a country-level approach rather than UK-wide as before.

The Countryside & Rights of Way (CROW) Act, 2000 requires that Government departments have regard to the purpose of conserving biological diversity in accordance with the Biodiversity Convention 1992 and to promote

the action required to further the conservation of species published on Biodiversity Action Plans (BAPs).

Further, The Natural Environment and Rural Communities (NERC) Act (2006) places a duty upon public bodies in England and Wales (including Local Planning Authorities) to have regard to the purposes of conserving biodiversity in exercising their functions. A list of 'habitats and species of principal importance for the conservation of biodiversity in England' was drawn up, as required by the NERC Act, to help guide decision-makers in this respect. The list includes all the habitats and species listed in the UK Biodiversity Action Plan, with the addition of Hen Harrier.

Species of Principal Importance/Priority Species listed (as revised in 2012 for England) include Soprano Pipistrelle bat, Brown Long-eared Bat, Noctule Bat, Hedgehog, House Sparrow, Starling, Song Thrush, Great Crested Newt, Grass snake, Slow-worm, Common Lizard, etc.

1.2.3 Nature Conservation Designations

Statutory Nature Conservation Designations

The site is just over 5.6km from Chichester & Langstone Harbours SSSI/Special Protection Area (SPA)/Ramsar, and Solent Maritime Special Area for Conservation (SAC). The site is therefore just outside of the identified impact/buffer zone around the SPA. However, the site is *within* the 'Solent nutrient impact area', which must be considered in relation to impacts on Solent SPA/SAC/Ramsar sites.

The Wildlife & Countryside Act, 1981 (as amended) and Countryside and Rights of Way (CROW) Act 2000, afford sites which are designated SSSI legal protection from damaging activities. Natural England must be consulted where any potentially damaging activities are likely to occur to a SSSI or its interest features, including possible indirect impacts arising from a proposal.

SACs and SPAs are designated under the EC Habitats Directive, 1992, and are afforded strict protection via *The Conservation of Habitats and Species Regulations 2010*, ('the Habitats Regulations'), which implements the EC Habitats Directive in UK law.

A Ramsar site is a designation of a wetland site of international importance under the Convention on Wetlands (Ramsar Convention), which is an intergovernmental treaty established in 1971. Planning policy indicates that for the purposes of considering development proposals that may affect them, Ramsar sites should be treated the same as SACs and SPAs.

Where the proposals may affect the qualifying habitats and features of a SAC/SPA/Ramsar site, either alone or in-combination with other plans/projects, a procedure set out in Regulation 61 of the Habitats Regulations must be followed. This is known as the Habitats Regulations Assessment (HRA), which requires that certain tests must be met before planning consent could be granted.

Further details of these designated areas are provided at **Section 3.2.1**, below.

Non-statutory Nature Conservation Designations

No non-statutory nature conservation designations were identified on the Havant District Local Plan proposal maps within 300m of the application site (Core Strategy 2011 Appendix 3 and Allocations Local Plan 2014). A few pockets of woodland, such as the 'Queen's Inclosure' (at around 350m to the south) exist within or at the edge of the local built up area which are designated Sites of Importance for Nature Conservation (SINC).

Such sites are afforded protection from development impacts via policies contained in the Local Plan (see **Section 1.2.4**, below).

1.2.4 Planning Policy

NPPF & ODPM Circular 06/2005

The planning policy guidance note dealing with Nature Conservation is contained within the National Planning Policy Framework (NPPF), as revised in 2019.

Underpinning the entirety of the NPPF is a presumption in favour of sustainable development. However, this does not apply where development requiring HRA under the Birds or Habitats Directives is being considered, planned or determined.

The NPPF states that when determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

The ODPM Circular 06/2005 currently provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system. The Circular advises that the '*presence of a protected species is a material consideration when a planning authority is*

considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'

It is also stated in the Circular that it is 'essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted'. However, it is noted that 'developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development'.

