Proposed 68 Bed Care Home (C2 Use)

including 3 No. Age Restricted Cottages (C3 Use)

Providence Hill, Bursledon, Southampton, Hampshire

Construction Environmental Management Plan (CEMP)



November 2025

Ref: 256 – 02C

COLTEN CARE

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COLTEN CARE

1 Introduction

Address: Land adjacent to 4 Brookfield, Providence Hill, Bursledon SOUTHAMPTON SO31 8AU

Client Team:

- Client — Colten Care
- Employer's Agent — Colten Developments
- Principal Designer — WLA Williams Lester (Planning)
  Colten Developments (Construction)

Site Location: The site is located on a triangular parcel of land to the north of Providence Hill (A27) and south of Goslings Turnings within Bursledon. The land parcel is triangular in shape with the western boundary ending at a point from the north and southern boundaries. To the north and away from the site the ground rises to highlight the Bursledon windmill. This is a strong character to the site and its view is very much part of the planning application/approval process.

Refer to Appendix A for the existing and proposed site plans.

The site use is currently open space which is currently overgrown with inaccessible areas. Previous use includes its use as a small holding.

The site is not level, with a fall approximatley 13m west to east and falls 10m south to north boundaries.

Electrical substation is located northwest of site, outside of the site boundary.

Northern boundary has an existing flowing (west to east) brook, including a series of mature trees along its length. A large heritage oak tree with larger root protection area is located halfway along northern boundary.

Southern boundary is lined with a landscaped verge owned by Local Authority Highways.

Refer to current tree survey and report for status on existing trees.

There are two existing accesses along the southern boundary, one being used as a vehicle access and the other has a five-bar gate and access.

The site is adjoined by private dwellings to the southwest corner and a mature tree line to the northeast corner.



Overall Land Parcel Plan



Aerial Land Parcel Plan

COLTEN CARE

2 Programme

The programme of works for the development is proposed as follows:

	Assumed Commencement Date	Assumed Completion Date
Enabling Phase	Autumn 2025	January 2026
Phase One	January 2026	June 2027
Phase Two	June 2027	May 2028

3 Environmental and Ecology

The Ecological Impact Assessment and the BNG Habitat Management & Monitoring Plan (with additional updates in June 2025) compiled by EcoSupport form an integral part of the CEMP and must be read in conjunction with one another.

The two reports highlight important information regarding the implementation of ecology barriers within the site during the construction phases and the employment of a 10m ecology strip along the northern edge that runs parallel with the brook during both the construction phases and post construction.

Appendix B includes both reports and any plans in this regard provided by EcoSupport for this scheme which must be adhered to throughout the works.

The reports also offer further guidelines in relation to the locations and mitigations for temporary lighting and temporary surface water drainage that is picked up in more detail in the individual sections of this document.

4 Site Organisation

The location of the site compounds for all contractors working on the site during all construction phases are highlighted on the site phasing plans within Appendix C. The site will continue to be kept secure at all times and will be maintained in a clean and orderly fashion.

A banksman supplied by suppliers or subcontractors will be on site to control access and egress from the construction site. The road construction appears to be suitable for this purpose but any damage to kerbing will be repaired as necessary. A photographic survey will be carried out before work commences and any defects noted.

Loading and unloading of lorries will be carried out within the curtilage of the site.

Transporting material around the site will generally be carried out by forklift truck. When movement of large material is required, a tower crane will be used. This would be located within the site boundaries, ensuring clearance of all trees and vegetation.

The provision of a power jet-washer will be available for the manual cleaning of wheels prior to lorries leaving the site boundary, as and when required.

24-hour monitored security CCTV will be placed on site, monitoring all boundaries and site entrance. Clear signage will be visible to clearly advertise the site has monitored CCTV coverage.

Statutory signage and company signage will be displayed on the site gates or Heras fencing to the front entrance of the site.

5 Working Hours

To minimise disturbance to local residents, all construction activities will take place between the hours of:

Monday to Friday: **07:30 to 18:00** *(Site will be unlocked at 07:30 to allow for quiet paperwork and preparation)*
Saturday: **08:00 to 13:00** *(Site will be unlocked at 07:30 to allow for quiet paperwork and preparation)*
Sundays, Public/bank holidays: **NO working**

There will be no continuous activities outside of these hours, except in an emergency, which will be agreed in advance with the Local Planning Authority, wherever possible.

6 Site Parking – Operatives and Visitors

The site phasing plans within Appendix C show the proposed location and extent of parking that will be maintained as a minimum.

There will not, at any time, be parking on areas which intrude into the tree protection or ecology zones or any unsafe location.

7 Protection of Pedestrian Routes

Hoarding and/or Heras fencing will be erected along the length of the site that adjoins Providence Hill to protect pedestrians on the main footpaths along Providence Hill.

Within the site a segregated 1m wide pedestrian route will be maintained for workers/visitors' safety. This has been highlighted on the site phasing plans within Appendix C. Pedestrian crossing will also be implemented with crossing hoops at designated points.





Examples of pedestrian barriers and pedestrian crossing hoops

8 Loading/unloading of Plant and Materials, incl. Storage

The location of materials storage is shown on the site phasing plans for the relevant phases.

Due to the extent of traffic using Providence Hill, all deliveries & plant movements will be restricted to minimise large deliveries between the hours 8.30am to 9.30am & 3.30pm to 4.30pm (*).

All large deliveries will be supervised by a trained banksman for access and egress from site. The road construction appears to be suitable for this purpose but any damage to kerbing will be repaired as necessary. A photographic survey will be carried out before work commences and any defects noted.

Loading and unloading of lorries will be carried out within the curtilage of the site.

Transporting material around the site will generally be carried out by forklift truck. When movement of large material is required, a tower crane will be used. This would be located within the site boundaries, ensuring clearance of all trees and vegetation.

The provision of a power jet-washer will be available for the manual cleaning of wheels prior to lorries leaving the site boundary, as and when required.

(*) When unavoidable large deliveries are expected to site within these time scales, Colten will endeavour to inform the adjoining properties.

9 Noise and Vibrations

On site activities are expected to represent typical construction measures and operations on this site. To mitigate the perception of noise and disturbance from regular activities, site fencing is proposed.

The hours of operation proposed are also not unusual and prevent unsocial working.

All contractors will be required to control and limit noise and vibration levels so that current legislative standards are not exceeded.

All materials will be handled, stored and used in a manner that minimises noise.

Plant and equipment utilised during construction will conform to current legislation on noise and vibration levels and will be examined on a regular basis for defects prior to the start of works. Under no circumstances will defective plant be used.

Neighbours will be provided with the contact details of the Site Manager so that they can quickly raise any concerns for Colten Developments attention. All complaints received about noise or vibration will be investigated immediately and where necessary action taken to minimise this.

10 Protective Fencing

Boundaries to the site will be protected by the erection of Heras fencing.

Tree protection is to be erected in accordance with the approved tree report and the agreed Tree Protection Plan PR124477-03B which can be found within Appendix D. All tree protection fencing will be retained until the building works are completed as per the phasing plans. No site personnel will be permitted to access behind the tree protection area at any time.

Additional protective fencing, other than tree protection fencing will be erected around all local construction areas prior to site work commencing and subsequently will be maintained in good condition.

Fencing will be removed and/or relocated to a new position only when safe to do so.



Example of tree protection fencing with ecology barrier

11 Temporary Lighting

Best practicable means will be used to control all temporary lighting on site during the works.

All temporary lighting will be in accordance with the guidelines set out within the Ecological Reports provided by EcoSupport within Appendix B and also in accordance with the requirements under the BREEAM: Hea 01 and Ene 03 criteria. Suggested location can also be found within the phase plans within Appendix C. No lighting will be located within the Ecology strip/area highlighted on the phasing plans.

Mitigation measures within the remainder of the site such as works being undertaken outside of dusk to dawn and lighting being limited to daylight hours only to ensure there is no negative impact towards commuting and/or foraging bats will be adhered to where possible.

A lighting plan in relation to Ecology has been designed by UKLD in line with the Ecology requirements set out by EcoSupport highlighting the main area of mitigation such as utilising only LED luminaires with a warm white light with levels not exceeding 1 Lux. This can be found within Appendix B.

The Ecology strip along the northern boundary and the Ecology area to the western point of the site have been designated as a Dark Corridor. This will be implemented both during construction and post construction. Within these areas mitigation measures have been set out limiting light levels in these areas to be maintained at or below 0.2 Lux horizontally, and 0.4 Lux vertically.

To mitigate the perception of light disturbance towards the neighbouring properties, during both enabling and construction works, where possible, all temporary lighting will be carefully installed so that it faces away from residential areas with, it required, baffles, hoods or louvres introduced to reduce light spill and direct light only where required.

All temporary lighting will also adhere to the Ecology measures set out within their reports. For security during the construction phases, a level of nighttime lighting will be required. This will be controlled via dusk to dawn timers, timelock/photocell detectors, or localised motion sensors with a limited (1-2 minute) timer.

Should lighting be required at higher levels, such as on scaffolding during the construction phases, it will adhere to the ecology guidelines.



Example of dark sky lighting

Neighbours will be provided with the contact details of the Site Manager so that they can quickly raise any concerns for Colten Developments attention. All complaints received about lighting will be investigated immediately and where necessary action taken to minimise this.

12 Access Phasing, Traffic Management and Public Access

The site access for the enabling phase will be via the existing access from Providence Hill to the southern corner of the site. Once enabling works are complete, the construction works will then utilise the new access to the site, located centrally along the southern boundary as per the approved plans.

A banksman supplied by suppliers or subcontractors will be on site to control access and egress from the construction site.

All suppliers will be notified on their orders regarding any specific delivery arrangements.

Neighbours will be provided with the contact details of the Site Manager so that they can quickly raise any concerns for Colten Developments attention.

13 Dust, Dirt and Odour Control

Best practicable means will be used to control dust, dirt and airborne pollutants at the site including the occurrence of smoke and fume emissions.

All plant and equipment will be checked prior to use to ensure that it is in good working order and repair, and conforms to manufactures or statutory emissions standards. Any defective items of plant shall not be used.

All cutting operations will be carried out using water suppression at source.

During very dry periods where dust spray is evident then the ground will be water mist sprayed to keep dust down to a minimum.

No materials will be burnt on site.

A wheel washing facility (jet wash) will also be provided on site to reduce the impact of dirt/mud transfer onto the highway during demolition and muckaway. A suggested location of the wheel washing facility will be highlighted on the phasing plans within Appendix C.

14 Temporary Surface Water Drainage



Example of temporary filtration system

During enabling and construction works, prior to the approved surface water drainage system being installed on site, it is proposed to incorporate temporary surface water drainage measures from the temporary hardstandings created on site.

This will be done to minimise the impact of any debris/pollutants that could enter the brook along the northern boundary from the construction site. By incorporating temporary filtration systems such as Geotextile membranes and filter strips at key areas this will help to remove pollutants and trap sediment prior to water discharging into the brook at the lower level of the site.

There will be no parking, refuelling or storage of materials within 10m of the watercourse.

Both the Ecology Reports set out in Appendix B together with the phasing plans set out in Appendix C should be adhered to which indicate the suggested mitigation and their locations for the surface water discharge during construction.

15 Waste, Recycling and Disposal

Where possible, waste materials will, in the following order of preference, be reduced, re-used, recycled and disposed of.

Attempts will be made to avoid the over-specification of materials, thereby reducing wastage.

Waste materials will be segregated on site. Skips will be used so that waste can be segregated for recycling and to prevent cross contamination. Used containers (especially if they contain hazardous materials/liquids) may need special handling and the manufacturer's data sheet/instructions will be followed. Skips will be regularly checked and renewed before becoming overfull.

No waste will be burnt on site.

Where possible, waste materials will be disposed of at Waste Transfer Stations closest to the development site to minimise transport impacts.

16 Hedgerow and Tree Protection

Any remedial or protective work to trees on site will be carried out by suitably trained and qualified personnel using recognised methods in accordance with approved tree method statements. The approved Tree Protection Plan PR124477-03B will be adhered to with the agreed location of the protective fencing.

Before any equipment, machinery or materials are brought onto site for the purpose of the development, trees will be enclosed at the outer edge of the overhang of their branches with protective fencing.

17 Dealing with Emergencies

Site specific construction plans will define the procedures for dealing with emergency events.

Health and safety controls will be established in accordance with relevant health and safety procedures.

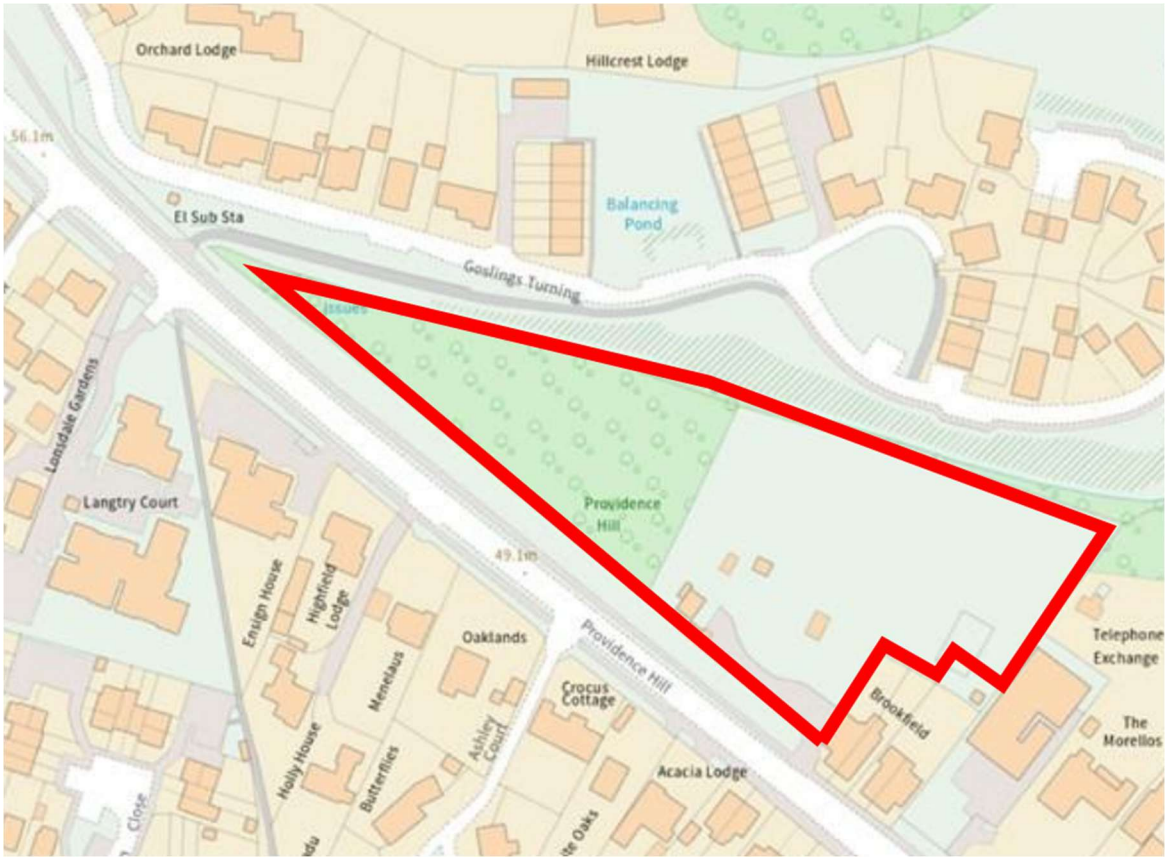
Personal protective equipment (PPE) will be worn by all construction personnel including, where necessary, hard hats, high visibility clothing and protective footwear.

18 Communication with Local Authority and Local Residents

Following commencement, the LPA, Town Council and local residents will be kept updated. Neighbours will be provided with the contact details of the Site Manager so that they can quickly raise any concerns for Colten Developments attention.

Details including a contact name, telephone number and address will also be made available on the pedestrian and site entrance gates, for further information or complaint purposes.

