



Hampshire
County Council

Ecological Appraisal

Netley Police Training College

For

Office of Police and Crime Commissioner (OPCC)

November 2024

Hampshire County Council Ecology Team

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Summary

Site Description	Netley Police Training Headquarters (SU 46891 07930) is situated between the village of Netley to the northwest and Hamble-Le-Rice to the southeast. The site within the redline boundary covers approximately 1.98 hectares and includes a variety of habitats such as grassland, woodland, Rhododendron scrub, and hardstanding areas.
Proposals	The proposals for the site, include a new 3m high security fence around the perimeter of the site and widening of sections of the access drive / road.
Objectives	The scope of this assessment is to provide an Ecological Appraisal of the proposed development including a desk-based study and field surveys, as well as a formal Biodiversity Net Gain (BNG) Assessment of the baseline biodiversity value (provided separately).
Results	<u>Designated Sites:</u> Due to the small-scale nature of the fence installation, there will be no impact on European, national and locally designated sites. <u>Habitats:</u> The habitats along the proposed fence line consist of broadleaved woodland, bracken, other neutral grassland, modified grassland, running water, hardstanding and species poor hedgerow. <u>Protected Species:</u> ▪ Badgers present in wider woodland, but no setts near proposed fence. ▪ Bat roosts likely to be present in trees in woodland. Habitat provides extensive areas of high-quality foraging habitat. ▪ Woodland / scrub provides extensive high-quality Dormouse habitat and habitat suitable for supporting a range of breeding birds. Further surveys confirmed Dormice are likely absent. ▪ Areas of taller grassland provide suitable habitats for reptiles and amphibians. ▪ Ponds in woodland assessed as being potentially suitable for Great Crested Newts (GCN). Further surveys confirmed GCN are likely absent. ▪ Site is generally suitable for a range of small mammals.

Mitigation and enhancement	Inherent and additional measures to address impacts include: ▪ Final fenceline set-out to be carried out with a suitably experienced ecologist to fine-tune the route, guiding positioning of fence posts in woodland and the cutting of fence panels to divert around trees, avoiding significant impacts to woodland and avoiding impacts to potential bat roosts. ▪ Creation of mammal passages through fence panels to maintain Badger dispersal. ▪ Clearance of vegetation outside the nesting bird season or under strict ecological supervision if during nesting season. ▪ Precautionary, staged approach to clearance of an areas of taller grass or other suitable reptile or terrestrial amphibian habitat. ▪ Adherence to a site-specific Method Statement that sets out these measures in detail. ▪ Net gains to biodiversity will be delivered through the enhancement of an area of woodland that is currently dominated by Rhododendron and Cherry Laurel, the enhancement of existing areas of amenity grassland to create a more species-rich and diverse neutral grassland habitat, and new hedge planting. ▪ Overall, the development is capable of delivering a 14.89% net gain in area-based habitats and a 52.49% gain in linear habitats.
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1. Introduction

Objectives

- 1.1. On 1st February 2024, the Hampshire County Council Ecology Team were commissioned to conduct an Ecological Appraisal of the site known as Netley Police Training Headquarters.
- 1.2. The purpose of this study was to gather ecological information about the site and assess the impacts of the development proposals for the site on these features, in order to support a planning application with Eastleigh Borough Council.
- 1.3. The Ecological Appraisal comprises a number of elements; initially a desk-based assessment was carried out, followed by field habitat survey work based on UKHab survey methodology, and a site-based assessment of the potential for the site to support protected and notable species.
- 1.4. The preliminary appraisal identified that the development had the potential to affect a range of specific ecological receptors. Following this work, further species-specific survey work for Great Crested Newts *Triturus cristatus* (GCN) and Hazel Dormouse *Muscardinus avellanarius* were carried out.
- 1.5. This Ecological Appraisal therefore sets out the methods and findings of all these elements of survey work and uses the findings to fully assess the impacts of the proposed development on the identified ecological receptors.
- 1.6. As part of the work, a formal Biodiversity Net Gain (BNG) assessment was carried out and a Biodiversity Gain Strategy developed.
- 1.7. Overall, the Ecological Appraisal and BNG strategy supports the proposed development through demonstrating how the proposal accords with all relevant biodiversity legislation and policy.

Site Description

- 1.8. The Netley Police Training Headquarters (SU 46891 07930) is situated between the village of Netley to the northwest and Hamble-le-Rice to the

southeast. The site within the redline boundary covers approximately 1.98 hectares and includes a variety of habitats such as grassland, woodland, scattered trees, scrub, buildings, and hardstanding areas.

- 1.9. Access to the site is via Hamble Lane (B3397), with a winding road leading to the Grade II Listed Victoria House Hamble, originally built in 1866 for the Army and remodelled for the Hampshire Constabulary in the 1980s. Additional access roads connect to various other training buildings.
- 1.10. The surrounding landscape includes a mix of agricultural land, residential areas, parks, campsites, schools, sports clubs, and industrial complexes. Netley Military Cemetery borders the eastern boundary, while the Royal Victoria Country Park, extending to The Solent, is situated to the west of the site.
- 1.11. Location plan and aerial photo of the site showing the site boundary, and its setting are shown in Appendix 1. Photos in Appendix 2 show the general conditions at the site.

Proposed works

- 1.12. The proposals for the site are for the installation of a new 3m high welded mesh security fence, along with secure pedestrian and vehicle gates, as well as an upgrade to the entrance of the site access road where the existing road will be widened into the adjacent verges.

2. Planning policy and legislation

National Policy

- 2.1. Paragraph 186 of the National Planning Policy Framework (NPPF) (MHCLG, 2023) requires that when determining planning applications, 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.

Local Policy

- 2.2. The site is within Eastleigh Borough. Policy DM11 of the Eastleigh Borough Local Plan 2016-2036 sets out a range of criteria that new developments must meet, and how they will be assessed, including:

- *The Council will determine planning applications, to protect, conserve and enhance ... networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character*
- *The Council will seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils*
- *Development will not be permitted unless it can be demonstrated that:*
 - a) *there have been thorough habitat and species surveys.*
 - b) *the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and*

- c) *the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.*

Legally Protected Species

- 2.3. Many species of animal are legally protected under both domestic or international law (the Wildlife and Countryside Act 1981 (as amended)¹ and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019² respectively). Badgers and their setts are protected under the Badgers Act 1992³.
- 2.4. With reference to bats, Hazel Dormice, and Great Crested Newts, these are European Protected Species (EPS). This legislation makes it an offence to kill, injure or disturb them, or to destroy or damage their breeding sites and resting places (even when the animals are not present). For such work to legally proceed, Natural England (the Government's statutory nature conservation agency) will issue a licence for the work to be able to proceed legally, subject to the proposals meeting certain criteria.

The Environment Act 2021 and Biodiversity Net Gain

- 2.5. Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) must deliver at least 10% biodiversity net gain from 12 February 2024. The assessment of these gains is measured using Defra's Statutory Biodiversity Metric and all off-site and significant on-site habitats will need to be secured for at least 30 years. This sits alongside a strengthened legal duty for public bodies to conserve and enhance biodiversity, new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

Biodiversity Action Plan

- 2.6. Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are

¹ <http://www.legislation.gov.uk/ukpga/1981/69>

² <https://www.legislation.gov.uk/primary+secondary/2019ConservationHabitatsSpeciesRegulations>

³ <http://www.legislation.gov.uk/ukpga/1992/51/contents>

usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

3. Methods

Desk-based assessment

- 3.1. A desk-based assessment was carried out by HCCET in February 2024, updated in July 2024 following site survey work and review of the project proposals. This comprised the following elements:

Zone of influence (Zoi)

- 3.2. The development proposals and the site were reviewed to establish the likely extent of impacts from the scheme at which potential ecological receptors might be affected. This was based on established criteria (such as Natural England's Impact Zones for Sites of Special Scientific Interest (SSSI)), or published zones around certain European designated sites. Where established criteria are not present, the Zoi was based on the ecologist's professional judgement. Where necessary, the Zoi for relevant receptors are discussed in the following sections.
- 3.3. Following the initial appraisal of the site, the Zoi may be reconsidered and drawn wider or narrower depending on the receptor being considered and how an understanding of the potential effects of the development evolves during the process.

Survey scoping

- 3.4. An initial review of the site and the proposals were carried out to consider the likelihood of particular ecological receptors being present at the site or nearby (within relevant Zoi). Where this scoping confidently concluded that a particular receptor is likely absent (for example there are unlikely to be water vole at a site with no on-site or nearby waterbodies), these are not considered in detail in the report.

Data search

- 3.5. Geographical Information Systems (GIS) mapping was used in order to identify all records of protected species and habitats within a 1km radius of the site. Given the localised nature of the proposals this search radius was considered sufficient for assessing risk to all ecological features. In addition, records were

obtained of all statutory and non-statutory designated nature conservation sites within the search radius.

- 3.6. The Ecology Team has full access to the extensive datasets maintained by the Hampshire Biodiversity Information Centre (HBIC). These datasets cover designated sites, priority habitats and over 6 million species records. Paragraph 4 of the HBIC Data Users Declaration states that

“whilst every reasonable effort is made to validate information supplied to and by the Hampshire Biodiversity Information Centre, owing to the dynamic and judgmental nature of information relating to wildlife, HBIC disclaims any responsibility for the accuracy or comprehensiveness of the information supplied, and accepts no liability for any indirect, consequential, or incidental damages or losses arising from use of the information”.

- 3.7. The desk-based assessment also included a review of any previous ecological studies at the site or nearby areas where relevant and available, as well as searching MAGIC⁴ for records of nearby European Protected Species Mitigation Licences.

Field survey

Baseline habitat survey

- 3.8. An initial site walkover to assess the site’s potential to support protected and notable species, and to gain a broad understanding of the habitats present was carried out on 26 March 2024 by Suzie Melhuish, Senior Ecologist with Hampshire County Council. Given the time of year this was carried out, an updating habitat survey was carried out on 06 June 2024 by Emma Taylor, Senior Ecologist with Hampshire County Council to gain a more robust understanding of the habitats and plant species present.
- 3.9. The site survey entailed the surveyors undertaking a methodical investigation of all areas of the site. Habitats were identified and mapped according to UKHab methodology and lists of representative plant species noted. An assessment

⁴ The Multi-Agency Geographic Information for the Countryside website, at: [Magic Map Application](#)

was made of the condition of each habitat parcel in line with the habitat condition assessments required to support the Biodiversity Net Gain metric.

- 3.10. All areas of the site and relevant contextual areas were assessed for evidence of, and potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitats Regulations, Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), those given extra protection under the Natural Environment and Rural Communities Act 2006, and species included in the Hampshire BAP (Hampshire Biodiversity Partnership, 1998).

Initial protected species assessment

- 3.11. A brief description of the survey methods used to initially assess the site's suitability for supporting protected or notable species is provided below.
- 3.12. The site was surveyed for evidence of Badger *Meles meles* setts or other Badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989).
- 3.13. An assessment was made of the suitability of habitat on site to support Hazel Dormice. Key habitats for this species are woodland, scrub and hedgerows, particularly where these offer dense vegetation for nesting or hibernation, along with food resources such as hazelnuts, fruiting and nectar-rich plants (e.g. hawthorn, bramble) and honeysuckle (for nesting material). The presence of important landscape-scale habitat linkages between suitable habitats was considered. The assessment was based on guidance outlined in Bright, Morris and Mitchell-Jones (2006).
- 3.14. The survey also included a consideration of the site's suitability to support breeding bird species. These will utilise a broad range of habitats, including structures such as houses and outbuildings, trees, scrub, isolated shrubs, dense herbaceous vegetation (terrestrial and aquatic) and open grassland.
- 3.15. The site's suitability to support reptiles was also considered. Key habitat features for reptiles include tussocky or patchy grassland, scrub edge, linear watercourses, ponds, compost heaps, brash piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the

potential for reptiles to occur, although populations can occur within isolated or fragmented habitats even within urban areas. The assessment was based on guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003).

- 3.16. An initial view of the presence and potential suitability of all waterbodies within the site and adjacent contextual areas was carried out.
- 3.17. Trees were assessed for their potential to support bats, using methods guided by and consistent with that set out in Collins (ed) (2023). Relevant trees were inspected from ground level to identify evidence of bat activity and/or identify the presence of any potential roost features (PRFs) such as rot holes, flaking bark, cracks or splits and areas of extensive deadwood.
- 3.18. An assessment was made of the suitability of the site and the surrounding landscape to support foraging, commuting and other flying behaviours such as swarming and social interactions. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland, and open water and watercourses, which are highly attractive to bats as both a foraging resource and as commuting routes. The presence of such habitats, particularly in a mosaic with other suitable habitats, typically increases the potential for structures to be exploited by bats where suitable roost and access opportunities are present. The presence of unlit semi-natural vegetation and habitat linkages between the site and the surrounding landscape were also considered.
- 3.19. Bat roost suitability and foraging habitat quality was assessed according to the criteria set out in Collins (2023).

Hazel dormouse survey

- 3.20. A total of 120 dormouse tubes were deployed, spaced at appropriate densities, on 06 June 2024. Nest tubes were deployed in woodland and scrub habitats alongside or near the proposed fence and road widening work. The distribution of tubes is shown in Appendix 4.
- 3.21. The robustness of dormouse surveys can be assessed as set out within Bright et al. (2006), based on each month of the survey period having a probability score of the survey tubes being used by dormice for nest-building. Where

survey effort accumulates a combined score of greater than 20 it is generally considered enough to conclude absence if no dormouse evidence is found during the surveyed period. The tubes were checked on a minimum two-monthly basis. Tubes were checked on five occasions from the end of June 2024 to the end of November 2024.

- 3.22. The tubes were deployed and checked by or under the supervision of Emma Taylor, holder of a dormouse survey licence. Other surveyors included Julie Trevellick, Jessica Forest, and Mollie White.

Great Crested Newt survey

Habitat Suitability Index (HSI) assessment

- 3.23. Relevant and accessible waterbodies identified during the desk-based assessment and subsequent survey work were assessed using Habitat Suitability Index (HSI) assessment methods (Oldham *et al*, 2000; ARG UK, 2010).
- 3.24. The approach provides an objective method for assessing the suitability of a waterbody as habitat for GCN (Oldham *et al.*, 2000; Herpetological Conservation Trust, 2008). The system provides an index between 0 and 1, with 0 indicating unsuitable habitat and 1 optimal habitat. Ten suitability indices are used to calculate the index score, each representing a factor considered to affect GCN. These factors are listed and briefly explained below:
1. Location: i.e. where the pond is located in the British Isles. Lowlands are generally thought to be most suitable; suitability declines with increases in altitude
 2. Pond area: i.e., the water surface area of a pond. Suitability peaks at approximately 800m².
 3. Pond drying: how often a particular pond dries out. Ponds which dry out more frequently are less suitable.
 4. Water quality: an indication of water quality based on the invertebrate diversity present. High invertebrate diversity indicates high water quality and suitability.
 5. Shade: an estimate of the total shaded perimeter of a pond. Shoreline shade below 60% is optimal.