Havant District Council Local Plan

The following relevant policies are contained in the Core Strategy for Havant District Council, adopted March 2011:

Policy CS11: Protecting and Enhancing the Special Environment and Heritage of Havant Borough

Planning permission will be granted for development that:

- 1. Ensures the key landscape and built form principles set out in the Havant Protects and where possible enhances the borough's statutory and non-statutory designated landscape, habitats and features of biological, hydrological or geological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures including wardening, education and information and the creation of new habitats, water bodies/courses planting of new trees and woodland.*
- 2. Has particular regard to the following hierarchy of nature conservation designations within the borough (as identified on the Proposals Map): (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar [International]. (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves [National]. (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), other Ancient Woodland not identified in (ii) above.*
- 3. Protects and where appropriate enhances the borough's statutory and nonstatutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest.*
- 4. Supports an ongoing programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.*
- 5. Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly on the coast, to reduce harm to nature conservation interests.*
- 6. Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new Borough Townscape, Landscape and Seascape Character Assessment are protected and where possible enhanced by partnership working with developers, groups and the wider community.*
- 7. Valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh.*

8. *Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.*
9. *Maintains undeveloped gaps between the settlements of Emsworth/Havant; Havant/Waterlooville; Havant/Portsmouth; Emsworth/Westbourne and Leigh Park/Rowlands Castle as shown on the Proposals Map.*
10. *Protects the best and most versatile agricultural land that has the greatest potential for local food security.*
11. *Responds to the emerging evidence from the Solent Disturbance and Mitigation Project, the published recommendations, and future related research*

Policy contained in the 'Allocations' Local Plan, adopted July 2014, includes:

Policy DM24 : Recreational Disturbance to Special Protected Areas (SPAs) from Residential Development Planning

Permission will be granted for residential developments that avoid or mitigate a likely significant effect on the SPAs, caused by recreational disturbance through the incombination effect of net additional dwellings.....

[NOTE: the application site is beyond the recognised 5.6km buffer/impact zone around the SPAs, and therefore this policy does not apply to the current application]

2.0 Methodology of Assessment

2.1 Desk study

Statutory nature conservation designations and any protected species data was extracted, from the governmental website: www.magic.defra.gov.uk. A 'site check' report was generated for the application site via this website to check for any likely impacts on SSSI (i.e. identified SSSI impact zones).

Proposal maps within the Havant Borough Local Plan (Core Strategy & Allocations plans) were reviewed to identify any areas subject to non-statutory nature conservation designations (e.g. Site of importance for Nature Conservation (SINC)) or other relevant allocations.

An OS map and aerial photograph of the local area were examined to assess potential ecological value of the site or features (including potential for protected species to occur) in the context of the surrounding landscape.

2.2 Site Survey

A walk-over survey of the site was completed on 18 October 2020 by Su Forster BSc PGDip CEnv MCIEEM, of 4Woods Ecology Ltd.

The application site was surveyed for floristic interest and habitats were described (based broadly on Phase I habitat survey techniques), with main or any notable species being recorded. An assessment of habitats within the site and surrounding land for potential to support legally protected and/or notable species was also completed. In particular, this included:

- Assessment of the habitat to support a reptile population;
- A search for evidence of any Badger activity across the site and at the boundaries (e.g. Setts, foraging signs, tracks, dung pits/latrines, underpasses, footprints/hair etc);
- Assessment of habitat for use by nesting birds and any notable bird species.
- Assessment of the potential for amphibians, such as Great Crested Newt, to occur based on habitat availability together with map-based assessment and existing records;
- Assessment for the potential for other notable species to occur, such as Hedgehog, Harvest Mouse, Stag Beetle and other notable invertebrates.

3.0 Results

3.1 Overall Description of Site & Local Context

The application site is a near rectangular, flat plot of land, which is located between existing residential properties within an urban area. The site is surrounded by medium density residential development, being located within the north-eastern portion of the built-up area of Waterlooville and adjoining towns. However, the site and neighbouring properties back onto a small area of undeveloped land, which is dominated by mature trees/parkland and is isolated within this urban environment (presumed to be part of the school grounds).