APPENDIX A: Site Plans



Existing Site Plan



Proposed Site Plan

APPENDIX B: Environment & Ecology - Reports & Plans



Biodiversity Enhancement Plan

Land Adjoing 4 Brookfield,
Providence Hill

Ecosupport Ltd
K4 Keppel,
Daedalus Park,
Lee-on-the-Solent
PO13 9FX

info@ecosupport.co.uk

VAT: 228 4314 18

ecosupport

Report	Biodiversity Enhancement Plan (BEP)
Site Name	Land Adjoining 4 Brookfields, Providence Hill
Author(s)	Anabelle Reed BSc (Hons)
Checked By	Darla Brown BSc (Hons) ACIEEM & Darrelle Moffat BES (Hons) PGCert ACIEEM
Client	Colten Care Ltd
Date of Issue	October 2025
Status	***Final***

EXECUTIVE SUMMARY

Ecosupport Ltd were commissioned by Colten Care Ltd to produce a Biodiversity Enhancement Plan (BEP) for the development of the 'Land Adjoining 4 Brookfield' at Providence Hill in Bursledon. This was requested to satisfy the discharge of condition 17 of the planning approval decision F/24/97312.

Various previous survey work has been undertaken on site. The initial PEA was undertaken in 2016 by Aven Ecology Ltd. with an updated walkover in 2021. Based on the initial PEA, subsequent Phase II survey works were undertaken in 2016 and 2017 in support of planning application O/17/80899. Hazel Dormouse surveys were also undertaken in 2018 in support of O/17/81166. An updated walkover was then conducted by ACD Environmental in 2022 in support of a further application F/24/97312 with subsequent Phase II work carried out throughout 2022. The following previous survey work has been included in this assessment:

- Preliminary Roost Assessment (August 2016, June 2022)
- Bat activity surveys (August-September 2016, May 2017, June 2022)
- Bat emergence / re-entry surveys (June 2022)
- Reptile presence/absence surveys (August – September 2016)
- HSI and eDNA of Windmill Pond (August 2016, June 2022)
- Hazel Dormouse survey (April-July 2018)

Throughout 2024, Ecosupport Ltd undertook a series of updated walkover surveys and ecological surveys of which, in combination with the aforementioned reports, forms the basis of this report. This report addresses the necessary mitigation and compensation for protected species present on site and also includes a series of management prescriptions to enhance the site for biodiversity in perpetuity as well as the targeted biodiversity enhancements to be included within the site.

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1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Colten Care Ltd to produce a Biodiversity Enhancement Plan (BEP) for the development of the 'Land adjoining 4 Brookfields, Providence Hill, Bursledon' (hereafter referred to as 'the site'. This was requested to satisfy the discharge of condition 17 of the planning approval decision F/24/97312. As part of the planning permission, condition 17 states the following:

"17) 'No development above ground level shall commence until a Biodiversity Enhancement Strategy has been submitted to and approved in writing by the Local Planning Authority. The content of the Biodiversity Enhancement Strategy shall include the following:

a) Purpose and conservation objectives for the proposed enhancement measures;
b) Detailed designs to achieve stated objectives;
c) Locations of proposed enhancement measures by appropriate maps and plans;
d) Persons responsible for implementing the enhancement measures;
e) Details of aftercare and long-term maintenance (where relevant).

The works shall be implemented in accordance with the approved details and shall be retained in that manner thereafter.

Reason: To ensure suitable biodiversity enhancements and avoid lighting impacts on bats, in accordance with Policies DM1 and DM11 of the Eastleigh Borough Local Plan (2016-2036)."

This document has therefore been produced to enable the above condition to be discharged. This document is combined with the Ecological Assessment, which includes updated survey work.

1.2 Aim

The aim of this report is to bring together all relevant sections of the ecological reports, in cooperation with updated surveys, associated with the above application to devise a site-wide BEP. This will ensure all features of ecological value and all legally protected species are protected, their presence on site retained in perpetuity, and targeted and proportionate recommendations for enhancements made.

1.3 Site Description

The site comprises a parcel of land and associated outbuildings to the north of Providence Hill, Bursledon, SO31 8AU (centred on OS grid reference SU 48308 10626) (**Fig 1**). The site is bound by the A27 to the south with residential housing areas lying to the north, east and west. The immediate surrounding environ can be considered largely urban comprising mostly of residential dwellings and their gardens however some small pockets of woodland and grassland are present to the north of the site.

Figure 1. Redline location plan of the site (Google Satellite, 2025).



1.4 Development Proposals

The proposals entail full planning consent for the erection of a 68-bed care home (Use Class C2) and 3 close-care cottages (Use Class C3 Age Restricted) with associated access, internal access roads, parking, landscaping and infrastructure (**Fig 2**).

Figure 2. View of the proposed plan drawing No. 6185-WLA-ZZ-XX-DR-A-0010 (provided by WLA, 2025).



2.0 RELEVANT LEGISLATION & POLICY

2.1 Legislation

2.1.1 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats and Species Regulations 2017 transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill, or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

The Conservation of Habitats and Species Regulations 2019 (EU Exit) makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 The Wildlife and Countryside Act (1981) (as amended)

This is the primary piece of legislation by which biodiversity if protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 art II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrots Feather (*Myriophyllum aquaticum*).

2.1.3 The Countryside and Rights of Way Act (2000)

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places

a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 Natural Environment and Rural Communities Act (2006)

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework.*

2.1.5 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a set and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

2.1.6 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may

affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

2.2 Policy

2.2.1 National

The National Planning Policy Framework (NPPF) (2024) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and minimising impacts on and providing net gains for biodiversity including by incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and land should be allocated with the least environmental or amenity value and take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure for the enhancement of natural capital at a catchment or landscape scale.

To protect and enhance biodiversity, plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

The NPPF states 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 SSSI, 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 SSSIs;

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;

d) Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Potential SPAs and possible SACs, listed or proposed Ramsar sites and sites required as compensatory measures for the previous should be given the same protection as habitats sites.

2.2.2 Local Planning Policy – Eastleigh Borough Council

The site falls within the jurisdiction of Eastleigh Borough Council, and therefore the Eastleigh Borough Council Local Plan 2016-2036 (adopted April 2022) is relevant for this site. Relevant strategic policies for the proposed application site have been outlined below:

'Policy DM11 – Nature Conservation

1. *The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:*
    a. *Protect, conserve and enhance all:*
        i. *international, national and local nature conservation designations; and*
        ii. *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; and facilitate their adaptation to climate change wherever possible;*
    b. *Assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);*
    c. *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; and*
    d. *Contribute to major elements of the PfSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9). International Designations*
2. *Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant*

effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.

3. *The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:*
    a. *implementing:*
        i. *the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and*
        ii. *the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;*
    b. *preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;*
    c. *protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and*
    d. *seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.*

National and Local Designations

4. *Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:*
    a. *there are no alternative solutions;*
    b. *the adverse effects are unavoidable;*
    c. *measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
    d. *there is an overall biodiversity net gain; and*
    e. *if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.*

Priority habitats, protected and priority species and the local ecological network

5. *Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:*

a. *there are no alternative solutions;*
b. *the adverse effects are unavoidable;*
c. *measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
d. *there is an overall biodiversity net gain; and*
e. *if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.*

Irreplaceable habitats

6. *Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.*

Buffers

7. *Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.*

Surveys

8. *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.'*

Policy S9 – Green Infrastructure

"Through new development and other initiatives the Borough Council will seek to achieve the provision, retention and/or enhancement of the following forms of multifunctional green infrastructure, including provision of:

a) *landscape scale strategic links across the Borough boundary, to and between the Borough's settlements, the countryside, the coast, and the major areas of open space including the country parks (see strategic policy S12);*
b) *interlinked publicly accessible open space through new and existing development including for example formal sports facilities and informal amenity spaces and cemeteries (see policies DM32-DM34, Chapter 5 and detailed proposals in Chapter 6);*

c) *green infrastructure incorporated into all new development with multifunctional spaces connected by primary, secondary and tertiary green links;*
d) *interconnected urban green infrastructure within the fine grain of existing and new development including green, cycle ways, paths and linkages between community facilities and open spaces to link community facilities;*
e) *green stepping stones such as street trees, green roofs and walls, pocket parks and urban copses (see policy DM1, Chapter 5);*
f) *connected habitats linking the network of designated sites and existing priority habitats, taking account of the Hampshire ecological network map (see policy DM11, Chapter 5);*
g) *incorporation of historic buildings and landscapes, including historic parks and gardens within the wider Green Infrastructure to protect their setting (see policy DM12, Chapter 5); and*
h) *opportunities for local food growing including allotments, community orchards and farms (see policies DM32 to DM34, Chapter 5 and detailed proposals in Chapter 6)'*

'Policy S5 - New development in the countryside

a. *avoid adverse impacts on the rural, woodland, riparian or coastal character, the intrinsic character of the landscape including the avoidance of adverse landscape impacts on areas adjoining national parks and their settings, the significance of heritage assets and on the biodiversity of the area*
b. *secure long-term beneficial management practices that will enhance the landscape and biodiversity of the countryside and coast;'*

'Policy DM1 – General Criteria for New Development

All new development should (as relevant):

a. *not have an unacceptable impact on, and where possible should enhance:*
    - ***i.*** *residential amenities of both new and existing residents; the character and appearance of urban areas, the countryside and the coast;*
    - ***ii.*** *biodiversity (avoiding significant adverse impacts); and*
    - ***iii.*** *the significance of heritage assets;*

b. *not involve the loss of or damage to trees, woodlands, hedgerows, ponds, priority habitats or other landscape features of value to the character of the area, for appearance or biodiversity unless they can be replaced with features of equivalent or enhanced value, (recognising that some species and habitats may be irreplaceable)…'*

3.0 BASELINE DATA

Various previous survey work has been undertaken on site. The initial PEA was undertaken in 2016 by Aven Ecology Ltd. with an updated walkover in 2021. Based on the initial PEA, subsequent Phase II survey works were undertaken in 2016 and 2017 in support of planning application O/17/80899. Hazel Dormouse surveys were also undertaken in 2018 in support of O/17/81166. An updated walkover was then conducted by ACD Environmental in 2022 in support of a further application F/24/97312 with subsequent Phase II work carried out throughout 2022. The following previous survey work has been included in this assessment:

- Preliminary Roost Assessment (August 2016, June 2022)
- Bat activity surveys (August-September 2016, May 2017, June 2022)
- Bat emergence / re-entry surveys (June 2022)
- Reptile presence/absence surveys (August – September 2016)
- HSI and eDNA of Windmill Pond (August 2016, June 2022)
- Hazel Dormouse survey (April-July 2018)

Throughout 2024, Ecosupport Ltd undertook a series of updated walkover surveys and ecological surveys of which, in combination with the aforementioned reports, forms the basis of this report, with the methodology detailed below. The methodology for updated survey work has been appended to this report.

3.1 Designated Sites

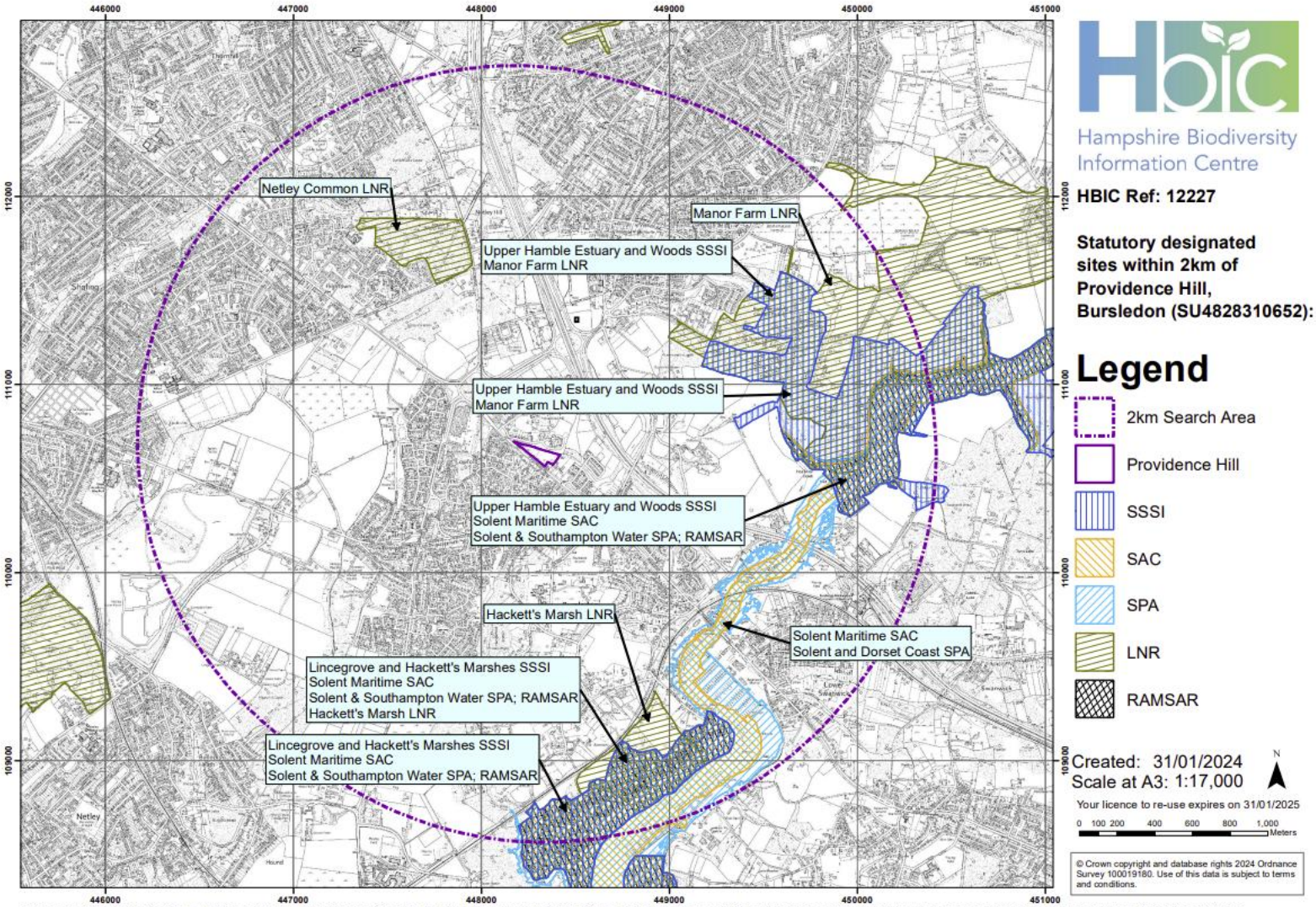
3.1.1 Statutory Designated Sites

The statutory designated sites identified within 2km of the site by HBIC are shown in **Figure 3**, with a summary of these sites presented in **Table 1**. The site also lies within the nutrient impact area for the Solent Marine European Designated Sites and lies approximately 8.1km from the New Forest SPA.

Table 1. Statutory designated sites located within 2km of the site as provided by HBIC and indicated in **Fig 3**.

Name	**Distance to Site**
Netley Common LNR	0.94 km
Manor Farm LNR	0.85 km
Upper Hamble Estuary and Woods SSSI	0.90 km
Solent and Southampton Water SPA / RAMSAR	1.17 km
Solent Maritime SAC	1.15 km
Solent and Dorset Coast SAC	1.09 km
Hackett's Marsh LNR	1.34 km
Lincegrove and Hackett's Marshes SSSI	1.53 km

Figure 3. Statutory designated sites located within 2km of the site as provided by HBIC.



Please note: The boundaries for statutory sites have been provided as digital data from Natural England (NE); this digital data is indicative not definitive. Paper maps produced by NE at the time the sites were designated show the official site boundaries.

3.1.2 Non-Statutory Designated Sites

The non-statutory designated sites identified within 2km of the site by HBIC are shown in **Fig 4**, with a summary of these sites presented in **Table 2**. HBIC also returned sites within the Solent Waders and Brent Goose Strategy, which are also shown in **Fig 4**, with a summary of these sites presented in **Table 3**.

Table 2. Summary of designated sites within 2km of the site as provided by HBIC and shown in **Fig 4**.

