

**LAND ADJACENT TO 47 BRYANSTON
ROAD, SOUTHAMPTON**

**PRELIMINARY ECOLOGICAL
APPRAISAL**



A Report to: Abri

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1. INTRODUCTION

1.1 BACKGROUND

In March 2023, Abri commissioned MMEcology to undertake a Preliminary Ecological Appraisal at a parcel of land adjacent to 47 Bryanston Road in Southampton, Hampshire. This assessment is required to inform a planning application associated with a new housing development of 8 dwellings, along with parking and landscaping. Figure 1 below shows the proposed site layout.



Figure 1. Proposed site layout

To fulfil the above brief, it was necessary to assess the existing ecological interest of the site. Therefore, a walkover survey was undertaken on 6 April 2023 and updated on 1st June 2023 for the purpose of Biodiversity Net Gain calculations.

1.2 SITE DESCRIPTION

The application site is located at National Grid Reference SU 43900 12130, at the bottom of Bryanston Road which is located on the outskirts of Bitterne in Southampton. The site is approximately 0.38ha in size and located in a predominantly residential area, with dwellings and their gardens located to the east and south of the site. Immediately to west is an active railway track, beyond which is an industrial estate and the River Itchen. Immediately to the north is the private gardens of a row of semi-detached dwellings associated with Ashburnham Close.

The application site is dominated by areas of tall ruderal vegetation and bracken, likely to have developed as a result of past removal of bramble scrub on site. A small, wooded area is located on an embankment in the eastern corner of the site. There are a small

2. METHODOLOGIES

2.1 DESK STUDY

An ecological desk study was conducted in April 2023 to determine the presence of any designated nature conservation sites and protected species within a 1km radius of the site. This involved obtaining information from statutory and non-statutory organisations which hold ecological data relating to the survey area, including:

- Natural England - Multi Agency Geographic Information for the Countryside (MAGIC) online database (<http://magic.defra.gov.uk>)
- Hampshire Biological Information Centre (HBIC)

The desk study included a search for European and UK statutory nature conservation sites, non-statutory local designations and protected/notable species records within a 1km radius of the site. A summary of the results is provided in Section 4.

The desk study also included a review of the relevant local planning policy with regard to biodiversity and nature conservation.

2.2 PHASE 1 HABITAT / UKHAB SURVEY

The walkover survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010) and the Institute of Environmental Assessment (IEA, 1995). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, the presence, or potential presence, of protected species was noted.

Whilst Phase 1 Habitat Survey is the most widely used habitat classification system, UKHAB has been designed to build on this existing system. *It is a fully translatable, hierarchical system that integrates with all major classifications in use in the UK. The system includes translation tables that allow legacy datasets to be translated into UKHAB and for habitat data collected using other systems to be seamlessly integrated. The combination of primary habitats and secondary codes is a major strength of the system, allowing habitat mosaics, habitat management, origins and other environmental and species features to be added directly to each coded primary habitat. This removes the need for complex target notes and substantially increases consistency and spatial accuracy of recording important features by attaching secondary codes directly to habitat polygons or linear features.* Therefore, for each habitat type recorded on site, the equivalent UKHAB category was also added. The habitat map provided in Appendix 1 is based on UKHAB classification.

Based on the Guidelines for Ecological Impacts Assessment in the UK and Ireland (CIEEM, September 2018), valuation involves assigning a receptor to a geographic frame of reference, i.e. International, UK/National, Regional, County, and District, Local or Parish so that the level of weight or importance attached to any impact can be appropriately assessed. Therefore, each receptor on site was appointed a value.

An impact assessment was then carried out based on the proposals known for the site at the time this report was produced. This involved identifying impacts, incorporating measures to avoid and mitigate negative impacts and identifying opportunities for ecological enhancement, in accordance with the National Planning Policy Framework.

2.3 PROTECTED AND NOTABLE SPECIES APPRAISAL

A preliminary appraisal of the site to support protected and notable species was carried out. During the walkover survey, the potential presence of the following species was assessed:

Badgers *Meles meles*

An assessment of the habitats on site was undertaken to identify the suitability of the site for use by foraging and sett building badgers. This takes the nature of the surrounding landscape and connectivity with other areas of suitable habitat into account. The site was therefore subject to a comprehensive walkover assessment for the presence of badger field signs such as badger setts, footprints, runs, hairs, snuffle holes and latrines. Any signs recorded were plotted on the UKHAB Map. Any setts found were classified according to the criteria used in the National Badger Surveys.

Bats

In line with the specifications detailed in the Bat Mitigation Guidelines (English Nature, 2004) and Good Practice Guidelines (Collins, 2016), a Preliminary Bat Roost Assessment of the trees on site was conducted. A ground level visual assessment of the trees was undertaken to determine the presence of any Potential Roost Feature (PRF), together with a general appraisal of the suitability of the site for foraging and commuting bats. Potential PRFs include cracks/splits in stems or branches, knot holes, cavities created by branches tearing out from parent stems, rot holes, woodpecker holes and loose bark.

Based on the PRF's present, the trees within the survey area were then assessed using the suitability classes detailed within the Good Practice Guidelines (Collins, 2016), including high, moderate, low and negligible suitability. Table 1 below provides further information.

Suitability	Description
High	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
Low	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Negligible	Negligible habitat features on site likely to be used by roosting bats.

Table 1: Classification of Trees with Bat Potential (Collins, 2016)

Reptiles

An assessment of the suitability of the site to support reptile species was undertaken, based on a review of habitat characteristics and other parameters known to influence reptile distribution such as site management and disturbance, vegetation structure, presence of refugia and potential hibernation habitat and connectivity to surrounding habitats of potential value to reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on-site. In addition, reptiles may utilise features such as tussocky grassland for shelter and compost heaps and rubble piles for hibernation.

Great Crested Newts *Triturus cristatus*

Available ordnance maps were reviewed to identify the potential presence of waterbodies within a 500m radius of the site. Particular attention was paid to the presence of suitable connective, habitat linking the application site and the waterbodies. Any ponds separated by the presence of barriers to their dispersal such as busy roads (e.g. A roads) and running water (e.g. rivers) were subsequently scoped out.

