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COMMERCIAL PROPERTY ADVICE



Preliminary Ecological Appraisal Report

Elettra Avenue, Waterlooville, Hampshire

On Behalf Of:

Hargreaves Property Ltd.

Prepared By:

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Preliminary Ecological Appraisal Report

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EXECUTIVE SUMMARY

Harris Lamb Property Consultants (HLPC) was commissioned by Hargreaves Property Ltd to produce a Preliminary Ecological Appraisal Report of c. 4ha of land off Elettra Avenue, Waterloo Park. The Applicant is seeking an outline planning application which will seek permission with all matters reserved, apart from access, for construction of up to c. 29,820sq.m B1(c) (business use), B2 (general industrial use), B8 (special industrial use - trade counter uses) and c. 10,288sq.m open A1 (retail use), A2 (professional services use), A5 (hot food and takeaway use), A4 (public house use), C1 (hotel use) and D2 (leisure use).

The site comprises bare ground/hard standing with rubble piles from demolition of previous buildings. Areas of broken ground have started to become established with tall ruderal plant communities that are common in the UK. The boundary consists of broadleaved trees and a species-poor hedgerow.

HLPC carried out an Extended Phase 1 Habitat Survey of the site in July 2018 by a suitably experienced ecologist. A reptile survey was undertaken in September/October 2018. No reptiles were recorded. Ponds were recorded within 250m of the site, but separated by road, commercial and housing development. eDNA sampling was undertaken in June 2018 and the results were negative for the presence of Great Crested Newt *Triturus cristatus* in all ponds that were sampled.

Desk-based consultation was undertaken with Hampshire Biodiversity Information Centre (HBIC) for records of protected species and habitats within 1km of the site. No statutorily or non-statutorily designated sites or priority habitats are anticipated to be affected by the proposed scheme. The habitats present on site, and the site location, is not considered likely to support species associated with Portsmouth Harbour SPA/Ramsar and Chichester & Langstone Harbours SPA/Ramsar.

Landscape design should include additional nesting bird habitat with tree planting and installation of bird boxes on suitable retained trees. Removal of vegetation should be undertaken outside the nesting bird season i.e. undertaken between September and February. Should mature oaks located outside the site require felling they should be further inspected by a licensed bat ecologist.

Mitigation and enhancement measures could be secured through planning condition and therefore the proposed development accords with biodiversity planning policy.

1.0 INTRODUCTION

1.1 Terms of reference

- 1.1.1 Harris Lamb Property Consultants (HLPC) was commissioned by Hargreaves Property Ltd to produce a Preliminary Ecological Appraisal Report (PEAR) of land at Waterloooville Industrial Estate, Elettra Avenue (National Grid Reference (NGR): SU676099) hereafter termed the 'site' (see Figure 1 below).



Figure 1: Site location inside red boundary. Not to scale.

1.2 Site location

- 1.2.1 The site is approximately 4ha in extent and is located on Waterloooville Industrial Estate, approximately 0.8km west of the centre of Waterloooville, Hampshire. The site is bounded by Elettra Avenue to the north and west, Silverthorne Way to the south, and the B2150 to the east. The site is set within an urban environment dominated by housing and commercial development.
- 1.2.2 The site is dominated by hard standing from formerly demolished buildings and access infrastructure. There are areas of demolition rubble and tall

ruderal plant communities are becoming established across the site. The boundary of the site consists of broadleaved trees and a species-poor hedgerow with construction fencing.

1.3 The proposed development

1.3.1 The Applicant is preparing an outline planning application which will seek permission with all matters, apart from access for construction of up to c. 29,820sq.m B1(c) (business use), B2 (general industrial use), B8 (special industrial use - trade counter uses) and c.10,288sq.m open A1 (retail use), A2 (professional services use), A5 (hot food and takeaway use), A4 (public house use), C1 (hotel use) and D2 (leisure use) as shown on Figure 1.

1.4 Purpose of the report

1.4.1 The purpose of this report is to:

- Identify key ecological constraints associated with the proposed development and input into the scheme design to minimise ecological impacts where possible.
- Set out mitigation measures required to ensure compliance with nature conservation legislation and address potentially significant ecological effects.
- Identify how mitigation measures could be secured.
- Provide an assessment of significance of residual effects.
- Identify appropriate enhancement measures.
- Identify appropriate post-construction monitoring if relevant.

2.0 PLANNING CONTEXT

2.1 National Planning Policy Framework (NPPF)

2.1.1 National Planning Policy Framework (NPPF¹) is the top tier of planning policy. The Framework provides guidance to local authorities and other agencies on planning policy and the operation of the planning system.

2.1.2 Relevant policies in relation to planning application include Paragraph 174:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate".

¹ National Planning Policy Framework (2018) July 2018 Ministry of Housing Communities and Local Government

2.1.3 Section 15 relates to 'Conserving and enhancing the natural environment'. Paragraph 175 it set out the following:

"When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity".

2.2 Relevant local planning policy

2.2.1 Havant Borough Council has an adopted Local Plan; this is made up of the Core Strategy (2011) and the Site Allocations Plan (2014)². These will remain in place until the Havant Borough Local Plan 2036 is adopted. Relevant identified policies are given in Table 1.

² Havant Borough Local Plan (2011).