3.2 Results of Desk Study

3.2.1 Nature Conservation Designations

Statutory Nature Conservation Designations

Chichester & Langstone Harbours SPA/Ramsar

The Chichester & Langstone Harbours SPA /Ramsar designation (also designated SSSI) occurs just over 5.6km (at the nearest point) from the application site. This site contains a large, sheltered area of intertidal habitat along the south coast of England that supports internationally and nationally important numbers of overwintering and breeding bird populations (reference should be made to the SPA site selection citation and Ramsar Sites Information for full details, www.designatedsites.naturalengland.org.uk).

Solent Maritime SAC

The Solent Maritime SAC stretches across a various coastal areas of the Solent, and includes Langstone & Chichester Harbours. The SAC comprises various estuaries that support a range of important intertidal/coastal habitat types. (www.sac.jncc.gov.uk)

SSSI Impact Zones

The 'site check' report for the application site, generated by www.magic.defra.gov.uk, indicates that the site is within the *Solent Nutrient Impact Area*. Any proposed residential units in this area would need to demonstrate nutrient neutrality in terms of waste water/run-off that would eventually drain into the Solent (where it would affect Solent SPAs/SACs/Ramsars).

No other impacts on SSSIs are indicated on the 'site check' report.

3.2.2 UKBAP Habitats & Habitat Network

Based on information gleaned from the governmental website www.magic.defra.gov.uk there are no priority habitats located within or adjacent to the application site. A large area of 'good quality semi-improved grassland' habitat and smaller blocks of woodland exist at the eastern edge of this part of Waterlooville, over 500m from the application site. Queens Inclosure, around 350m to the south, comprises an area of ancient replanted woodland.

However, this area of Waterlooville is identified as being in 'Network Enhancement Zone 2'. This is part of a Habitat Network plan for England, drawn up by Natural England based on the distribution of identified priority

habitats and potential for creating connected networks across a wide landscape (Habitat Components & Network Enhancement Zones). The network enhancement zones are areas that occur within relatively close proximity to the existing habitat components, and which are unlikely to be suitable for habitat re-creation but where other types of habitat may be created or land management may be enhanced including delivery of suitable Green Infrastructure. This zoning should therefore be considered when devising ecological enhancement measures for the application site.

OS map evidence indicates that the site backs onto a small isolated parkland/wooded area, which extends from adjacent school grounds, within an urban area.

3.2.3 Notable & Protected Species

The nearest Great Crested Newt record held on www.magic.defra.gov.uk is over 1.2km to the north of the application site (2016 record). Other Great Crested Newt records exist at Rowlands Castle, over 3km to the east of the application site and beyond the A3. There are no ponds within 500m of the site, and only a very few, very small ponds beyond this distance in the urban area.

3.3 Results of Site Surveys

3.3.1 Habitats & Flora

The site comprises a flat, near rectangular plot of land which narrows towards the northern end (**Map 2**). The site has recently been cleared, and is currently used to store building materials and debris.

The site is surrounded by a 6ft close-boarded timber fence on all sides, with a further metal railing fence through the centre. The vegetation is regrowing in places and includes Bramble *Rubus fruticosus* (agg.), Ash *Fraxinus excelsior* seedlings, Ivy *Hedera helix*, Rose *Rosa* sp., Field Maple *Acer campestre* seedlings, Hazel *Corylus avellana* seedlings, Blackthorn *Prunus spinosa*, Honeysuckle *Lonicera periclymenum*, Ornamental Dogwood *Cornus* sp., Dandelion *Taraxacum officinale* (agg.), Wood Avens *Geum urbanum*, Creeping thistle *Cirsium arvense*, Groundsel *Senecio vulgaris*, Hogweed *Heracleum sphondylium*, Teasel *Dipsacus fullonum*, Creeping buttercup *Ranunculus repens*, Ragwort *Senecio jacobaea*, Hedge Bindweed *Calystegia sepium*, Broadleaved Willowherb *Epilobium montanum*, Annual Meadow grass *Poa annua* and Yorkshire Fog *Holcus lanatus*.