6. Fowl: indication of impact by waterfowl. High waterfowl numbers are generally considered detrimental.
 7. Fish: indication of fish abundance. High fish numbers are generally considered detrimental.
 8. Pond count: based on the density of ponds occurring within 1km of a particular pond. Suitability is positively correlated with pond density.
 9. Terrestrial habitat: based on the availability of suitable habitat in the pond vicinity, e.g. rough grassland, scrub and woodland. For this assessment, the categories provided in the NARRS Survey Pack (Herpetological Conservation Trust, 2008) were used. This differs from the assessment criteria by Oldham et al. (2000), and is based on work by Lee Brady (unpublished); and
 10. Macrophytes: based on an estimate of the percentage cover by emergent and aquatic vegetation. Suitability peaks at between 70% and 80% cover.
- 3.25. The overall HSI score is a geometric mean of these ten scores – the scores are multiplied together, and the tenth root of this number is calculated $(x)^{1/10}$ i.e. x to the power of 0.1.
- 3.26. The overall HSI score will give an overall suitability of the pond to support GCN as set out in Table 1, below.

Table 1 Great crested newt HSI scoring

HSI Score	Pond Suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
> 0.8	Excellent

Environmental DNA (eDNA) sampling

- 3.27. Where relevant, water samples were taken for laboratory analysis for the presence of environmental DNA (eDNA) analysis Natural England (NE) has approved this method for the determination of GCN presence or absence. Field

sampling was undertaken by a Natural England great crested newt licenced surveyor. Samples were obtained on 07 June 2024, during the newt breeding season. During the survey visit, 20 samples were taken from the pond, with the location of these sub-samples spaced as evenly as possible around the pond margin, focussing on areas where of suitable egg-laying habitat and open water areas suitable for GCN displaying. The collected sub-samples were then mixed well and transferred to six sterile tubes, each containing 35ml of ethanol to preserve the eDNA sample. The samples were then sent to a laboratory for testing.

Limitations

Baseline habitat survey

- 3.28. All areas of the site were fully accessible and visible during the updating survey work. The weather was 15°C, dry, and partly cloudy. There are therefore no significant limitations to the survey work.

Habitat mapping

- 3.29. The redline boundary of the site is narrow and linear – it is approximately 2.0km long, while only approximately 4.0m wide along the majority of its length. Habitat mapping typically first establishes a ‘minimum mapping unit’ (MMU) to guide the degree of fine-scale mapping carried out. While the latest iteration of the UKHab and BNG guidance does not specify what the MMU would ordinarily be, previous iterations considered that 5.0 linear metres or 25 square metres (an area 5m x 5m) could be considered to be the MMU.
- 3.30. Given that for the majority of its length the redline boundary is narrower than the linear MMU, it should be recognised that generating meaningful and accurate habitat information in narrow strips is challenging. Mapping the baseline habitats has therefore based the mapping on Ordnance Survey MasterMap polygons, with further detail and confirmation based on the on-site habitat surveys and further informed by review of recent and historic aerial photographs.
- 3.31. In most cases, this is not a significant constraint where – for example – the redline boundary passes through large areas of clearly homogenous habitat, such as hardstanding or grass playing field. However, in a small number of

locations, the redline boundary encompasses strips of transitional habitat, where there is no clearly defined interface between habitat types. An example of this is where the redline passes along the northern boundary of the playing fields to the north-west of the site. Between the redline boundary extents along here, the habitats grade from mown amenity grassland, hardstanding, rough grassland verge, woodland edge scrub, and woodland. i.e. there are five distinct habitats in a single 4.0m strip of land – this can be seen in Photo 3 in Appendix 2. In locations such as this, habitat patch boundaries were drawn to match edges of the lower distinctiveness hardstanding and classifying all the habitat north of this as woodland rather than attempting to show finer-scale fringes of rough grassland. This approach serves to avoid the risk of ‘under-valuing’ some of the transitional habitats and recognises that transitional habitats should in many cases be considered a functional and fundamental part of an overall habitat mosaic and its constituent blocks.

- 3.32. Overall, it is therefore considered that this approach overcomes the limitations presented by undertaking a BNG assessment of the complex and challenging redline boundary at this site.

Dormouse survey

- 3.33. Dormouse survey tubes were able to be installed in suitable areas of connected habitat, at appropriate spacing (approx. 20m). There were no constraints to access during the surveys and no limitations to the survey work.

GCN eDNA survey

- 3.34. Full access to the identified pond was available and no constraints to obtaining the necessary samples were encountered.

4. Habitat Survey and Preliminary Species Assessment

Desk-based assessment

Designated sites

- 4.1. Appendix 1 shows the location of the site and its surrounding relevant designated statutory and non-statutory sites.
- 4.2. There are two internationally designated sites located within 1km of the application site. Solent and Southampton Water qualifies as an SPA for its breeding and wintering bird species. In the summer months, the site supports breeding Common Tern *Sterna hirundo*, Little Tern *Sternula albifrons*, Mediterranean Gull *Ichthyaetus melanocephalus*, Roseate Tern *Sterna dougallii*, and Sandwich Tern *Thalasseus sandvicensis*.
- 4.3. Over-wintering birds include important populations of Black-tailed Godwit *Limosa limosa*, Dark-bellied Brent Goose *Branta bernicla*, Ringed Plover *Charadrius hiaticula* and Teal *Anas crecca*.
- 4.4. The SPA is designated for the internationally important assemblages of migratory waders and waterfowl that it supports during the winter months. These are particularly vulnerable to disturbance impacts, especially from recreational activities along the coast.
- 4.5. Solent and Southampton Water also qualifies as a Ramsar site under four criteria, including: supporting a wide range of wetland habitats such as saltmarshes, estuaries, intertidal flats, grazing marshes, and reedbeds, and the many of the bird species and populations that the SPA is also designated for. It also supports an important assemblage of rare plants and invertebrates.
- 4.6. The Solent and Dorset Coast SPA is designated for its value to foraging and breeding terns and covers the open water habitats below mean high tide.
- 4.7. Outside the search area are several other SPAs and Special Areas of Conservation (SACs) associated with the Solent coast. designated for a range of coastal and maritime habitats. These habitats are vulnerable to a range of

impacts associated with habitat damage or deterioration, and particularly those that arise from an increase in nutrients entering the system from agricultural runoff and domestic sewage discharges.

- 4.8. There is one nationally designated site within the search area. Lee on the Solent to Itchen Estuary Site of Special Scientific Interest (SSSI) lies approximately 500 m south-west of the site and is one of the SSSIs that underlies the Solent and Southampton Water SAC designation.
- 4.9. West Wood (Royal Victoria Country Park) Site of Importance for Nature Conservation (SINC) lies along the southern boundary. The SINC is designated for its ancient semi-natural woodland, wet woodland and fens. There are another eight SINC's within 1 km of the site.

Priority Habitats

- 4.10. Figure A3.2 in Appendix 3 shows the areas of mapped Priority Habitat at and around the site. The HBIC data identified that much of the woodland across the wider Police College site is likely to be Lowland Mixed Deciduous Woodland (Lowland Mixed Deciduous Woodland) Priority Habitat. Of particular note is the larger expanse of Lowland Mixed Deciduous Woodland to the south-east of the site. The site boundary (both the blue and redline boundaries) along this area runs along the original walled boundary of Victoria House, constructed when it was originally built as the psychiatric unit of the larger Royal Victoria Military Hospital to the south. While the larger expanse of the West Wood SINC and area of ancient woodland (see paragraph 4.9, above) lies outside the site to the west, the woodland within the site is still mapped as Priority Habitat.
- 4.11. To the north-west of the site is an area that is mapped as Wood Pasture and Parkland. This area was examined in further detail during the desk-based assessment and during the field survey work and will be discussed further in the following sections of the report.
- 4.12. Outside of the designated sites and other more ecologically valuable habitats, there is open grassland pasture extending northwards from the site, and a disused grass airfield to the east, and extensive woodland and grassland to the south at Royal Victoria Country Park. This swathe of open land, and the site

itself, occupies a slightly elevated position between shallow wooded valleys to the east and west.

Protected and notable species

4.13. A review of the biological database held by HBIC identified records of a range of protected and notable species within the search area. These are shown in Table A3.1 in Appendix 3 and are discussed in the relevant sections of the report, below.

Previous survey work

4.14. A preliminary Ecological Appraisal (PEA) was carried out across the whole site in 2023 by Arcadian Ecology (Valerio, 2022) to inform potential future works to enhance the grounds for biodiversity. This identified that the site offered suitable potential habitat for bats, badgers, breeding birds, dormice, reptiles, invertebrates, and small mammals. It also noted extensive areas of invasive Rhododendron scrub within the woodland areas.

Survey scoping

4.15. There are no watercourses on or near the site. Therefore, riparian mammals have been scoped out.

Zone of Influence

4.16. The development is for the installation of a new fence through a range of habitat types, and small-scale access road widening. As discussed above, the Solent and Southampton Water SPA is vulnerable to recreational impacts, while SACs further afield are vulnerable to increases in nutrients from new residential or other 'overnight stay' developments. As impacts of these type would not arise from the proposed fencing and road widening work, the SPA and SAC are concluded to be outside the Zol of the proposed development.

4.17. There are no impact pathways between the site and any nearby SINC or the SSSI further away. Therefore, the SSSI and SINC designations are concluded to be outside the Zol of the proposed fencing and road widening works.

4.18. From a review of the proposals and the likely ecological interests at the site prior to the site survey and given that impacts to the designated sites in the

surrounding area were scoped out, the ZOI at the initial stage was considered to be the site itself and immediately adjacent habitats.

- 4.19. There are no designated sites that have been specifically designated for important populations of wide-ranging bat species in the wider area.
- 4.20. At the desk-based assessment stage the site appeared to be unlikely to be important for wide-ranging or migratory species. However, this issue was re-examined during and after the field survey work to ensure this conclusion remained valid and robust.

Field Survey

Habitats

- 4.21. The main habitats present at and around the site are shown in the Habitat Survey map in Appendix 4.

Deciduous woodland

- 4.22. Much of the woodland is deciduous woodland. In general, the maturity of the woodland varies, with the eastern and southern boundaries being more mature. Species recorded include Pedunculate Oak *Quercus robur*, Hazel *Corylus avellana*, Beech *Fagus sylvatica*, Ash *Fraxinus excelsior*, Holly *Ilex aquifolium*, Hawthorn *Crataegus monogyna*, Silver Birch *Betula pendula*, Dogwood *Cornus sanguinea* and Field Maple *Acer campestre*. See Photo 1 in Appendix 2.
- 4.23. In UKHab terms, the deciduous woodland has been classified as *w1f lowland mixed deciduous woodland* and is generally in moderate condition.
- 4.24. The area of woodland that is within the walled boundary to the south-east part of the site has become heavily invaded by Rhododendron *Rhododendron ponticum* and Cherry Laurel *Prunus laurocerasus*. In this area, the native woodland tree cover is <25% and consideration was given to classifying this as *h3g rhododendron scrub*. However, given that this area was contiguous with the adjacent West Wood SINC and Ancient Woodland before the construction of the boundary wall and Victoria House, it has been classified as still being *w1f lowland mixed deciduous woodland*, although this area is in poor condition due to the abundant Rhododendron and Cherry Laurel.

Grassland

- 4.25. There are grass verges alongside the access road into the site – see Photos 3 and 6. Grass species account for >75% of the cover in most places and are typical of managed verges and open space / playing fields. Herb species are typical of areas of higher fertility and more regular management, and include Broad-leaved Plantain *Plantago major*, Ribwort Plantain *P. lanceolata*, Lesser Hawkbit *Leontodon saxatilis*, Daisy *Bellis perennis*, Sow Thistle *Sonchus oleraceus*, White Clover *Trifolium repens*, Mouse-ear Hawkweed *Pilosella officinarum*, Dandelion *Taraxacum* agg., Yarrow *Achillea millefolium*.
- 4.26. In the western part of the site is a large area of grassland sports field. This grassland is regularly maintained and used by the training centre, with outdoor gym equipment located at various points around the field. Species recorded within this area included Broad-leaved Plantain, Daisy, Creeping Buttercup *Ranunculus repens*, and Yarrow.
- 4.27. The planning application redline boundary encompasses a further two areas of amenity grass lawn within the main part of the site, so that they can be included in the proposed habitat enhancements for BNG purposes. These are similarly species-poor and are regularly and closely mown.
- 4.28. In view of the dominance of grasses (including Ryegrass) and generally poor herb diversity, which includes White Clover, the amenity grass areas are considered to be *g4 modified grassland* in poor condition

Bracken

- 4.29. There is a fringe of Bracken *Pteridium aquilinum* along the boundary of the site to the south of the car park in the northern part of the site.

Hedge

- 4.30. A Privet *Ligustrum vulgare* hedge borders the southern part of the playing field (see Photo 5).

Other habitats

- 4.31. To the furthest west of the site, outside the redline boundary, is a vegetated bund. Aerial photos indicate that this area was heavily landscaped in

approximately 1999 and has since been allowed to establish with a mosaic of unmanaged rough grassland, ruderal vegetation, and scrub. At the time of the survey, the section nearest the proposed fenceline was noted to be dominated by Bramble, with much Thistle and other ruderal species. See Photo 4.

- 4.32. Further to the west is a recently planted community orchard, while the vegetation along the northern edge of the site is deciduous woodland (Photo 3).
- 4.33. No evidence was noted to suggest that the habitats around the north-west part of the site were Wood Pasture / Parkland Priority Habitat or were being managed to create this habitat.

Protected and notable species

Badger

- 4.34. The HBIC data returned one record of Badgers within 1km of the site. The habitats across the site, including woodland, dense scrub, and grassland, could provide excellent foraging opportunities for badgers. Evidence of Badgers was recorded during the survey. Large clumps of Badger fur were found along the edge of the woodland in the southwestern part of the site, near the car park.
- 4.35. Several push-unders were noted along the current chain-link fencing on the eastern boundary, indicating that mammals do pass across the boundary.
- 4.36. A larger mammal tunnel entrance was discovered towards the southeast corner of the site. However, upon closer inspection, this was identified as a Fox *Vulpes vulpes* den, based on the size and shape of the entrance, Fox guard hairs found, and scent.
- 4.37. Overall, it is considered that there are likely Badger setts in the wider site and associated woodlands, and Badgers are likely to forage and disperse across the proposed works area. However, no setts are currently present within the works area

Bats

- 4.38. The HBIC data returned numerous bat records. Of particular note is the record of a Noctule *Nyctalus noctula* roost in an Oak tree in the wider woodland at the site. The records also indicate the presence of roosts in nearby buildings
- 4.39. The buildings and trees across the site have the potential to support roosting bats, The main building dates back to 1856 and is likely to support a wide range of roost opportunities. The woodland supports trees of various ages, and many of these exhibit potential roost features and could support roosting bats. Bat roosts should be considered to be present in the woodland
- 4.40. The extensive woodland habitats and the woodland edges adjacent to the grassland provide high quality foraging habitats and dispersal networks for local bat populations. Additionally, the woodland along the southern boundary connects to Royal Victoria Country Park which represents an adjacent large area of higher quality foraging habitat.