Dormice *Muscardinus avellanarius*

A habitat and connectivity survey were conducted to determine the likelihood of dormouse being present within the site. This involved a walkover assessment of the site and the immediate environs. Particular attention was paid to the presence of key food sources such as hazel *Corylus avellana*, presence of large gaps in the vegetation, structural diversity of the habitats on site, presence of understorey habitat and connectivity to adjacent areas of woodland/scrub.

Nesting Birds

An assessment of the suitability of habitats present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests was carried out.

Invertebrates

An assessment was made of the suitability of the site to support invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora and waterbodies.

Other Species

An assessment was made of the sites' suitability for notable species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species, such as hedgehogs *Erinaceus europaeus*.

Invasive Species

During the field survey, any invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) such as Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum* were recorded and mapped.

3. POLICY

3.1 NATIONAL PLANNING POLICY FRAMEWORK

The adopted National Planning Policy Framework (NPPF) was revised in July 2021. Paragraph 180 of the adopted NPPF states “*when determining planning applications, local planning authorities should apply the following principles:*

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

3.2 LOCAL PLANNING POLICY

City of Southampton Local Plan Review – Adopted Version 2nd Revision (2015)

Policies NE1, NE2 and NE3 are in relation to sites designated for nature conservation including International and National sites and Sites of Local Nature Conservation Importance. Policy NE 4 is relevant to Protected Species. All these policies have been part replaced by Core Strategy Policy CS 22.

Local Development Framework Core Strategy Development Plan Document (amended version 2015)

Policy CS 22 ‘Promoting Biodiversity and Protecting Habitats’ of the Core Strategy states that “*Effective protection of biodiversity cannot be achieved by focusing solely on land within the city. The Council will work with other PUSH authorities to achieve a sub-regional approach, in particular through the Green Infrastructure Strategy for South Hampshire.*”

This policy aims to ensure that developments do not adversely affect the integrity of international designations, and that they are unlikely to have an unacceptable impact on a national or local designation. Furthermore, this policy reiterates the safeguarding and

extending the existing Green Grid to provide a network of wildlife corridors and stepping stones between areas of green space within the city and linking to the surrounding countryside. It is also stated within this policy that developments should retain, protect and enhance features of biological interest and provide for the appropriate management of these features, along with seeking to produce a net gain in biodiversity by designing in provisions for wildlife.

4. DESK STUDY RESULTS

4.1 STATUTORY DESIGNATED SITES

There are six statutory designated sites of international, national and local importance, located within a 1km radius of the development site. These include the Solent and Southampton water Special Protection Area (SPA) and Ramsar, Lee-on-The Solent to Itchen Estuary Site of Special Scientific Interest (SSSI), Solent and Dorset Coast SPA, Peartree Green Local Nature Reserve (LNR) and Chessel Bay LNR.

Solent and Southampton Water SPA and Ramsar are located approximately 85m north of the site. This site qualifies as a SPA for its breeding and wintering bird species. As breeding species, the site contains Common Tern, Little Tern, Mediterranean Gull, Roseate Tern and Sandwich Tern. Over wintering birds include Black-tailed Godwit, Dark-bellied Brent Goose, Ringed Plover and Teal.

Solent and Southampton Water also qualifies as a Ramsar site under four criteria, including:

- Supporting many wetland habitats such as saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.
- Supporting an important assemblage of rare plants and invertebrates.
- Supporting avian assemblages of international importance
- Regularly supporting 1% of the individuals in a population of one species or subspecies of water bird (in this case, dark-bellied Brent goose).

Lee-on-The Solent to Itchen Estuary is also located 85m north of the site and extends along the eastern shore of Southampton Water from Lee-on-the-Solent to the mid-Itchen estuary and includes the lower estuary of the River Hamble. The site comprises extensive intertidal muds with a littoral fringe of vegetated shingle, saltmarsh, reedbed, marshy grasslands and deciduous woodland on alluvium, valley gravels (Hamble Common), and Bracklesham Beds (Hook Links). The site is an integral part of Southampton Water which is of international importance for over-wintering dark-bellied geese, and of national importance for three species of wildfowl (great-crested grebe, teal and wigeon) and five species of wader (black-tailed godwit, dunlin, grey plover, ringed plover, redshank). The SSSI supports an outstanding assemblage of nationally scarce coastal plants. In addition, the cliffs at Brownich and the foreshore at Lee-on-The Solent are of national geological importance.

Solent and Dorset Coast SPA aims to protect important foraging areas at sea used by qualifying interest features from colonies within adjacent SPAs. These qualifying interest features are three species of tern: common tern, Sandwich tern and little tern, all during breeding.

Peartree Green LNR is located 45m south of the site, separated from the application site by a road, dwellings and their gardens and a track. During World War 2 air attacks significant bomb craters were created and in the 1970s, chalk from the construction of the M27 motorway was laid at the bottom of the Green, covering areas used for landfill in the 1960s and this has created a unique habitat for several varieties of orchids and insects.

Chessel Bay LNR is located approximately 460m to the north-east of the application site. The Bay is the only remaining long stretch of undeveloped, natural shoreline in the lower Itchen river. A narrow strip of woodland, with oak, beech, brambles and hawthorn, runs along the edge of the LNR which is bounded by a railway line to the north-east. A parallel strip of shingle and saltmarsh contain iris, sea club rush, reeds and sea asters. The largest proportion of the site is composed of mudflats, which at low tide provide feeding grounds for wading birds and wildfowl. Furthermore, at Chessel Bay the transition occurs from shingly mud through clumps of *Spartina* marsh to a fringe of common reed at the toe of a Brickearth terrace. The edge of the terrace is covered by mature oak woodland which is believed to be ancient in origin.