A narrow strip of improved, cut grassland extends along the western edge of the site, comprising Cocksfoot *Dactylis glomeratus* and Perennial Rye-grass *Lolium perenne* with Yorkshire Fog, Creeping Buttercup, Ragwort, Hogweed, White Clover *Trifolium repens*, Ribwort Plantain *Plantago lanceolata* and Nettles *Urtica dioica*.

Mature trees (Oak *Quercus robur*) exist just beyond the rear fenced boundary, with further trees extending along the rear of adjacent properties and beyond into a small parkland/wooded area.

Piles of building materials exist in places across the site including Bricks, pallets and other debris. In addition a layer of woodchippings exists over much of the site. (**Map 2**)



View of site looking north



View of site looking south (showing mature trees beyond the southern boundary)

3.3.2 Fauna Mammals

There are no trees or other structures within the site that could potentially be used by bats. The houses to either side of the plot both appear to have tightly-fitting roof tiles and PVC soffits, with a small area of tightly-fitting hanging tiles on one dormer. These buildings are therefore considered to have low potential for bat roosts to occur adjacent to the plot.

The site provides poor potential foraging habitat for bats in its current cleared state. However, the small parkland/wooded area beyond the rear boundary of the site may be of particular value for foraging bats in this urban area.

Some evidence of a mammal accessing the site under the rear boundary fence was noted, together with signs of minimal foraging activity over the surface of the woodchippings within the site only (but no excavations). However, the gaps appear to be too small to allow access by Badger and no evidence of this species was found at the boundaries or throughout the site. The remainder of the boundary fence is tight to the ground.

While Hedgehog could potentially occur in the local area and could potentially access the site beneath the rear boundary fence, there is little cover available within the application site which could be used by this species for refuge, except for the piles of stored debris/materials.

Reptiles

The site does not support suitable habitat for reptiles, and is isolated from any other potentially suitable reptile habitat.

Amphibians

There are no ponds within the application site. Based on OS map evidence there are no ponds within 500m of the site (although small garden ponds cannot be ruled out). The nearest pond is around 530m to the west, within a dense urban area and beyond a main road. The nearest record of Great Crested Newt is over 1km distance from the site, to the north.

It is therefore unlikely that Great Crested Newt would occur at the application site.

Birds

This cleared small site, in an urban location and situated between two residential properties, is unlikely to provide valuable habitat for birds. The site is likely to be too small and disturbed for ground nesting birds to occur in this urban location.

The small parkland/wooded area to the rear of the site is likely to be inhabited by a variety of garden and woodland bird species.

Species recorded in the local area during the survey include: Goldfinch, Blackbird, Starling, Wren.

Invertebrates

This cleared small site is unlikely to support a notable invertebrate fauna. However, a higher abundance of insects is likely to be associated with the line of trees/parkland extending along the rear/southern end of the site and beyond, providing foraging opportunities for insectivorous species (e.g. bats).

No rotting deadwood is present within the site which might support specialist deadwood invertebrates.

4.0 Discussion – Interpretation & Recommendations

4.1 Assessment of Nature Conservation Value

The site is considered to be of low nature conservation value, comprising a recently cleared, small urban site with minimal regrowth of common trees/shrub species and ruderal vegetation, amongst a layer of woodchippings. The site continues to be subject to disturbance with building materials and debris being stored on site.

However a small parkland/wooded area exists beyond the southern end of the site, providing a potentially valuable habitat for local wildlife species (e.g. birds, foraging bats, invertebrates etc), and is considered to be of nature conservation value at the local (neighbourhood) level.

No evidence of any notable or protected species has been found at the site. Habitat within the site is currently unlikely to support notable/protected species.

In a wider context, the application site lies within the nutrient neutrality zone of the Solent SPA/SAC/Ramsars. Such sites are of nature conservation value at the European/international level.