Hazel Dormouse

- 4.41. The HBIC data returned no records of Hazel Dormouse within 1 km of the site. Additionally, a review of MAGIC maps revealed no Dormouse mitigation licence records within 1km.
- 4.42. The woodland and hedgerows across the site have the potential to support a population of hazel dormice. The woodland is connected to an offsite habitat network of woodland, dense scrub, and hedgerows throughout the local area.
- 4.43. On the basis of the preliminary assessment, Dormice were considered potentially present, and potentially impacted and therefore further survey work was recommended.

Breeding birds

- 4.44. The HBIC data identified records of a range of bird species within 1km of the site. The woodland and hedgerows on the site are suitable for providing a good assemblage of more widespread bird species and the site is likely to support numerous active nests in the Spring and Summer.

Reptiles

- 4.45. HBIC data returned records of Common Lizard and Slow Worm from a site approximately 850m to the south-east. Within the site. There are small areas of suitable reptile habitat along some of the fringes of boundary features and habitat interfaces, for example, the fringe of bracken near the car park, and the fringe of rough grass between the access road and adjacent woodland along the northern part of the proposed fenceline. These areas have the potential to support foraging and hibernating reptiles, although given the scale of these features within the redline boundary, only likely to support small numbers.
- 4.46. The large grassland sports pitch areas and road verges are well managed with a very short, maintained sward height, rendering these areas highly unsuitable for supporting reptiles, as are the dense woodland areas.
- 4.47. Overall, it was considered that small areas of the site should be assumed to support small numbers of widespread reptile species. No detailed reptile survey was carried out as it was considered that due to the nature of the work, impacts to reptiles would most effectively be avoided through sensitive working methods (detailed further in subsequent sections).

Amphibians

- 4.48. The HBIC data returned no records of amphibians within 1km of the site. Additionally, a review of MAGIC revealed no mitigation licence records for works affecting Great Crested Newt within 1km of the site.
- 4.49. Two waterbodies were recorded on site, both of which are woodland ponds. No additional waterbodies were found within 500m of the site. The terrestrial habitat along the site boundary, which includes woodland, bracken, and grassland, has the potential to support GCN during their terrestrial phase.

Other notable species

- 4.50. HBIC returned two records of hedgehogs within 1km. The habitats recorded across the site, including woodland, dense scrub, and grassland, have the potential to provide nesting and foraging habitats for hedgehogs. These on-site habitats are connected to a broader network of woodland, hedgerows, and grassland.

5. Dormouse Survey Results

- 5.1. The location of the Dormouse survey is shown in Appendix 4. The survey tubes were examined on a monthly basis between June and November, giving a total of 18 points for survey validity, as shown in Table 2, below.

Table 2 Dormouse survey results

Month	Points available per 50 tubes	Comments	Score
April	1	n/a	0
May	4	n/a	0
June	2	120x tubes deployed early June, Checked 28 June.	4
July	2	Not checked, but July can be counted as checked late June and early August.	4
August	5	Checked – no Dormouse evidence	10
September	7	Checked – no Dormouse evidence	14
October	2	Checked – no Dormouse evidence	4
November	2	Checked – no Dormouse evidence. Survey tubes collected in.	4
Total points			40

- 5.2. The total survey score is 40. No Dormice or confirmed or potential Dormouse nests were found in any of the survey tubes. A minimum score of 20 points, with no positive findings, needs to be obtained before absence can be confidently concluded. Given that 40 points were gained at this survey, with no positive findings of Dormice, it can confidently be concluded that Dormice are absent from the site.

6. Great Crested Newt Survey Results

Habitat Suitability Assessment

6.1. HSI assessment was carried out on the two waterbodies identified within 250m of the proposed fenceline:

Table 3 Pond HSI results

Criteria	POND 1		POND 2	
	Comment	Score	Comment	Score
<i>Location</i>	In Zone A	1.0	In Zone A	1.0
<i>Pond area</i>	Approximately 600sqm area across highest likely water level	1.0	Approximately 250sqm	0.5
<i>Permanence</i>	Uncertain, but likely to dry out only rarely	1.0	Dry at time of visit – likely to dry annually	0.1
<i>Water quality</i>	Uncertain - considered likely to support moderate invertebrate diversity.	0.67	Likely to be poor due to annual drying.	0.01
<i>Shade</i>	Approx. 75% shaded	0.7	Approx. 80% shaded	0.06
<i>Fowl</i>	Absent	1.0	Absent	1.0
<i>Fish</i>	Absent	1.0	Absent	1.0
<i>Pond count</i>	Small number of ponds in wider area	0.65	Small number of ponds in wider area	0.65
<i>Terrestrial habitat</i>	Excellent – extensive woodland and grassland	1.0	Excellent – extensive woodland and grassland	1.0
<i>Macrophytes</i>	Approx. 15% cover overall, limited to fringes and banks	0.4	Negligible macrophytes	0.3
		0.81 <i>Excellent</i>		0.48 <i>Poor</i>

eDNA sampling

- 6.2. Given the finding that Pond 1 presented Excellent suitability for supporting GCN, a sample of pond water was obtained for laboratory analysis to test for the presence of GCN DNA.
- 6.3. The analysis returned a Negative result for GCN eDNA. Consequently, it is concluded that GCN are likely absent from the site.
- 6.4. The analysis certificate is shown in Appendix 4.

7. Impact Assessment and Mitigation

Introduction

- 7.1. The following sections differentiate between impacts that are likely during the installation of the fence and the road widening work, and impacts that would be likely to occur as a result of the operational phase of the proposal – i.e. once the fence is in place.
- 7.2. The potential for the work to cause ecological these impacts was first considered in the absence of any avoidance, mitigation, or compensation measures.

Key impacts and broad mitigation strategy

- 7.3. The impacts and consequent mitigation can broadly be examined in two main parts:
- Permanent loss of habitat from the road widening parts of the scheme, plus loss of hedgerow during fence installation.
 - Impacts to species (direct harm; interruption of dispersal behaviour) from the fence installation.

Road widening

- 7.4. With respect to habitats, the main impacts identified were related to potential damage to the more sensitive woodland habitats along the proposed fenceline, along with the net loss of areas of amenity grassland and a small area of woodland relating to the proposed road widening elements of the scheme.
- Woodland enhancement scheme to the south-east part of the site to remove the invasive Rhododendron and Cherry Laurel and ongoing management to prevent its re-establishment.
 - Creation of two areas of wildflower meadow type habitat on two areas of existing species-poor amenity grass lawn. The future management of these will enable these areas to develop as areas of *g3c other neutral grassland*.
 - Planting of a section of new native-species hedge along an existing car park boundary.

Fence installation

- 7.5. A degree of flexibility has been built into the design so that within the redline, the final position of the fence can be adjusted according to local conditions, particularly the location of any trees. The weldmesh fence panels can be cut shorter as needed and therefore, if at any point along the route the fence needs to be diverted around trees, the panels can be cut accordingly. The construction of the fence will ensure that any post holes that need to be installed in the root protection area of any trees will be dug by hand to ensure that significant tree roots are avoided and not damaged. The size of the holes in each location are small and therefore will not result in any significant habitat loss.
- 7.6. The final route of the fenceline will be guided by an experienced ecologist who will work with the contractors to inform the final location of the posts and panels. Thus, the ultimate route of the fence will be diverted around any trees, with work within any RPAs avoiding harm to nearby trees.
- 7.7. The work will not require full clearance of any of the woodland habitat; after completion, the habitat will remain as woodland. The clearance of any lower-growing woodland understorey and shrubs will either be carried out:
- Either:
- During the winter months to avoid risks of damaging active bird nests,
- Or
- Will be carried out only under strict ecological supervision and only where preceded by a thorough check by a suitably experienced ecologist for active nests no more than 24hrs before clearance. Where active nests are identified, an exclusion zone of approximately 5m (to be determined by the supervising ecologist) will be marked off with warning tape. No work will take place in this zone until the ecologist confirms that the nest has become disused of its own accord.
- 7.8. To address impacts associated with the fence creating a barrier to wildlife dispersal, gaps along the base of the fence will be created. These will be formed by installing proprietary 2-way badger gates in approximately six locations around the fence where the fence passes through woodland. At this time, it is not proposed to include any badger gates along the northern boundary, due to

the proximity of this to the adjacent public footpath and the consequent concerns over dogs entering the Netley site through badger gates and becoming trapped.

- 7.9. The base of the fence will not be buried, so small mammals will still be able to pass through.
- 7.10. Final set-out and construction of the fence will follow a suitable method statement that clearly sets out these measures.
- 7.11. Table 4, below, summarises all the identified impacts and mitigation measures, as well as any residual impacts.

Table 4 Impact assessment and mitigation

Receptor	Impact (in the absence of mitigation)	Mitigation measure	Residual impacts
Designated sites			
	There are no designated sites within the ZOI of the proposed works. No impacts to designated sites are anticipated during site clearance, construction, or operational phases of the development.	None required	None
Habitats			
Lowland Mixed Deciduous Woodland (Priority Habitat)	<u>Fence</u>		
	<i>Construction phase:</i> Construction will require small-scale clearance of some of the shrub layer of the woodland. However, the overall character of the fenceline will remain wooded. There will be no overall loss of woodland.	The fenceline will be adjusted during construction to avoid the need to remove mature trees and tree root areas, and the individual fence panels will be cut to size to ensure post locations can be sensitively hand-dug and avoid tree roots.	None
	<i>Operational phase:</i> Maintenance of the fenceline through the woodland will result in a more open strip of woodland habitat along the fence route. The occasional maintenance of this will contribute to the woodland habitat by functioning as a more open 'ride' type habitat strip, resulting in greater species and structural diversity.	No additional mitigation required.	None
	<u>Road</u>		
	<i>Construction phase:</i> Small loss of woodland near the proposed barrier.	Loss of habitat will be addressed through enhancement of woodland with invasive Rhododendron and Cherry Laurel to be cleared and managed as native woodland.	None

	<i>Operational phase:</i> No ongoing impacts to woodland	None required	None
Grassland	<u>Fence</u>		
	<i>Construction phase:</i> Minor short-term disturbance of low-distinctiveness grassland habitats. No significant impacts anticipated.	No mitigation required.	None
	<i>Operational phase:</i> No impacts anticipated.	No mitigation required.	None
	<u>Road</u>		
	<i>Construction phase:</i> Permanent loss of areas of low-distinctiveness grassland.	Addressed via enhancement existing areas of species-poor amenity grass lawn to more species-rich neutral grassland habitat.	None
	<i>Operational phase:</i> No operational phase impacts.	No mitigation required.	
Hedge	<u>Fence</u>		
	<i>Construction phase:</i> Permanent loss of short section of species-poor hedge.	Planting of longer section of mixed native species hedge adjacent to car park.	None
	<i>Operational phase:</i> No impacts anticipated.	No mitigation required.	None
	<u>Road</u>		
	<i>Construction phase:</i> No impacts anticipated	No mitigation required.	None
	<i>Operational phase:</i> No operational phase impacts.	No mitigation required.	None
Species			
Badger	<i>Construction phase:</i> No setts identified along or near proposed fenceline.	Ongoing monitoring – checks to be carried out no more than one month in advance of works to allow for the identification of any new sett-building	None

		activity and guide final route and post placement to avoid impacts.	
	<i>Operational phase:</i> Barrier to dispersal	Holes created along base of fence large enough to allow Badger passage, every 50m where the fence passes through woodland, as well as at clearly defined extant mammal tracks.	None
<i>Bats (roosts)</i>	<i>Construction phase:</i> Construction will not require felling of trees	None required	None
	<i>Operational phase:</i> No new lighting, no loss of habitat. No impacts	None required	None
<i>Bats (foraging)</i>	<i>Construction phase:</i> No removal of bat foraging habitat	None required	None
	<i>Operational phase:</i> No new lighting, no loss of habitat. No impacts	None required	None
<i>Hazel Dormouse</i>	Likely absent – no impact		
<i>Nesting birds</i>	<i>Construction phase:</i> Damage / destruction of active bird nests	Removal of any suitable nesting habitat to be carried out during the period September-February inclusive, to avoid the nesting season. OR Any vegetation removal needed between March-August (inclusive) to be carried out under ecological supervision, and only after a robust check for active nests no more than 24hrs before clearance. 5m exclusion areas to be established around any identified active nests.	None

	<i>Operational phase:</i> Damage / destruction of active bird nests during routine maintenance.	Routine maintenance of the fence that requires management of any encroaching scrub will be timed to avoid the nesting season. In the event of any emergency maintenance work needing scrub removal in the nesting season, this will be only carried out if affected vegetation is clear of active bird nests.	None
<i>Reptiles</i>	<i>Construction phase:</i> Small areas of potential reptile habitat present in 'edge' habitat longer grassland – clearance of the fence route through these areas has the potential to kill or injure reptiles.	Staged, precautionary approach to vegetation removal in these areas – cutting vegetation down to c.250mm, then leaving for 24 hours before any further clearance. Ecological supervision during relevant areas of fencing installation.	None
	<i>Operational phase:</i> None anticipated	None required	None
<i>Amphibians</i>	GCN concluded to be likely absent. No impacts anticipated. Potential for more widespread species to be directly harmed during site clearance within taller grassland and woodland.	No mitigation for GCN necessary. Impacts to more widespread amphibian species will be avoided through the sensitive clearance methods.	None
<i>Other notable species</i>	<i>Construction phase:</i> Direct harm to Hedgehogs or other small mammals.	Precautionary clearance of vegetation along fence route.	None
	<i>Operational phase:</i> None anticipated – base of fence will not be buried; therefore, small mammals will still be able to pass through the fenceline.	None required	None

8. Biodiversity Gain Strategy

Assessment method

- 8.1. The Biodiversity Metric compares the existing extent and condition of the habitats against the proposed development. GIS was used to measure the extents of the existing habitats as mapped by the habitat survey (see map in Appendix 4). The survey work was designed to enable the condition of the various habitat parcels to be assessed in line with the condition scoring set out in the metric. For the purposes of the assessment, a habitat parcel is a contiguous area of habitat of the same type (distinctiveness) and condition. These results give a value for the existing 'biodiversity units' that the site currently provides.
- 8.2. Following this, the habitats that would be created on the site as a result of the development proposals were mapped out. This map is shown in Appendix 5.
- 8.3. Based on the likely success of the implementation of the establishment and long-term management, a condition score was determined for the new, enhanced, and retained post-development habitats.