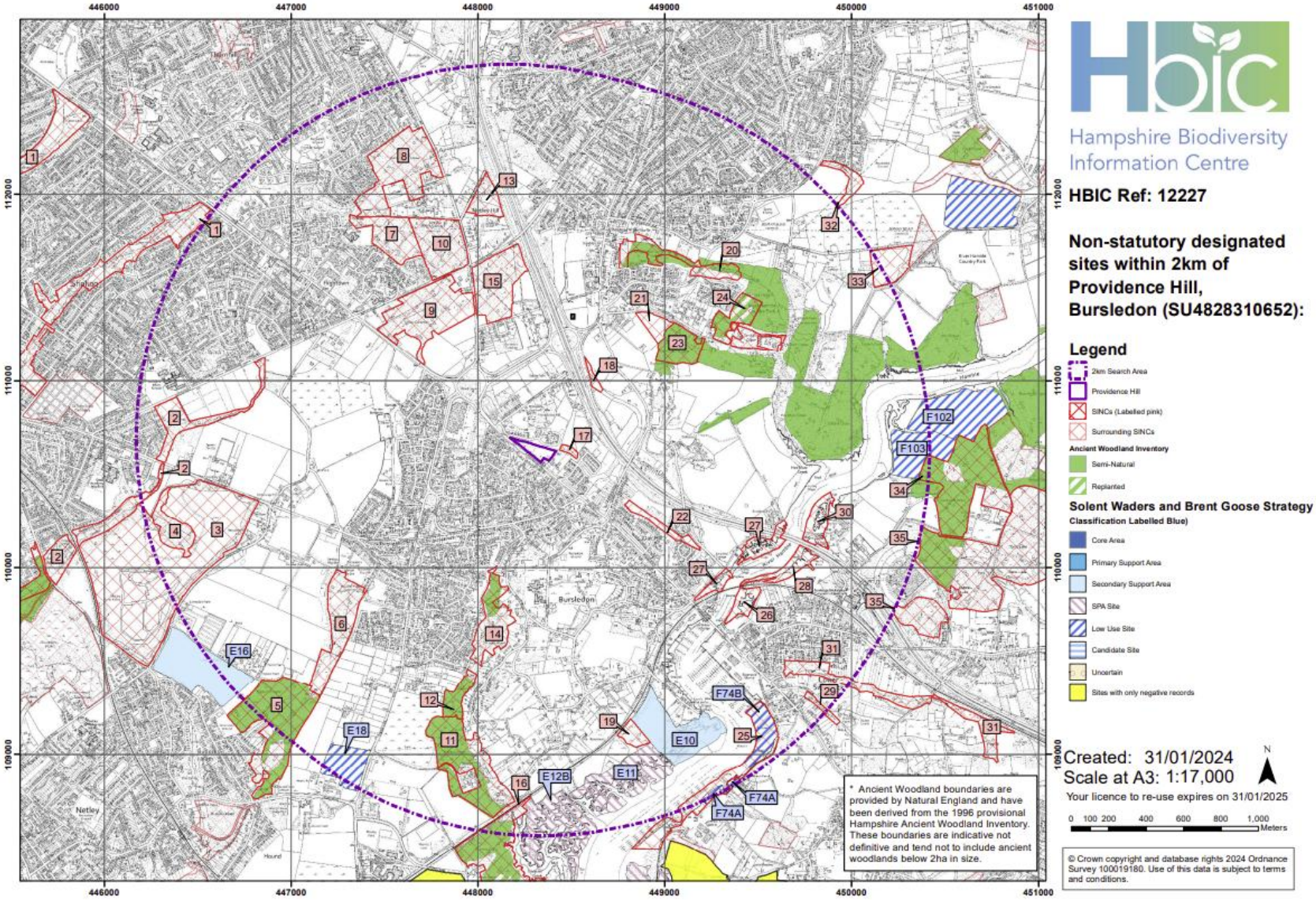
Map Label	SINC Name	SINC Criteria Met	Distance to Site
1	Shoreburs Greenway	1B/1Cii/2B/5Biii/6A/7A	1.96 km
2	Weston Greenway	1A/1B/1Cii	1.34 km
3	Netley Farm Closed Landfill Site	6A	1.45 km
4	Burrows Copse (Remnant)	1A/1B	1.78 km
5	Priors Hill Copse/Hound Grove	1A	1.72 km
6	Priors Hill Brickworks	1B/2D*/3Bi	1.15 km
7	Netley Common, Southampton	2B/3A/3Bii/5B	1.19 km
8	Dumbleton's Copse	3Bii	1.45 km
9	Windhover (Netley Common South)	3A/3Bi	0.64 km
10	Netley Common, Hound	2B/3A/3Bii/5B	0.95 km
11	Mallards Moor	1A/1Cii	1.45 km
12	Piland's Wood (Lower)	1A	1.16 km
13	Netley Hill Heath	3A/3Bi	1.20 km
14	Piland's Wood (Upper)	1A/1Cii	0.59 km
15	Peewit Hill	3A/3Bi/6A	0.64 km
16	Badnum Copse	1A/1Cii/4A	1.79 km
17	Windmill Fields Wood	1B	25 m
18	Oakleigh Meadow	2B	0.39 km
19	Bursledon Meadow	2A	1.47 km
20	Piland's Copse	1A	1.06 km
21	Durncomb's Copse Meadow	2B	0.85 km
22	Land North of Bridge Road	2B	0.46 km
23	Durncomb's Copse	1B	0.72 km
24	Sandpit Copse	1A/1B	1.07 km
25	River Hamble Mudflats & Saltmarsh - 1	4A	1.71 km

26	River Hamble Mudflats & Saltmarsh - 2	4A	1.26 km
27	Brixedone Saltmarsh & Mudflat	4A/6A	1.10 km
28	River Hamble Mudflats & Saltmarsh - 3	4A	1.24 km
29	Andark Marsh	2D*	1.86 km
30	River Hamble Mudflats & Saltmarsh - 4	4A/6A	1.39 km
31	Lower Swanwick Woodlands	1A/1Cii/5B	1.67 km
32	Tanhouse Meadow	5B	1.99 km
33	Kings Copse Meadow & Pond	2B/5B	1.96 km
34	Swanwick Wood	1A	1.96 km
35	Swanwick Nature Reserve	1A/1B/2A/5A/6A/6C	2.00 km

Table 3. Solent Waders and Brent Goose Strategy sites located within 2km as provided by HBIC and indicated in F**ig 4**.

Map Label	**SPA**	**Classification**	**Distance to Site**
E10	Solent and Southampton Water	Secondary Support Area	1.35 km
E11	Solent and Southampton Water	SPA Site	1.63 km
E12B	Solent and Southampton Water	SPA Site	1.79 km
E16	Solent and Southampton Water	Secondary Support Area	1.90 km
E18	Solent and Southampton Water	Low Use Site	1.79 km
F102	Solent and Southampton Water	Low Use Site	1.88 km
F103	Solent and Southampton Water	Low Use Site	1.78 km
F74A	Solent and Southampton Water	Low Use Site	1.99 km
F74B	Solent and Southampton Water	Low Use Site	1.70 km

Figure 4. Non-statutory designated sites located within 2km of the site as provided by HBIC.



3.2 Habitats

The vegetation within the site has been described below using classification terminology as described within Habitat Definitions Version 2.0 (UKHab Ltd., 2023). The below species should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise of (with locations identified in the appended UK Habs Map):

- Other Woodland; Mixed – Mainly Broadleaved (w1h5) with secondary habitat code 33 (line of trees) and 50 (ditch) (**Figure 5**)
- Modified Grassland (g4) with secondary habitat codes 32 (scattered trees), 108 (frequently mown), 510 (bare ground) and 518 (neglected) (**Figure 6**)
- Mixed Scrub (h3h) (**Figure 7**)
- Bramble scrub (h3d)
- Bracken (g1c) (**Figure 8**)
- Non-Native and Ornamental Hedgerow (h2b)
- Built-Up Areas and Gardens (u1) with secondary habitat code 827 (introduced shrub)
- Artificial Unvegetated; Unsealed Surface (u1c)
- Buildings (u1b5)
- Other rivers and streams (r2b)

Figure 5. Image showing w1h5 line of trees in the background, with h3d bramble scrub and g4 modified grassland visible in the foreground (taken December 2023).



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Figure 6. Image showing a section of the g4 modified grassland habitat, with patches of bare ground visible in the background (taken December, 2023).



Figure 7. Image showing a section of h3h mixed scrub habitat (taken December, 2023).



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Figure 8. Image showing a section of g1c Bracken habitat with a section of the stream (r2b) also visible (taken December, 2023).



3.3 Bats

3.3.1 Pre-existing Information

HBIC have provided the following bat records from within 2km of the site; Western Barbastelle (*Barbastella barbastellus*) (1 record), Bat species (*Chiroptera spp*) (5 records), Serotine (*Eptesicus serotinus*) (25 records), Unidentified Myotis Species (*Myotis spp*) (10 records), Daubenton's Bat (*Myotis daubentonii*) (1 records), Whiskered Bat (*Myotis mystacinus*) (6 records), Whiskered/Brandt's Bat (*Myotis mystacinus/brandtii*) (12 records), Natterer's Bat (*Myotis nattereri*) (4 records), Leisler's Bat (*Nyctalus leisleri*) (1 records) Noctule Bat (*Nyctalus noctula*) (34 records), Pipistrelle (*Pipistrellus spp*) (59 records), Nathusius's Pipistrelle (*Pipistrellus nathusii*) (4 records), Common Pipistrelle (*Pipistrellus pipistrellus*) (98 records), Soprano Pipistrelle (*Pipistrellus pygmaeus*) (76 records), Plecotus spp (8 records) and Brown Long-eared Bat (*Plecotus auritus*) (33 records).

3.3.2 Preliminary Roost Assessment (PRA) (Buildings) (2023)

The findings of the updated Preliminary Roost Assessment (PRA) of the buildings on site is outlined in Table 4 below.

NB. Please note that, following confirmation that the buildings held negligible potential for roosting bats, these buildings have now been demolished.

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Table 4. Preliminary Roost Assessment of the buildings on site.

Building	Figure	Description of Construction	PRFs / Evidence of Occupation	Assessment Roost Potential
B5	**Figure 9**. External view of building 'B5 	Small shed damaged shed comprising a corrugated asbestos roof and side panels on a metal frame (**Fig 9**).	No PRFs were noted and no evidence of bat presence was found.	Negligible
B6	**Figure 10.** External view of building 'B6 	Shed comprising of mixture of corrugated metal/ plastic supported by a timber frame (Fig 10).	The building was noted to be in significantly dilapidated condition since the previous survey effort, with previous identified features no longer considered suitable to support roosting bats due to damage/ expose to inclement weather. As such no PRFs were noted and no evidence of bat presence was found.	Negligible *Previous emergence undertaken in June 2022 by ACD Environmental recorded no evidence of roosting bats

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3.3.3 Foraging and Commuting Bats

Overall, it was considered there was a moderate level of bat activity across the site with Common Pipistrelle representing the dominant species recorded (considered to be a widespread species within the UK). Soprano Pipistrelle were recorded frequently (considered to be a widespread species within the UK) with occasional registrations of Noctule, Myotis sp. Brown Long-eared bats, Leisler's, Serotine and Nathusius' Pipistrelle (considered to be widespread to rarer within the UK). During the survey period, the highest concentration of recordings was identified along the northern and southern boundary tree lines with occasional observations of bats commuting and foraging over the grassland and scrub.

3.3.4 Ground Level Tree Assessment (GLTA) (2024)

Following the latest Tree Protection Plan (ACD Environmental, 2024), trees G1, G11, G8 and T1 are expected to be removed. These trees were subject to a Ground Level Tree Assessment and were all identified as being of Negligible potential for roosting bats, largely comprising of small and non-native specimens (**Fig 11**).

Figure 11. View of G1 on site (taken April, 2024).



3.4 Reptiles

3.4.1 Pre-existing Information

HBIC returned records for Slow Worm (*Anguis fragilis*) (18 records), Grass Snake (*Natrix helvitica*) (3 records), Adder (*Vipera berus*) (15 records) and Common Lizard (*Zootoca vivipara*) (8 records) within 2km of the site.

3.4.2 Summary of Previous Survey Work (2016)

A suite of reptile surveys was undertaken by Aven Ecology in 2016, with a low population of Slow Worm recorded within the site.

3.4.3 Updated Presence/ Absence Survey Results (2023 & 2024)

During the updated walkover in 2023, the habitats on site were noted to be largely the same as they were during the 2016 reptile surveys (although there had been some increase in the extent of scrub on site). The areas identified as being most suitable for reptiles included the

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longer grassland and scrub-grassland interfaces in the west of the site. Since more than 3 years have now elapsed since this survey work took place and given that there are local records of reptile species not previously identified on site, it was considered necessary to carry out an updated suite of reptile presence / likely absence surveys in line with CIEEM guidance (2019). These surveys were undertaken between April and May 2024 with the results provided in **Table 5** below and locations of where reptiles were found indicated in **Fig 12**.

Figure 12. The locations of where reptiles were identified on site during the presence / likely absence surveys undertaken in 2024 (blue = reptiles present) (Google Satellite, 2025).



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Table 5. Results of the reptile surveys undertaken on site May 2024. Wind speed is estimated in the Beaufort scale. AM = adult male, AF = adult female, SA = sub-adult, J = juvenile.

Date	Start Time	Weather Conditions	Slow Worm			
			AM	AF	SA	J
29/04/24	11:00	Temp: 13°C, Wind: 3, Cloud: 20%, Precipitation: 0%	1	1	0	0
02/05/24	14:40	Temp: 14°C, Wind: 0-1, Cloud: 100%, Precipitation: 0%	2	0	1	1
07/05/24	09:30	Temp: 14°C, Wind: 0, Cloud: 5%, Precipitation: 0%	0	2	0	3
10/05/24	09:20	Temp: 16°C, Wind: 1, Cloud: 5%, Precipitation: 0%	3	3	1	0
13/05/24	09:00	Temp: 14°C, Wind: 1-2, Cloud: 100%, Precipitation: 0%	0	2	3	3
21/05/24	10:45	Temp: 14°C, Wind: 1, Cloud: 100%, Precipitation: 0%	3	5	5	9
24/05/24	10:30	Temp: 15°C, Wind: 1, Cloud: 75%, Precipitation: 0%	1	2	2	1

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3.4.5 Evaluation

Given the size of the suitable areas of habitat, the number of refugia deployed and the maximum count of adults (which was 8), a '***Low***' population of Slow Worms are present on-site. Slow Worms are however relatively widespread within Southern England and as such the site is considered to be ***Local Value*** for reptiles.

3.5 Great Crested Newt

3.5.1 Pre-existing Information

HBIC returned 4 records of Great Crested Newt (*Triturus cristatus*) within 2km of the site, with the nearest record located approximately 0.34km to the east of the site, beyond the M27. With reference to NatureSpace's impact risk zone map for GCN, the site is located within an 'amber' impact risk zone.

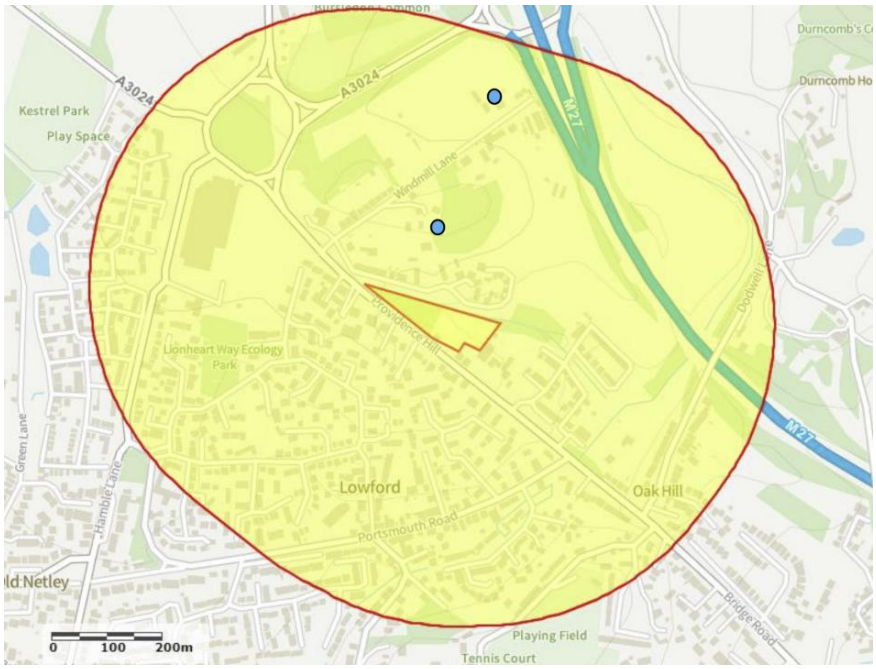
3.5.2 Summary of Previous Survey Work

In addition to an updated HSI assessment of the Bursledon Windmill pond, an eDNA sample was also collected in June 2022 by ACD Environmental. The sample subsequently returned a negative result for Great Crested Newt.