4.2 Ecological Impacts

4.2.1 Direct Impacts

Proposed development at the site is unlikely to result in any significant direct ecological impacts given that the site contains no habitat, features or species of nature conservation value.

4.2.2 Indirect Impacts

Construction Phase

Based on current findings, building activities at the site are unlikely to result in any significant ecological impacts.

The possibility of Hedgehog (a Biodiversity Action Plan Priority species) being found beneath piles of debris cannot be ruled out. This material would need to be removed from the site before commencing work which would remove any possible refuge for this species.

Operational Phase

Development of 4 new residential units on this site is unlikely to result in any new significant indirect ecological impacts post-development, with the following exceptions:

- Unsympathetic lighting to the rear/southern end of the site has potential to affect habitat value of the adjacent small parkland/wooded area for foraging bats and other species.
- In a wider context, proposed new development at the site is likely to result in an indirect impact upon Solent SPA/SAC/Ramsar sites, in combination with other residential developments, due to increases in nutrients entering the Solent area. Increases in nutrients draining into

the Solent are causing eutrophication and increased growth of algae on intertidal habitats of the designated SPA/SAC/Ramsars in this region. All planning applications for residential use in the Havant Borough are now required to demonstrate nutrient neutrality in terms of water discharge/run-off from the site. Full details are provided in the Havant Borough '*Position Statement and Mitigation Plan for Nutrient Neutral Development*' (August 2020) (www.havant.gov.uk)

The Natural England nutrient calculator should be used to determine whether the application will achieve nutrient neutrality in terms of water draining to the Solent. Where nutrient neutrality cannot be achieved, mitigation measures will be required. For small sites such as the current application site, it is likely that a financial contribution towards the Council-managed mitigation scheme (Warblington Farm) will be the most viable option for mitigation. The level of required financial contribution will be based on the results of the nutrient calculation for the site.

4.3 Legal Considerations

4.3.1 Protected Species

It is unlikely that any legally protected species will be affected by the proposed development.

4.3.2 Habitats Regulations Assessment

With the potential for the proposals to affect designated SACs and SPAs, the local planning authority will need to undertake a Habitats Regulations Assessment (HRA) of the proposals before granting planning consent, in accordance with the requirements of the Conservation of Habitats and Species Regulations 2017.

An HRA is required where the proposal is likely to have a significant impact on an SPA/SAC/Ramsar, either alone or in-combination with other plans/projects. If nutrient neutrality of surface water run-off and outflow from the site cannot be demonstrated (using the Natural England calculator), an HRA would be required due to the likely in-combination impacts of increased nutrients affecting Solent SPA/SAC/Ramsars. Mitigation measures would then be required to achieve nutrient neutrality, which is likely to involve a financial contribution towards an off-site mitigation scheme. Planning consent may then only be granted where the tests of the HRA are satisfied.

4.4 Proposed Mitigation & Enhancement

4.4.1 Lighting

In the long-term (operational phase) lighting at the southern end of the site should be minimised. Any necessary lighting should be designed to avoid illuminating the trees just beyond the southern boundary.

Therefore, any necessary lights at the southern half of the site should be set at an appropriate height to minimise light spill, and direction lights or shields/hoods used to ensure light does not spill upwards (i.e. around tree canopies/eaves) or beyond the area that requires illumination. Wherever appropriate, external lighting should be on a timer and/or motion-activated to

ensure lights are only used when necessary. Warm/neutral colour lighting (avoiding use of white/blue wavelengths of the light spectrum) should be used to minimise potential impacts on wildlife.

4.4.2 Hedgehogs

In the event that any Hedgehogs are discovered beneath piles of debris/materials, they will be carefully moved (or allowed to move) to the rear boundary of the site where gaps exist beneath the fence. If hibernating individuals are discovered during winter, further advice will be sought from an ecologist or appropriate local wildlife protection group.

4.4.3 Ecological Enhancement

In accordance with current planning policy, ecological enhancement measures must be included in the development proposals.