Relevant date

- 8.4. Baseline BNG value needs to be calculated at a particular and agreed point in time. This 'relevant date' is either the date of the application or an earlier date. This relates to the need to accommodate any habitat degradation in the establishment of the BNG baseline. There are two key dates to consider in this:
 - Accounting for *unauthorised* habitat degradation. Where degradation e.g. site clearance, tree felling has occurred that does not have any form of approval (e.g. planning permission), the highest 'pre-degradation' biodiversity value must be used as the baseline. This relates to any activity after 30 January 2020.
 - If activities that are associated with an *extant planning permission* are carried out after 25 August 2023, and these lower the biodiversity value of the onsite habitat, the pre-development biodiversity value of the onsite

habitat is taken to be the biodiversity value immediately before the carrying out of the activities.

- 8.5. At Netley Police Training College site, no work has been undertaken in the redline boundary that is either unauthorised, or to implement a previous extant planning permission in recent years. No work has been carried out that would degrade the habitats since the 2024 survey work. The relevant date for the purposes of the BNG assessment for this development is taken to be the date of the planning application.

Strategic significance

- 8.6. In addition to the habitat distinctiveness and condition, the biodiversity units assigned to particular habitat parcels also depends on the 'strategic significance' of the location of those parcels. This will, in time, tie into the Local Nature Recovery Strategy (LNRS). However, at the time of carrying out the assessment at the Netley Police HQ, the LNRS is not in place. Therefore, alternative published sources must be used when assessing the significance of the location of particular habitat parcels. For the purposes of this assessment, the following information sources have been used:

- Eastleigh Borough Council Biodiversity Action Plan⁵
- Eastleigh Borough Council map of Priority Biodiversity Areas and Links⁶
- Habitat Network Mapping and Opportunity Mapping provided by HBIC

- 8.7. Based on these documents, it is considered that the areas of Lowland Mixed Deciduous Woodland within the redline boundary are particularly relevant, as although the Netley site itself is not specifically highlighted in the BAP, the wider area is part of a Biodiversity Priority Area and these habitat parcels are included in the HBIC habitat network map.

- 8.8. Guidance in the BNG User Guide (DEFRA, 2023) identifies that:

⁵ [biodiversity-action-plan-2012-22.pdf](#)

⁶ [bapsouthmap2012to2022.pdf](#)

“If your project delivers the mapped measure set out in the LNRS or alternative strategy (where the LNRS is not yet available) you should

- *record strategic significance as low in the baseline*
- *record strategic significance as high in post-intervention sheets”*

8.9. Therefore, for the purposes of the BNG assessment, the areas of Lowland Mixed Deciduous Woodland Priority Habitat within the redline boundary have been recorded as being of low significance in the baseline habitats section of the Metric, but *where these are to be subject to future enhancement*, these parcels are recorded as having high strategic significance in the post-development sections of the Metric.

Pre-development condition scoring

8.10. Tables below show the condition scoring for the main areas of modified grassland and the areas of woodland to be enhanced. The formal BNG spreadsheet (DEFRA Statutory Metric) is provided separately, while condition tables for all habitat parcels will be provided under the Statutory Net Gain Planning Condition.

Table 5 Condition scoring – EXISTING g4 modified grassland

Condition Assessment Criteria (Low Distinctiveness)		Pass / Fail Notes
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	Fail: Dominated by grasses, with limited herb diversity.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Fail: Sward is evenly mown short, with limited height diversity.
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).	Pass: No scrub present.
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Pass: negligible damage
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Pass: negligible bare ground
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Pass: some Bracken present in some areas across the wider site, but negligible in assessed areas of grassland
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA4).	Pass: None noted in grassland
Condition Assessment Result		Proposed Condition
Passes 7 or 7 criteria including passing essential Criterion A	Good (3)	-
Passes 4 or 5 criteria including passing essential Criterion A	Moderate (2)	-
Passes 3 or fewer criteria; OR Passes 4 to 6 criteria (excluding Criterion A)	Poor (1)	POOR – meets 5 criteria but fails 'essential' Criterion A

Table 6 Baseline habitats condition scoring – EXISTING Large area of w1f Lowland Mixed Deciduous Woodland within walled area

Condition Assessment Criteria						
Criterion		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score	Notes (such as justification)
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	2	Young tree present, Intermediate tree present
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure in 40% or more of whole woodland.	2	No significant evidence of browsing (mainly due to lack of younger trees), but deer are present so browsing is a constraint in this area.
C	Invasive plant species	No invasive species present in woodland.	Rhododendron or cherry laurel not present, and other invasives <10% cover.	Rhododendron or cherry laurel present, or other invasives <10% cover.	1	Extensive Rhododendron and Cherry Laurel.
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	2	Low species diversity due to domination of invasives.
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	1	Native canopy cover <50% due to invasives
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. If woodland <10ha has <10% temporary open space, use Good category.	3	Parcel is <10ha in size.

G	Woodland regen.	All three classes present in woodland ⁸ ; trees 4 - 7 cm DBH, saplings; seedlings; coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	Limited age structure
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present	3	Tree mortality <1% - <i>Fraxinus excelsior</i> .
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.	1	No recognisable woodland community at ground layer due to extensive shading from invasive species.
J	Woodland vertical structure	Three or more storeys across all survey plots, or complex woodland.	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	2	Limited vertical structure
K	Veteran trees	Two or more veteran trees / ha.	One veteran tree / ha.	No veteran trees present.	1	No veterans present.
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood.	25% - 50% of all survey plots within the woodland parcel have deadwood.	Less than 25% of all survey plots within the woodland parcel have deadwood.	1	Deadwood present but very little at sufficient diameter/age.
M	Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1ha in total of nutrient enrichment, and or less than 20% of woodland area has damaged ground.	1ha or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground.	2	No nutrient enrichment noted; however woodland is likely to have been historically disturbed since enclosure within walled garden of Victoria House.
Total Score (out of a possible 39)					23	
Condition Assessment Result			Condition Assessment Score			Result Achieved
Total score >32 (33 to 39)			Good (3)			POOR
Total score 26 to 32			Moderate (2)			
Total score <26 (13 to 25)			Poor (1)			

Table 7 Baseline habitats condition scoring – EXISTING other areas of LDMW within redline

Condition Assessment Criteria						
Criterion		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score	Notes (such as justification)
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	2	Young tree present, Intermediate tree present
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure in 40% or more of whole woodland.	2	Some evidence of deer browsing
C	Invasive plant species	No invasive species present in woodland.	Rhododendron or cherry laurel not present, and other invasives <10% cover.	Rhododendron or cherry laurel present, or other invasives <10% cover.	2	Occasional invasives
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	3	Good species diversity
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	3	Good cover of native species
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. If woodland <10ha has <10% temporary open space, use Good category.	3	Parcel is <10ha in size.

G	Woodland regen.	All three classes present in woodland ⁸ ; trees 4 - 7 cm DBH, saplings; seedlings; coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	Limited age structure – constrained by browsing
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present	3	Tree mortality <1% - <i>Fraxinus excelsior</i> .
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.	2	Not strong AW, but clearly W8 or variants.
J	Woodland vertical structure	Three or more storeys across all survey plots, or complex woodland.	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	2	Limited vertical structure
K	Veteran trees	Two or more veteran trees / ha.	One veteran tree / ha.	No veteran trees present.	1	No veterans present.
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood.	25% - 50% of all survey plots within the woodland parcel have deadwood.	Less than 25% of all survey plots within the woodland parcel have deadwood.	2	Moderate amount of deadwood
M	Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1ha in total of nutrient enrichment, and or less than 20% of woodland area has damaged ground.	1ha or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground.	2	No nutrient enrichment noted; however woodland is likely to have been historically disturbed
Total Score (out of a possible 39)					29	
Condition Assessment Result			Condition Assessment Score			Result Achieved
Total score >32 (33 to 39)			Good (3)			MODERATE
Total score 26 to 32			Moderate (2)			
Total score <26 (13 to 25)			Poor (1)			

Development site habitat changes

Road widening

8.11. The development will result in a loss of approximately 0.08ha of modified grassland and approximately 0.01ha of woodland due to the widening of the access road and construction of the new entry barrier system. The extent of these changes can be seen in Figures A4.2 and A5.2 in the Appendices.

Fence installation

8.12. Construction of the fence will require small-scale clearance of some of the shrub layer of the woodland. While this will alter the general structure of the woodland along these sections, it will not result in the loss of any woodland and the overall character of the fenceline will remain wooded. The fence construction will result in a greater degree of structural variation in the woodland and overall will not result in an adverse impact.

8.13. The fence construction will also require the removal of approximately 180m of existing single-species Privet hedge.

Biodiversity gains

8.14. As described in the previous section, habitat loss will be addressed through various measures:

- Woodland enhancement scheme to the south-east part of the site focussed on removal of the invasive Rhododendron and Cherry Laurel and ongoing management to prevent its re-establishment.
- Enhancement of two areas of species-poor amenity grass lawn areas to allow these to develop into species-rich and structurally diverse neutral grassland.
- Approximately 40m of new mixed native species hedge planting car park boundary.

8.15. When these measures are mapped and assessed in the BNG Metric, it can be demonstrated that the development would deliver a **14.89%** net gain in area-based habitats and a **52.49%** gain in linear habitats.

Post-development condition scoring

8.16. Tables 8 to 10 show the anticipated condition of the proposed new and enhanced habitats at the site, as shown in Appendix 5.

Table 8 Post-development condition scoring – PROPOSED q3c other neutral grassland

Condition Assessment Criteria (Medium Distinctiveness)		Pass / Fail Notes
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type. Note - this criterion is essential for achieving Moderate or Good condition.	Fail: Although the enhancement measures will improve species and structural diversity, a precautionary score has been assigned due to the uncertainty over the success of achieving a 'good' example of this habitat type
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass: Mowing regime will ensure sward height is not cut short in summer, and will be managed to deliver structural diversity.
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Pass: Mowing will ensure no significant scrub encroachment.
D	Cover of bracken is less than 20% and cover of scrub (including bramble) is less than 5%.	Pass: Management will ensure no bracken encroachment.
E	Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species are present, this criterion is automatically failed.	Pass: Management will ensure this is passed.
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type. Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	Fail: Will not achieve high species diversity
Condition Assessment Result		Proposed Condition
Passes 7 or 7 criteria including passing essential Criterion A	Good (3)	-
Passes 4 or 5 criteria including passing essential Criterion A	Moderate (2)	-
Passes 3 or fewer criteria; OR Passes 4 to 6 criteria (excluding Criterion A)	Poor (1)	POOR – meets four criteria but fails 'essential' Criterion A

Table 10 Post-development condition scoring – **PROPOSED** enhanced LMDW within walled area

Condition Assessment Criteria						
Criterion		Good (3 points)	Moderate (2 points)	Poor (1 point)	Score	Notes (such as justification) – <u>green boxes indicate focus of enhancement and management</u>
A	Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	2	Young tree present, Intermediate tree present
B	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure in 40% or more of whole woodland.	2	No significant evidence of browsing (mainly due to lack of younger trees), but deer are present, so browsing is a constraint in this area.
C	Invasive plant species	No invasive species present in woodland.	Rhododendron or cherry laurel not present, and other invasives <10% cover.	Rhododendron or cherry laurel present, or other invasives <10% cover.	2	Management to remove existing invasives and to manage in the long term.
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	3	Tree planting to increase cover of native species, following removal of invasives.
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	3	Canopy cover of native species improved due to above management measures.
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. If woodland <10ha has <10% temporary open space, use Good category.	3	Parcel is <10ha in size.

G	Woodland regen.	All three classes present in woodland ⁸ ; trees 4 - 7 cm DBH, saplings; seedlings; coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	Limited age structure
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback ⁹ .	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present	3	Tree mortality <1% - <i>Fraxinus excelsior</i> .
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.	2	Management will allow development of a more typical W8 variant NVC community
J	Woodland vertical structure	Three or more storeys across all survey plots, or complex woodland.	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	2	Limited vertical structure
K	Veteran trees	Two or more veteran trees / ha.	One veteran tree / ha.	No veteran trees present.	1	No veterans present.
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood.	25% - 50% of all survey plots within the woodland parcel have deadwood.	Less than 25% of all survey plots within the woodland parcel have deadwood.	1	Deadwood present but very little at sufficient diameter/age.
M	Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1ha in total of nutrient enrichment, and or less than 20% of woodland area has damaged ground.	1ha or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground.	2	No nutrient enrichment noted; however woodland is likely to have been historically disturbed since enclosure within walled garden of Victoria House.
Total Score (out of a possible 39)					28	
Condition Assessment Result			Condition Assessment Score			Result Achieved
Total score >32 (33 to 39)			Good (3)			MODERATE
Total score 26 to 32			Moderate (2)			
Total score <26 (13 to 25)			Poor (1)			

Outline management plan

8.17. An outline plan for the establishment and ongoing management is set out below. At this stage, this is presented as a broad outline only; the detail will be provided via the formal Habitat Management and Monitoring Plan (HMMP) that is to be submitted alongside the formal Biodiversity Gain Plan under the statutory BNG planning condition.

Woodland enhancement

8.18. Rhododendron and Cherry Laurel removal will be conducted by a combination of mechanical removal and chemical treatment. Cutting and removing stems will be done by hand or by chainsaw, as close to the ground as possible. The stumps will then either be dug out or treated with herbicides such as glyphosate, triclopyr or ammonium sulphate. This will be carried out by a suitably qualified contractors. All potential regrowth will be monitored and treated as necessary.

8.19. Once areas are cleared and ongoing management of regrowth has commenced, the woodland area will be reviewed to gauge the most appropriate tree planting strategy. Broadly, this will have the aim of encouraging a greater degree of native species, with planting including Oak, Silver Birch, Cherry, Hazel, Spindle, Common Lime, and Yew. These will be planted to allow structural diversity with areas of taller trees, shrub layer, and more open ride s/ glades. New trees will be protected with tree guards.

8.20. Once the invasive shrub layer has been removed, a review of the remaining tree stock will take place, to identify any suitable semi-mature or mature trees for possible future veteranisation. 'Halo' thinning around suitable trees may be carried out to allow for healthy stem growth and preventing stems from becoming too 'drawn up'.

Grassland

8.21. The ground will be prepared to minimise fertility as far as is possible and preparing a medium tilth with a firm surface. Sowing will take place in the early autumn or in spring, avoiding waterlogged conditions.

- 8.22. The seed will not be covered, but will be firmed in with a roll, or by treading, to give good soil/seed contact.
- 8.23. Plants will be allowed to become established. It should be noted that soon after sowing there will be a flush of annual weeds, arising from the soil seed bank. These will provide nurse cover to the sown seedlings, and they will die before the year is out so they will not be cut until the end of summer.
- 8.24. At the end of the first summer, the new sward will be mown and the arisings collected. The area will be mown occasionally when conditions allow during winter / early spring to remove rapid weed / grass growth. Residual undesirable weeds (e.g. dock, thistle) will either be dug out by hand or spot treated with suitable herbicide. NB – Broadcast / wide dispersal herbicide will not be used.
- 8.25. From Year 2 onwards, a late summer cut-and-collect, plus occasional mowing over winter into early spring as needed will be carried out to control coarser grass / undesirable weed growth.

