

**ECOLOGY UPDATE
REPORT AND
ASSESSMENT**

**LAND AT INTERBRIDGES,
NORTH OF SEAGULL LANE,
EMSWORTH**

APRIL 2016

CONTENTS

ECOLOGY UPDATE REPORT AND ASSESSMENT

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Outline of the Scheme and Site Location	2
1.3	Relevant Legislation and Policy	2
2.0	ASSESSMENT METHODOLOGY	3
2.1	Introduction	3
2.2	Site Survey Methodology	3
3.0	BIOPHYSICAL CHANGES WITHIN THE ZONE OF INFLUENCE	5
3.1	Introduction	5
3.2	Biophysical Changes associated with the Development Scheme	5
3.3	Site Preparation / Construction Activities and Biophysical Changes	5
3.4	Predicted Operational Activities during Use Phase and Biophysical Changes	5
4.0	UPDATE TO EXISTING ECOLOGY MITIGATION WORK	6
4.1	Introduction	6
4.2	Vegetation & Habitats	6
4.3	Birds	6
4.4	Bats	6
4.5	Other Mammals	7
4.6	Reptiles & Amphibians	7
5.0	ASSESSMENT OF LIKELY IMPACTS	8
5.1	Introduction	8
5.2	Protected Sites	8
5.3	Habitats and Species on Site	8
6.0	CONCLUSIONS	9
7.0	REFERENCES	9