The following enhancement measures are proposed:

- Additional native tree planting within the site, comprising a mix of species, along the rear and western boundaries to provide habitat corridors through the site, and foraging/nesting opportunities for birds. Such species could include: Blackthorn, Hawthorn, Field Maple, Rowan, Hazel, Guelder Rose, Spindle, Crab Apple, Dog Rose, Dogwood (all native species of UK provenance). Other ornamental tree/shrub planting around the new building and car parking area will comprise either native species or other species with a known benefit to wildlife. (**Map 3**)
- Maintaining/creating small gaps beneath the close-boarded fence (at least one gap on each of the southern, eastern and western boundaries), of a sufficient size to allow movement of Hedgehog and other smaller terrestrial species (i.e. 13cmx13cm) between rear gardens and parkland habitat to the rear. (**Map 3**);
- Inclusion of x2 integrated brick bat box units within the walls of the new buildings, on the western elevations (**Map 3**);
- Provision of x2 integrated bird nest boxes within the walls of the new buildings, including a Sparrow terrace box and Swift nest box (on separate buildings), at the eaves/gable on the eastern elevations (**Map 3**).

5.0 Conclusions

The findings indicate that the application site is of low nature conservation value, and that proposed development is unlikely to result in any significant direct impacts. However, it is recommended that lighting is limited at the southern end of the site to avoid illumination of the trees/wooded area to the rear of the site which could otherwise affect its use by wildlife, such as foraging bats. In addition, care will be taken during removal of the piles of debris on site to ensure any Hedgehogs are not harmed.

Further ecological surveys are not considered necessary, based on current habitat assessment and available information.

In a wider context, based on research studies to date and published guidance, proposed residential development in the Havant Borough is likely to result in a significant in-combination impact on sites subject to international nature conservation designations (SPA/SAC/Ramsar sites within the Solent). This is due to residential developments resulting in increases in nutrients draining into the Solent causing eutrophication of important intertidal habitats.

Where a SAC, SPA or Ramsar site is likely to be affected, the LPA is required to complete an HRA of the proposals in accordance with UK legislation. The proposals must pass the HRA tests before planning consent could be granted. In order to pass the HRA tests a contribution towards an off-site mitigation scheme is likely to be required where nutrient neutrality cannot be demonstrated using the Natural England calculator.

6.0 References

CIEEM (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland. Second Edition, January, 2016.* www.cieem.net

Institute of Lighting Professionals (ILP) (2018). *Guidance Note 8: Bats and Artificial Lighting in the UK.* Guidance Note produced by ILP and The Bat Conservation Trust (BCT). ILP, 2018.

Havant Borough (2020). Position Statement and Mitigation Plan for Nutrient Neutral Development, August 2020. www.havant.gov.uk

Natural England (2020). Advice on achieving nutrient neutrality for new development in the Solent Region. Version 5 – June 2020.