Hedge

- 8.26. A new section of native hedge will be planted in triple staggered rows set 0.45-0.5m apart. The planting will take place in late November to end February when soil and weather conditions are suitable, i.e. not during periods of frost or strong winds or when the ground is waterlogged.
- 8.27. Hedge plants will be planted into a trench dug 900mm wide x 75mm deeper than the root depth of the plants. Topsoil mixed with soil conditioner in a ratio of 80:20 shall be used to backfill the trenches any excess soil shall be disposed of off-site. The hedge will be mulched using 75mm depth of medium chipped bark mulch composted for at least 4-6 weeks prior to application. Particle size 15-50mm. Spread across the hedge base 900mm width.
- 8.28. Ongoing monitoring / management to remove invasive plant species and to replace dead, dying, diseased trees / shrubs.

9. Conclusions

- 9.1. The Ecological Appraisal at the site of the proposed fencing around the Netley Police Training HQ identified that the site supports habitats of low to moderate ecological value, with areas of woodland, Rhododendron scrub, grassland, and urban hardstanding.
- 9.2. Desk-based assessment and detailed consideration of the Zone of Influence concluded that the development will not affect internationally, nationally, or locally designated sites.
- 9.3. The site survey concluded that the site had suitability for supporting Badger, roosting, foraging and commuting bats, reptiles, Hazel Dormice, GCN, and breeding birds. Subsequent detailed survey work confirmed that Hazel Dormice and GCN are likely absent from the site.
- 9.4. Impacts from the development, in the absence of mitigation, would include the loss of habitat, interruption of Badger and small mammal dispersal behaviour, harm to active bird nests, and harm to reptiles, common amphibians, and small mammals.
- 9.5. Inherent and additional measures to address these impact include:
 - Final fenceline set-out to be carried out with a suitably experienced ecologist to fine-tune the route, guiding positioning of fence posts in woodland and the cutting of fence panels to divert around trees.
 - Creation of mammal passages through fence panels.
 - Clearance of vegetation outside the nesting bird season or under strict ecological supervision.
 - Precautionary, staged approach to clearance of an areas of taller grass or other suitable reptile or terrestrial amphibian habitat.
 - Adherence to a site-specific Method Statement that sets out these measures in detail.
- 9.6. Net gains to biodiversity will be delivered through the enhancement of an area of woodland that is currently constrained by dense Rhododendron and Cherry

Laurel understorey, enhancement of existing modified grassland, and planting of a new section of native hedge.

- 9.7. Overall, the development is capable of delivering a 14.89% net gain in area-based habitats and a 52.49% gain in linear habitats.
- 9.8. Unless otherwise advised, the findings and recommendations in this report are solely based on the plans and brief provided to HCCET. The results and findings are valid for two years from the date of the initial field survey. HCCET should be contacted if this report is to be used after this period to check if any updating work needs to be undertaken.

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- DEFRA (2023). *The Statutory Biodiversity Metric User Guide (draft November 2023)*. Department for Environment, Food and Rural Affairs; London
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- Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1*. Chartered Institute of Ecology and Environmental Management, Ampfield
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Appendix 1 – Plans and Figures