ECOLOGY UPDATE REPORT AND ASSESSMENT

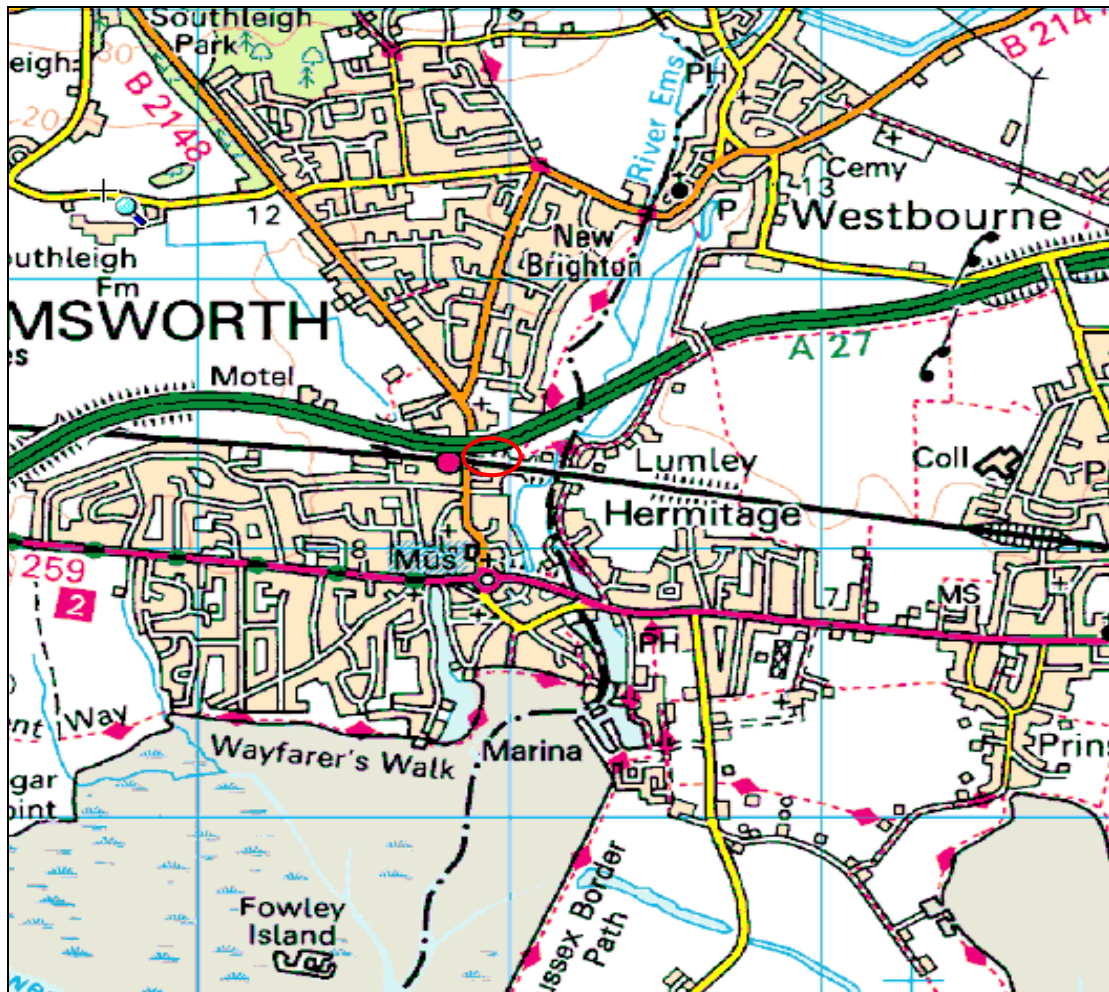
1.0 INTRODUCTION

1.1 Background

- 1.1.1 Aluco Ecology Ltd was commissioned by The Savoy Latham Partnership Ltd and Nash & Partners to carry out an ecological assessment of land north of Seagull Lane, Emsworth, known as 'Interbridges'. The site has planning permission for commercial development. A detailed Ecological Assessment was provided for the site (Aluco Ecology, 2014) and this has been carried through into implementation, with pre-construction ecology mitigation and site clearance works having commenced in 2015.
- 1.1.2 The site owners are now submitting a new planning Application for the site and this report provides an update of existing ecology mitigation undertaken to date, and assessment of the new scheme.

1.2 Site Location

- 1.2.1 The land at Interbridges which is subject to this ecological assessment runs along the A27(T) and the south coast railway line and is located as shown in **Figure 1**.
- 1.2.2 The basic plan for the proposed development was of industrial units. The new scheme on which this ecological assessment has been prepared, now provides a new layout of industrial units. It is shown in **Figure 2**. The overall layout of the scheme is similar in footprint over the majority of the site, however the north east corner is now excluded and is subject to a separate scheme by SSE, and the south west corner and additional capacity car parking for the adjacent railway station.



© Crown copyright 2014 Ordnance Survey. All rights reserved. Licence number OS 1000047209

Figure 1: Location of the Site

1.3 Relevant Legislation and Policy

- 1.3.1 The outcomes of this assessment will be tested against relevant legislation and policy; namely the Habitat Regulations 2010 in relation to the protection of European sites (Special Protection Areas SPA, and Special Areas of Conservation SAC) and European protected species (e.g. bats, great crested newts) (**Technical Appendix 1**) and the Wildlife & Countryside Act 1981 (as amended) and Countryside & Rights of Way Act (CROW) 2000 for protected species and the designation and protection of SSSIs (**Technical Appendix 2**). The Protection of Badgers Act 1992 gives protection to Badgers *Meles meles*.
- 1.3.2 The Government sets out its objectives for conserving and enhancing biodiversity in the National Planning Policy Framework and Planning Practice Guidance on the Natural Environment. The Government's objectives for planning and biodiversity are that '...the planning system should seek not just to protect, but where possible to enhance biodiversity – making sure we don't just have isolated pockets of wildlife, but rich and connected green spaces for all kinds of species to thrive.'

- 1.3.3 The Framework goes on to state that at the heart of the planning system is a presumption in favour of sustainable development. Planning Practice Guidance on the Natural Environment provides information on taking biodiversity into account in planning (see Para. 007- onwards).
- 1.3.4 In addition that outlined above, strategic and local planning policies further implement the legal and national policy. The Havant Borough Council Local Development Framework Core Strategy was adopted in March 2011 and contained policies related to ecology and biodiversity. These policies are set out in **Technical Appendix 3**.
- 1.3.5 Under the Governments duty to conserve Biodiversity, a number of Biodiversity Action Plans have been prepared for habitats and species of conservation concern, including national and local action plans such as a Biodiversity Action Plan for Hampshire (HCC, 1998).