Table 1: Summary of relevant Local Planning Policies

Policy	Summary
Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough	Planning permission will be granted for development that: <i>Protects and where possible enhances the borough's statutory and non-statutory designated landscape, habitats and features of biological, hydrological or geological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures including wardening, education and information and the creation of new habitats, water bodies/courses planting of new trees and woodland.....</i> <i>Has particular regard to the following hierarchy of nature conservation designations within the borough (as identified on the Proposals Map): (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar [International]. (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves [National]. (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), other Ancient Woodland not identified in (ii) above [Local].....</i> <i>Supports an ongoing programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.....</i> <i>Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly on the coast, to reduce harm to nature conservation interests.....</i> <i>Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh. 8. Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.</i>
Policy CS13 Green Infrastructure	Development will be permitted that: <i>1. Maintains and manages the network of green infrastructure identified at the sub regional and local levels. 2. Incorporates, where appropriate, improvements to existing green infrastructure through the restoration, enhancement or creation of additional resources. 3. Does not undermine the functional integrity of the green infrastructure. 4. Creates, where appropriate, new green infrastructure (including access management measures) either through on site provision or financial contributions.</i> <i>Development proposals that adversely affect green infrastructure will not be permitted unless superior alternative provision can be provided or where it is part of a service provider's plans to provide improved local services in equally accessible locations.</i> <i>Green infrastructure sites will be allocated in the Development Delivery (Allocations) Plan.</i>

Policy	Summary
DM8 Conservation, Protection and Enhancement of Existing Natural Features	<i>Development will only be permitted where it protects and enhances local habitats and landscape distinctiveness and which addresses all of the relevant criteria as set out below:</i> <i>1. Protects natural features of nature conservation and/or amenity importance on the site, for example trees, woodlands, hedgerows, soils, streams, stream corridors, springs, ditches or ponds from damage, destruction and a deterioration in quality. 2. Sympathetically incorporates existing features into the overall design of the scheme including measures taken to ensure their continued survival. 3. Provides new landscape works that integrate successfully with the local environment and existing natural features, using local materials and plant species and making provision for future maintenance of new landscape works associated with new developments. 4. Ensures sequences of greenspaces are maintained and protects the attractiveness and visual amenity of all green open spaces that contribute to the identity of the borough.</i>
DM9 Development in the Coastal Zone	<i>Planning Permission will only be granted for development in the coastal zone which addresses all of the relevant criteria as set out below as shown on the Proposals Map: 1. Has no harmful effects on nature conservation within the Chichester and Langstone Harbour SSSIs and SPA, Solent Maritime SAC and Ramsar site, or any SINCs and Local Nature Reserves. 2. Maintains and enhances the appearance and distinctiveness of existing settlements and landmarks along the coast. 3. Contributes positively to the landscape and has regard to best practice on the design of new buildings in coastal locations. 4. Upgrades existing footpaths and ensures that public access is retained and provided to connect existing paths along the waterfront where appropriate. 5. Would result in improvements to or redistribution of moorings, marine berths or launch on demand facilities (dry berths) in the harbours. 6. Would not be detrimental to infrastructure for, and quality of, water-based recreation, or be detrimental to the safety of navigation. 7. Provides recreational opportunities that do not adversely affect the character and appearance of the coast.</i>

2.3 Natural Environment and Rural Communities Act

- 2.3.1 In Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act, which came into force on 1st Oct 2006 requires the Secretary of State to publish “a list of habitats and species which are of principal importance for the conservation of biodiversity in England”. This list guides decision-makers such as councils and statutory undertakers, as to their duty under Section 40 of the NERC Act, to “have regard to the conservation of biodiversity in England” in day-to-day decisions.

2.3.2 There are currently 56 habitats of principal importance and 943 species of principal importance included on the S41 list. The key priority species and habitats considered to be of relevance to the site based on its location and habitats have been identified within this report.

2.4 Havant Borough Council Local Biodiversity Action Plan³

2.4.1 Havant Borough Council produced a Local Biodiversity Action Plan (LBAP) in 2011 that *“provides a vision and a framework for future action to conserve biodiversity in Havant Borough. The LBAP provides Havant with a mechanism for meeting Green Infrastructure objectives to enhance existing biodiversity, restore habitats, mitigate for the impacts of development and reduce the effects of climate change”*.

³ <http://www.havantfoe.org.uk/wp-content/uploads/Havant-Borough-Council-Havant-Biodiversity-Action-Plan-2011.pdf> [accessed September 2018]

3.0 METHODOLOGY

3.1 Study area

3.1.1 The study area is the application boundary shown on Figure 1. The study area was extended beyond the site where appropriate to undertake species-specific appraisals as detailed below. The study area and assessments comply with industry guidance from the CIEEM Guidelines for Preliminary Ecological Appraisal⁴.

3.2 Desk study

3.2.1 The desktop study was undertaken in July 2018 and included:

- Hampshire Biodiversity Information Centre (HBIC);
- Multi Agency Geographic Information for the Countryside (MAGIC) website⁵;
- Ordnance Survey (OS)⁶, and
- Aerial imagery⁶.

3.2.2 The geographical extent of the search area for biodiversity information was related to the significance of sites and species and potential zones of influence which might arise from development within the site. For this site the following search areas were considered to be appropriate:

- 10km around the site boundary for sites of International Importance (e.g. Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar site)).
- 1km around the site boundary for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI)), protected or otherwise notable species and non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS).
- 1km for ancient woodland.