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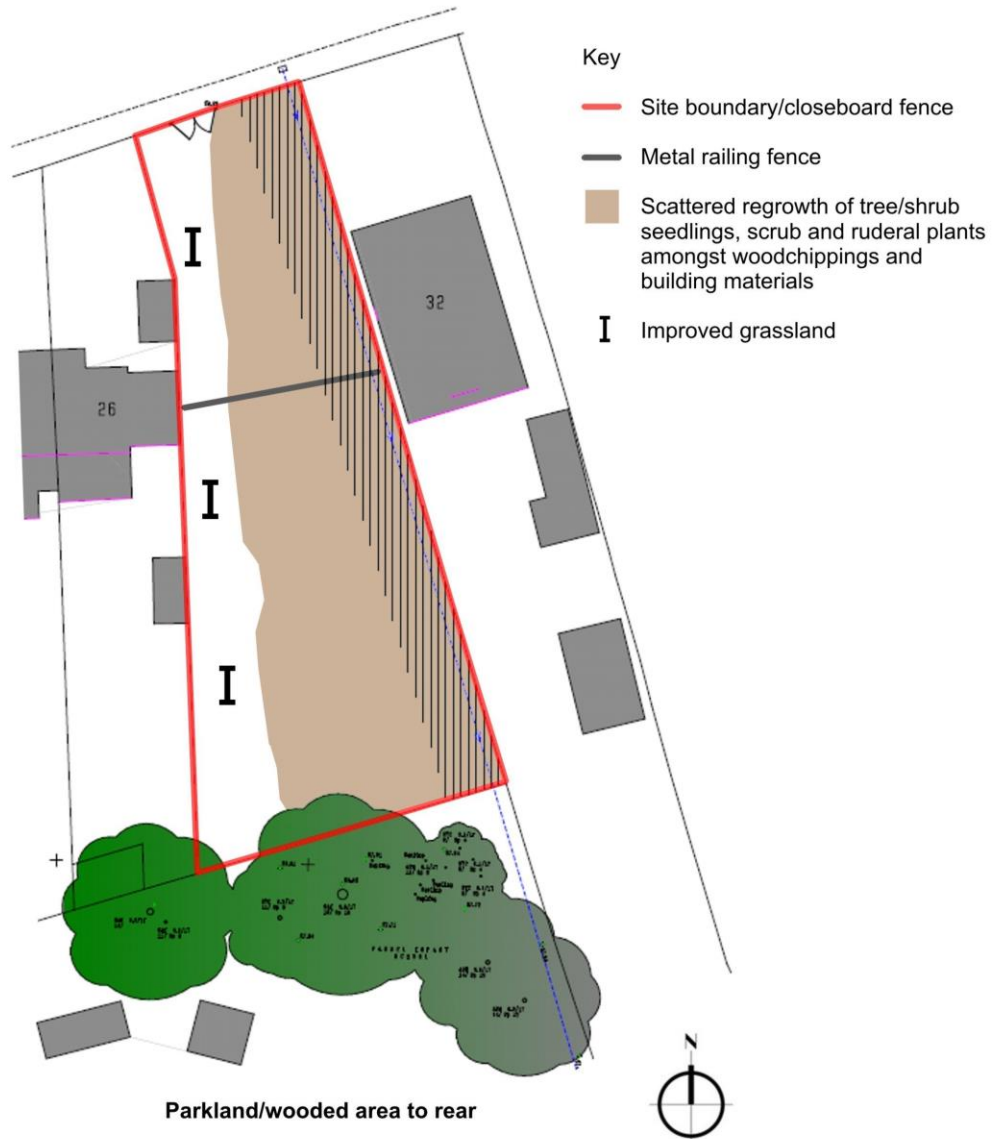
Map 1 - Site Location



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Land Between 26 & 32 Padnell Road, Cowplain

Map 2 - Survey Results

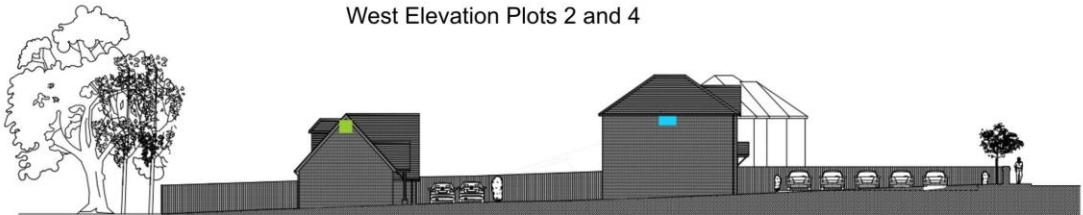


Land Between 26 & 32 Padnell Road, Cowplain

Map 3 - Habitat Enhancement



West Elevation Plots 2 and 4



East Elevation Plots 1 and 3

Key

- Integrated bat box
- Integrated House Sparrow box
- Integrated Swift box
- Access gaps under close-board fencing
- Native mixed hedge planting
(other planting to be native or species with a known benefit to wildlife)