2.0 ASSESSMENT METHODOLOGY

2.1 Introduction

- 2.1.1 The methodology for this appraisal is based on the Guidelines for Ecological Impact Assessment (EcIA) in the United Kingdom published by the Institute of Ecology and Environmental Management (IEEM, 2006 & CIEEM 2016).

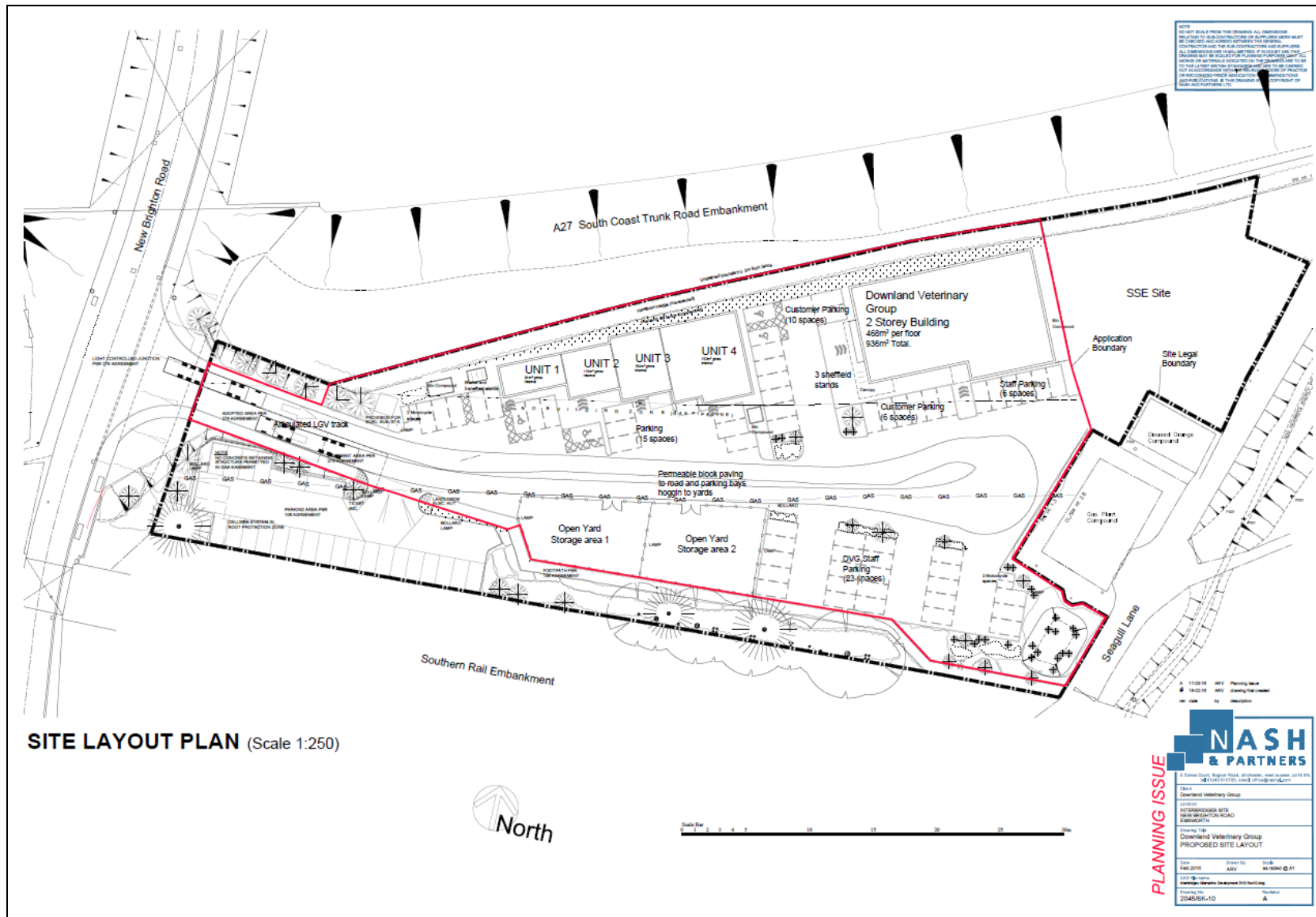


Figure 2: Proposed Development Details

3.0 BIOPHYSICAL CHANGES AND THE ZONE OF INFLUENCE

3.1 Introduction

3.1.1 In order to be able to target relevant ecological survey and assess the impacts of a proposed development, it is necessary to identify the activities that may result in biophysical changes from the development and the area these cover (i.e. the zone of influence). There are three stages of this development scheme that include activities that may have an impact on features of ecological value; namely site preparation, construction and operation / use.

3.1.2 The plan on which this ecological appraisal has been prepared is shown in **Figure 2** above.

3.2 Biophysical Changes associated with the Development Scheme – Determination of the Zone of Influence

3.2.1 It is proposed that re-landscaping of the site and top soil stripping will result in the physical structure of the present site being altered. The potential zone of influence of the proposal is determined from the predicted biophysical changes brought about by activities associated with construction and post-construction phases. Therefore the zone is predicted to extend across the development footprint and locally along the edge of the site and the hydrological systems in the adjacent River Ems Valley. Consequently, desk surveys have been carried out within this zone and backed up by field survey where required.

3.3 Site Preparation / Construction Activities and Biophysical Changes

3.3.1 During the construction phase, it is predicted that site preparation activities will include earthworks, vegetation clearance and topsoil stripping. This phase may affect habitat suitable for wildlife, including protected and/or notable species. Without appropriate mitigation, site clearance work may result in death or injury to protected species (if they are present), or damage to other features of ecological value. Construction could result in the loss of features of ecological value and/or the loss of habitat of protected species resulting in a net decrease in biodiversity. Construction has the potential to also create habitat suitable for some species.