⁴ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

⁵ www.magic.gov.uk accessed 19th March 2018

⁶ www.bing.co.uk accessed April 2018

- 1km for biological records.

3.2.3 No pre-application consultation relating to ecology was undertaken at the time of writing this report. No previous ecological information relating to the site was identified.

3.3 Field survey

Flora

3.3.1 HLPC carried out an Extended Phase 1 Habitat Survey of the site on 5th July 2018. The survey was carried out by an experienced ecologist with 13 years' experience. The survey was undertaken in accordance with 'Extended Phase 1' methodology⁷.

3.3.2 Specific habitat features were mapped using Target Notes (TN) to record ecological features of note.

Fauna

3.3.3 The fauna included within this assessment is based on the habitats present, data from the desk-based searches, and the following legislation⁸:

- Wildlife and Countryside Act 1981 (as amended);
- The Protection of Badgers Act 1992;
- The Conservation of Habitats and Species Regulations 2010; and
- The NERC Act 2006 – S41 Species of Principal Importance (SPI) for the conservation of biodiversity.

Great Crested Newt

3.3.4 Waterbodies within 500m of the site boundary were identified using online Ordnance Survey maps⁹ and aerial imagery and were assessed for their suitability to support Great Crested Newt *Triturus cristatus* using a Habitat

⁷ Joint Nature Conservation Committee (2010) Handbook for Phase 1 Habitat Survey. A Technique for Environmental Audit.

⁸ See www.legislation.gov.uk

⁹ <https://www.bing.com/maps> [accessed April 2018]

Suitability Index (HSI)¹⁰. The HSI is a numerical index, between 0 and 1. Values close to 0 indicate unsuitable habitat, 1 represents optimal habitat.

- 3.3.5 One pond was identified c. 50m west of the site, separated by Elettra Avenue. A further five ponds were identified c. 160-340m south of the site (Figure 2).

¹⁰ Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10(4), 143-155.