3.5.3 Waterbodies within 500m

Figure 13 below indicates the ponds located within 500m of the site with the closest one located approximately 0.16km to the north of the site, situated within the grounds of Bursledon Windmill. Previous habitat suitability assessments of this waterbody undertaken in 2016, 2021 and 2022 assessed the pond as holding 'good' suitability for Great Crested Newts.

Figure 13. Locations of waterbodies within 500m of the site.



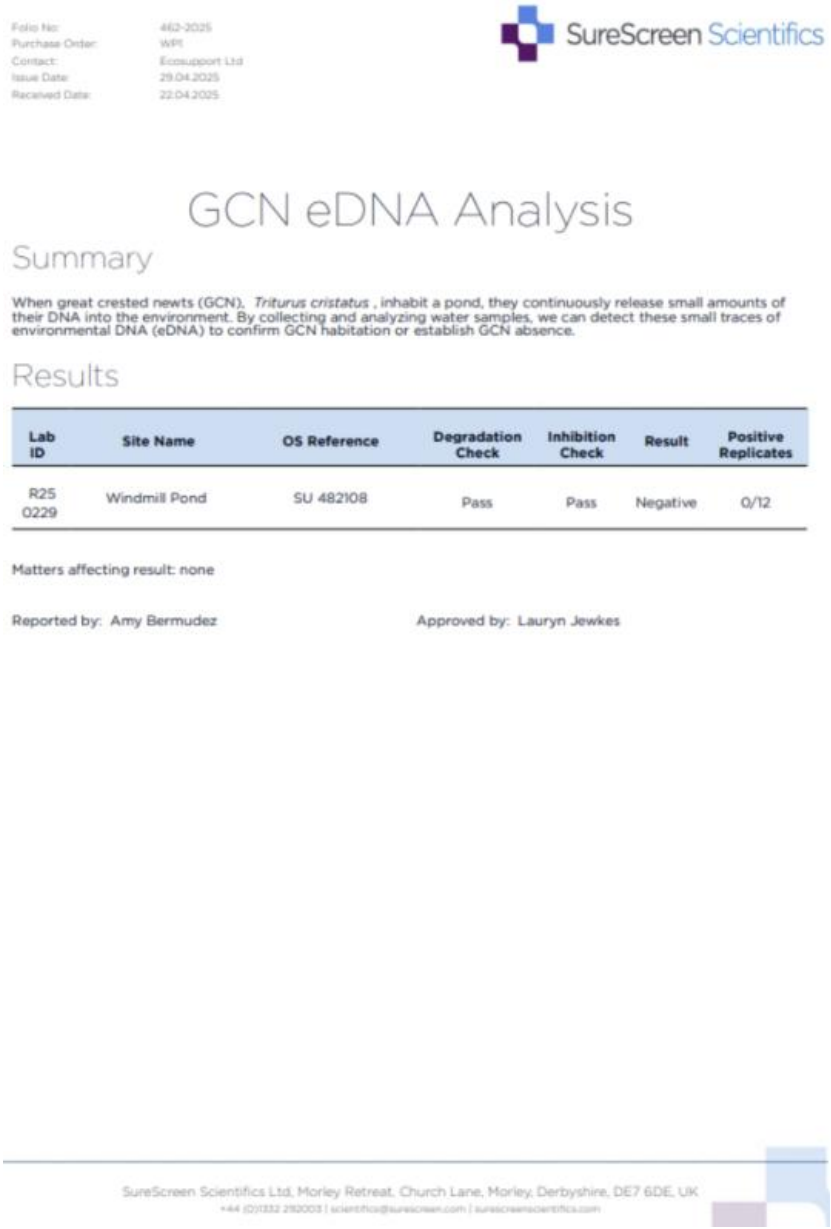
3.5.4 Updated Site Assessment

Windmill Pond was subject to an eDNA test on the 17th April 2025 with this conducted by

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Ecosupport Ltd. During the eDNA test, 20 evenly spaced sample sites were identified around the ponds perimeter and one ladle of pond water was collected from each of the pre-identified sites. The samples were then mixed along with preservative following guidance from SureScreen Scientifics and sent for eDNA analysis Windmill Pond returned a negative eDNA result (**Fig 14**) indicating the likely absence of GCN from the pond.

Figure 14. Results of Windmill Pond eDNA analysis as provided by SureScreen Scientific.



Folio No: 462-2025
Purchase Order: WPI
Contact: Ecosupport Ltd
Issue Date: 29.04.2025
Received Date: 22.04.2025

SureScreen Scientifics

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
R25 0229	Windmill Pond	SU 482108	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Amy Bermudez Approved by: Lauryn Jewkes

SureScreen Scientifics Ltd, Morley Retreat, Church Lane, Morley, Derbyshire, DE7 6DE, UK
+44 (0)1332 292003 | scientifics@surescreen.com | surescreenscientifics.com

3.5.5 Evaluation

Given that Windmill Pond returned a negative eDNA result and considering that there are limited local records for GCN (all of which are considered separated from the site), it is considered unlikely that GCN would be present on site. Therefore, no specific mitigation measures with regard to GCN will be required. Nevertheless, the hibernacula that are due to be created on site for reptiles and the extensive meadow and scrub creation as part of the BNG strategy will benefit any amphibians which may colonise the site in the future.

3.6 Hazel Dormice

3.6.1 Pre-existing Information

HBIC returned 5 records for Hazel Dormice (*Muscardinus avellanarius*) within 2km of the site boundary, with the nearest record located on the north-eastern side of the M27 situated approximately 0.3km away from the site. No granted EPS licences for Hazel Dormouse were noted within 2km of the site boundary (DEFRA, 2024).

3.6.2 Summary of Previous Survey Work

Previous Hazel Dormouse presence / absence surveys undertaken by Aven Ecology in 2016 found no evidence of this species on site (see planning ref O/17/81166). In addition to this, Ecosupport Ltd undertook Dormouse presence / absence surveys in 2018 as part of an adjacent development scheme 'Providence Hill, Bursledon' (O/17/81166) with nest tubes erected around the site boundary of this application. Ecosupport Ltd has also undertaken further Dormouse presence / absence surveys within the wider landscape in support of previous planning application sites known as 'Land North of Bridge Road' and 'West of Blundell Lane, Bursledon (O/13/73701). No evidence of Dormice was recorded during any of the above surveys.

3.6.3 Updated Site Assessment

The tree lines situated along the site's boundaries and the dense scrub habitat within the site were considered suitable to support Dormice, with mixed scrub habitat recorded on site in areas previously noted as supporting woodland following management works between 2014 – 2016. Whilst this area would have been subject to significant disturbance, which may have resulted in a temporary reduction in available habitat resources, the mixed scrub habitat that has subsequently developed is considered suitable to support Hazel Dormice. Notwithstanding this, the site is not connected to any areas supporting known populations of this species and is largely isolated from further suitable habitat with the M27 to the north-east, A3024 to the north-west, A27 to the south-west and River Hamble to the south-east (all forming significant barriers to dispersal). Given the relative isolation of the site and the repeated negative results of Dormouse surveys conducted across the local area, it was not considered proportionate to update the Dormouse surveys and it is considered that Hazel Dormice are likely absent from the site.

3.7 Badgers & Other Terrestrial Mammals

3.7.1 Pre-existing Information

HBIC returned 16 records of Badgers (*Meles meles*) within 2km of the site boundary.

3.7.2 Updated Site Assessment

Whilst no evidence of foraging or commuting Badgers was noted on-site during the updated survey in December 2023, evidence of Badger hairs located on the barbed wire fence situated along the northern boundary was identified by Aven Ecology in 2016. No Badger setts or other evidence of associated Badger activity (e.g. deceased animals, snuffle holes, latrines, spoil heaps) were detected within the proposed site during each survey visit. Notwithstanding this, the scrub, grassland and tree lines provide suitable habitat to support potential foraging and commuting activity, and as such the site is considered to hold Moderate potential for foraging and commuting Badgers.

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3.8 Breeding and Nesting Birds

3.8.1 Pre-existing Information

HBIC have provided an extensive list of BOCC, consisting of 983 records across 92 individual species, within 2km of the site with the following considered to be some of the more relevant species listed; Lesser Redpoll (*Acanthis cabaret*) 9 records, Skylark (*Alauda arvensis*) 13 records, Kingfisher (*Alcedo atthis*) 38 records, Water Pipit (*Anthus spinoletta*) 2 records, Tree Pipit (*Anthus trivialis*) 2 records, Grey Heron (*Ardea cinerea*) 20 records, Short-eared Owl (*Asio flammeus*) 1 record, Dark-bellied Brent Goose (*Branta bernicla*) 24 records, Nightjar (*Caprimulgus europaeus*) 2 records, Cetti's Warbler (*Cettia cetti*) 3 records, Little Ringed Plover (*Charadrius dubius*) 1 record, Marsh Harrier (*Circus aeruginosus*) 1 records, Hawfinch (*Coccothraustes coccothraustes*) 3 records, Cuckoo (*Cuculus canorus*) 14 records, Dartford Warbler (*Curruca undata*) 2 records, Lesser Spotted Woodpecker (*Dendrocopos minor*) 9 records, Little Egret (*Egretta garzetta*) 43 records, Yellowhammer (*Emberiza citrinella*) 5 records, Reed Bunting (*Emberiza schoeniclus*) 6 records, Merlin (*Falco columbarius*) 2 records, Peregrine (*Falco peregrinus*) 8 records, Hobby (*Falco subbuteo*) 15 records, Pied Flycatcher (*Ficedula hypoleuca*) 5 records, Brambling (*Fringilla montifringilla*) 8 records, Snipe (*Gallinago gallinago*) 10 records, Linnet (*Linaria cannabina*) 13 records, Grasshopper Warbler (*Locustella naevia*) 1 record, Nightingale (*Luscinia megarhynchos*) 7 records, Red Kite (*Milvus milvus*) 23 records, Yellow Wagtail (*Motacilla flava*) 3 records, Spotted Flycatcher (*Muscicapa striata*) 7 records, Curlew (*Numenius arquata*) 4 records, Wheatear (*Oenanthe oenanthe*) 24 records, Osprey (*Pandion haliaetus*) 10 records, House Sparrow (*Passer domesticus*) 22 records, Black Redstart (*Phoenicurus phoenicurus*) 4 records, Firecrest (*Regulus ignicapilla*) 30 records, Whinchat (*Saxicola rubetra*) 2 records, Siskin (*Spinus spinus*) 12 records, Starling (*Sturnus vulgaris*) 21 records, Redwing (*Turdus iliacus*) 23 records, Song Thrush (*Turdus philomelos*) 29 records, Fieldfare (*Turdus pilaris*) 12 records, Mistle Thrush (*Turdus viscivorus*) 16 records, Barn Owl (*Tyto alba*) 9 records and Lapwing (*Vanellus vanellus*) 22 records.

3.8.2 Site Assessment

The tree lines and scrub habitat within the site offer favourable habitat to support local breeding and nesting birds, in addition to the adjoining grassland habitat which could provide foraging opportunities to local birds of prey such as Barn Owl, Red Kite, Peregrine Falcon and Hobby. As such the site is considered to be of High potential for nesting and breeding birds.

3.8.3 Breeding Bird Survey (April – June 2024)

A total of 18 bird species were recorded during the Breeding Bird Surveys within or just beyond the site boundaries. Of the species observed, 7 species appear on the Birds of Conservation Concern (BoCC) as declining (red or amber lists) (Stanbury et al., 2021) and / or are listed as Species of Principle Importance (SoPI) under the NERC Act (2006). The notable species recorded on site are detailed in Table 6 while key breeding activity has been detailed in **Fig 15**.

Table 6. Protected bird species, BoCC Red and Amber listed species and Species of Principle Importance (SoPI) recorded on site.

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Species	Legal/Conservation Status	Number of Pairs, Nest Locations, Males Holding Territory on Site
Starling (*Sturnus vulgaris*)	BoCC Red / SoPI	Commuting over the site and foraging beneath northern tree line.
Bullfinch (*Pyrrhula pyrrhula*)	BoCC Amber / SoPI	1 pair suspected to be breeding within western scrub.
Moorhen (*Gallinula chloropus*)	BoCC Amber	Observed along edge of unnamed watercourse to north of site.
Song Thrush (*Turdus philomelos*)	BoCC Amber / SoPI	Commuting along northern tree line.
Dunnock (*Prunella modularis*)	BoCC Amber / SoPI	1 pair suspected to be breeding within the northern tree line.
Wren (*Troglodytes troglodytes*)	BoCC Amber	2 pairs suspected to be breeding within southern and eastern tree lines.
Wood Pigeon (*Columba palumbus*)	BoCC Amber	Foraging on site.

Figure 15. Results of the breeding bird surveys undertaken on site between April and June 2024.



3.8.4 Evaluation

A total of 1 Red-listed and 6 Amber-listed Birds of Conservation Concern were recorded as using the site as a resource, or likely using the site. Of these, 3 species were found to be nesting / breeding or likely to be nesting / breeding within the site. Their HOS status description and approximate numerical range in Hampshire (HOS, 2023) are as follows:

Species	**HOS Status Description**	**Approximate Numerical Range (Breeding Pairs)**
Bullfinch	Common but declining	1,001-5,000
Dunnock	Abundant	30,000+
Wren	Abundant	30,000+

Due to the considered low number of BoCC Amber listed nesting pairs / territories present on site and the current common and abundant status of these species across the UK, the site is considered to be of Low ecological value to breeding and nesting birds and it is not considered that the loss of bird populations and the communities present would be significantly detrimental on a County level. On a more local level there will be a reduction in nesting and foraging resources in some areas of the site however.

3.9 Riparian Mammals

3.9.1 Pre-existing Information

HBIC returned 1 record of European Water Voles (*Arvicola amphibious*) within 2 km of the site, with the nearest recorded located approximately 0.53km south of the site boundary. The identified record is not connected to the site, with significant urban infrastructure situated between the location of the record and the site boundary. HBIC also returned 1 record for Eurasian Otters (*Lutra lutra*) within 2 km of the site.

3.9.2 Updated Habitat Assessment

The brook identified along the northern boundary of the site did not support the well layered herbaceous vegetation structure preferred by Water Voles, with the watercourse heavily overgrown with Bramble scrub. No evidence or associated field signs of Water Vole was identified during the updated survey. The small brook was also considered unsuitable to support Otters. As such, the site is considered to hold Negligible potential to support riparian mammals.

3.10 Hedgehogs

3.10.1 Pre-existing Information

HBIC returned 56 records of West European Hedgehog (*Erinaceus europaeus*) within 2km of the site.

3.10.2 Updated Habitat Assessment

The scrub, tree lines and spoil/ rubble piles provide suitable habitat to support hibernating and sheltering opportunities for Hedgehogs, with the grassland offering suitable foraging habitat. As such, the site is considered to hold Moderate potential to support Hedgehogs.

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3.11 Invertebrates

3.11.1 Pre-existing Information

HBIC returned 2 records for Scarce Blue-Tailed Damselfly (*Ischnura pumilio*) within 2km of the site, located at a Private Nature Reserve in Old Bursledon, approximately 1.31km to the south of the site. Furthermore, HBIC returned 198 records for Stag Beetle (*Lucanus cervus*) within 2km of the site.

3.11.2 Updated Habitat Assessment

The site supports tree lines, hedgerows and deadwood habitat that could potentially support Stag Beetle, with a range of ecological niches and foodplants identified that could support a diverse range of invertebrate species. Notwithstanding this, given that the habitats present within the site are widespread, it is considered unlikely that that the site supports rarer invertebrate species.