The location of the above statutory sites is shown in Figure 4 below:

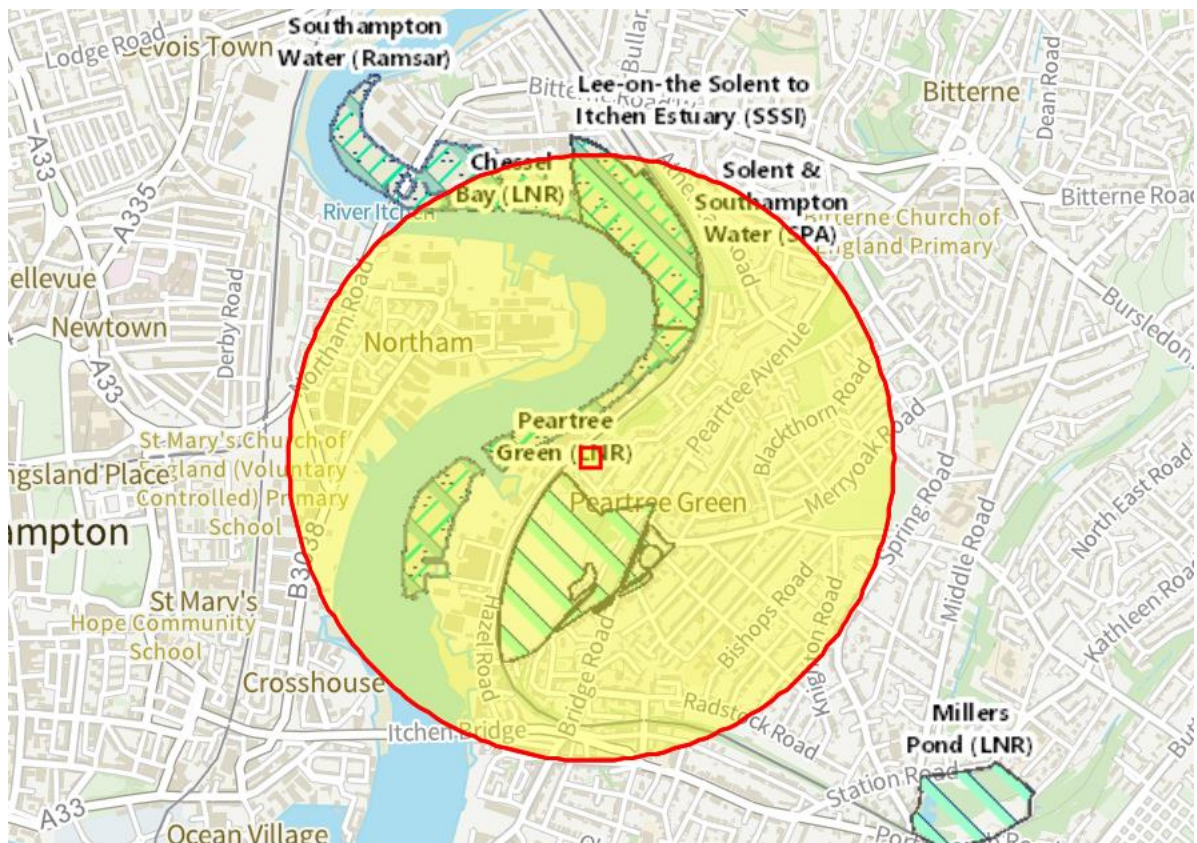


Figure 4. Location of statutory designated sites within a 1km radius of the site (Source: MAGIC website)

4.2 NON-STATUTORY DESIGNATED SITES

There are six non-statutory designated sites (Sites of Importance for Nature Conservation – SINCs) located within 1km of the application site; the closest of which is Peartree Green SINC located 45m south of the site, designated for supporting semi-improved grasslands which retain a significant element of unimproved, being of particularly high value to local communities and for the presence of white-letter hairstreak *Satyrium w-album* and Bithynian Vetch *Vicia bithynica*.

Furthermore, Braeside Road Woodland SINC is located approximately 90m north-east of the site, designated for being a semi-natural woodland (Priority Habitat deciduous woodland). A number of the SINCs are located on the other side of the River Itchen such as Saxon Wharf/Shamrock Quay. The location of these SINCs is shown in Figure 5 below.

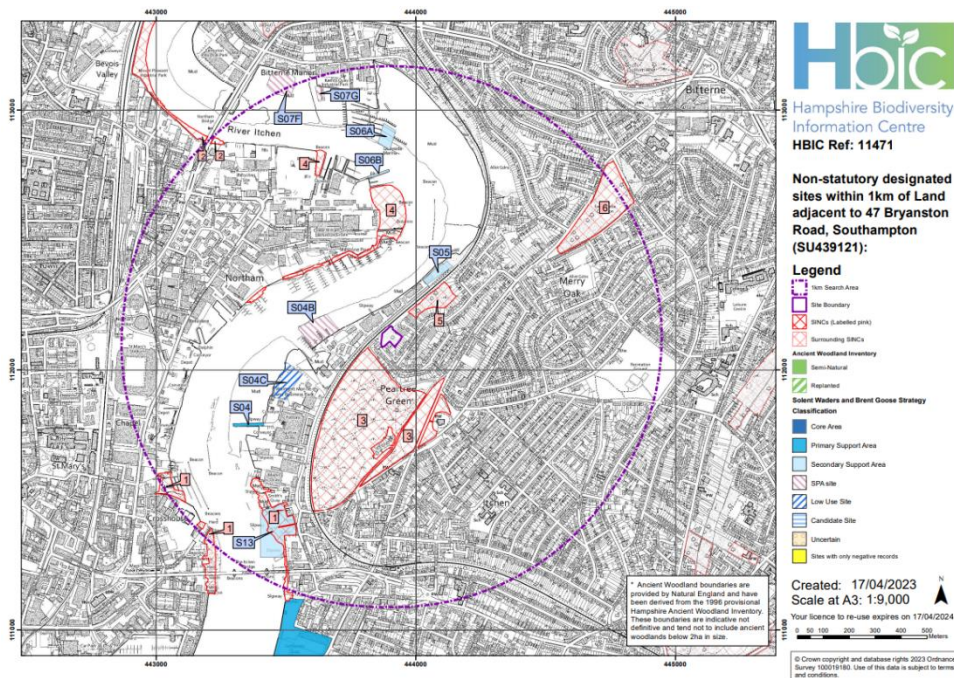


Figure 5. Location of non-statutory designated sites within 1km of the site

There is no Ancient Woodland located within 1km of the site. The nearest Priority Habitat is the northern part of Peartree Green SINC, which is a Lowland Mixed Deciduous Woodland.