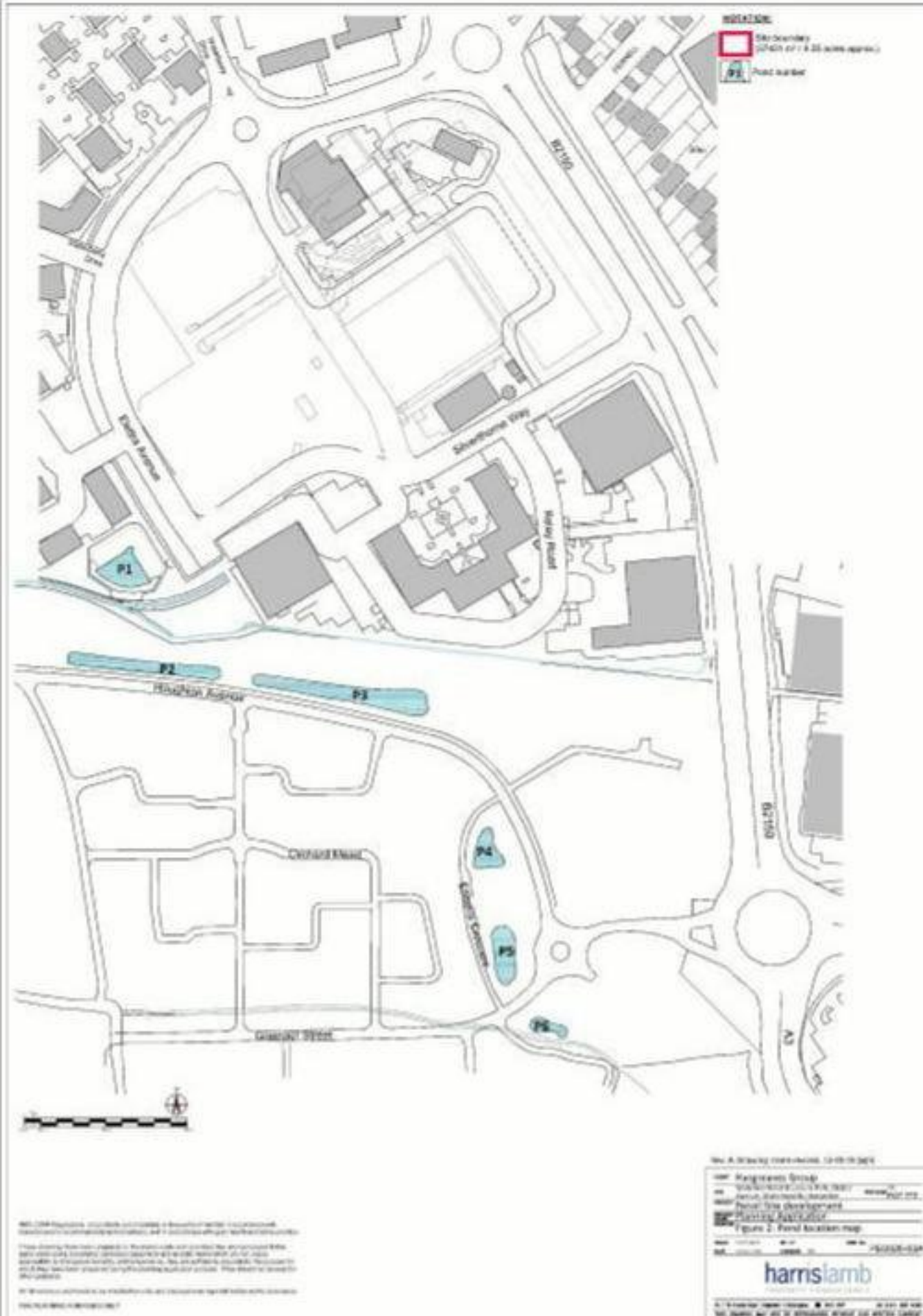


Figure 2: Pond location

3.3.6 Water environmental DNA (eDNA) sampling was undertaken at Ponds 2-6 on 20th June 2018 in accordance with methodology approved by Natural England (Biggs *et al.*, 2014) and laboratory results sent to SureScreen Scientific Laboratories who follow WC1067, the accepted eDNA screening

method by Natural England and are listed as a quality provider and participate in their proficiency testing scheme. Access to Pond 1 was not considered safe to access due to health and safety concerns.

Reptiles

- 3.3.7 An assessment of the suitability of the habitats present to support common reptile species was undertaken. In accordance with current guidance, this assessment involved a review of habitats and habitat structure for suitable shelter for reptiles such as areas of scrub and woodpiles, grassland with well-developed and varied structure, areas suitable for basking, large tussocks etc.
- 3.3.8 The site was subjected to a presence/absence reptile survey using 60 Artificial Cover Objects (ACO's) or refugia according to Froglife guidelines (1999)¹¹ throughout September and October 2018. Artificial Cover Objects were constructed of c. 0.5m x 0.5m sheeting using a roofing felt as recommended by Froglife. In addition, natural refugia features already present i.e. rubble/brick piles, wooden planks, were searched.
- 3.3.9 The artificial refugia were left to 'bed in' for approximately six weeks. Once the artificial refugia had bedded in, seven non-consecutive survey visits were carried out to determine the presence/absence of reptile species on site. During each visit, the artificial refugia were checked visually from a distance to determine whether reptiles were basking on their surface. The artificial refugia were then carefully approached and lifted to check for reptiles sheltering beneath them.
- 3.3.10 Weather during the survey visits was conducive for surveying for reptiles, being dry and warm or mild. Froglife guidelines (1999) recommend ideal temperatures for reptile survey between 9°C and 18°C.

Birds

- 3.3.11 Bird species identified at the time of survey were noted and nesting birds recorded as seen. An assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

¹¹ Froglife (1999). Froglife Advice Sheet 10: Reptile Survey. Froglife, London

Bats

- 3.3.12 The tree assessments were undertaken from ground level, with the aid of a torch and binoculars, where required. During the survey Potential Roosting Features (PRF) for bats following current best practice^{12, 13, 14} were recorded.
- 3.3.13 The potential for the site and immediate surrounds to support foraging and commuting bats was also assessed, with particular regard given to the presence of continuous treelines, watercourses and hedgerows providing good connectivity in the landscape, and the presence of varied habitat such as scrub, woodland, grassland and open water in the vicinity.

Badger

- 3.3.14 No evidence of Badger *Meles meles* activity e.g. setts, snuffle holes, latrines, identified during the survey were recorded.

Riparian mammals

- 3.3.15 The watercourse adjacent to the site was assessed for its potential to support protected riparian mammals, Otter *Lutra lutra* and Water Vole *Arvicola amphibius*.

Invertebrates

- 3.3.16 The habitats were assessed for their potential to support a diverse assemblage of priority invertebrates. The watercourse was assessed to determine the suitability for supporting White-clawed Crayfish *Austropotamobius pallipes*.

Other notable species

- 3.3.17 Signs of other notable species were recorded as seen.

Legally controlled species

- 3.3.18 Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended was recorded as seen.

¹² Bat Conservation Trust (BCT) 2016. Bat Surveys for Professional Ecologists, Good Practice Guidelines, 3rd Edition

¹³ Mitchell-Jones, A.J. & McLeish, A.P. Ed. 2004. Bat Workers' Manual 3rd Edition

¹⁴ BCT (2015) Surveying for Bats in Trees and Woodland – Guide

3.4 Assessment methodology

3.4.1 The importance of ecological features and impact assessment methodology is based on CIEEM guidelines for ecological impact assessment in the UK and Ireland¹⁵. Significant effects is defined as “*an effect that either supports or undermines biodiversity conservation objectives for important ecological features*” (CIEEM, 2016). A significant effect does not necessarily equate to an affect so severe that consent for a project should be refused planning permission if they can demonstrate following the mitigation hierarchy (avoid, mitigate, compensate) has been applied as part of the decision-making process. Significant effects are qualified with a scale: international and European, national, regional, metropolitan/county, local or within the zone of influence (defined here as site level).

3.4.2 This report assumes that construction will commence within 2-3 years of the date of the assessment in accordance with the British Standard 42020:2013¹⁶ unless otherwise stated.