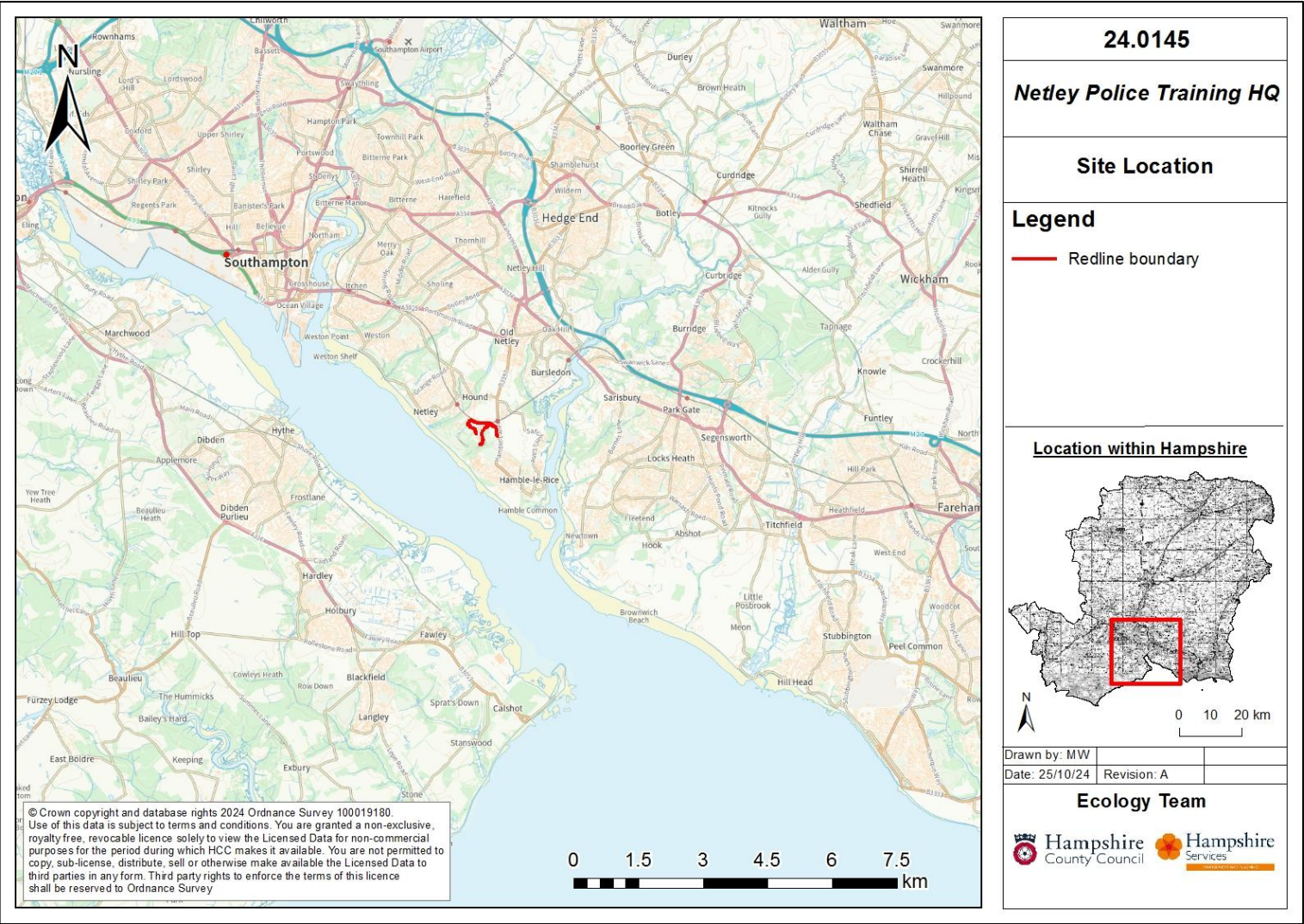


Figure A1.1 Site Location

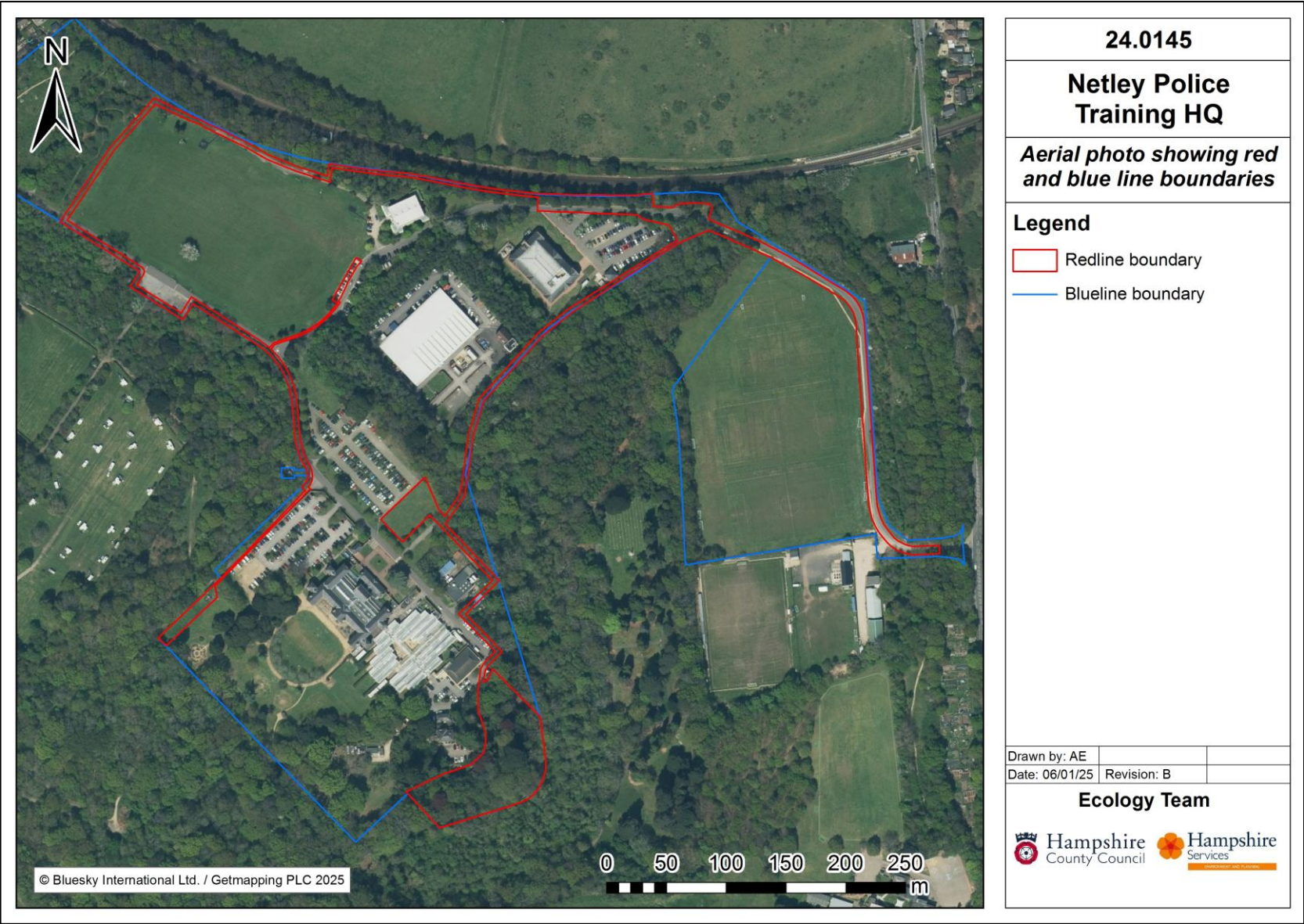


Figure A1.2 Aerial Photo

Appendix 2 – Photos



Photo 1 View into woodland, showing Cherry Laurel



Photo 2 Group of Hybrid Poplar



Photo 3 Northern edge of western sports fields



Photo 4 Scrub & tall ruderal embankment



Photo 5 Privet hedge



Photo 6 Roadside verge



Photo 7 On-site standing water



Photo 8 Off-site waterbody



Photo 9 Fox den

Appendix 3 – Desk-Based Assessment Findings

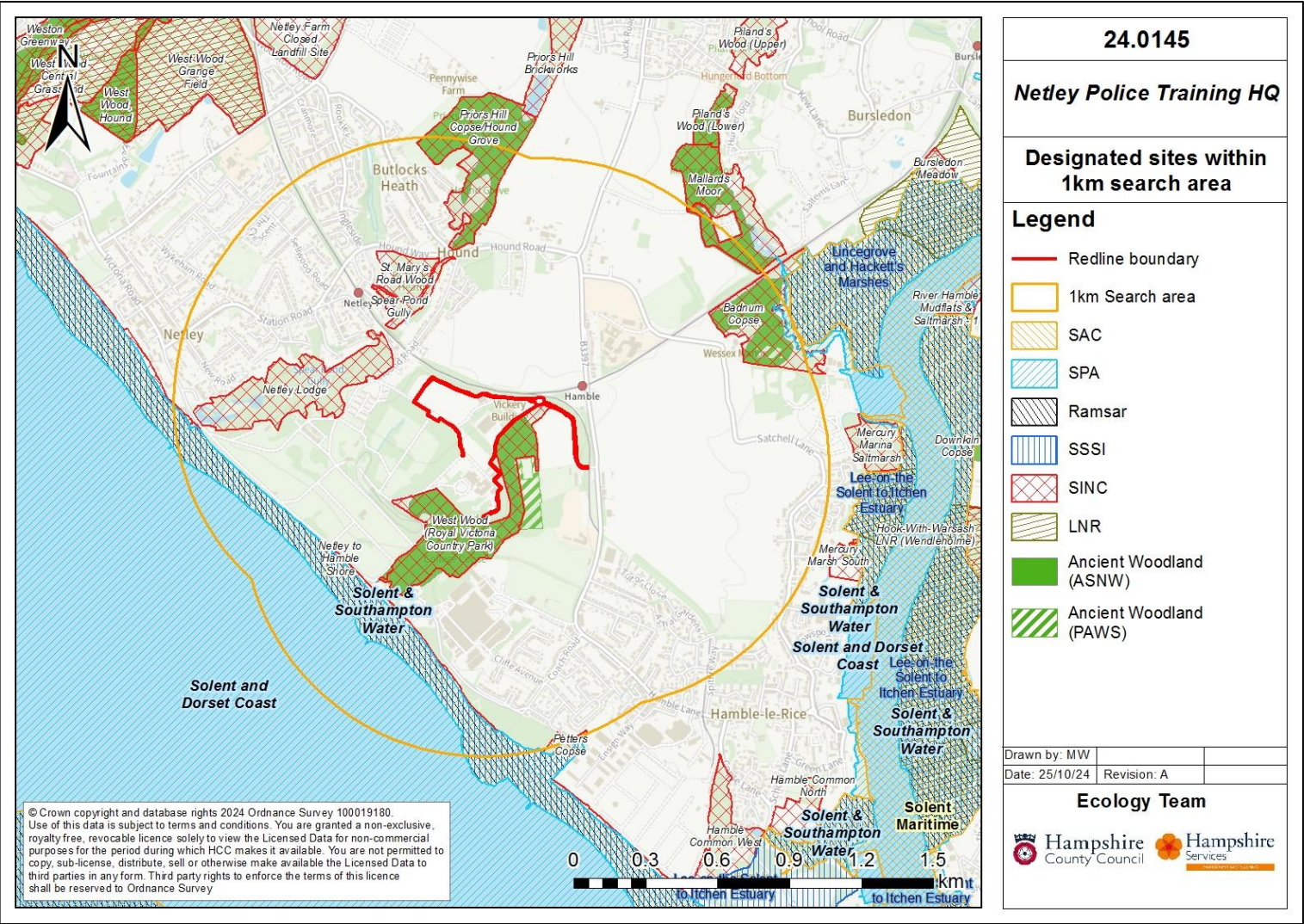


Figure A3.1 Map of nearby designated sites and 1km search area around site

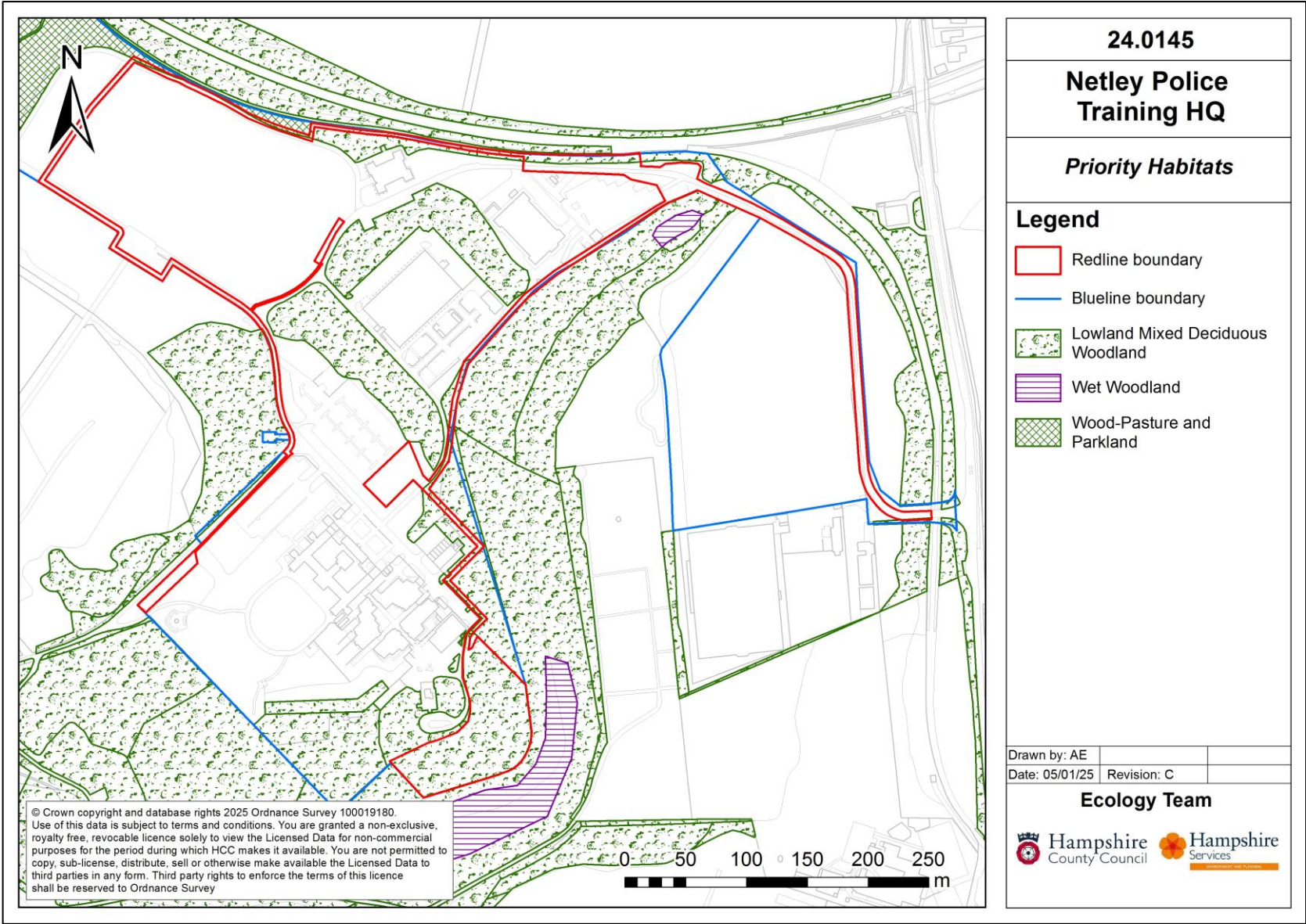


Figure A3.2 Map of areas of mapped Priority Habitat

Table A3.1 Protected and notable species records from within 1.0km of the centre of the site

Common name	Taxon name	Details	Distance / direction from site
<i>Reptiles</i>			
Common Lizard	<i>Zootoca vivipara</i>	2015; Artificial Refugia: Unspecified; Maximum count 7	875m SE
Slow Worm	<i>Anguis fragilis</i>	2015; Artificial Refugia: Unspecified; Maximum count 24	875m SE
<i>Birds</i>			
Black Redstart	<i>Phoenicurus ochruros</i>	6x records	650-775m SW
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	2022; None; 0	675m SW
Cetti's Warbler	<i>Cettia cetti</i>	2013; field record; Reed bed behind Netley Sailing club	825m SW
Dartford Warbler	<i>Curruca undata</i>	2022; None;	825m E
Fieldfare	<i>Turdus pilaris</i>	2023; None; *	925m E
Firecrest	<i>Regulus ignicapilla</i>	2014; field record;	150m S
Firecrest	<i>Regulus ignicapilla</i>	2022; None;	175m SW
Firecrest	<i>Regulus ignicapilla</i>	2015; None; *	475m SW
Firecrest	<i>Regulus ignicapilla</i>	2014; field record;	550m S
Firecrest	<i>Regulus ignicapilla</i>	2022; None; Time: 07:15	550m S
Firecrest	<i>Regulus ignicapilla</i>	2014; field record;	600m SW
Firecrest	<i>Regulus ignicapilla</i>	2015; field record;	675m S
Firecrest	<i>Regulus ignicapilla</i>	2015; None; *	1000m W
Firecrest	<i>Regulus ignicapilla</i>	2014; field record;	1000m W
Great Black-backed Gull	<i>Larus marinus</i>	2021; None; Seen -15:28 Adult.	950m SW
Great Crested Grebe	<i>Podiceps cristatus</i>	2021; None;	950m SW
Great Northern Diver	<i>Gavia immer</i>	2021; None; Netley Shore	925m SW
Herring Gull	<i>Larus argentatus</i>	2019; field record; 1 pr nested on roof of Victoria House	250m S

Herring Gull	<i>Larus argentatus</i>	2021; None;	875m SW
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	2013; field record; Drumming male	350m S
Linnet	<i>Linaria cannabina</i>	2021; None; 1m	750m SE
Little Egret	<i>Egretta garzetta</i>	2017; Field Observation;	700m N
Little Egret	<i>Egretta garzetta</i>	2021; None; Netley Shore On the foreshore	925m SW
Mediterranean Gull	<i>Ichthyaetus melanocephalus</i>	2016; field record	825m SW
Peregrine	<i>Falco peregrinus</i>	2015; field record; M; Sitting on chapel	650m SW
Peregrine	<i>Falco peregrinus</i>	2016; field record; on chapel	650m SW
Peregrine	<i>Falco peregrinus</i>	2022; None; 0	725m SW
Red-throated Diver	<i>Gavia stellata</i>	2021; None	950m SW
Siskin	<i>Spinus spinus</i>	2016; field record; On alders east of lane	950m SE
Song Thrush	<i>Turdus philomelos</i>	2021; None; Time: 17:45	925m W
Song Thrush	<i>Turdus philomelos</i>	2015; None; *	1000m W
Starling	<i>Sturnus vulgaris</i>	2019; field record;	325m E
Flowering Plants			
Annual Beard-grass	<i>Polypogon monspeliensis</i>	2019; Unknown; Several plants, pavement edge, Hamble Lane,	725m NE
Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2002; Daytime observation; On River Terrace Gravel	625m SW
Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2013; Field record / observation;	800m W
Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2000; Field record / observation; 5293 - 78 sterile plants on a lawn	800m W
Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2002; Daytime observation; On River Terrace Gravel	800m W
Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2008; Photographic record	900m W
Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2012; Field record / observation; Three at SU4610 0791 and five at SU4611 0791.	900m W

Autumn Lady's-tresses	<i>Spiranthes spiralis</i>	2012; Field record / observation; Five at SU4608 0791 and one at SU4609 0792.	1000m W
Bird's-foot Clover	<i>Trifolium ornithopodioides</i>	2002; Field record / observation;	350m S
Bird's-foot Clover	<i>Trifolium ornithopodioides</i>	2000; Field record / observation;	600m SW
Boreau's Ramping- fumitory	<i>Fumaria muralis subsp. boraiei</i>	2000; Field record / observation;	700m W
Butcher's-broom	<i>Ruscus aculeatus</i>	2015; None;	475m SW
Butcher's-broom	<i>Ruscus aculeatus</i>	1999; None;	475m SW
Butcher's-broom	<i>Ruscus aculeatus</i>	2002; None;	475m SW
Butcher's-broom	<i>Ruscus aculeatus</i>	2000; Field record / observation;	600m SW
Butcher's-broom	<i>Ruscus aculeatus</i>	2019; Unknown; Roadside hedge, Hound Road,	675m N
Butcher's-broom	<i>Ruscus aculeatus</i>	2002; Field record / observation;	675m NW
Butcher's-broom	<i>Ruscus aculeatus</i>	2000; Field record / observation;	700m W
Butcher's-broom	<i>Ruscus aculeatus</i>	2023; None; *	925m E
Butcher's-broom	<i>Ruscus aculeatus</i>	1999; None;	1000m W
Climbing Corydalis	<i>Ceratocapnos claviculata</i>	2002; None;	475m SW
Climbing Corydalis	<i>Ceratocapnos claviculata</i>	2000; Field record / observation;	600m SW
Climbing Corydalis	<i>Ceratocapnos claviculata</i>	1997; Field record / observation; 1385 - Still in flower	850m S
Corn Spurrey	<i>Spergula arvensis</i>	2000; Field record / observation;	600m SW
Cornflower	<i>Centaurea cyanus</i>	2000; Field record / observation; 5293 - Two plants in flower beds near chapel	675m SW
Fiddle Dock	<i>Rumex pulcher</i>	2023; None;	725m SW
Fiddle Dock	<i>Rumex pulcher</i>	1993; Field record / observation; 3727 - 2 plants	775m SW
Fiddle Dock	<i>Rumex pulcher</i>	1993; Field Record; R. 2 plants	775m SW
Field Mouse-ear	<i>Cerastium arvense</i>	2003; None;	675m N

Green-winged Orchid	<i>Anacamptis morio</i>	2002; Field record / observation;	350m S
Green-winged Orchid	<i>Anacamptis morio</i>	1997; Field record / observation;	675m SW
Hairy Buttercup	<i>Ranunculus sardous</i>	2023; None;	725m SW
Hairy Buttercup	<i>Ranunculus sardous</i>	2023; None;	825m SW
Heath Dog-violet	<i>Viola canina</i>	2002; Field record / observation;	350m S
Hybrid Cinquefoil	<i>Potentilla anglica</i> x <i>reptans</i> = <i>P. x mixta</i>	2x records; 2002; None;	350m S
Hybrid Cinquefoil	<i>Potentilla anglica</i> x <i>reptans</i> = <i>P. x mixta</i>	2x records; 2000; None;	600m SW
Hybrid Cinquefoil	<i>Potentilla anglica</i> x <i>reptans</i> = <i>P. x mixta</i>	2x records; 2000; None;	675m SW
Lesser Spearwort	<i>Ranunculus flammula</i>	2004; None;	975m N
Rough Clover	<i>Trifolium scabrum</i>	1997; Field record / observation;	675m SW
Sea Mouse-ear	<i>Cerastium diffusum</i>	2001; Field record / observation;	600m SW
Sea Mouse-ear	<i>Cerastium diffusum</i>	2000; Field record / observation; 5293 -	700m W
Smith's Pepperwort	<i>Lepidium heterophyllum</i>	2000; Field record / observation;	600m SW
Smith's Pepperwort	<i>Lepidium heterophyllum</i>	1997; Field record / observation; 1818 -	675m SW
Subterranean Clover	<i>Trifolium subterraneum</i>	3x records; Field record / observation	600-725m SW
Suffocated Clover	<i>Trifolium suffocatum</i>	3x records; Field record / observation	600-675m SW
Wild Pansy	<i>Viola tricolor</i>	2000; Field record / observation;	600m SW
<i>Invertebrates - coleoptera</i>			
Alder Leaf Beetle	<i>Agelastica alni</i>	2x records	1000m W
Stag Beetle	<i>Lucanus cervus</i>	Large number of records across search area, generally in urban / domestic gardens; (Great Stag Hunts)	
<i>Invertebrates - coleoptera</i>			
Brussels Lace	<i>Cleorodes lichenaria</i>	2022; Light Trapping;	725m NW
Buff Ermine	<i>Spilosoma lutea</i>	2022; Light Trapping;	725m NW
Channel Islands Pug	<i>Eupithecia ultimaria</i>	2022; Light Trapping;	725m NW

Festoon	<i>Apoda limacodes</i>	2022; Light Trapping;	725m NW
Jersey Tiger	<i>Euplagia quadripunctaria</i>	2022; Field Observation;	1000m N
Rustic	<i>Hoplodrina blanda</i>	2022; Light Trapping;	725m NW
Small Heath	<i>Coenonympha pamphilus</i>	2022; None; Source-iRecord	800m SW
White-letter Hairstreak	<i>Satyrrium w-album</i>	2017; field record;	900m SW
Terrestrial mammals – non-bats (<i>bold</i> indicates roost)			
Brown Long-eared Bat	<i>Plecotus auritus</i>	2016; mist netting with acoustic lure;	575m S
Brown Long-eared Bat	<i>Plecotus auritus</i>	2017; Roost inspection; Seen in roof void.	675m SW
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2x records; 2016; mist netting with acoustic lure;	575m S
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2022; Bat detector -	700m N
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2005; Daytime observation;	800m W
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	7x records; 2011; Aural bat detector; Not recorded	875m S
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2017; Bat detector - Anabat;	950m E
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2020; bat in hand; Female adult.	975m S
Long-eared Bat species	<i>Plecotus</i>	2008; droppings: (Royal Victoria CP Chapel).	675m SW
Natterer's Bat	<i>Myotis nattereri</i>	2x records; 2016; mist netting with acoustic lure; Mist netting	575m S
Noctule Bat	<i>Nyctalus noctula</i>	2016; Emergence survey; from woodpecker hole in oak tree.	450m S
Noctule Bat	<i>Nyctalus noctula</i>	2011; Aural bat detector;	875m S
Noctule Bat	<i>Nyctalus noctula</i>	2017; Bat detector - Anabat;	950m E
Pipistrelle Bat species	<i>Pipistrellus</i>	1988; Roost visit;	550m NW
Pipistrelle Bat species	<i>Pipistrellus</i>	2003; Roost visit;	675m NW
Pipistrelle Bat species	<i>Pipistrellus</i>	2002; Roost visit; Injured bat	725m W
Pipistrelle Bat species	<i>Pipistrellus</i>	2001; Bat Detector/Bat Walk;	800m W
Pipistrelle Bat species	<i>Pipistrellus</i>	1987; Roost visit;	800m SW