3.12 Invasive Species

3.12.1 Japanese Knotweed

The previous report (ACD Environmental, 2022) identified a small stand of Japanese knotweed (*Fallopia japonica*) within five meters of the southern Application Site boundary, adjacent to the pavement of Providence Hill (Grid Reference: SU4823410638), covering an area of approximately 1m^2. During the walkover conducted in April 2024 (Ecosupport Ltd) no Japanese Knotweed was identified on site. However, the survey was not conducted at the optimal flowering time for this species.

3.12.2 Bamboo

Two patches of Bamboo (*Bambusa vulgaris*) were recorded on the southeast and eastern boundaries of the site (**Fig 16**).

Figure 16. View of the bamboo recorded within the southern boundary tree line on site (taken April, 2024).

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3.12.3 Rhododendron

A large patch of Rhododendron (*Rhododendron* sp.) (**Fig 17**) was recorded adjacent to the Bramble scrub on the north of the site.

Figure 17. View of the Rhododendron recorded adjacent to the bramble scrub on the north of the site (taken April, 2024).



3.12.4 Cotoneaster

Several Cotoneaster shrubs were noted within the western mixed scrub area. Given the difficulty identifying Cotoneaster to species level, this will be treated as an invasive species with appropriate measures put in place to eradicate it.

4.0 MITIGATION & ENHANCEMENTS

This section details the measures that will be implemented to mitigate against the impacts to the species identified on site and provide targeted and proportionate ecological

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enhancements (further details of the enhancements recommended can be found in **Plan 1** appended).

4.1 Protection of Retained Habitats

All the existing tree lines that will be retained will be protected from damage during the works. All the site boundaries including the buffers outside the area of impact will be fenced using Heras fencing or similar to prevent access by machinery. Where large mature trees are present, they will be protected using standard arboricultural tree protection measures which include protection of the canopy and prevents root compaction. Access will not be permitted behind this fencing by construction personnel.

This will also provide protection for wildlife species that may be using the margins of the site including bats, reptiles, amphibians, invertebrates and other mammals. No vehicles will enter the protective ring fencing and no materials will be stored within their circumference. All protective fencing must be in place prior to any construction machinery arriving on site, before any works on site get underway, and will remain in place until all work is completed. This will minimise the level of disturbance within the boundary habitat / buffer areas during the works and ensure the habitats and any wildlife species that may be using them are protected.

4.2 Bats

4.2.1 Mitigation

4.2.1.1 Sensitive Lighting for Nocturnal Species

<u>During Construction</u>

In order to avoid any disturbance to bats (and other potential nocturnal wildlife) construction works should be limited to daylight hours and should not be undertaken 30 minutes prior to dusk through to dawn. All lighting should be sensitive to the use of the site by nocturnal wildlife, for example by including low-level downward-facing / hooded lights that are sensor-operated where possible.

<u>During Operation</u>

Due to the value of the site to foraging and commuting bats noted on site (based on survey effort undertaken by Ecosupport Ltd) and the locally known species as returned by HBIC, a detailed sensitive lighting strategy for the site has been prepared in accordance with the published *Guidance Note 08/23 Bats and Artificial Lighting at night* (ILP / BCT, 2023) produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), which outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats.

Of importance, the site has been designed to retain the areas of most importance to bats, incorporating a dark corridor buffer along the northern and western boundaries, with the northern, southern, and eastern boundary treelines all due to be retained. Furthermore, important foraging areas such as the western scrub are due to be retained and enhanced. This, in combination with the creation of meadow and scrub within the ecological buffer along

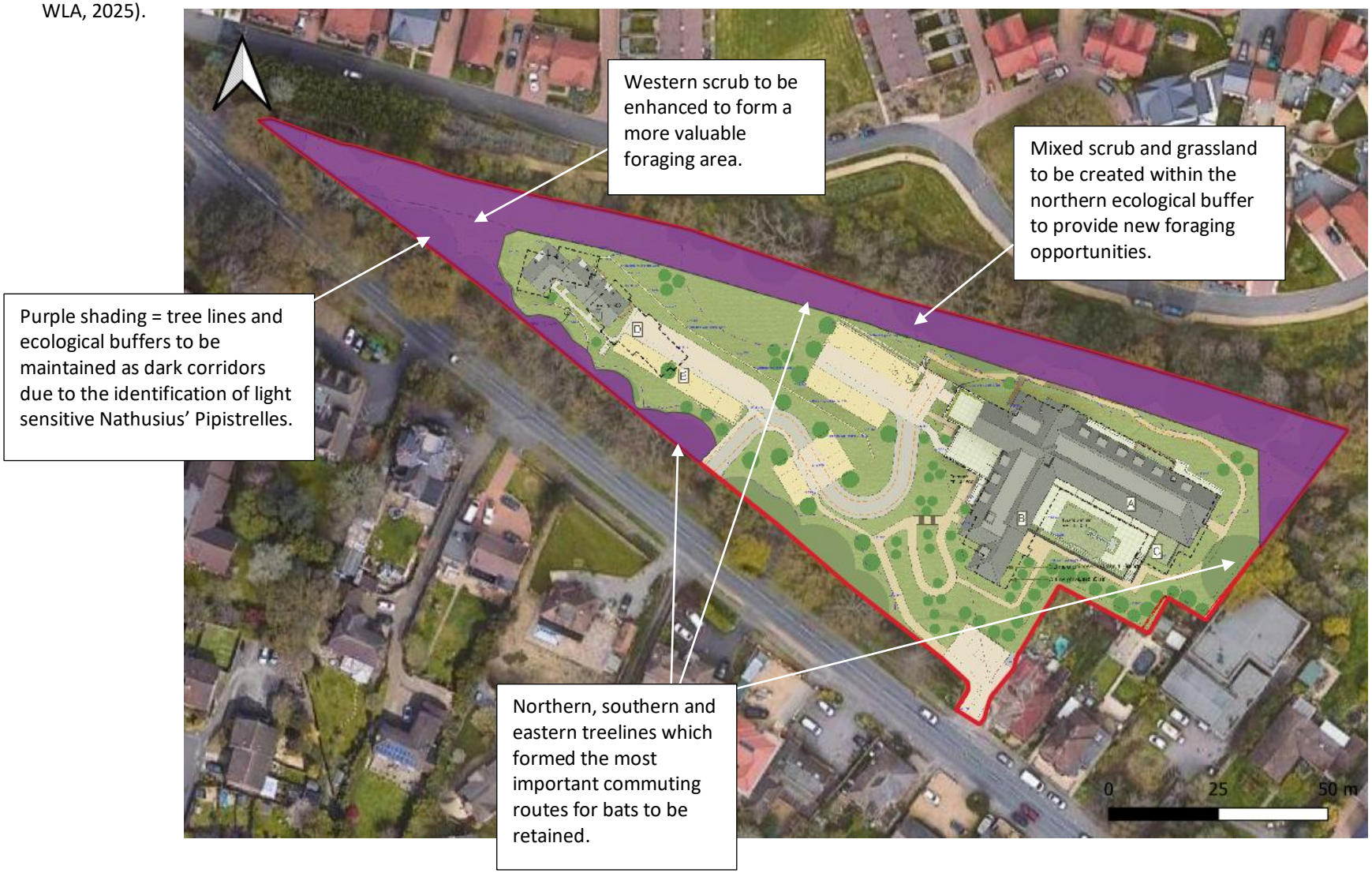
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T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

the northern boundary of the site, will greatly increase foraging resources for bats utilising the site.

A detailed lighting plan with spill contours has been produced by UK Lighting Design and has been appended to this report, in accordance with **Figure 18**, below.

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Figure 18. Location of proposed dark corridors and measures to enhance the site for foraging and commuting bats (Drawing No. 6185-WLA-ZZ-XX-DR-A-0010 - provided by WLA, 2025).



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4.2.1.2 Maintaining Connectivity

Many bat species are reluctant to leave the cover of features such as tree lines and hedges as they move between their roost and foraging grounds. Fragmentation of the landscape can therefore be a serious issue for bats. To address these issues, key areas of suitable habitats for foraging and commuting bats are being retained along with habitat enhancements provided to increase invertebrate biomass (further described in **Section 5.0**). This includes the provision of trees / shrubs / hedgerows being planted across the residential development.

4.2.2 Enhancements – Bat Bricks

To act as biodiversity enhancement, 11 No Ibstock bat bricks (11 No total) (**Fig 19**) will be integrated within the external brickwork. These features are entirely self-contained and available in a variety of different colours to match different construction materials. They should ideally be placed on an elevation which will benefit from some degree of sunlight exposure and be located away from windows. ***See the appended plan at the end of the report for the proposed locations of these enhancement features.***

Figure 19a. Ibstock bat brick 'B' which will be integrated into the gable walls of the newly buildings.



Additionally, at least 2 No bat boxes will be erected onto a retained mature tree at the north of the site. This will comprise 2 No Vivara pro Harlech woodstone bat box (**Fig 19**). These are manufactured from long-lasting Woodcrete, which is a blend of wood, concrete and clay which will not rot, leak, crack or warp, and will last for at least 20 - 25 years, making it suitable for long-term mitigation projects. Woodcrete is breathable and maintains a stable temperature inside the box. They are painted black to absorb warmth. These boxes will be erected by or under the supervision of an ecologist to ensure they are erected in an appropriate location. ***See the appended plan at the end of the report for the proposed locations of these enhancement features.***

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Figure 19b. Vivara Pro Harlech woodstone bat box which will be erected onto a suitable retained mature tree at the north of the site.



4.3 Reptiles

A low population of Slow Worm is present on site. As such, a reptile translocation operation will be carried out in accordance with best practice guidelines as stated in various resources (Froglife 1999) (Gent & Gibson 1998) to provide appropriate protection for this species.

4.3.1 Receptor Preparation

Wherever possible, reptiles should be retained on site, or released immediately adjacent to the site. In-situ relocation schemes, where reptiles are retained in suitable areas of a development site or released into immediately adjacent habitat are preferable (English Nature, 2004). The proposed receptor site will comprise of the ecological buffer situated along the northern boundary of the site which will be combined with the retained/enhanced area of scrub habitat within the western portion the site (where the majority of recorded reptiles were identified) will provide a suitable receptor area to support translocated reptiles measuring approximately 0.25ha (**Fig 20**). These areas will be enhanced through appropriate planting of mixed scrub and a rough / tussocky grassland mix and managed for the benefit of reptiles, with management / enhancement of the existing scrub habitat to improve its suitability to support reptiles (including managing scrub to create scalloped edges to enhance microclimatic opportunities).

Figure 20. Map showing the location of the proposed reptile receptor indicated (blue shaded area).



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4.3.2 Site Set-Up

Initial habitat manipulation will be implemented across the site. Any longer grass will be cut to reduce the sward height to 15cm. Vegetation will be cleared in a directional approach (working towards retained boundaries), encouraging reptiles/amphibians away from the area of impact towards suitable habitat out of harms way. This will be undertaken during the active season for reptiles/amphibians (April – September).

One-way exclusion fencing will then be installed around the perimeter of the site (where reptile presence was identified) and around the receptor (**Fig 20**). This will provide a division between the 'working' areas (i.e. those areas where humans and machinery will disturb the ground) to prevent reptiles passively moving across the site. The fencing will remain in place until all works are completed. The barrier will also illustrate the retained ecology areas.

All fencing will be made from robust HDPE material. In order to remain in line with the best practice guidance (English Nature, 2001) the following points will be addressed in the installation of the one-way exclusion fence and semi permanent drift fence;

- Fencing installation will be carried out under the supervision of an ecologist
- The grass within the proposed fence line will first be strimmed down to 10 – 15 cm then searched and cleared of any amphibians prior to the digger being on site to dig the trench.
- The fencing layout will avoid gaps through which reptiles could pass.
- The fence will be erected to a height of 600 mm above ground level with depth of 250 mmm (to include a lip) to prevent reptiles from passing underneath.
- The backfill will be placed turf downwards in the trench to supress re-growth of grass.
- All fence trenches will be filled on the same day as being dug. Artificial refugia will then be distributed throughout the site. The refugia used will be a mixture of bitumen roofing felt and corrugated metal.

NB. These works have been undertaken, supervised by a suitable qualified ecologist, and all reptile fencing was erected during September 2025 with the reptile translocation presently underway.

4.3.3 Timing

The optimum period for capture of reptiles is April to June and September, however, it is possible to capture reptiles outside of this period providing weather conditions are suitable. By ensuring that all animals are translocated by the end of September, it will allow sufficient time for reptiles to find suitable hibernation sites within the receptor site.

4.3.4 Catching

Suitably qualified ecologists will carry out the trapping of reptiles during the active season on days where reptiles/amphibians are likely to be found (i.e. between 10°c and 20°C with little or no wind or rain). Reptiles will be captured by hand from beneath the artificial refugia and placed into a suitable container to be transported to the on-site receptor. All captured animals will be released on to the receptor site immediately (**Fig 20**).

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4.3.5 Capture Effort

The HGBI guidelines (1998) suggest that for a 'low' population of Slow Worms a minimum of 60 days capture is undertaken (**Table 7**). Artificial refugia will be distributed across the site at an increased minimum density of <50/ha. Despite the recommendation for 60 capture days, it is considered a significantly lower figure than this would be appropriate (30 days), however this can be reviewed during the capture works. Capture visits will continue until 5 consecutive visits have been carried out in ideal weather conditions[1] where no reptiles are captured (or seen), it is considered that the relocation can come to an end. This approach is based on survey guidance (Highways Agency, 2005), which suggests that a minimum of five visits are required to establish whether reptiles are present or likely to be absent from a site, during a standard survey. Therefore, if no reptiles are recorded after five visits (in optimal survey conditions), it can be concluded that reptiles are likely to be absent from the site.

Table 7. The minimum capture effort for common reptile species based on HGBI (1998). The figures relevant to this scheme are emboldened and italicised.

Species	Population Size (adult density)	Refugia Density / ha	Minimum No of Trapping Days in Good Weather
Slow Worm	High (>100/ha)	100	All suitable days between March & September or a full year (min. 90 suitable days)
	Medium (>50/ha)	100	All suitable days between March & September or a full year (min. 70 suitable days)
	Low (<50/ha)	***50***	***60 suitable days***

4.3.6 Destructive Search

Once the five negative capture days have been achieved the site will be subject to a sensitive destructive search. This will involve a digger, utilising a toothed bucket, removing the grass and top layer of soil. This work will be supervised by an ecologist experienced in reptile mitigation.

In the unlikely event that any reptiles are found these will be caught and placed within the onsite receptor area by the ecologist.

4.3.7 Funding and Safeguard

Habitat monitoring and subsequent management at the receptor site must be undertaken as required to maintain its suitability to support reptiles. The management and on-going monitoring of the receptor site will be funded by the developer for a period of no less than 30 years following the completion of the development. The responsibility will eventually be passed onto a responsible landscape management company upon appointment.

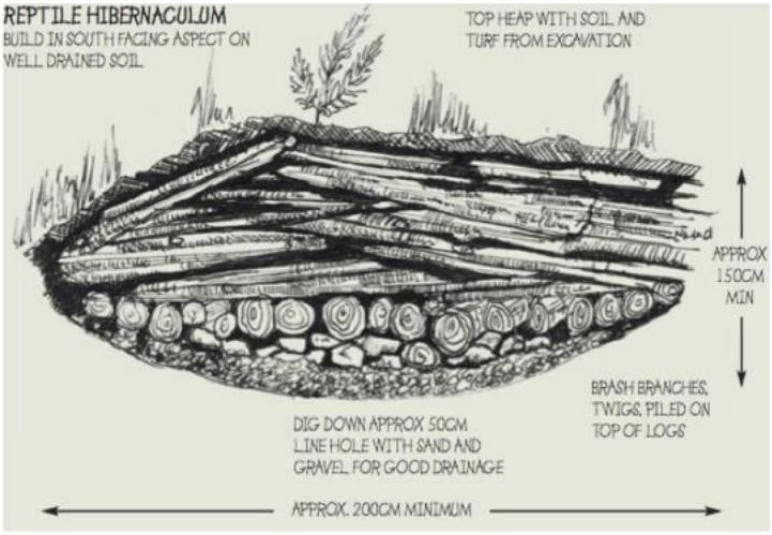
[1] Suitable weather conditions are generally considered to be between 10 and 18°C with intermittent sunshine and little or no wind and rain (see Froglife 1999).