3.3.2 The construction of the site has the potential to affect adjacent wildlife habitats in the Ems Valley, through noise, air and water pollution.

3.4 Predicted Operational Activities during Use Phase and Biophysical Changes

3.4.1 The operational phase will also need to consider how protected species and species of conservation concern may use the sites, and what effect this may have on their conservation status locally.

4.0 UPDATE TO EXISTING ECOLOGY MITIGATION WORK

4.1 Introduction

- 4.1.1 The existing planning permission and agreed ecological mitigation strategy (see Aluco Ecology, 2014) provided a number of measures to be undertaken to ensure that the development meets ecological legislation, policy and best practice. These measures are outlined below with an update on progress to date.

4.2 Vegetation & Habitats

- 4.2.1 As part of protected species mitigation (see below), the majority of the site's vegetation and habitats within the proposed construction area have been removed and a top soil strip undertaken during early Autumn 2015.
- 4.2.2 A number of trees along the site's southern boundary are to be retained as part of the scheme and these were temporary fenced during initial vegetation clearance and have been retained in situ. These retained habitats are to be fenced to British Standards to ensure that construction does not have an adverse impact on them.
- 4.2.3 Payments that have been agreed for loss of existing habitats on site have been made to Brook Meadow Conservation Group for management of habitats within the adjacent Local Nature Reserve (see Aluco Ecology, 2014). This process was undertaken during spring-summer 2015.
- 4.2.4 In addition, during protected species mitigation work seeds of three locally interesting species; Meadow Barley *Hordeum brachyantherum*, Corky-fruited Water-dropwort *Oenanthe pimpinelloides* and Common Knapweed *Centurea nigra* were collected in late summer and dried. These were passed on to the Conservation Group at Brook Meadow to sow in Autumn 2015 in areas of new site management on the Meadow, as all three species are rare within the LNR.