Determining importance

3.4.3 Determining the importance of identified ecological features is based on CIEEM guidance¹⁷. Various characteristics contribute to the importance of ecological features including:

- naturalness;
- animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
- ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
- endemic species or locally distinct sub-populations of a species;
- habitat diversity;

¹⁵ CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland

¹⁶ BSI (2013) Biodiversity – Code of Practice for Planning and Development.

¹⁷ CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester

- habitat connectivity and/or synergistic associations;
- habitats and species in decline;
- rich assemblages of plants and animals;
- large populations of species or concentrations of species considered uncommon or threatened in a wider context;
- plant communities (and their associated animals) that are considered to be typical of valued natural/seminatural vegetation types, including examples of naturally species-poor communities;
- species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.

3.4.4 Geographic context is also considered within a defined geographical context.

- International and European.
- National.
- Regional.
- Metropolitan, County, vice-county or other local authority-wide area.
- Local (including district or borough context) or within a zone of influence (here termed the site).

3.5 Assessment limitations

- 3.5.1 Ecological surveys are limited by factors that affect the presence of plants and animals, such as the time of year, weather, migration patterns and behaviour. The initial survey was undertaken in July 2018 and updated through survey visits to the site throughout September and October 2018.
- 3.5.2 Any absence of desk study records cannot be relied upon to categorically infer absence of a species/habitat as the absence of records may be a result of under-recording within the given search area.
- 3.5.3 Phase 1 Habitat survey aimed to characterise the habitat on site and is not intended to give a complete list of plant species present.
- 3.5.4 Access to Pond 1 was not possible to take an eDNA sample due to steep sides and health and safety concerns.

4.0 RESULTS

4.1 Ecological designations

Internationally designated sites for nature conservation

- 4.1.1 Five internationally statutory designated sites for nature conservation were recorded within 10km of the site. Three Special Areas of Conservation (SAC) and two sites that were designated as Ramsar and Special Protection Areas (SPA).

Table 2: Summary of international sites for nature conservation within 10km of the site

Name of Site	Status	Approximate distance and direction from the Site	Brief description
Solent & of Wight lagoons	SAC	4.6km south	The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna including large populations of three notable species: the nationally rare Foxtail Stonewort <i>Lamprothamnium papulosum</i> the nationally scarce Lagoon Sand Shrimp <i>Gammarus insensibilis</i> and the nationally scarce starlet sea anemone <i>Nematostella vectensis</i> .
Solent Maritime	SAC	4.6km south	The site is the only one in the series to contain more than one physiographic sub-type of estuary and is the only cluster site. The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day, and for the complexity of the marine and estuarine habitats present within the area.
Portsmouth Harbour	SPA & Ramsar	5.9km southwest	Portsmouth Harbour has only a narrow connection to the sea via the Solent, and receives comparatively little fresh water, thus giving it an unusual hydrology. The site supports important numbers of wintering Dark-bellied Brent Goose <i>Branta b. bernicla</i> , which feed also in surrounding agricultural areas away from the SPA.
Chichester & Langstone Harbours	SPA & Ramsar	6.4km southeast	The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland. The mud-flats are rich in invertebrates and also support extensive beds of algae. The site is of particular significance for waterbirds, especially in migration periods and in winter. It also supports important colonies of breeding Common Tern <i>Sterna hirundo</i> .
Butser Hill	SAC	9km north	A large area of dry grassland steppes with the richest terricolous lichen flora of any chalk grassland site in England.

- 4.1.2 These sites are considered to be of international importance to nature conservation.

Nationally designated sites for nature conservation designation

- 4.1.3 No nationally designated sites for nature conservation were recorded within 1km of the site.

Non-statutorily designated sites for nature conservation designation

- 4.1.4 Two non-statutorily designated sites for nature conservation were identified within 1km of the site. Both of which are Sites of Importance to Nature Conservation (SINC).

Table 3: Summary of non-statutory designated sites for nature conservation within 1km of the site

Name of Site	Status	Approximate Distance and Direction from the Site	Brief Description
Newlands Row and Plant Row	SINC	496m southwest	Stretch of natural and plantation woodland surrounded by arable land.
Park Wood, Havant	SINC	795m northeast	Fragment of ancient woodland from the Forest of Bere in the heart of Waterlooville.

Ancient woodland

- 4.1.5 One ancient woodland was identified within 1km of the site, Park Wood is a semi-natural ancient woodland located c. 805m northeast of the site.

4.2 Habitats

- 4.2.1 All habitats recorded within the site are described, below and are shown on Figure 3. Target notes are provided in Appendix 1.

Box 3: Drawing frame revised and 4-hour change
 10-10-10 (add)
 Box 4: Web site / Mail updated. 10-09-2010

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Bare ground/hard standing

- 4.2.2 The site was dominated by hard standing with demolition rubble piles at the time of survey. This habitat type was species-poor and considered to be of limited interest to nature conservation.