The nearest Solent Waders and Brent Goose (SW&BG) Strategy site is 'SPA Site' S04B site, located approximately 150m west of the site, separated by the existing industrial estate. This site supports oyster catchers in low numbers (maximum of 14 individuals recorded). All SW&BG Strategy sites have the potential to be used by waders or Brent geese. These sites have the potential to support the existing network and provide alternative options and resilience for the future network.

HBIC has produced a detailed Ecological Network Map (ENM) for Hampshire on behalf of the Local Nature Partnership. An ENM is a group of habitat patches that species can move easily between, maintaining ecological function. Through appropriate management, ecological networks can provide a connected collection of refuges for wildlife. Establishing the network will enable biodiversity to recover from recent declines and create a more resilient natural environment. Based on the provided mapping by HBIC, the application site has been highlighted as a Networks Opportunities site.

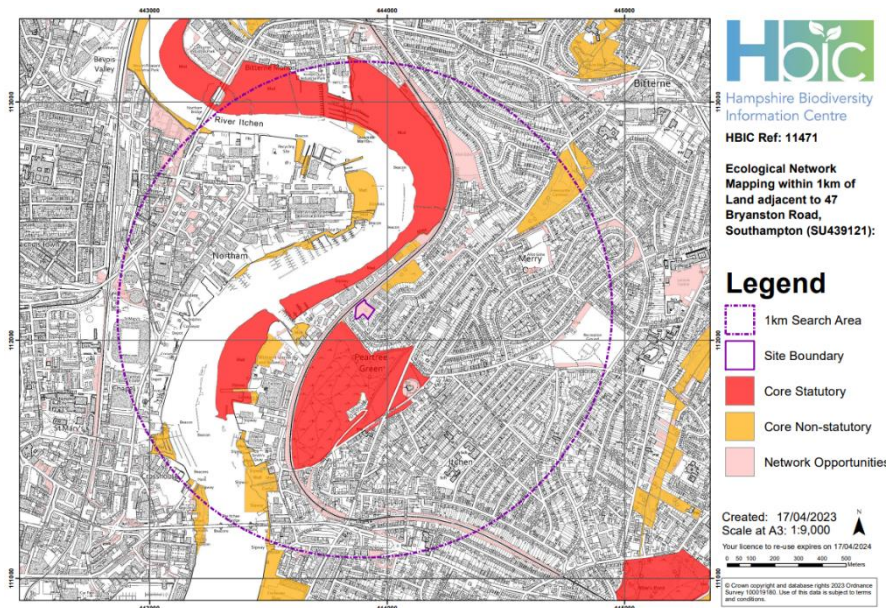


Figure 6. Location of ENM within a 1km radius of the site (Source: HBIC)

4.3 PROTECTED / NOTABLE SPECIES

Records of bats, reptiles, fish notable birds, invertebrates, marine mammals and notable plants have been returned from a 1km radius of the application site, provided by HBIC.

Bats - In summary, records of bats belonging to at least 9 species, including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, brown long-eared bat *Plecotus auratus*, noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, Whiskered *Myotis mystacinus*, Natterer's bat *M. nattereri*, Daubenton's bat *Myotis daubentonii* and greater horseshoe bat *Rhinolophus ferrumequinum* have been returned by HBIC. The nearest records to the site relate to common pipistrelle and Daubenton's bat, located approximately 188m away (recorded in 2017).

Dormice - No records of dormouse have been returned.

Reptiles – Records of common lizard *Zootoca vivipara* and slow worm *Anguis fragilis* have also been returned, with the nearest record from Peartree Green, but having been recorded in 1984. The remaining records are over 600m away from the application site.

Amphibians - No records of great crested newts have been returned.

Badgers – No records of badgers are present for the search radius.

Invertebrates - Numerous records of notable terrestrial invertebrates has been returned with the nearest records being of stag beetle *Lucanus cervus*, ghost hawk *Hepialus humuli* and cinnabar *Tyria jacobaeae*, located approximately 50m away from Chessel Bay and Freemantle Common.

Birds - HBIC provided numerous bird records for the study area, with the nearest one being mainly associated with the Itchen Estuary Manor Farm Country Park, including a number of Schedule 1 bird species such as Dark-bellied Brent Goose *Branta bernicla*, Ringed Plover *Charadrius hiaticula* and Little Egret *Egretta garzetta*.

Fish – Records of European eel *Anguilla Anguilla* have been returned. These records are from the River Itchen near to Northam Bridge, located over 880m away (2017).

Marine mammals – Marine mammals such as harbour seal *Phoca vitulina* have been recorded in Chessel Bay located over 600m away.

Notable plants – Numerous records of notable plants are present within the search area, with the nearest records returned from the nearby Peartree Green such as chicory *Cichorium intybus* and narrow-leaved bird's-foot-trefoil *Lotus tenuis*.

5. PHASE 1 HABITAT SURVEY

5.1 HABITATS

The Phase 1 Habitat survey of the site was carried out on 6 April 2023 by M. Miri, a Principal Ecologist, MSc, CEnv, MCIEEM, holder of Level 2 bat class licence, Level 1 great crested newt and dormouse licences from Natural England, with over 16 years of experience as a professional ecologist within both the private and public sector. This walkover survey was updated on 1st June 2023, within the optimal window for botanical surveys, to ensure the survey findings were sufficiently robust.