To ensure the retained reptile habitat is afforded the appropriate level of protection once the site has been built, it should be listed within the S106 (or similar such as a restrictive covenant) as protected habitat.

4.3.8 Enhancements

Two wood-based hibernacula will also be constructed within the reptile receptor to enhance the carrying capacity of the areas for reptiles. This will provide shelter and hibernation opportunities as well as providing a significant habitat resource for invertebrates (a food resource for reptiles). **Fig 21** illustrates hibernacula design that follows best practice guidelines (HART, 2009). The size of the hibernaculum will be at least 5m^2.

Figure 21. Reptile hibernaculum design as provided in HART (2009).



NB. Two hibernacula have been created and installed at the west of the site, following best practice guidelines, within the reptile receptor.

4.4 Badgers

4.4.1 Mitigation

The following mitigation will be followed during the construction period to minimise impacts upon badger movement across the Site:

- Avoid blocking Badger runs which are not directly affected by the scheme.
- Avoid leaving open trenches into which animals could fall. If this is not possible a means of egress should be provided, such as a plank. It should be ensured dangerous areas such as deep excavations are fenced to prevent badger access or covered overnight.
- Across the scheme, ensure at least one safe crossing point of the construction footprint is available every 100m.
- Avoid storage of plant or materials on areas of potential foraging habitat.
- Avoid night works where possible, to avoid disturbance through the use of artificial lighting, and ensure the site is left unlit at night during the construction period. If lighting of some areas is unavoidable, then hoods, cowls or shields should be used to avoid light spill onto setts or known badger paths.

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4.5 Breeding and Nesting Birds

4.5.1 Avoidance of Disturbance

In order to avoid disturbance of breeding and nesting birds or damage to their nests, any works to the buildings on site should be undertaken outside of the bird nesting season (typically March – August, dependent on weather). If this is not possible, the area to be cleared should be thoroughly checked by an ecologist immediately prior to clearance. If any active nests are found, they should be left undisturbed with a suitable buffer (ca. 5m) until nestlings have fledged

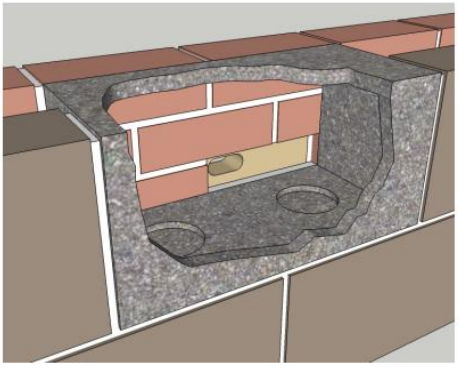
4.5.2 Compensation

A number of the Red & Amber listed species recorded on site (namely Starling, Song Thrush, Dunnock, Wren and Wood Pigeon) are likely to be adaptive to the proposed care home scheme. The retention of the boundary habitats, creation of new scrub, and provision of new nesting features will be sufficient to compensate for the loss of any existing nesting habitat for these species. Bullfinches typically nest in woodland or dense scrub. They tend to be shy and are less likely to frequent more urban environments or use nest boxes. However, given that the scheme is retaining the boundary tree lines and a large portion of the western scrub as well as providing significant new scrub planting within the ecological buffer, it is considered that any loss of nesting habitat will be compensated for. Full details of planting can be found within the accompanying Habitat Management and Monitoring Plan (Ecosupport Ltd., 2025).

4.5.3 Enhancements – Bird Bricks

To act as biodiversity enhancement, 11 No Swift bricks will be incorporated into the new buildings. The 'CJ Wildlife Swift maxi nesting box' (**Fig 22**) with entrance via a CJ Wildlife 'Cambridge Swift full-face brick' (The Cambridge System is a concept comprising an entrance piece and a nest box embedded in the cavity and inner leaf. It is particularly suited to gable ends at roof-space level). If this model is not suitable for the building specifications, an alternative swift box with internal floor space exceeding 400cm squared must be used. A list of swift boxes can be found on the RSPB website via the following link (https://www.rspb.org.uk/globalassets/downloads/about-swifts/swift-bricks.pdf) however it is worth noting that some of these do not have an internal floor space exceeding 400cm squared and are therefore not considered appropriate. ***See the appended plan at the end of the report for the proposed locations of these enhancement features.***

Figure 22. A schematic of how the Cambridge full face Swift brick leads into a cavity created by the prior installation of the Swift maxi nesting box.



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Additionally, the erection of nest boxes in trees will provide further enhancements. Using nest boxes of varying designs would maximise the species complement attracted to the site, and where possible these could be tailored to provide opportunities for red listed/BAP species known from the local area. The following bird boxes will be erected on suitable trees situated along the northern boundary of the site:

- 2 No. Vivara Pro Seville 32mm Woodstone (Tree mounted)
- 2 No. Vivara Pro Seville Barcelona (Tree mounted)

See the appended plan at the end of the report for the proposed locations of these enhancement features.

4.6 Hedgehogs

4.6.1 Mitigation

Maintaining Connectivity

All new fences within the gardens or new fences on site will also ensure at least 2 gaps are present within the gravel boards / bases of each fence line to allow for movement of Hedgehogs from gardens into the wider area. The gaps should be at least 15 cm high by 15 cm wide with permeability for small mammals.

Small signage could be installed at these points to ensure they remain open upon completion of the development. The People's Trust for Endangered Species provide such signage, the purchase of which also supports conservation efforts (**Fig 23**).

Figure 23. Example of Hedgehog Highway signage to be placed above fence gaps provided to allow movements between gardens (PTES, 2019).



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4.7 Invertebrates

4.7.1 Enhancements - Bee Bricks

To increase opportunities for invertebrates within the site, bee bricks will be included within the 3 No. new cottages and 3 will be included within the new care home (6 No. in total) (Fig 24). The brick can be used in place of a standard brick and provides cavities for solitary bee species such as Red Mason bees (*Osmia bicornis*) or Leafcutter bees (*Megachile* sp.), both nonaggressive native species. The bricks should be placed in a sunny location at a minimum height of 1m. It is highly recommended the brick is placed in a location where landscaping will include nearby pollinator-friendly plants.

Figure 24. Bee Bricks (NHBS)



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5.0 MAINTENANCE AND MONITORING

5.1 Compliance Check & Monitoring

A compliance visit will be completed by a suitably qualified ecologist once the construction phase of the development has been completed. The ecologist will check that all ecological enhancements set out in **Section 4.0** have been completed as described.

5.2 Safeguarding

The developer and project manager will be responsible for briefing all site personnel of the ecological sensitivities of the site and implementing the mitigation measures outlined within this report. If any protected species are encountered during the construction works, it will be the responsibility of the project manager to cease works and immediately contact an ecologist for advice.

The safeguarding of the integrated species-specific enhancement features (such as swift and bat bricks) will be included within the deeds of the relevant dwellings to inform any new owners of their ecological sensitivity and protect them in perpetuity.

5.3 Maintenance

All enhancement features must be in place prior to occupation. The responsibility of the management of the on-site enhancements will be placed with a management company following the completion of the development. Until that point the responsibility will remain with the developer.

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6.0 IMPLEMENTATION PLAN SUMMARY

Schedule of mitigation and enhancements on site. Locations of enhancements are shown in **Plan 1**, appended.

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General Activity	Year	Specific Activity	Dates / Timing	Description
Protection of Retained Habitats Section 4.1	Prior to commencement	Protection of existing trees	Anytime	• All the existing trees that will be retained will be protected from damage during the works. • All the site boundaries will be fenced using Heras fencing or similar to prevent access by machinery • All protective fencing must be in place prior to any construction machinery arriving on site, before any works on site get underway, and will remain in place until all work is completed • Fencing must be raised at least 30cm off the ground to allow for passage of Badgers
Bats Section 4.2	Prior to commencement	Mitigation	Anytime	• Sensitive lighting during the construction and operational phase to be implemented.
	Prior to occupation	Enhancements	Anytime	• A total of 11 No Ibstock bat bricks boxes will be incorporated into the new buildings on site.
Reptiles Section 4.3	Prior to commencement	Mitigation – temporary receptor	As soon as possible	• **Prior to any works getting underway**, the temporary receptor site at the north-western corner will be left unmanaged to develop into a suitable receptor with areas of scrub and tussocky grassland. This retained area will form the temporary receptor area required for passive dispersal operations.
		Mitigation – Reptile capture	Following temporary receptor establishment – April to September	• Suitably qualified ecologists will carry out the trapping of reptiles during the active season on days where reptiles/amphibians are likely to be found (i.e. between 10°c and 20°C with little or

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				no wind or rain). Reptiles will be captured by hand from beneath the artificial refugia and placed into a suitable container to be transported to the on-site receptor. All captured animals will be released on to the receptor site immediately. • The capture will be undertaken for a minimum of 30 days. if no reptiles are recorded after five visits (in optimal survey conditions), it can be concluded that reptiles are likely to be absent from the site.
		Mitigation – destructive search	April to October	• If required, following the dispersal of reptiles and erection of fencing, a destructive search will be carried out under the supervision of the suitably qualified ecologist.
	Prior to occupation	Enhancements	Anytime following habitat establishment	• A total of 1 No log pile hibernaculum will be created within the retained grassland at the east of the site.
Badgers Section 4.4	During construction	Mitigation – general mitigation	During the construction phase	• Measures to mitigate against impacts towards Badgers during construction are set out within **Section 4.4.1**.
Breeding and Nesting Birds Section 4.5	Prior to occupation	Enhancements	Anytime	• A total of 11 No Swift bricks will be incorporated into the new buildings on site.
Hedgehogs Section 4.6	Prior to occupation	Mitigation	Anytime	• All new garden fences within the site will also ensure at least 2 gaps are present within the gravel boards / bases of each fence line to allow for movement of Hedgehogs into the wider area.

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				The gaps should be at least 15 cm high by 15 cm wide with permeability for small mammals.
Invertebrates Section 4.7	Prior to occupation	Enhancements	Anytime	• A total of 6 No Bee bricks will be incorporated into the new buildings on site.
Compliance Check Section 5.1	Prior to occupation	Enhancements	Anytime	• A compliance visit will be completed by a suitably qualified ecologist once the construction phase of the development has been completed. The ecologist will check that all ecological enhancements set out in **Section 4.0** have been completed as described.

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7.0 CONCLUSION

This document has been prepared to bring together all the existing ecological information for Land adjoining 4 Brookfields, Providence Hill, the aim of providing a means to address all of the ecological constraints identified and provide mitigation and opportunities for enhancement that are consistent with the aims of national and local planning policy. It is considered that should all aspects of this document be implemented; adequate mitigation can be achieved to minimise impacts of the existing population of protected and notable species and a net gain in the site's biodiversity value achieved.

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T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

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T: 01329 832841 info@ecosupport.co.uk www.ecosupport.co.uk

9.0 APPENDICES

9.1 Methodology

9.1.1 Habitats

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation.

UKHab represents a method for classifying habitats which has been produced to provide an up-to-date replacement for the current industry standard phase 1 survey method. One of the main benefits of UKHab is that it supports the evaluation of habitats for EcIA and no net loss/ net gain analysis, providing a more detailed interpretation of habitat types, which is important for assessing the distinctiveness and condition of habitats against which biodiversity net gain is measured.

The standard survey methodology has been 'extended' in this report to include the following:

- Floral species lists for each identified habitat;
- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition;
- Mapping of additional habitat types (e.g. hardstanding);
- Identification of Priority Habitats under Section 41 of the NERC Act;
- Evidence of, or potential for, the presence of certain species/groups

9.1.2 Ground Level Tree Assessment

A non-exhaustive Ground Level Tree Assessment (GLTA) assessment of any notable trees on site was undertaken by Louise Davies on the 18th January 2024 with an updated visit carried out by Lewis Lakudzala on 3rd April 2024. This followed BCT (Collins (ed) 2023) best practice survey which includes aiming to identify the following Potential Roost Features (PRFs):

- PRFs formed by disease and decay: woodpecker holes, squirrel holes, knot holes, pruning cuts, tear outs, wounds, cankers, compression, forks, butt rots
- PRFs formed by damage: lighting strikes, hazard beams, subsidence cracks, shearing cracks, transverse snaps, welds, lifting bark, desiccation features, frost cracks; and
- PRFs formed by association: fluting Ivy.

The presence or absence of any of the features listed above are then fed into the classification of the tree which is as follows (**Table 7**).

Table 7. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement (Collins (ed) 2023).

Suitability	**Description**

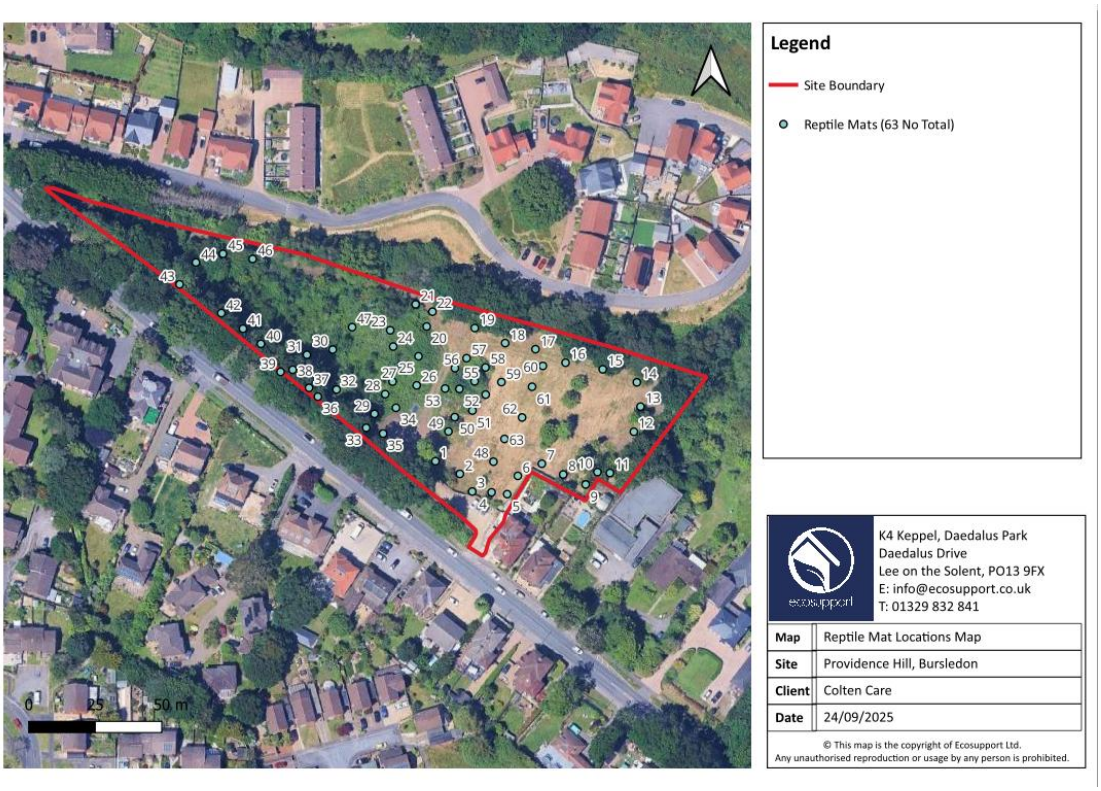
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None	Either no PRFs in the tree or highly unlikely to be any
FAR	Further Assessment Required (FAR) to establish if any PRFs are present in the tree
PRF	A tree with at least one PRF present.

9.1.3 Reptile Survey

The surveys undertaken by Ecosupport were carried out in accordance with best practice guidelines as stated in various resources (Froglife 1999) (Gent & Gibson 1998) in April & May 2024. Artificial refugia comprising of bitumen roofing felt were distributed throughout the suitable reptile habitats present around the site (**Fig 25**). These artificial refugia warm up faster and retain heat for longer than the ground or surrounding vegetation. Reptiles, being exothermic, shelter under the refuge in order for their bodies to reach the temperature required for activity.