Plate 1: Example of bare ground with rubble piles

Tall ruderal/scrub mosaic

- 4.2.3 Site boundaries were dominated by tall ruderal species since the grassland ceased to be managed. Species include Common Ragwort *Senecio jacobaea*, False Oat-grass *Arrhenatherum elatius*, Cock's-foot *Dactylis glomerata*, Spear Thistle *Cirsium vulgare*, Creeping Thistle *Cirsium arvense*, Broad-leaved dock *Rumex obtusifolius*, Curly Dock *Rumex crispus* with frequent Butterfly Bush *Buddleja davidii*, Tansey *Tanacetum vulgare*, Bramble *Rubus fruticosus* agg., Prickly Sow-thistle *Sonchus asper*, Birch saplings *Betula pendula*, Creeping Cinquefoil *Potentilla reptans*, Common Nettle *Urtica dioica*, Weld *Reseda luteola*, Ribwort Plantain *Plantago lanceolata*, Creeping Bent *Agrostis stolonifera* and rare areas of Gorse *Ulex europaeus*. Due to the common nature of species present and the limited

structure they provide it is considered to be of importance to nature conservation at a site level only.



Plate 2: Areas of grown out amenity grassland

Hedgerows and Scattered trees

- 4.2.4 The majority of the site boundary is formed by fencing with scattered trees and a species-poor hedgerow. Hedgerow consisted of Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Bramble, Ash *Fraxinus excelsior*, Elder *Sambucus nigra*, and Norway Maple *Acer platanoides*.
- 4.2.5 The hedgerow does not link to other hedgerows or habitat corridors in the wider landscape as the site is surrounded on all sides by roads. The hedgerows are not considered to qualify as 'Important' under the Wildlife and Landscape criteria of the Hedgerow Regulations (1997). Hedgerows are a UK Priority Habitat if they are "any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less than 20m wide (Bickmore, 2002). Any bank, wall, ditch or tree within 2m of the centre of the hedgerow is considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow. All hedgerows consisting predominantly (i.e.

80% or more cover) of at least one woody UK native species are covered by this priority habitat, where each UK country can define the list of woody species native to their respective country". The hedgerow on site is considered to fall within this definition.

- 4.2.6 Scattered native and non-native trees located along the southern site boundary and within the eastern section of the site. Tree species include Hawthorn, ash, Norway maple, willow *Salix* sp. and Lleyland Cypress *Cuprocyparis leylandii*.
- 4.2.7 Scattered trees and hedgerows are common in the local landscape, limited in extent within the site and lack habitat connectivity. They are considered to be of important to nature conservation at a site level only.



Plate 3: Example of boundary vegetation

4.3 Species

Amphibians

- 4.3.1 One record of Great Crested Newt within 1km of the site was provided by HBIC located over 500m from the site.

- 4.3.2 The site is separated from six recorded ponds within 500m of the site by major roads and industrial and residential development. There are no hedgerows linking the site to the identified ponds.
- 4.3.3 Ponds 2-6 were considered to provide below average to average suitability to support Great Crested Newt (see Appendices). eDNA samples were negative for the presence of Great Crested Newt DNA. Pond 1 is newly created with steep engineered sides. It was considered to provide below average suitability to support Great Crested Newt (see Plate 4).



Plate 4: Pond 1

- 4.3.4 Based on the survey data gathered, Great Crested Newt are not considered likely to be a receptor with respect to the proposed development.

Reptiles

- 4.3.5 Records of grass snake and common lizard within 1km of the site were provided by HBIC.
- 4.3.6 The site is largely isolated from suitable reptile habitat within the wider landscape. However, following demolition of buildings, rubble piles had been created on site. The hard standing/tall ruderal mosaic subsequently

provided some suitable habitat for reptiles. Given reptiles are known to be in the wider area a reptile survey was undertaken in September 2018.

- 4.3.7 No reptile species were recorded during the presence/absence survey (see Table 4 below).

Table 4: Results of reptile survey

Date & time (h) of survey	Weather conditions	Results
12/09/2018	16°C Dry and windy	Nil
13/09/2018	14°C Dry with 90% cloud cover	Nil
19/09/2018	21°C Dry, clear sky and windy	Nil
26/09/2018	17.5°C, Dry, clear sky, no wind	Nil
27/09/2018	10°C Dry, clear sky, no wind	Nil
30/09/2018	14°C Dy, 70% cloud cover, little wind	Nil
01/09/2018	9°C Dry, 20% cloud cover, no wind	Nil
09/10/2018	11.5°C Dry, sunny, 10% cloud cover.	Nil

- 4.3.8 Based on the survey results reptiles are not currently considered a receptor with respect to the proposed development.

Birds

- 4.3.9 Records of a range of bird species within 1km of the site were provided by HBIC.
- 4.3.10 At the time of survey common urban bird species were recorded on, or immediately adjacent to, the site including Blackbird *Turdus merula* and Wood Pigeon *Columba palumbus*.
- 4.3.11 The site is c. 4ha with some scattered scrub and trees which could be used by urban bird species for nesting and foraging. The site is set within an area of commercial use with major roads on all sides. It is limited in extent and the boundary of the site is partially formed by trees and hedgerows. The site is therefore not considered likely to be of value to ground nesting birds.
- 4.3.12 Given the abundance of similar habitats within the wider area, and the limited extent of suitable habitats within the site, the habitats on site are considered to be of importance to birds for nesting and foraging at a site level only.