The following habitat types were recorded on site during the field survey:

Phase 1: Tall Ruderal (C3.1) / UKHAB: Primary code: u1 Built-up areas & gardens, Secondary code: 16 Tall herb

This is the prominent habitat on site and is likely to have developed due to past removal of bramble scrub on site. The dominant species at the time of survey was common nettle *Urtica dioica*, with other species recorded including cleavers *Galium aparine*, ground ivy *Glechoma hederacea*, creeping buttercup *Ranunculus repens*, field speedwell *Veronica agrestis*, hairy bittercress *Cardamine hirsuta*, lords and ladies *Arum maculatum*, Spanish *Hyacinthoides hispanica* and hybrid bluebell *H. x massartiana*, sycamore seedlings *Acer pseudoplatanus*, marsh marigold *Caltha palustris*, honeysuckle *Lonicera periclymenum* and dandelion *Taraxacum officinale*. The ground on site is uneven and building waste such as broken concrete, bricks, roof tiles, etc. are scattered throughout the site. Furthermore, due to the site being surrounded by dwellings and their gardens, discarded household waste and garden arisings are also scattered throughout the application site.



Figure 7. View of nettle dominated areas on site (May 2023)



Figure 8. View of nettle dominated areas on site (May 2023)



Figure 9. View of nettle dominated areas on site (June 2023)



Figure 10. Example of discarded waste within areas of tall ruderal vegetation

Overall, this habitat is considered to be of low ecological value at 'site' level only, as it readily colonises any disturbed areas or derelict sites.

Phase 1: Scrub (A2) / UKHAB: h3d Bramble scrub + h3h Mixed scrub

An area approximately 80m² in size was present, dominated by young, self-seeded aspen *Populus tremula*, with infrequent hazel *Corylus avellana*, goat willow *Salix caprea*, privet *Ligustrum vulgare*, bramble *Rubus fruticosus* and sycamore. In association with areas of tall ruderal vegetation and bracken, small patches of bramble, buddleia *Buddleja davidii* and gorse *Ulex europaeus* were visible.

An area of dense bindweed *Convolvulus arvensis*, with some unmanaged bramble scrub is present on the embankment in the north-eastern corner of the site, between the woodland and the residential gardens of the neighbouring properties. This area contains discarded materials and some garden waste from the surrounding neighbouring gardens.



Figure 11. View of young aspen scrub on site (May 2023)



Figure 12. View of young aspen scrub on site (June 2023)



Figure 13. View of unmanaged bindweed & bramble in the north-eastern corner of the site (May 2023)



Figure 14. View of unmanaged bramble in the north-eastern corner of the site (June 2023)

Scrub habitat is common in the local area, supports a poor species diversity on site and will readily colonise unmanaged areas and is therefore considered to be of low ecological value, at 'site' level only.

Phase 1: Scattered trees / UKHAB: Primary code: u1 Built-up areas & gardens, Secondary code: 11 Scattered trees

A small number of mature and semi-mature trees are scattered within the application site such as sycamore, wild cherry *Prunus avium*, aspen, Leyland cypress *Cupressus x leylandii*, goat willow and oak *Quercus robur*. For full details in relation to trees on site please refer to the Arboricultural Report for the site (REPORT ON INSPECTION OF TREES by Broad Oak Tree Consultants Limited, March 2023).



Figure 15. Example of trees on site (May 2023)



Figure 16. Example of trees on site (May 2023)



Figure 17. Example of trees on site (June 2023)

Whilst of limited extent on site, due to the age of the trees on site and their intrinsic value, they are appointed a 'local' value.

Phase 1: Poor semi-improved grassland (B6) / UKHAB: g4 Modified grassland

Small patches of poor semi-improved grassland are found in mosaic with areas of bracken and tall ruderal vegetation on site. These patches are present in the north of the site. At the time of survey in May 2023, the vegetation sward was of medium height, with the grass species present including Yorkshire fog *Holcus lanatus*, false oat-grass *Arrhenatherum elatius*, creeping bent *Agrostis stolonifera*, creeping soft-grass *Holcus mollis*, red fescue *Festuca rubra*, perennial rye-grass *Lolium perenne* and Spanish/hybrid bluebell. A small patch of greater stitchwort *Stellaria holostea* was also present. Other herb species present included dandelion and cleavers. In June 2023, this area had received a cut and supported a shorter sward of approximately 100mm.



Figure 18. View of the grass patches on site (May 2023)



Figure 19. View of the grass patches on site (June 2023)

Due to poor species and structural diversity, the grassland on site is appointed a 'site' value only.

Phase 1: Bare ground (J4) / UKHAB: Primary code u1b Developed land; sealed surface, Secondary code 73

A small area, approximately 50m², located close to the entrance in the south-eastern corner of the site is covered by compacted ground made up of crushed bricks, etc. and discarded building materials.



Figure 20. View of the area of bare ground on site (May 2023)



Figure 21. View of the area of bare ground on site (June 2023)

This area is of negligible ecological value.

Phase 1: Broad-leaved semi-natural woodland (A1.1.1) / UKHAB: w1g Other woodland; broad-leaved

A small rectangular parcel of woodland is located on an embankment with steep banks, in the north-eastern corner of the site. This woodland appears to be self-seeded. Species present in the woodland include mature and semi-mature sycamore (dominant), oak, goat willow and rowan *Sorbus subg. Sorbus*, with a sparse understorey of holly *Ilex aquifolium*, elder *Sambucus nigra*, bramble, hawthorn *Crataegus monogyna*, elm *Ulmus procera*, laurel *Laurus nobilis*, buddleia and honeysuckle. The ground flora is dominated by Spanish and hybrid bluebell, cleavers, nettle, ivy *Hedera helix* and hogweed *Heracleum sphondylium*. Discarded materials from the surrounding neighbouring gardens, along with building waste such as broken concrete are also present in this woodland.



Figure 22. View of the woodland on site (May 2023)



Figure 23. View of the woodland on site (May 2023)



Figure 24. View of the woodland on site showing the Spanish/hybrid bluebell ground flora (May 2023)



Figure 25. Example of discarded waste within the woodland



Figure 26. Example of discarded waste within the woodland



Figure 27. View of the woodland on site (June 2023)

Whilst the woodland on site is in a poor condition due to lack of management and is subject to unauthorised disposal of waste by the neighbouring properties, is of small extent and isolated, and supports invasive species such as laurel, buddleia and Spanish bluebell, due to its location in a highly urban area surrounded by residential units, it is considered to be of 'local' value.