4.3 Birds

- 4.3.1 Any nesting bird habitat within the proposed construction zone was removed outside the nesting bird season to stump level where reptile habitat may have been affected. All nesting bird habitat has now been taken out of the construction zone.
- 4.3.2 A total of six woodcrete bird nest boxes have been located on the site, in retained mature trees on the southern boundary.

4.4 Bats

- 4.4.1 Mature trees along the southern edge of the site have been retained in situ as part of the previous scheme. A total of six woodcrete bat boxes have also been located in suitable habitat

on site along the southern boundary. A single dead tree had already fallen prior to vegetation works in 2015.

4.5 Other Mammals

- 4.5.1 Prior to pre-site top soil works and site entrance works commencing in 2015 update Badger *Meles meles* and Fox *Vulpes vulpes* survey work was undertaken on site. No evidence of Setts/Earths of either species was recorded within the construction zone. Foxes evidence was present on site, and Roe Deer *Capreolus capreolus* have also been recorded on site.

4.6 Reptiles & Amphibians

- 4.6.1 A detailed reptile translocation strategy was agreed (see Aluco Ecology, 2014). This included the following steps:

- Agreement of use of two local receptor sites for the population of reptiles recorded at the Interbridges site;
- Payment to the conservation groups of funds for additional management of the two receptor sites for maintaining additional reptile habitat;
- A methodology for translocation of the reptile population from the construction zone prior to development commencing;
- Proposals for some monitoring of the translocated reptiles.

- 4.6.2 The reptile translocation was undertaken during spring-autumn 2015. The details of the results are set out in **Technical Appendix 5**. In summary:

- A total of 37 Slow Worm *Anguis fragilis* were translocated to Nore Barn Woods Receptor site.
- A total of 3 Grass Snake *Natrix natrix* were translocated to Brook Meadow Nature Reserve, which is in proximity to the development site.
- The translocation and destructive search also translocated a total of 24 Common Toad *Bufo bufo* and 20 Common Frog *Rana temporaria*. These animals were taken to Brook Meadow Nature Reserve.
- Destructive searches of the construction zone were undertaken during early Autumn 2015 to remove habitat and prevent re-colonisation in the short term;
- Recommendations have been provided to the site owners to ensure that the site is kept clear of vegetation and reptile habitat re-developing given that development has not continued.

5.0 ASSESSMENT OF LIKELY IMPACTS OF THE NEW SCHEME

5.1 Introduction

- 5.1.1 This section provides a review of the new scheme (a Masterplan is provided at **Figure 2**) and whether any additional impacts on ecology are likely. Where these are predicted additional mitigation is recommended.

5.2 Protected Sites

Potential Impacts on the Chichester Harbour designated sites, and Brook Meadow LNR

- 5.2.1 No additional impacts on the features (habitats and species) of the designated sites are considered likely as a result of the new scheme.

5.3 Habitats & Species on Site

Potential Impacts on Habitats and Vegetation

- 5.3.1 The majority of the grassland and scrub has been re-profiled as a result of the existing development scheme. The mature trees highlighted by **Figure 2** on the southern boundary are retained.

- 5.3.2 The new scheme will have no additional impacts on vegetation and habitats on site. Recommendations relating to fencing of retained trees and habitat should continue, and the retained habitat now just outside the red line boundary should be protected during the construction phase of the development with temporary Heras or similar fencing to British Standards as a minimum.

Potential Impacts on Birds

- 5.3.3 Any potential woody vegetation within the construction zone of the site has been removed, and bird nest boxes erected in the retained trees on the southern boundary.

- 5.3.4 The new scheme will have no additional impacts on bird populations.

Potential Impacts on Bats

- 5.3.5 The proposed new scheme will not result in any additional changes to boundary habitats or commuting and foraging routes along the edges of the site. External lighting for the new scheme has not been detailed. Any external lighting should be downward facing and directed away from the retained woody boundaries.

- 5.3.6 No additional impacts are predicted on local bat populations.