Figure 25. Approximate locations of the reptile refugia placed around suitable habitat (redline) for reptiles within the site (Google Satellite, 2024).



These were allowed to bed in for one week, after which seven visits to the site were undertaken during suitable weather conditions. All the refugia were checked for the presence of reptiles in combination with a visual observation transect.

This survey is considered sufficient to identify the presence or likely absence of reptiles on the site. It does not provide sufficient information to allow an accurate assessment of population

sizes, however, it does allow inferences to be made as to population size class in combination with other considerations such as the extent and quality of the habitat.

9.1.4 Habitat Suitability Index – GCN

A Habitat Suitability Index (HSI) was carried out on the ponds within 500m of the site following the guidance provided with ARG (2010). This considers the following factors when calculating the waterbodies suitability to support GCN (Great Crested Newts):

- Location of Waterbody,
- Surface Area,
- Permanence,
- Water Quality,
- Shade,
- Presence of Waterfowl and Fish,
- Number of Ponds within 1km,
- Quality of Terrestrial Habitat,
- Macrophyte Cover

These criteria are used to calculate a score according to ARC Guidelines (ARC 2010) using the Oldham (2000) calculation formulae.

This gives a score between 0 and 1 of the suitability of the waterbody for GCN with:

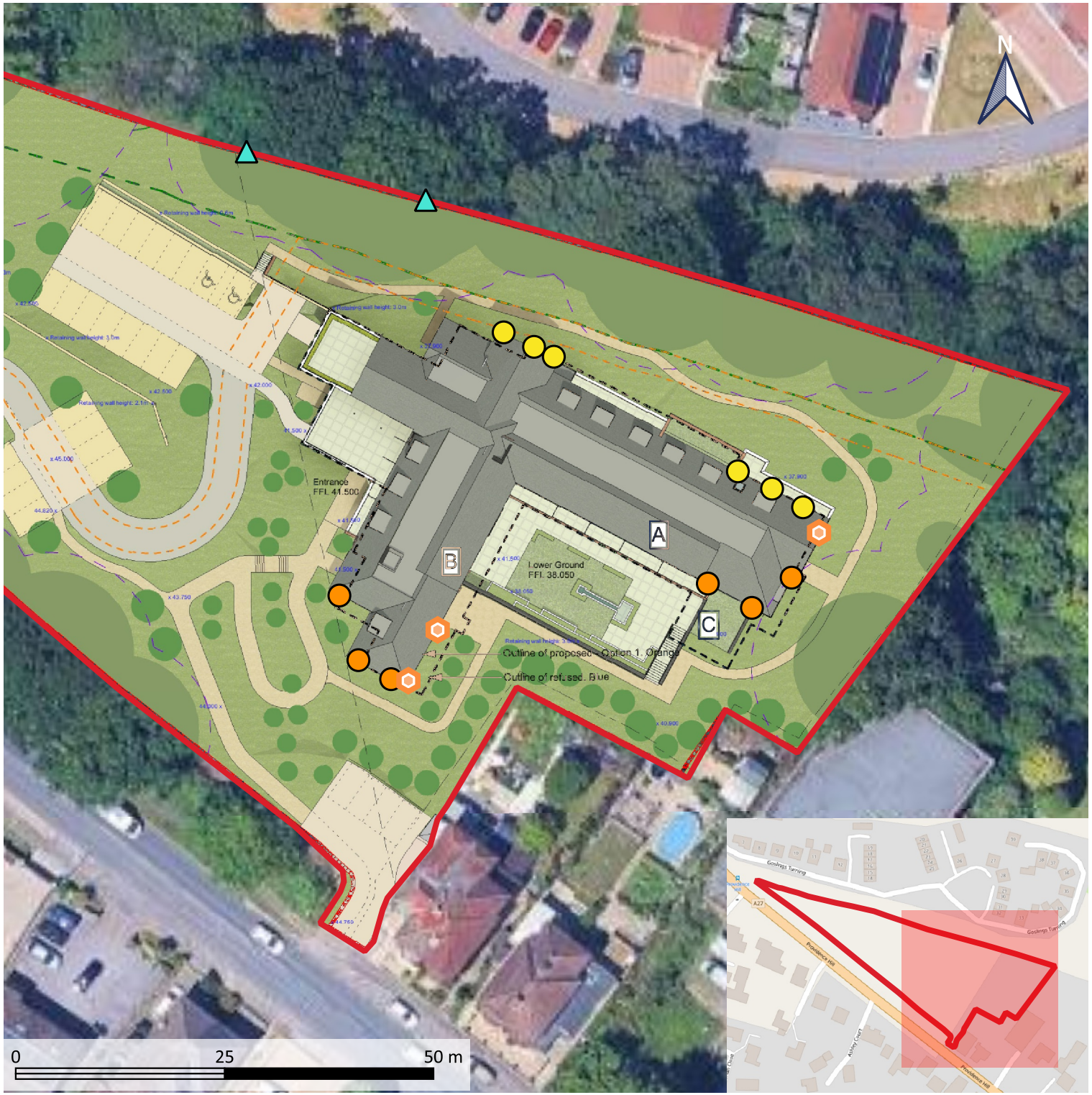
0.40 – 0.50: Poor suitability for GCN
0.51 – 0.59: Below average suitability for GCN
0.60 – 0.69: Average suitability for GCN
0.70 – 0.79: Good suitability for GCN
0.80 – 1.00: Excellent suitability for GCN

9.1.5 Badger Surveys

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 50m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

Due to the confirmed presence of a Badger sett, a Badger activity survey was undertaken to determine the level of use to allow the classification of the sett. Fourteen motion-activated cameras were used and the survey was undertaken following best practice guidelines (Natural England, 2015 & 2018). The sett entrances were monitored between the 29th January – 27th February 2025, with periodic site visits undertaken within this period to check camera footage, change the batteries and note any fresh footprints at the entrance. During each return visit to the site the full site area was searched for the presence of additional sett entrances and field signs. Any evidence of Badger activity was then recorded.

Ecosupport Ltd K4 Keppel, Daedalus Park, Daedalus Drive, Lee-on-the-Solent, Hampshire, PO13 9FX
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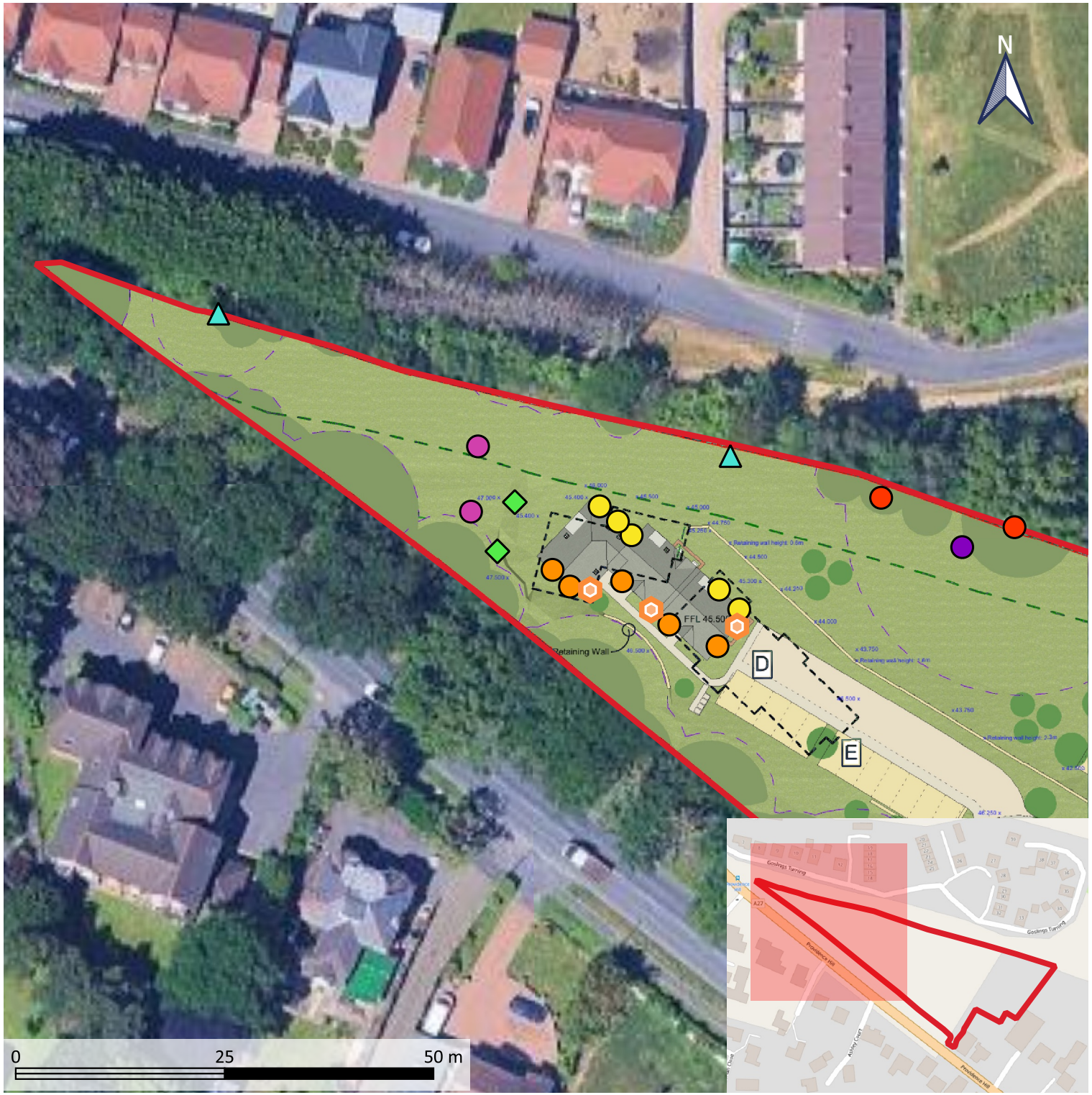
Legend

- Site Boundary
- Bat Brick
- Bird Box
- Swift Brick
- Bat Box
- Bee Brick
- Hedgehog Home
- Hibernaculum

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K4 Keppel, Daedalus Park
Daedalus Drive
Lee on the Solent, PO13 9FX
E: info@ecosupport.co.uk
T: 01329 832 841

Map	Biodiversity Enhancement Plan (East)
Site	Land Adjoing 4 Brookfield, Providence Hill
Client	Colten Care Ltd.
Date	07/10/2025

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Legend

- Site Boundary
- Bat Brick
- Bird Box
- Swift Brick
- Bat Box
- Bee Brick
- Hedgehog Home
- Hibernaculum

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Lee on the Solent, PO13 9FX
E: info@ecosupport.co.uk
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Map	Biodiversity Enhancement Plan (West)
Site	Land Adjoing 4 Brookfield, Providence Hill
Client	Colten Care Ltd.
Date	07/10/2025

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DESIGN REPORT

Bursledon External Lighting

UKLD LIGHTING DESIGN

LIGHTING APPLICATION NOTES

DESIGN NOTES

This preliminary design is produced by the UK Lighting Design based on information supplied by the Customer for the purpose of identifying suitable products and costing the proposal. This design cannot be used for Construction. This design does not purport to eliminate health and safety risks as a CDM Regulation risk assessment has not been undertaken. Depending on the level of information received, several assumptions may have been applied in order to create an indicative lighting proposal and costing model, according to lighting industry guidelines and incorporating industry best practice methods. These assumptions are documented below and will require confirmation by the Principal Designer (which is not UK Lighting Design) during the detailed design phase.

PROJECT SPECIFIC INFORMATION

Lighting Levels as per CIBSE Guidelines BS EN12464-1:2021 & BS 5266-1:2016 + BS EN1838:2013
Surface reflectance values of 70/50/20 and Maintenance factor of 0.8 used
Mounting Height: 4m & Root Mounted Bollards

TRANSPARENCY

All designs and information provided are based upon UK Lighting Design interpretation of information provided by the client. It remains the responsibility of the client to determine that the design is suitable for the purpose it is to be put. UK Lighting Design cannot accept responsibility in respect of the design provided and shall in no way be liable for any direct or consequential damage, loss or expense arising from any defect arising from the design provided.

This design and the information provided is done so in confidence, for the sole purpose of the recipient and may not be disclosed to any non-related third party or used for any other purpose without the express written permission of UK Lighting Design.

Unless stated otherwise the Preliminary Design proposals must not be treated as a fully compliant Emergency Lighting Design. Whilst the UK Lighting Design team will include Emergency Lighting luminaires to achieve >0.5 lux in Anti-panic areas (spaces over 60m2) and >1 lux in corridors & on stairs. A fully compliant emergency lighting design can be carried out on request, if all the necessary information is provided to do so.

Unless stated otherwise, UK Lighting Design has not visited site. Therefore, all proposed luminaire locations are indicative and are subject to an onsite verification arranged/performed by the Principal Designer. In the event a proposed luminaire location is not feasible, a revised calculation should be requested.



REF	SYMBOL	QTY	PRODUCT CODE	DESCRIPTION
L01		5	VE15-A827-00GH-76-1	Vesper 15W - 2700K - Optic 1 - Rear Shield
L02		8	VE15-A827-00GH-76-3	Vesper 15W - 2700K - Optic 3 - Rear Shield
L03		36	HV10-A1X-00-B	Havant 10W

This design is produced by the UK Lighting Design team based on information supplied by the customer for the purpose of identifying suitable product location and positioning. This design cannot be used for Construction, as this design does not purport to eliminate health and safety risks as a CDM Regulation risk assessment has not been undertaken.

Depending on the level of information received, a number of assumptions may have been applied in order to create an indicative lighting proposal and costing model, according to lighting industry guidelines and incorporating industry best practice methods. These assumptions are documented and will require confirmation by the Principle Designer (which is not UK Lighting Design) during the detailed design and build phase.