Phase 1: Tall herb and fen, Bracken (C1) / UKHAB: g1c Bracken

This is the prominent habitat on site and is likely to have developed due to past removal of bramble scrub on site. A thick layer of bracken has developed over uneven ground, with building waste, discarded household waste and garden arisings found throughout this habitat.



Figure 28. View of bracken on site (June 2023)



Figure 29. View of bracken on site (June 2023)

This habitat readily develops within disturbed and unmanaged areas, suppresses the development of other species and is therefore appointed a 'site' value only.

5.2 OFF-SITE HABITATS

The below habitats are located outside the application site and will be retained as part of the proposals. Therefore, they have been detailed below for information only.

Species-poor, intact hedgerow

A small length of managed privet hedge is located outside a section of the northern boundary of the site, forming the boundary of the neighbouring garden.



Figure 30. Privet hedge (left: May 2023 – right: June 2023)

Scattered trees

A line of lopped Leyland cypress trees are located immediately outside the south-eastern boundary of the site, behind post and wire fencing.



Figure 31. Lopped Leyland cypress trees

5.3 PROTECTED SPECIES

Due to the habitats present on site, the following protected/notable species were considered during the survey:

Nesting Birds

The trees and scrub on site are suitable for supporting common and widespread bird species. Therefore, nesting birds are a constraint in relation to the proposals and a recommendation is made in Section 7.

Roosting Bats

The trees on site generally lacked any suitable features for roosting bats such as rot holes, lifted bark and woodpecker holes. The trees within the woodland were not subject to an

assessment as they will be retained and protected as part of the proposals. Roosting bats are therefore not considered to be a notable consideration in relation to the proposed works.

The habitats located immediately within the application site in the form of areas of tall ruderal vegetation, patchy grassland and managed scrub are of low value to foraging bats. However, the small woodland on site is considered to be of high potential in an otherwise urban area, dominated by buildings and residential gardens. As such, foraging and commuting bats are considered to be a notable consideration in relation to the works and a recommendation is made in Section 7.

Reptiles

Whilst areas of grassland on site are limited in extent and patchy, the presence of reptiles cannot be discounted. Furthermore, the site is surrounded by residential gardens which can offer some habitat suitable for reptiles such as slow worms. The railway line located outside the western boundary of the site and separated by a post and wire fence, is unvegetated and only supports ballast and sleepers on the development site side. Nevertheless, reptiles are a notable consideration in relation to the works and a recommendation in relation to further survey work is made in Section 7.



Figure 32. View of the railway track outside the western boundary of the site (may 2023)

Amphibians

Review of the OS mapping indicates the absence of any ponds within 500m of the site. As such, due to lack of potentially suitable ponds within 500m of the site, great crested newts are not considered to be a constraint in relation to the proposed works.

Badgers

No evidence of badgers in the form of setts, snuffle holes or latrines was recorded on site. The habitats on site are however suitable for badgers and therefore due to their mobile nature, as a precautionary measure, a recommendation is made in Section 7.

Small Mammals

The application site is of value to hedgehogs. Therefore, small mammals are a notable consideration in relation to the proposed works and a recommendation is made in Section 7.

Dormice

The site is considered to be of negligible potential to dormice due to its isolated nature and the small area of sub-optimal woodland present, which is not large enough to support a viable population of dormice. Dormice are therefore not considered to be a constraint in relation to the works.

Invertebrates

The habitats on site are considered to be of value to common and widespread invertebrates, with limited value to notable invertebrates such as stag beetle. Therefore, notable invertebrates are not considered to be a constraint in relation to the proposals.

6. IMPACT ASSESSMENT

6.1 SUMMARY OF PROPOSALS

Construction of 8 residential units, along with parking and landscaping is proposed.

6.2 NATURE CONSERVATION SITES

Solent and Southampton SPA is located approximately 82m north of the application site. Due to residential nature of the proposals, if unmitigated, there will be a likely significant effect on the integrity of this designation as a result of an increase in the recreational level within 5.6km of the SPA. A net increase in housing development within 5.6km of the Solent and Southampton SPA is likely to have a significant effect on those sites through a consequent increase in recreational disturbance. Development within the 5.6km zone will increase the human population at the coast and thus increase the level of recreation and disturbance of bird species. This impact is of concern for the populations of over-wintering birds, due to the adverse effects of disturbance on the behaviours of the birds (such as feeding and roosting) and the consequent impacts on the energy budgets of the birds.

Similarly, increases in housing within a 13.8km radius of the New Forest SPA, SAC and Ramsar will result in a marked increase in use of the sites and exacerbate recreational impacts. Residential development has the potential to indirectly affect the qualifying features of the New Forest SPA/Ramsar, such as breeding populations of nightjar, woodlark and Dartford warbler through disturbance from increased human and/or dog activity. Residential development also has the potential to directly and indirectly affect the qualifying features of the New Forest SAC (e.g. bog woodland, European dry heaths, Molinia meadows on calcareous, peaty or clayey-silt-laden soils, etc.), through contamination (e.g. dog fouling, grey water from campervans, littering, runoff from roads, etc.) and trampling, which can alter plant species composition or result in direct habitat loss.

Furthermore, Natural England advises that there is a likely significant effect on the European designated sites (e.g. Solent and Southampton Water SPA, Solent Maritime SAC, etc.) due to the increase in waste water from any new housing. There is existing evidence of high levels of nitrogen and phosphorus in the water environment with evidence of eutrophication at some designated sites. An Integrated Water Management Study for South Hampshire was commissioned by the Partnership for Urban South Hampshire (PUSH) Authorities to examine the delivery of development growth in relation to legislative and government policy requirements for designated sites and wider biodiversity. The PUSH water quality work has identified that there is uncertainty as to whether new local plan housing development can be accommodated without having a detrimental impact on the designated sites within the Solent. Therefore, in the absence of mitigation, there is potential for all new development within the Solent catchment to impact on the nutrient levels of the designated sites.