Potential Impacts on Reptiles

- 5.3.7 The reptile population on the site has been translocated as per the agreed mitigation strategy, with site destructive searches being undertaken in early Autumn 2015. The recommendations

are to maintain the site tidy with stock piles of top soil, and clear of any vegetation regrowth whilst development work has not commenced, and the owner's agents are taking this into account.

- 5.3.8 With no reptiles or reptile habitat on site, no additional impacts are predicted.

6.0 CONCLUSIONS

- 6.1 The proposed new scheme is of a similar land take to the existing approved scheme. There are no additional impacts to local ecology. The ecology mitigation for the existing planning permission has been progressed according to the agreed mitigation strategy. No additional mitigation or impacts are considered likely and recommendations are made to ensure that the existing mitigation strategy continues to be complied with.
- 6.3 With these measures in place the development will ensure that the ecology policies outlined in Section 3 are adhered to.

7.0 REFERENCES

Aluco Ecology (2014) Ecological Assessment, Land at Interbridges, Emsworth

CIEEM (2016). Guidelines for Ecological Impact Assessment in the United Kingdom, Second Edition, Institute of Ecology and Environmental Management, Winchester.

Hampshire County Council (HCC) (1998) A Biodiversity Action Plan for Hampshire

IEEM (2006). Guidelines for Ecological Impact Assessment in the United Kingdom, Institute of Ecology and Environmental Management, Winchester.

Report Author
Gareth Knass LLb Hons MSc MCIEEM

Report Review:
Anthony Blunden MSc CEnv MCIEEM

Aluco Ecology Ltd
Ref. 0826

Technical Appendix 1

Habitats Regulations and Schedule 2 Species

The Conservation (Natural Habitats & c.) Regulations SI 1994/2716 partially implement the Habitats Directive. This has recently been replaced by the Conservation of Habitats and Species Regulations 2010 (the Habitat Regulations). The Regulations contain provisions relating to the protection of European sites and European protected species. European Sites are defined within the Regulations as Special Areas of Conservation (SACs) or Special Protection Areas (SPAs) whether proposed, candidate or classified. European Protected Species are those species listed in Annex IV of the Directive that occur in the UK, and these have been listed in Schedule 2 of the Regulations.

Species listed under Schedule 2 of the Habitat Regulations were formally afforded protection by Regulation 39 (1994), this is now found under Regulation 41/42 (2010). European protected species include the great crested newt, dormice and all species of bats.

(1) The Habitats Regulations makes it an offence;

(a)deliberately to capture or kill a wild animal of a European protected species;

(b)deliberately to disturb any such animal;

(c)deliberately to take or destroy the eggs of such an animal; or

(d)to damage or destroy a breeding site or resting place of such an animal.

(2)It is an offence to keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European protected species, or any part of, or anything derived from, such an animal.

(3)Paragraphs (1) and (2) apply to all stages of the life of the animals to which they apply.

(4)A person shall not be guilty of an offence under paragraph (2) if he shows-

(a)that the animal had not been taken or killed, or had been lawfully taken or killed, or

(b)that the animal or other thing in question had been lawfully sold (whether to him or any other person).

For this purpose "lawfully" means without any contravention of these Regulations or Part I of the Wildlife and Countryside Act 1981.

(5)In any proceedings for an offence under this regulation, the animal in question shall be presumed to have been a wild animal unless the contrary is shown.

(6)A person guilty of an offence under this regulation is liable on summary conviction to a fine not exceeding level 5 on the standard scale.

The Regulations go on to state exemptions and defences that apply to acts that may contravene the Regulation. Such exemptions include those listed in Regulation 40 (1994) now found at Regulation 42 of the 2010 Regulations

The granting of a licence under Regulation 44 (1994 Regulations) now Regulation 53-55 (of 2010 Regulations).

In order to carry out a lawful operation (e.g. development work which has full planning permission) that may result in any of the offences above, it is necessary to obtain a licence from Natural England to allow the operation to proceed.