Bats

- 4.3.13 Bat species reported by HBIC were; Serotine *Eptesicus serotinus*, Whiskered Bat *Myotis mystacinus*, Brandt's Bat *Myotis brandtii*, Noctule *Nyctalus noctule*, Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus* and Brown Long-eared Bat *Plecotus auratus*.
- 4.3.14 No buildings are on site. The majority of the trees on site were considered to provide negligible interest to roosting bats with two exceptions. Two semi-mature oaks were recorded outside the site boundary (TN2, TN3; Figure 3) one of which (TN2; Figure 3) had several dead limbs. Both trees were covered in Common Ivy *Hedra helix* obscuring visibility (see Plate 5). Tree at TN2 was considered to have moderate suitability for supporting roosting bats. Tree at TN3 was considered to have low suitability for supporting roosting bats.



Plate 5: Semi-mature oaks outside the site

- 4.3.15 The site is approximately 4ha in extent and bordered by roads, commercial development associated with Waterloo Park and housing. As such the

site is surrounded by sources of light at night. The site also lacks good habitat connectivity for commuting bats with the wider landscape.

- 4.3.16 Based on the limited extent of the site and the abundance of similar for extensive habitats surrounding the site, the habitats on site are considered to be of importance to foraging/commuting bats at a site level only.

Badger

- 4.3.17 No records of Badger within 1km of the site were provided by HBIC.
- 4.3.18 No evidence of Badger was recorded on site, or immediately adjacent to it, at the time of survey. The site is bounded on all sides by busy roads and the site lacks connectivity to suitable badger habitat in the wider landscape. Badgers are therefore not currently considered a receptor with respect to the proposed scheme.

Riparian mammals

- 4.3.19 No records of Otter and Water Vole within 1km of the site were provided by HBIC.
- 4.3.20 The watercourse adjacent to the site is culverted under Silverthorne Way and under the site (see Plate 6). Therefore Otter or Water Vole are not considered likely to be a receptor with respect to the proposed development.



Plate 6: Culverted watercourse

White-clawed Crayfish

- 4.3.21 No records of White-clawed Crayfish were provided by HBIC.
- 4.3.22 The watercourse adjacent to the site is culverted under Silverthorne Road and under the site. Therefore white-clawed crayfish are not considered likely to be a receptor with respect to the proposed development.

Invasive species

- 4.3.23 No evidence of invasive species on Schedule 9 of the Wildlife and Countryside Act (1981) as amended were recorded at the time of survey.

Other notable species

- 4.3.24 Hedgehogs have been recorded within 1km of the site. Whilst the margin habitats on the site are suitable for supporting this species the site is surrounded by roads and the site lacks habitat connectivity to the wider landscape. It is therefore considered unlikely that hedgehogs would be a receptor with respect to the proposed development.

- 4.3.25 The habitats on site are dominated by bare ground. Therefore, it is not considered likely that the site provides habitat diversity to support a diverse range of important invertebrate species.

5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

5.1 The proposed development

5.1.1 The proposed site development is for commercial and industrial use and associated infrastructure. Most trees will be retained with selected vegetation removal and additional tree planting. Hedgerow and tree planting along the site boundaries would be retained where possible.

5.1.2 The following assessment is based on the drawing of the proposed development (reference 1618-SK35 Rev A) dated June 2018 provided by the client.

5.2 Statutory and non-statutory designated sites for nature conservation

5.2.1 The habitats on site are not considered likely to support bird species associated with Portsmouth Harbour SPA/Ramsar and Chichester and Langstone Harbours SPA/Ramsar located over 5km from the site. The site is isolated from the wider landscape with major roads around the site and commercial development adjacent to the site, associated with Waterloo Park. The proposals are for commercial use and not residential and as such no residential pressure on these sites is anticipated to occur. Given the distance of the proposed development from identified statutorily and non-statutorily designated sites for nature conservation and the scale of the proposed development, it is not anticipated that any significant impacts to these sites will result from the proposed development. No further mitigation, enhancement or monitoring measures are considered to be required.

5.3 Habitats

Potential impacts

5.3.1 The proposed development will require land-take bare ground/hard standing, rubble piles, and isolated areas of tall ruderal/scrub. The proposed scheme is likely to retain hedgerow and scattered trees around the site boundary.

5.3.2 The habitats on site are isolated from the wider landscape and newly established following demolition of buildings on the site. Therefore, proposals are not considered likely to adversely affect green infrastructure aspirations within the Local Plan.

- 5.3.3 The proposed scheme would incorporate new native planting and could include additional planting around the site boundary. The proposed development is anticipated to result in a net enhancement of vegetation when completed and established.

Mitigation measures

- 5.3.4 Retained trees and hedgerows should be protected through the construction phase following advice set out within the British Standard Tree Survey which accompanies the planning application. Where trees/hedgerows cannot be retained they should be replanted using native species within the scheme design.
- 5.3.5 The details of the landscaping scheme including native species mixes could be secured through a planning condition.

Significance

- 5.3.6 Assuming a detailed landscape scheme can be secured through a planning condition it is anticipated that the proposed development would not result in a significant adverse impact to nature conservation.

Enhancement

- 5.3.7 Planting with native species of local provenance would be an enhancement.

Monitoring

- 5.3.8 The success of the landscape scheme could be monitored through standard landscape management practices.

5.4 Species

Birds

Potential impacts

- 5.4.1 All nesting birds and their active nests are protected under the Wildlife and Countryside Act, 1981 (as amended)¹⁸.
- 5.4.2 The proposed development will require land-take of trees that could be used for nesting by a range of common urban and farmland bird species. The

¹⁸ See www.legislation.gov.uk for full legislation details for this section and subsection references

proposed scheme includes new planting using native tree species to ensure no net loss of bird nesting and foraging habitats within the scheme over the long-term.