In summary, in the absence of mitigation, a likely significant effect on the Solent and Southampton Water SPA and Ramsar, Solent and Dorset Coast SPA, Solent Maritime SAC and the New Forest SPA, SAC and Ramsar is likely.

Due to distance and presence of buffers in the form of roads, residential and commercial units, active railway lines and semi-natural habitats, direct or indirect impacts on other statutory designated sites located within a 2km radius of the site has been ruled out.

The nearest non-statutory designated site is Peartree Green SINC and LNR, located approximately 45m south of the site. This designated site is however separated from the application site by a built-up residential area and therefore there will be no direct or indirect impacts during the construction phase. The proposals are small scale, for 8no. new dwellings and therefore due to the size of the SINC and LNR, presence of a voluntary Friends Group undertaking management works and its capacity as a green space for visitors, no indirect impact during the operational phase as a result of a slight increase in recreational pressure is anticipated. Braeside Road Woodland SINC is located 90m north-east of the site. Whilst there is a narrow strip of scrub connecting this designation to the site, the majority of it is separated by a densely populated residential area. Due to distance and presence of buffers in the form of buildings and roads, no impacts during the construction phase is considered likely. Furthermore, there is no access to this woodland as it is surrounded by dwellings and their gardens on three sides and an active railway line in the west. Therefore, no impacts during the operational phase is likely.

Overall, no adverse impacts are considered likely on non-statutory designated sites located within a 1km radius of the site.

6.3 HABITATS

The proposals will result in the loss of the areas of bracken, scrub, bare ground, areas of tall ruderal vegetation and poor semi-improved grassland. The majority of the woodland on site will be retained, protected and enhanced as a result of the proposals. However, a small number of trees are required to be removed for safety works, to address risks to adjoining properties from potential stem collapses; these include mainly goat willows, with a single oak and a sycamore. A semi-mature sycamore, a mature wild cherry and a young sycamore will also be removed in the western part of the site. As the proposals will result in an overall net loss in biodiversity, if unmitigated, a number of recommendations are made in Section 7 to ensure an overall net gain in biodiversity of the site (please refer to the Biodiversity Enhancement Strategy).

6.4 PROTECTED SPECIES

Nesting Birds

If the current scrub management on site is ceased and further clearance of trees on site is required and if the works are to be undertaken within the nesting bird season, then there is potential for impact on nesting birds. As such, a recommendation is made in Section 7.

Badgers and Small Mammals

Whilst no evidence of badgers was found during the site walkover, due to their mobile nature, impacts may be likely if the site is used for foraging and commuting. Therefore, measures to ensure no adverse impacts on badgers and small mammals are recommended in Section 7.

Reptiles

Due to the presence of suitable habitat on site, if the reptile survey confirms the presence of this group of species, then loss of habitat, along with accidental killing/injury of individuals is likely. Therefore, a recommendation is made in Section 7.

Foraging/commuting bats

The woodland on site will be retained and enhanced through management, inclusion of a landscaped buffer and supplementary planting. A sensitive lighting scheme for the site will also be developed to ensure no indirect impacts on foraging and commuting bats during the operational phase. Therefore, recommendations are made in Section 7.

7. RECOMMENDATIONS

7.1 DESIGNATED SITES

Since July 2014, all applications for new residential planning permissions across Southampton city need to provide a means of mitigating the development's impact upon the ecological importance of the Special Protection Areas within and around the Solent. A developer contribution will therefore be required for every net additional dwelling within the 5.6km zone of influence. As the proposed development is located within 5.6km of the Solent and Southampton Water SPA and 13.8km of the New Forest SPA, Ramsar and SAC, the required financial contribution, will be secured via a S106 legal agreement. These contributions will ensure no adverse effect on the integrity of these designated sites.

In response to the impact of nitrate pollutants, and to help ensure that developments achieve nutrient neutrality, where the outcome of the nitrogen budget calculation indicates a surplus load, applicants will confirm which mitigation scheme they will use, to enable the Council to consider whether this meets the requirements for mitigation as set out in its Position Statement. By providing a suitable mitigation package submitted to the council, it can then be concluded that any positive nitrogen output into the Solent designated sites has been mitigated to ensure no adverse effect on the integrity of these designations.

7.2 HABITATS

In order to ensure no net loss in biodiversity, the loss of habitats on site will be compensated by the creation of a number of high-quality habitats on site, as outlined below. This is demonstrated in the submitted Biodiversity Enhancement Strategy.

- Creation of ornamental hedgerows along the boundaries of the front gardens.
- A total of 23no. native trees of local provenance (extra heavy standard) will be planted on site. The exact location and species of trees to be used has been provided in the Soft Landscaping Strategy for the site, including field maple *Acer campestre*, black birch *Betula nigra*, wild cherry *Prunus avium*, whitebeam *Sorbus aria* and rowan *Sorbus aucuparia*.
- The woodland on site will be enhanced through management in the form of removal of waste and invasive species. Supplementary planting with native trees and scrub will also be undertaken, along with supplementary seeding of the woodland floor with a suitable shade tolerant seed mix.
- Woodland edge planting (native scrub planting) will be undertaken on both sides of the woodland (i.e. along the residential garden side and to the area between the woodland and the proposed parking spaces). Species to be planted include field

maple, holly, dogwood *Cornus sanguinea*, guelder rose *Viburnum opulus*, hawthorn, hazel, blackthorn, elder and dog rose *Rosa canina*.

By implementing the above measures, not only the loss of habitats on site will be compensated, but an overall net gain will be achieved. Please refer to the Biodiversity Enhancement strategy for the site.

Furthermore, the gardens are recommended to remain permeable to small mammals. This could be achieved through creating 'Hedgehog Highways' within the garden fence panels (i.e. a 13cm x 13cm hole to be cut at the bottom of the fence if there are no other gaps).