Pipistrelle Bat species	<i>Pipistrellus</i>	2004; Roosting; Maternity Roost	850m NW
Pipistrelle Bat species	<i>Pipistrellus</i>	2014; Roost inspection;	875m S
Pipistrelle Bat species	<i>Pipistrellus</i>	2004; Roost visit; in hand	925m SE
Pipistrelle Bat species	<i>Pipistrellus</i>	1998; Daytime observation;	950m NW
Serotine	<i>Eptesicus serotinus</i>	2022; Bat detector - time expansion recording;	700m N
Serotine	<i>Eptesicus serotinus</i>	2011; Aural bat detector; Not recorded	875m S
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2016; mist netting with acoustic lure;	575m S
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2022; Bat detector - time expansion recording;	700m N
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2005; Daytime observation;	800m W
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	3x records; 2011;	875m S
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2017; bat droppings with DNA analysis;	950m E
Whiskered Bat	<i>Myotis mystacinus</i>	2016; mist netting with acoustic lure;	575m S
Whiskered/Brandt's Bat	<i>Myotis mystacinus/brandtii</i>	2017; Bat detector - Anabat;	950m E
Terrestrial mammals – non-bats			
Eurasian Badger	<i>Meles meles</i>	2008; Field Observation;	575m N
Eurasian Badger	<i>Meles meles</i>	2008; Field Observation;	900m NW
West European Hedgehog	<i>Erinaceus europaeus</i>	2009; Field Observation; hedgehog in garden at 8.40pm	550m NW
West European Hedgehog	<i>Erinaceus europaeus</i>	2017; Field record / observation; Source: iRecord - iRecord App.	550m S
West European Hedgehog	<i>Erinaceus europaeus</i>	2x records; 2020; Field Observation;	925m S
West European Hedgehog	<i>Erinaceus europaeus</i>	2018; Field Observation; Record ID: 43801. State: Alive.	950m NW
West European Hedgehog	<i>Erinaceus europaeus</i>	2020; Field Observation; BIG Hedgehog Map	950m S

Appendix 4 – Field Survey Results

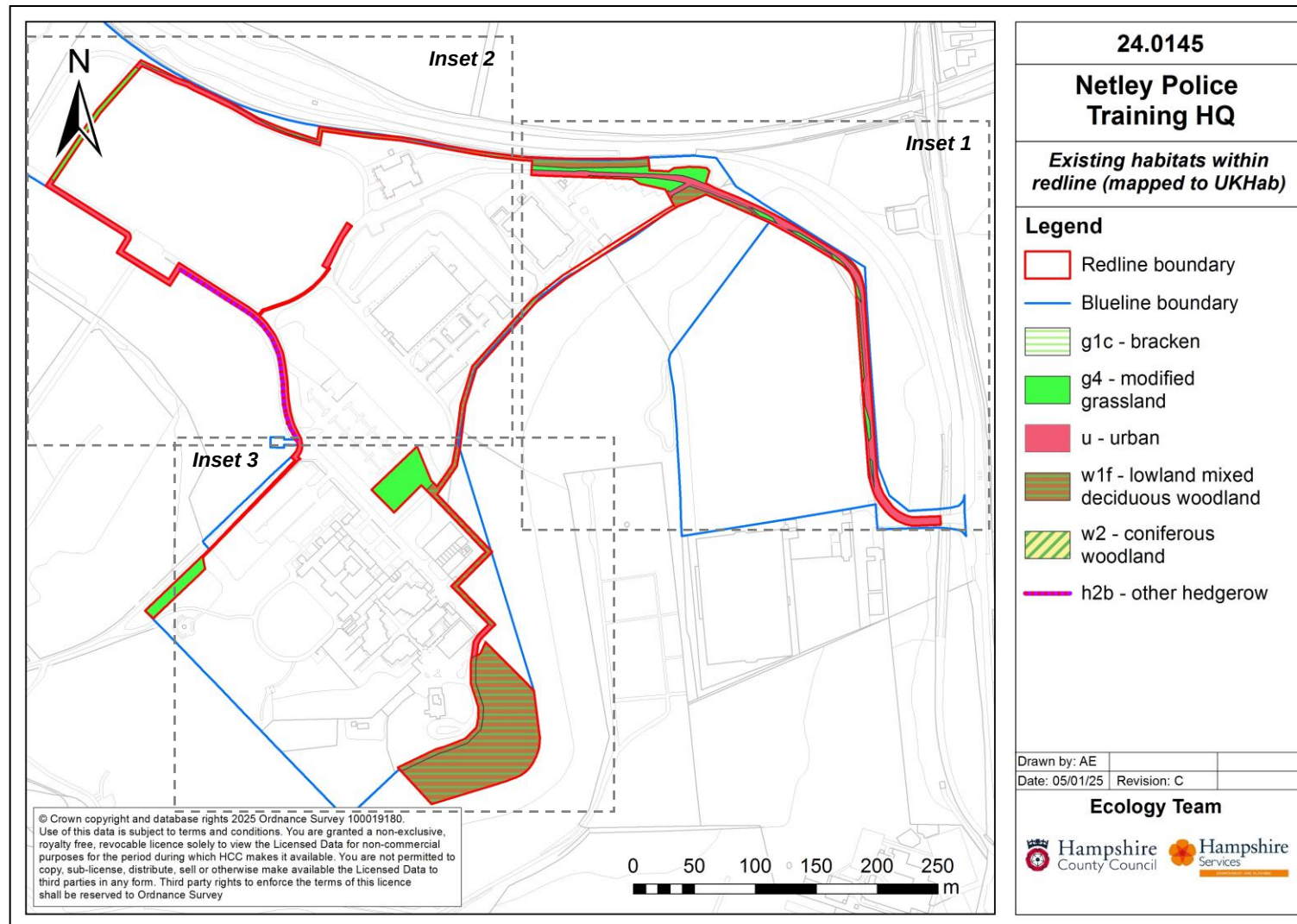


Figure A4.1 Baseline UKHab survey plan (full site) – see Insets below

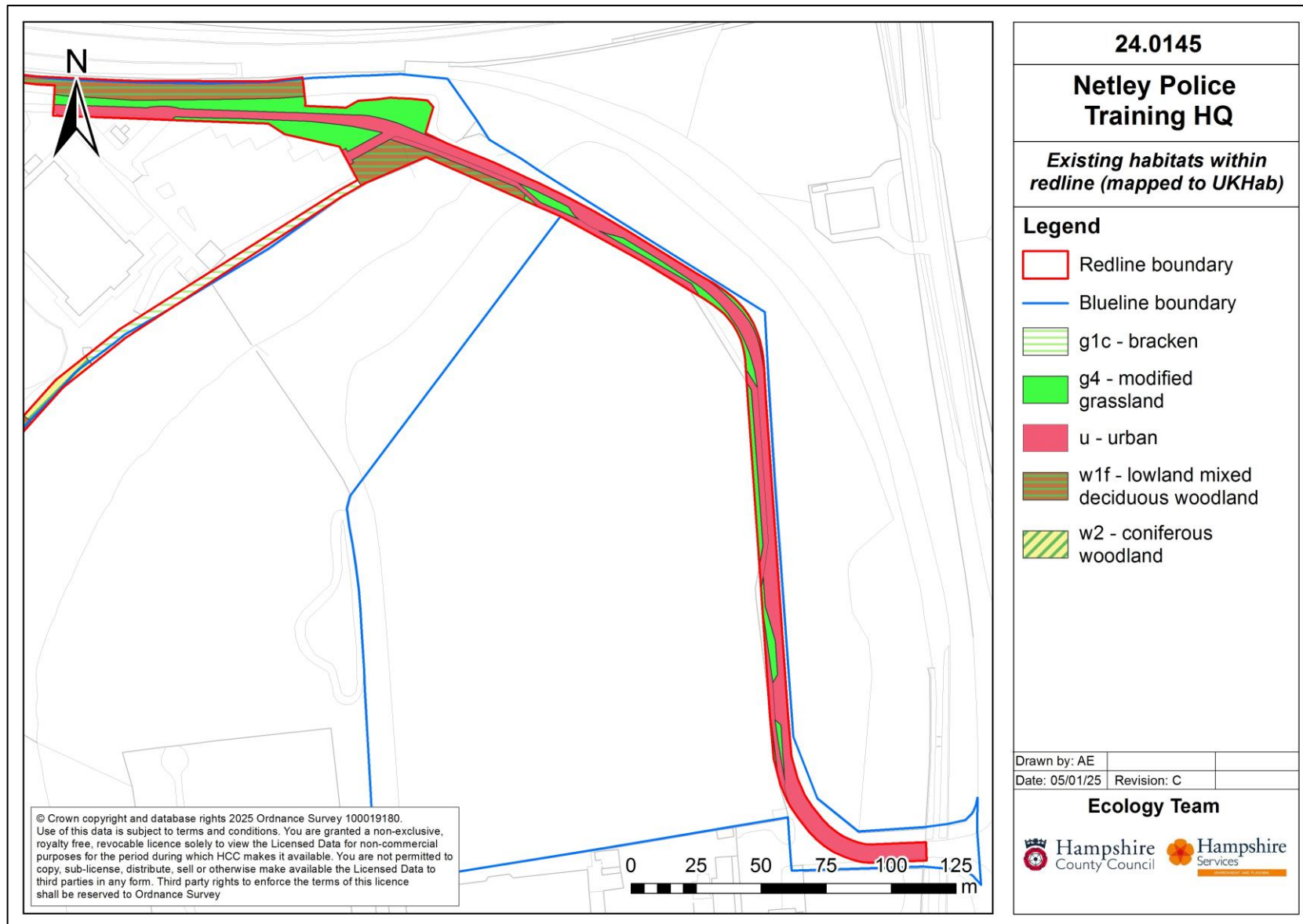


Figure A4.2 Baseline UKHab survey plan (Inset 1)

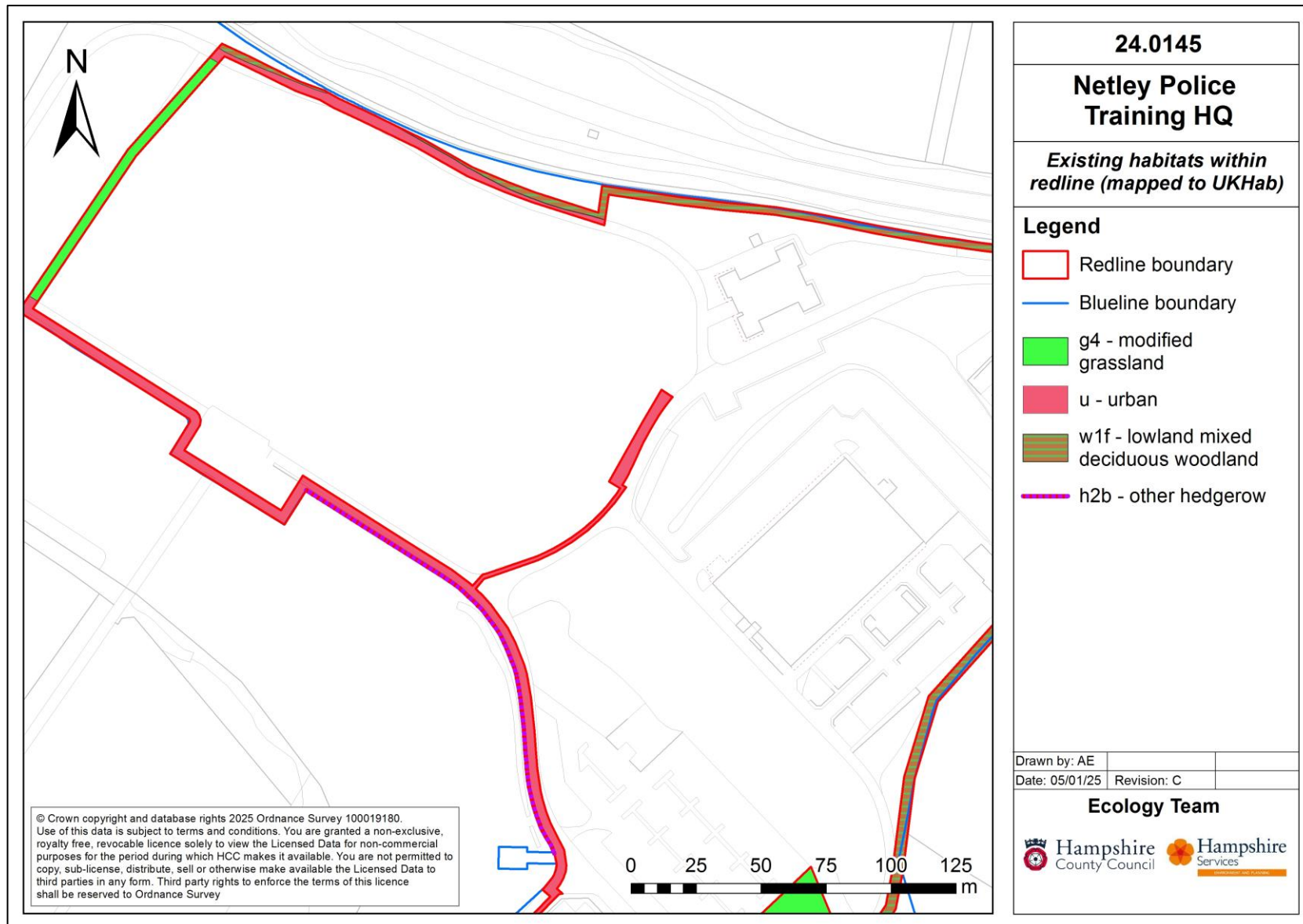


Figure A4.3 Baseline UKHab survey plan (Inset 2)