Mitigation measures

- 5.4.3 As a precautionary approach trees should be felled (if required) outside the nesting bird season (nesting season runs March-August inclusive) where practicable. Should trees require felling within the nesting bird season they should be checked prior to works affecting trees commencing by a suitably experienced ecologist. If active nests are found, the tree must be left undisturbed until all birds have fledged.

Significance

- 5.4.4 Assuming the above measures are secured through a planning condition it is anticipated that the proposed development would not result in a significant adverse impact to nesting/foraging birds.

Enhancement

- 5.4.5 Installation of 3no. suitable nesting bird boxes on retained trees would result in a net enhancement of nesting bird habitat. The location and type of nesting bird boxes could be secured through a planning condition.

Monitoring

- 5.4.6 No additional monitoring is considered to be required.

Bats

Potential impacts

- 5.4.7 Bats receive protection under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).
- 5.4.8 Removal of trees with low to moderate potential for roosting bats could adversely affect roosting bats without mitigation.
- 5.4.9 Two oaks (TN 2, TN3; Figure 3) are located outside the site boundary and were considered to have moderate potential to support roosting bats. It is understood that these trees will be retained as they are outside the application boundary.

Mitigation measures

- 5.4.10 If bats are discovered when branches are removed or trees felled, work must stop immediately and a licensed bat ecologist contacted. Advice will be given on how to proceed. It should be appreciated that bats require only a very small cavity and are highly mobile.

Significance

- 5.4.11 Assuming the above measures are secured through a planning condition it is anticipated that the proposed development would not result in a significant adverse impact to bats.

Enhancement

- 5.4.12 It is recommended that at least 3no. bat boxes are installed on appropriate retained trees on the northern site boundary. The location and type of bat box could be secured through a planning condition.

Monitoring

- 5.4.13 No additional monitoring is considered to be required.

6.0 CONCLUSIONS

- 6.1.1 Based on the data collected and information provided about the proposed development, it is not anticipated that the development as proposed would result in a significant ecological impact.
- 6.1.2 Impacts to species and habitats identified within this report could be mitigated, enhanced and secured through appropriate planning conditions.
- 6.1.3 On this basis the proposed development accords with planning policy.

APPENDICES

Target Notes (TN)	Description
TN1	Wood pigeon nest.
TN2	Semi-mature dead, ivy covered Oak
TN3	Semi-mature ivy covered oak
TN4	Large rubble pile
TN5	Multiple rubble piles
TN6	Shipping containers
TN7	Culverted streams, stone banks, sluggish flow. C. 1-2m wide fenced off with dense bramble banks



Folio No: E3480
Report No: 1
Order No: PE0026/ENV/HS
Client: HARRIS LAMB
Contact: Miles Haslam
Contact Details: temp@harrislamb.co.uk
Date: 02/07/2018

TECHNICAL REPORT

ANALYSIS OF ENVIRONMENTAL DNA IN POND WATER FOR THE DETECTION OF GREAT CRESTED NEWTS

Date sample received at Laboratory: 26/06/2018
Date Reported: 02/07/2018
Matters Affecting Results: None

RESULTS

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
3431	Waterlooville, Pond 2	SU 676 099	Pass	Pass	Pass	Negative	0
3432	Waterlooville, Pond 3	SU 676 099	Pass	Pass	Pass	Negative	0
3503	Waterlooville, Pond 6	SU 676 099	Pass	Pass	Pass	Negative	0
3504	Waterlooville, Pond 4	SU 676 099	Pass	Pass	Pass	Negative	0
3505	Waterlooville	SU 676 099	Pass	Pass	Pass	Negative	0

		Site Waterloooville					
		Project Number PE0026					
Pond Number		1	2	3	4	5	6
SI No	SI Description	SI Value	SI Value	SI Value	SI Value	SI Value	SI Value
1	Geographic location	1	1	1	1	1	1
2	Pond area	0.6	0.4	0.4	0.2	0.2	0.2
3	Pond permanence	0.9	0.1	0.1	0.5	0.5	0.5
4	Water quality	0.33	0.5	0.5	0.5	0.33	0.33
5	Shade	0.7	1	1	1	1	1
6	Water fowl effect	0.67	0.67	0.67	0.67	0.67	0.67
7	Fish presence	0.6	0.5	0.5	0.5	0.5	0.5
8	Pond Density	0.6	0.95	0.95	0.95	0.95	0.95
9	Terrestrial habitat	0.33	0.67	0.67	0.67	0.67	0.33
10	Macrophyte cover	0.4	0.9	0.7	0.8	0.9	0.8
HSI Score		0.58	0.57	0.56	0.62	0.60	0.55
Pond suitability (see below)		Below average	Below average	Below average	Average	Average	Below average

Categorisation of HSI Score by Lee Brady

HSI Score	Pond Suitability
< 0.50	Poor
0.50 - 0.59	Below average
0.60 - 0.69	Average
0.70 - 0.79	Good
> 0.80	Excellent

ARGUK advice note 5 - Great Crested Newt Habitat Suitability Index

clearthinking

commercial property advice



COMMERCIAL AGENCY



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