Rev	Comment	Date
1	INITIAL PROPOSAL	31/10/25

Project Number: 42212

Scale & Sheet Size: 1:400 @ A1

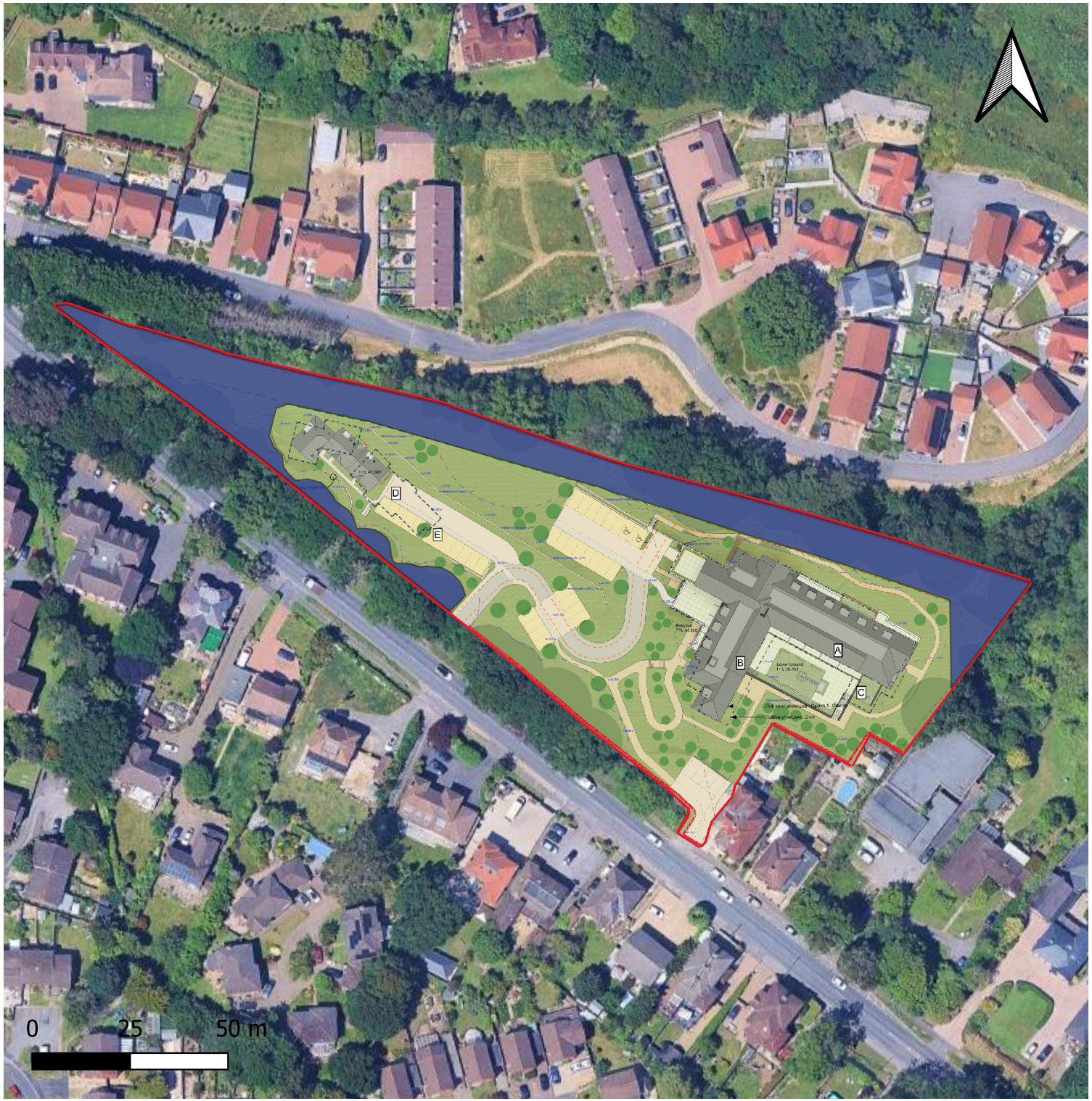
Sheet Number: R1

Project Name: Bursledon External Lighting

Drawing Name: External Lighting Layout

UK LIGHTING DESIGN


THANK
YOU
Please don’t hesitate to contact your appointed project
manager with any questions.
UKLED
LIGHTING DESIGN



Legend

- Site Boundary
- DarkCorridor

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E: info@ecosupport.co.uk
T: 01329 832 841

Map	Dark Corridors Map: Post-Development
Site	Providence Hill, Bursledon
Client	Colten Care
Date	17/09/2025

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APPENDIX C: Phasing Plans

ENABLING WORKS:

- Erect retile barriers in liaison with Ecologist
- Erect tree protection fencing
- Set up site welfare (W/C, office etc.)
- Lay temporary road to access working areas
- Erect partial section of retaining wall
- Backfill levels to raise area to carry out formation of new access
- Install section of site road to allow access to new access point
- Create compound area for plant and materials
- Create parking for site staff
- Form new site access from Providence Hill



Key:

- NO WORKS to be undertaken within this area other than erection of tree protection fencing – in accordance with Approved Plan PR124477-03B (ACD)
- Site Boundary
- Tree Protection Fence Line – in accordance with Approved Plan PR124477-03B (ACD)
- Tree Protection Fence Line amended to accommodate enabling access only
- Ground protected within Root Protection Area in accordance with Approved Arboricultural Impact Assessment (ACD)
- Ecology Barrier – in accordance with Approved Plan PR124477-03B (ACD)
- Ecology Strip
- Existing retaining wall to be removed
- Proposed retaining wall to be erected
- Suggested location of temporary surface water drainage – in accordance with Approved Ecology Report (Ecosupport)
- Approved S278 Works: to base course only, tarmac fillets to omit trip hazard at kerb – serviced from within site boundary for H&S reasons
- Permanent access road up to base course only
- Pedestrian route (1m wide) segregated with barriers
- * Pedestrian crossing with crossing hoops
- Compound area (materials & plant)
- Storage & Plant containers
- Temporary route to access enabling works only (crushed concrete or similar on Tarum)
- CDL Parking only
- Existing 3no. parking spaces to be retained for residents of neighbouring properties
- Site Office (stacked with Canteen during Phase One only) & W/C
- # Suggested location of temporary lighting – in accordance with Approved Ecology Report (Ecosupport)
- + Suggested location of wheel washing facility

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COLTEN HOUSE WELLWORTHY WAY RINGWOOD HAMPSHIRE BH24 3FE
TEL (01425) 541145

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All dimensions and levels to be checked on site, only figured dimensions to be used for setting out.

REVISION:
* - 01.10.25 - RT - First Issue

COLTEN CARE

JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:	DRAWN BY:
Land at Providence Hill, Bursledon	Enabling Phase Plan	N.T.S. @A3	24/09/25	RT
		JOB REFERENCE: 256	DRAWING NO: 001	REVISION: *

PHASE ONE:

- Close off existing access from car park
- Construct remainder of new access road
- Erect balance of retaining walls
- Create second car park to be used for materials, plant storage and containers
- Site parking to be relocated to enabling works material and plant compound area
- Site office, canteen, W/C and drying room to be located on parking spaces along new access road

PHASE TWO COTTAGES

FFL 46.500

Retaining Wall

Bin store

Office & Canteen

WC

Entrance
FFL 44.500

Lower Ground
FFL 38.050

SITE ACCESS

Key:

- Site Boundary
- Tree Protection Fence Line – in accordance with Approved Plan PR124477-03B (ACD)
- Ecology Barrier – in accordance with Approved Plan PR124477-03B (ACD)
- Ecology Strip
- Existing retaining wall to be removed
- Proposed retaining wall to be erected
- Suggested location of temporary surface water drainage – in accordance with Approved Ecology Report (Ecosupport)
- Permanent access road up to base course only
- Pedestrian route (1m wide) segregated with barriers
- Pedestrian crossing with crossing hoops
- Compound area (materials & plant)
- Storage & Plant containers
- Temporary route to access Silo's only (crushed concrete or similar on Tarum)
- CDL Parking only
- Visitor & Staff Parking
- Existing 3no. parking spaces to be retained for residents of neighbouring properties
- Site Office (stacked with Canteen during Phase One only) & W/C
- Silo x2
- Overnight telehandler parking
- # Suggested location of temporary lighting – in accordance with Approved Ecology Report (Ecosupport)
- + Suggested location of wheel washing facility

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COLTEN CARE

JOB TITLE:	Land at Providence Hill, Bursledon
DRAWING TITLE:	Phase One Plan
SCALE:	N.T.S. @A3
DATE:	24/09/25
DRAWN BY:	RT
JOB REFERENCE:	256
DRAWING NO:	002
REVISION:	*

PHASE TWO:

- Site office and welfare/facilities to remain at location within Phase ONE.
- Visitors' car parking alongside site offices, retained.
- Contractor parking to utilise the parking spaces along the new access road.
- Site containers, Silo's and material compound located on lower car park.
- Construct new cottages.
- Install associated parking, facilities and landscaping.
- Connect and commission all utilities.
- Complete access road with final wearing course.



Key:

- Site Boundary
- Tree Protection Fence Line – in accordance with Approved Plan PR124477-03B (ACD)
- Tree Protection Fence Line removed only once Phase One completed & building occupied
- Ecology Barrier – in accordance with Approved Plan PR124477-03B (ACD)
- Ecology Strip
- Suggested location of temporary surface water drainage – in accordance with Approved Ecology Report (Ecosupport)
- Pedestrian route (1m wide) segregated with barriers
- Pedestrian crossing with crossing hoops
- Compound area (materials & plant)
- Storage & Plant containers
- CDL Parking only
- Visitor & Staff Parking
- Existing 3no. parking spaces to be retained for residents of neighbouring properties
- Site Office (stacked with Canteen during Phase One only) & W/C
- # Suggested location of temporary lighting – in accordance with Approved Ecology Report (Ecosupport)
- \+ Suggested location of wheel washing facility
- Approved S278 Works complete – including wearing course to all access roads and carparks

COLTEN DEVELOPMENTS LIMITED
COLTEN HOUSE WELLWORTHY WAY RINGWOOD HAMPSHIRE BH24 3FE
TEL (01425) 541145

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The Company reserve the right to amend or alter this drawing without giving notice and all details shown are for guidance only and do not constitute an offer.

All dimensions and levels to be checked on site, only figured dimensions to be used for setting out.

REVISION:
* - 01.10.25 - RT - First Issue

COLTEN CARE

JOB TITLE:
Land at Providence Hill, Bursledon

DRAWING TITLE:
Phase Two Plan

SCALE:	DATE:	DRAWN BY:
N.T.S. @A3	24/09/25	RT
JOB REFERENCE:	DRAWING NO:	REVISION:
256	003	*

APPENDIX D: Tree Protection Plan

Fencing positioned up to ditch.

RPA based on onsite recording of DBH.

Veteran oak tree has been afforded a greater area of protection commensurate with an RPA calculated at 15x trunk diameter.

Line of Key View

Excavations associated with retaining walls to be conducted in a sensitive manner.

Minimum area of no-dig surfacing to be applied.

Section of footpath to be sensitively excavated within RPA.

Area TPO No. 825-E

Bespoke surfacing foundation design. Radial strips to avoid large roots >25mm. Foundations to be sensitively excavated under supervision of the project arboriculturist. See arboricultural method statement for further details.

Section of footpath to be sensitively excavated within RPA.

Additional area rooting environment afforded within CEZ to mitigate for encroachment into RPA.

Additional area rooting environment afforded within CEZ to mitigate for encroachment into RPA.

Temporary position of TPF, prior to construction work.

Section of building footprint to be excavated following sensitive methodology, under supervision from the project arboriculturist.

Section of exposed RPA to be protected with ground protection upon final positioning of TPF.

No-dig footpath design to be used.

T25 - B2 Common Oak
T26 - U Common Oak
T24 - C2 Common Oak
G6 - C2 Norway Maple
G5 - B2 Silver Birch
G7 - B2 Ash
T29 - C2 Norway Maple
T27 - B2 Common Oak
T28 - C2 Common Oak
T30 - B2 Common Oak
G3 - C2 Goat Willow
T23 - A3 Common Oak
T22 - U Yew
T20 - A2 Common Oak
T19 - B2 Holly
T18 - A2 Common Oak
T17 - C2 Holly
T16 - A2 Common Oak
T15 - C2 Beech
G2 - B2 Scots Pine
T13 - U Scots Pine
T12 - A2 Common Oak
T11 - B2 Scots Pine
T14 - A2 Common Oak
T10 - A2 Scots Pine
T9 - B2 Wild Cherry
T8 - B2 Beech
T7 - B2 Common Oak
T6 - B2 Common Oak
T5 - C2 Common Oak
T4 - A2 Common Oak
G1 - C2 Apple, Hazel
G8 - C2 Monkey Puzzle, Norway Spruce, Laburnum, Apple
T1 - C2 Horse Chestnut
G11 - C2 Ash
T31 - B2 Common Oak
G0 - C2 Common Oak, Sycamore, Ash, Cherry Laurel
T33 - B2 Lawson Cypress
T32 - B2 Common Oak
T34 - C2 Ash
T42 - C2 Common Oak
T35 - C2 Sweet Chestnut
T36 - U Common Oak
T38 - A2 Common Oak
T39 - B2 Common Oak
T37 - U Common Oak
T40 - C2 Ash
T41 - A2 Common Oak
T43 - C2 Common Oak
T46 - B2 Common Oak
T45 - B2 Common Oak
T44 - A2 Common Oak
T47 - A2 Common Oak
T49 - A2 Common Oak
T48 - A2 Common Oak
T57 - C2 Common Oak
T50 - B2 Common Oak
T51 - B2 Common Oak
T52 - A2 Common Oak
T53 - B2 Common Oak
T58 - B2 Common Oak
T59 - A2 Common Oak
T55 - A2 Common Oak
T56 - B2 Red Oak
Retaining Wall
Bin store
Entrance FFL 41.500
Lower Ground FFL 38.050
FFL 45.500
gravel path
rear gardens
no access to survey
single storey extensions
DENCE HILL

LEGEND

TREE PROTECTION FENCING & EXCLUSION ZONE
No access for personnel or machinery or storage in any plant activity on site whatsoever, including demolition, utility installation, groundworks, and soil stripping. Once erected, all TPF will be regarded as sacrosanct, and will not be removed or altered without prior recommendation by the project arboriculturist and approval of the local planning authority.

Tree Protection Fence shall comprise of Heras type panels on 'boots' well braced to resist impact, supported on rubber feet to prevent ground disturbance. Where the exclusion zone has been protected by barriers and/or ground protection, construction work can commence. All weather notices may be erected on the barriers.

1 Weldmesh (e.g Heras) Panels
2 Rubber Mounts to support
3 Scaffold pole uprights driven firmly into ground, then secured to panels with wire ties
4 Uprights driven firmly into ground through hole in block, then secured to panels with wire ties
5 Panels to be interlinked using clamps

TEMPORARY FENCING
The fencing is used to protect the trees prior to construction works and installation of special detail and is only to be moved directly before associated construction works commence.

BESPOKE SURFACE FOUNDATION DESIGN
Suported foundation design for the proposed site entrance, strip foundations positioned away from large roots >25mm dia. Necessary excavations to be conducted in a sensitive manner, under supervision.

RDCH 4/2251/1/GC

Table: S:\Bills\GC\	
CHINESE DISPOSAL No.	
EXCAVATION OF TOPSOIL	
EXCAVATION OF SUBSOIL	
EXCAVATION OF ROCK	
EXCAVATION OF TRENCHES	
EXCAVATION OF POND	
REMOVING EX.Ma	
Transfer/deduct	

NO-DIG SURFACE
Cellular confinement system (CCS) to be used to create this area of hard surface, above the existing ground level. Topsoil to be retained. Depth of CCS to be 50-75mm for pedestrian surfaces and 100-200 for vehicular surfaces. Cells to be filled with 20-40mm clean graded angular stone. CCS to be installed under arboricultural supervision. **All specifications subject to engineering design.**

Cells to be filled with 20-40mm clean graded angular stone to manufacturers details and specifications

TreeTex 7300 geotextile or similar laid over Cellfelt

Peg and board edging

Porous surface to finish

Top soil to BS3882:2007

Original ground level

TreeTex 7300 non-woven geotextile or similar approved laid over formation

Depressions in sub-grade formation to be filled with sharp sand where required

CCS Cellular confinement system (Geosynthetics Cellfelt or similar approved)

GROUND PROTECTION ADJACENT TO PROPOSED BUILDINGS
The area of ground is within the RPA of the adjacent retained tree. Ground protection must be installed according to the following specifications/methods:

GROUND PROTECTION WITHIN ROOT PROTECTION AREAS

Foot traffic

Scaffolding

Protective fencing

Protected area

Platform level at 5m lift of 2.5m

Ground undisturbed and protected by additional level of scaffold boards mounted 150mm above ground level

For pedestrian movements the installation of ground protection as shown will suffice. For further details see BS5837:2012 Section 6

SENSITIVE EXCAVATION
Where excavation work is within retained RPA. To reduce impacts to underlying roots the excavation is to be conducted in a sensitive manner, either by use of hand-tools and an spade where feasible or through use of an excavator with a toothless bucket and under direct supervision.

TREE TO BE RETAINED

TREE TO BE REMOVED

HEDGE CANOPY TO BE REDUCED
Hedge to be trimmed back from the red dashed line to the green line as indicated

A CATEGORY TREE
B CATEGORY TREE
C CATEGORY TREE
U CATEGORY TREE

ROOT PROTECTION AREA (RPA) FOR RETAINED TREES

The original of this drawing was produced in colour- a monochrome copy should not be relied upon.

Rev	Date	Details	Drawn
B	26/03/25	Update to layout.	WTW
A	22/07/24	Update to layout, and supplied bespoke surface foundation design.	WTW

ACD ENVIRONMENTAL

HEAD OFFICE
Rodbourne Rail Business Centre, Grange Lane, Malmesbury, SN16 0ES
Tel: 01666 825646

Unit 7, Godalming Business Centre, Woolsack Way Godalming, GU7 1XW
Tel: 01483 425774

Suite 6, Crescent House, Yonge Close, Eastleigh, SO50 9SX
Tel: 02382 026300

email: mail@acdenv.co.uk
www.acdenvironmental.co.uk

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client: Colten Care Ltd.
drawing: Tree Protection Plan
date: 07/03/2024
scale: 1:250@AO
dwg no: PRI24477-03B
drawn: WTW checked: HEP