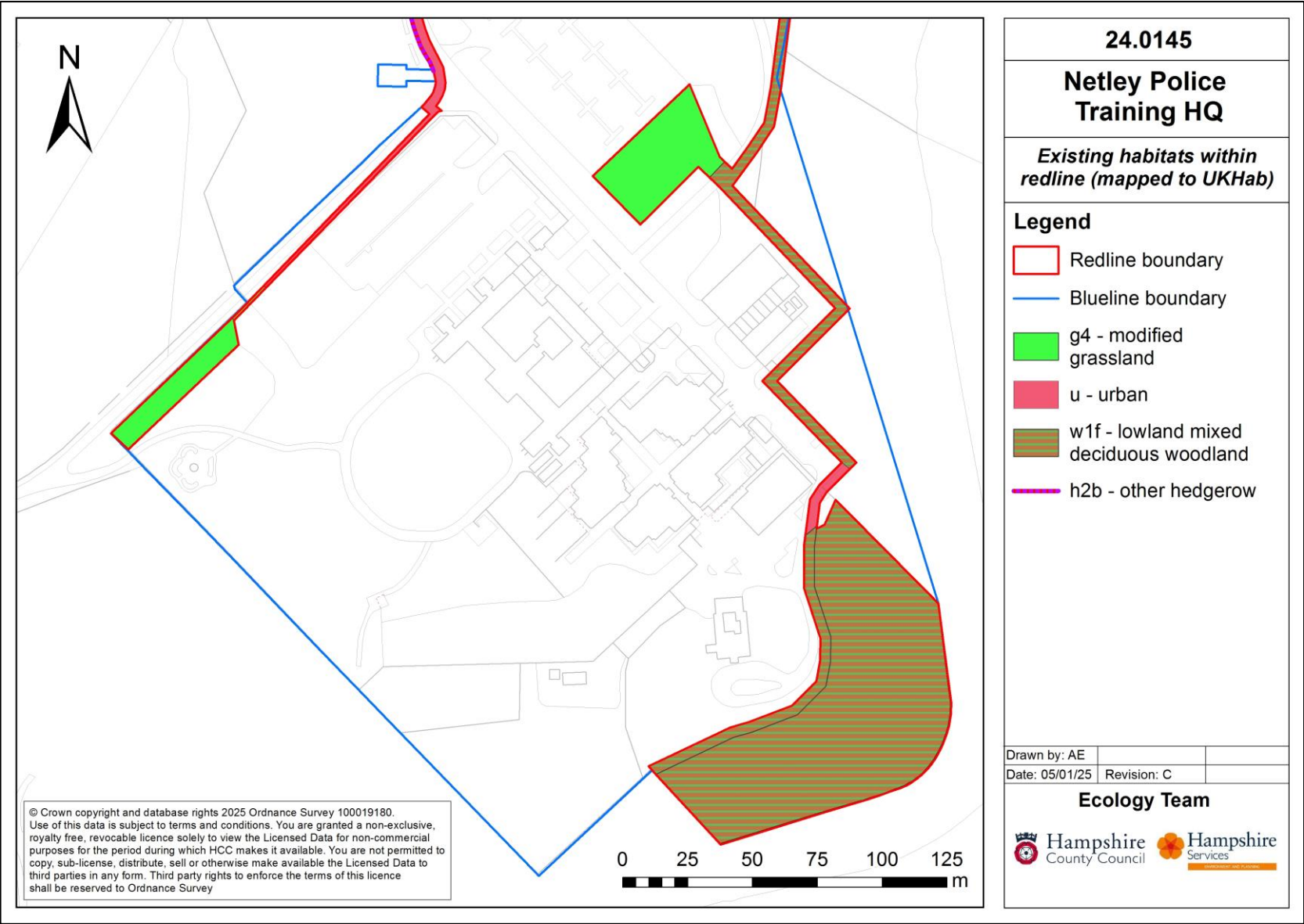


Figure A4.4 Baseline UKHab survey plan (Inset 3)

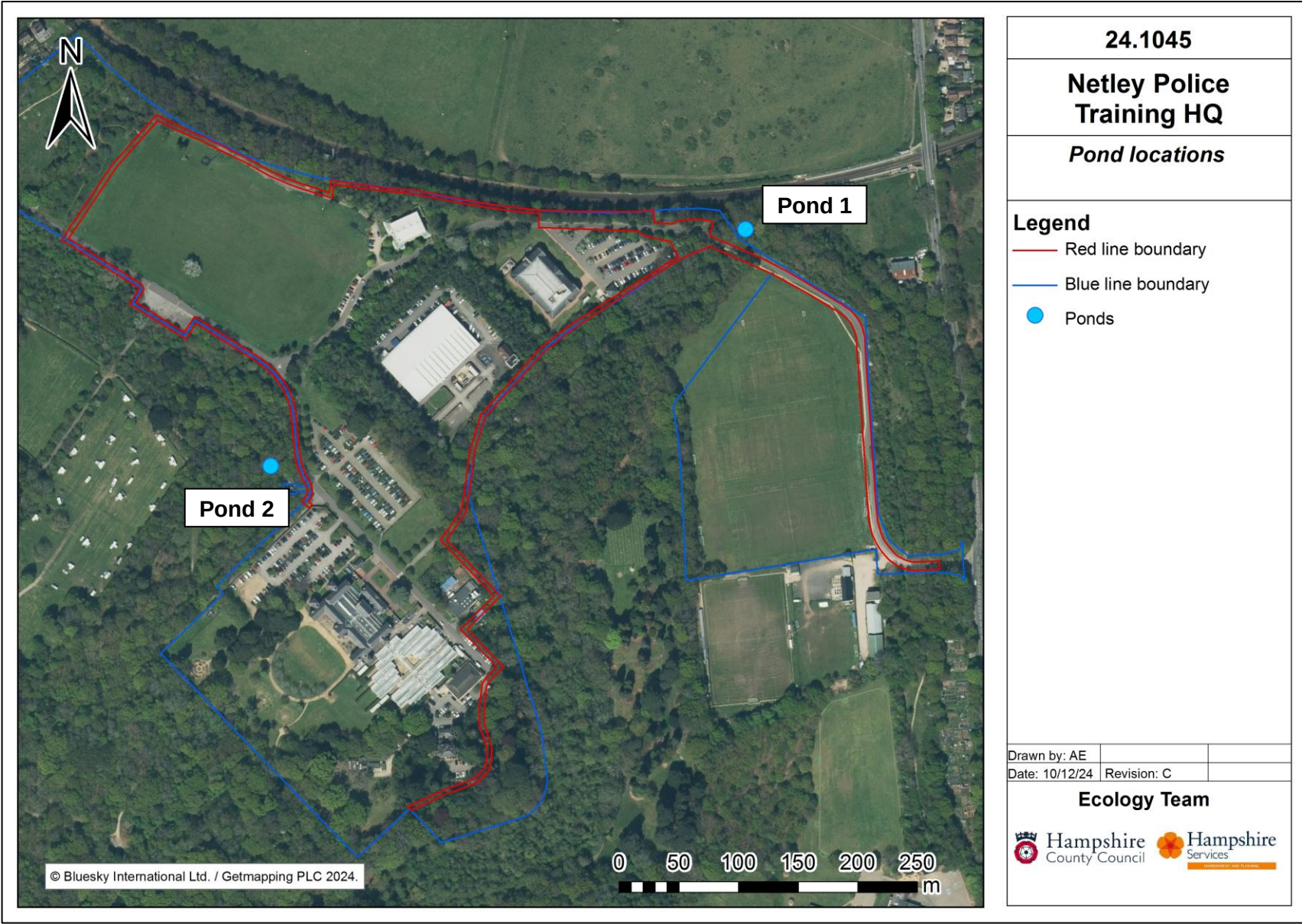


Figure A4.5 Pond locations

Folio No:
Purchase Order:
Contact:
Issue Date:
Received Date:

2170-2024
NEW CUSTOMER
Hampshire County Council
02.07.2024
20.06.2024



GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN3242	Netley Police HQ	SU4721208135	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Daisy Chambers

Approved by: Christopher Troth

SureScreen Scientifics Ltd, Morley Retreat, Church Lane, Morley, Derbyshire, DE7 6DE, UK

+44 (0)1332 292003 | scientifics@suresscreen.com | suresscreenscientifics.com



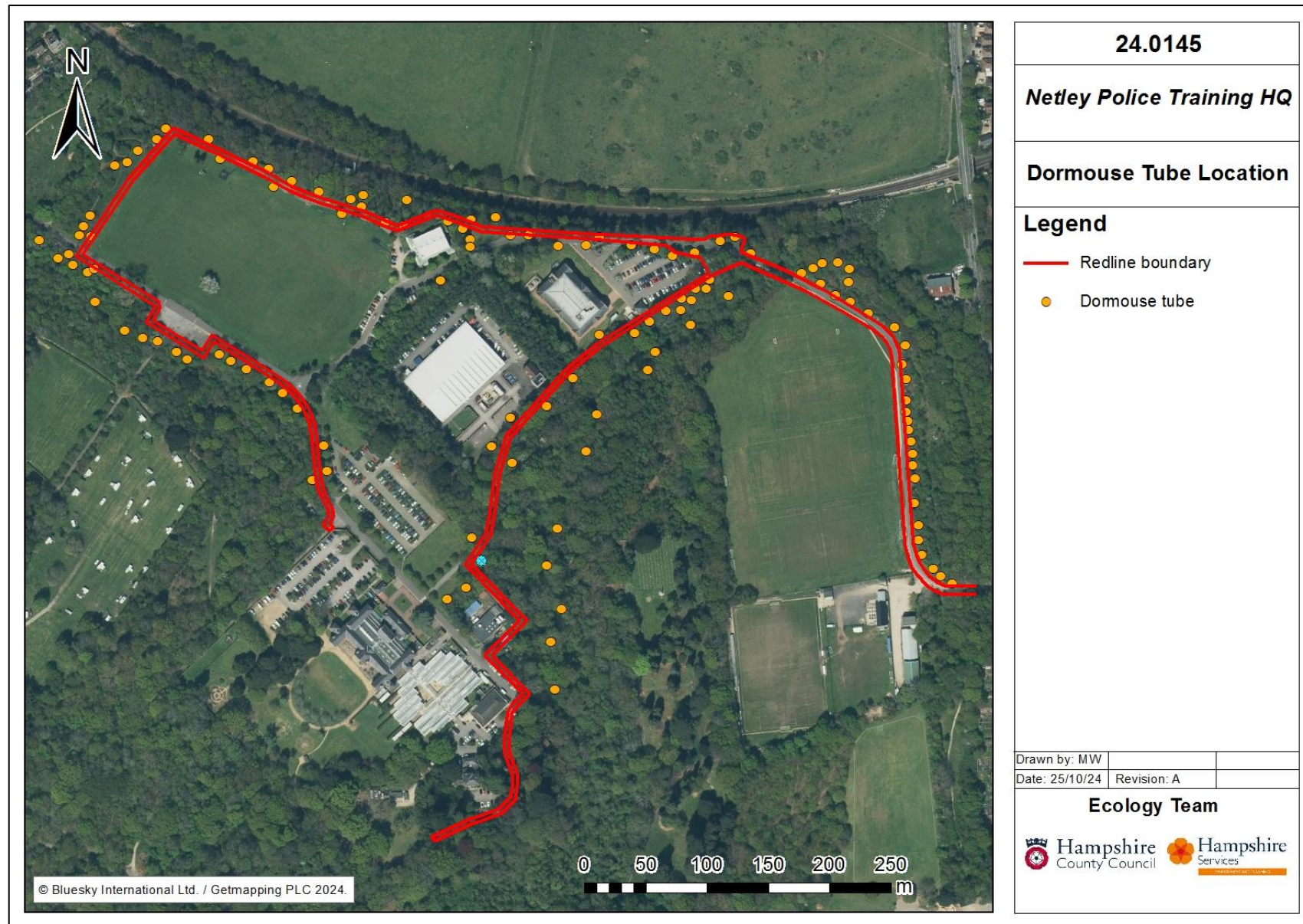


Figure A4.6 Dormouse Survey Plan

Appendix 5 – Proposed Habitats

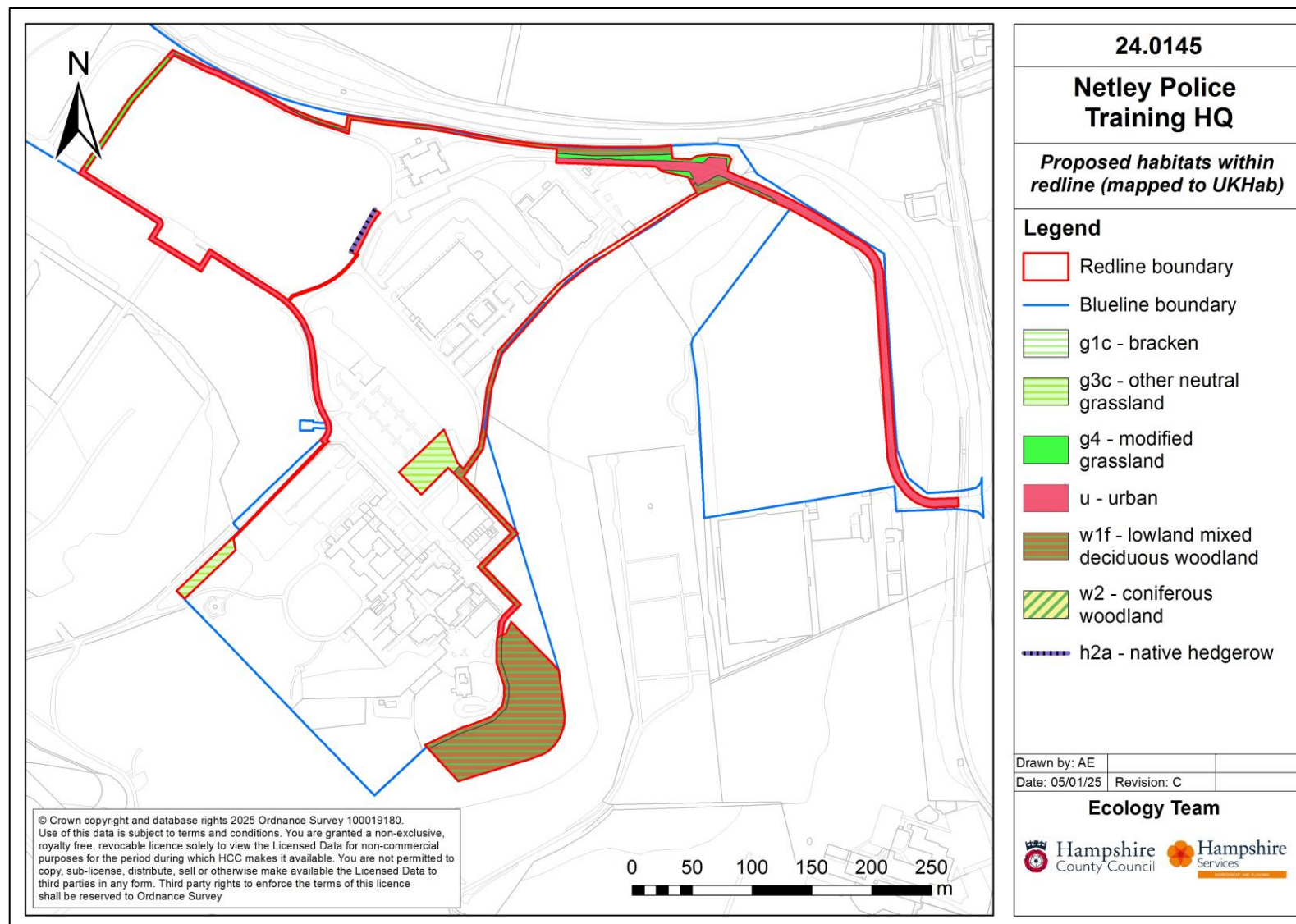


Figure 5.1 Proposed habitats