Figure 33. Example of permeable garden fencing (Source: Hedgehog Street Website)

A minimum of 2 integrated bird features will be incorporated into the design of the new dwellings. These could include a mixture of Schwegler 1SP Sparrow terraces and swift bricks.

A minimum of 2 bat features such as bat bricks (e.g. Ibstock bat brick) will also be incorporated into the external walls of the new dwellings.



Figure 34. Example of bat bricks in external walls

Due to the presence of a woodland on site, it is recommended that a Construction Environmental Management Plan (CEMP) is produced and implemented to ensure no indirect impacts on this retained habitat.

Any trees on site, or overhanging the site, which are to be retained will be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations".

7.3 PROTECTED SPECIES

Nesting Birds

Whilst the woodland on site will be retained and the areas of scrub are under regular management, in the event that further vegetation clearance is required, it is recommended that the works to the vegetation are undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and end of August. If this is not possible, then any vegetation to be affected should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting, any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

Badgers/Small Mammals

Any deep excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape.

Reptiles

Due to the presence of suitable habitat for reptiles, it is recommended that presence/absence surveys are undertaken. Reptile surveys can be undertaken in suitable weather conditions between March and September. At least seven visits in suitable weather conditions using artificial refuges will be required.

Foraging and Commuting bats

Habitat of value to foraging and commuting bats in the form of woodland will be retained, enhanced and protected. Furthermore, the proposed soft landscaping scheme will increase the value of the site for bats.

A sensitive lighting strategy is also recommended for the proposals to ensure no light spill of >1lux along the woodland edge. This can be secured via a Planning Condition. It is also recommended that any lights used for illuminating driveways are downward bollard lights on a motion sensor. These are designed to direct the light down on to a path or driveway with no light spill to the surrounding habitats.

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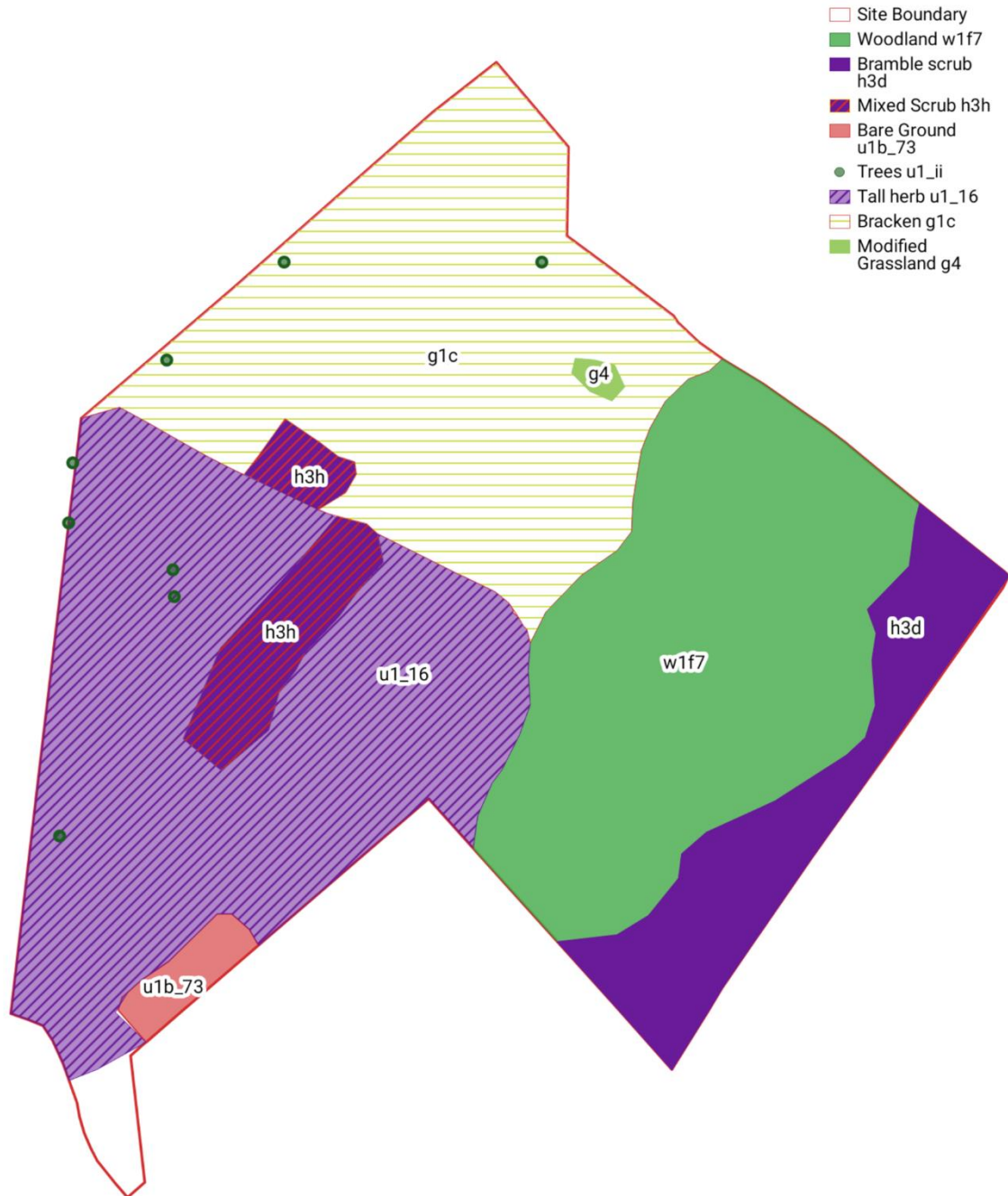
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APPENDIX 1

UKHAB Map

UKHab Habitat Map - April 2023

Site: Bryanston
Road, Southampton
Client: ABRI



- Site Boundary
- Woodland w1f7
- Bramble scrub h3d
- Mixed Scrub h3h
- Bare Ground u1b_73
- Trees u1_ii
- Tall herb u1_16
- Bracken g1c
- Modified Grassland g4