However, in accordance with the requirements of the Habitats Regulations 2010, a licence can only be issued after the following conditions have been satisfied:

- *that there is no satisfactory alternative, and*
- *that the action authorized will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*
- *that the action is required in preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;*

Full planning permission is required to apply for a Natural England licence (where such a consent is necessary for the work to be carried out). In addition, a method statement which details the survey results, methodology of work to be undertaken, mitigation and compensation measures, must be submitted to Natural England with the licence application.

For Full details of the 2010 Habitat Regulations see:

<http://www.legislation.gov.uk/ukxi/2010/490/regulation/42/made>

Technical Appendix 2

Wildlife & Countryside Act 1981 & Countryside & Rights of Way Act 2000 (CRoW)

Wildlife & Countryside Act

The Wildlife and Countryside Act 1981 (as amended) (WCA) is the principle legislation in Britain for the protection and conservation of our wildlife and its habitats of national importance. The legislation adopts a habitat and species based approach to nature conservation. Habitats and some species are protected in designated Sites of Special Scientific Interest (SSSI). Other species are afforded some protection from harm or disturbance by way of inclusion in either Article 1 (birds), Schedule 1 (specially protected birds), Schedule 5 (specially protected animals) or Schedule 8 (specially protected plants).

(ii) Protection Afforded to SSSIs

The presence of an SSSI on or near to a development is a material consideration, and this is discussed further in policy (see PPS9)

(iii) Law Relating to Protected Species

The WCA provides protection to such species via Section 1 (birds) and Section 9 (animals). These sections provide protection from intentionally:

- killing, injuring or taking any wild bird or taking, damaging or destroying the nest or eggs of a wild bird
- disturbing any wild bird in Schedule 1 whilst building, on or near a nest, or disturbing dependant young of such birds
- damaging, destroying or obstructing access to any structure or place of shelter or protection of a schedule 5 animal, or disturbs any such animal whilst it is occupying a structure or place it uses for that purpose
- killing, injuring or taking any animal listed in Schedule 5
- Having in procession or control any live or dead wild bird or egg, or any wild animal in Schedule 5, or trading in any animal under Schedule 5.

As with European Protected species, there are exemptions from this legislation, and licences for development can be obtained in certain circumstances. Protected species are also a material consideration in planning applications.

Countryside & Rights of Way Act 2000 (CRoW) and Wildlife and Countryside Act 1981

(i) Protected Species & SSSIs

The Countryside and Rights of Way Act 2000 (CRoW Act 2000) adds to protected species legislation in the WCA. The lesser test of 'Recklessness' is added to the protection from disturbance in three circumstances. These are:

- disturbance to Schedule 1 birds and their nests, eggs and dependant young,
- disturbance to Schedule 5 animals in their place of shelter/protection, and
- disturbance to the places of shelter/protection of Schedule 5 animals.

This addition means that any person who deliberately takes an unacceptable risk or fails to notice an obvious risk is falls under the Section irrespective of intention.

The CRoW Act also provides greater protection to SSSIs from operations (and non operations) of owners, occupiers and third party users of an SSSI.

Havant Borough Council Ecology Policies

LOCAL DEVELOPMENT FRAMEWORK CORE STRATEGY ADOPTED IN MARCH 2011:

The Nature Conservation policies saved from the former Local Plan are now replaced by the Core Strategy. The following policies now apply:

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

Planning permission will be granted for development that:

1. Ensures the key landscape and built form principles set out in the Havant Borough Townscape, Landscape and Seascape Character Assessment are protected and where possible enhanced by partnership working with developers, groups and the wider community.
2. 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.
3. 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].
4. Protects and where appropriate enhances the borough's statutory and non-statutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest.
5. Supports an ongoing programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.
6. 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.
7. 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.
9. Maintains undeveloped gaps between the settlements of Emsworth/Havant; Havant/Waterloo; Havant/Portsmouth; Emsworth/Westbourne and Leigh Park/Rowlands Castle as shown on the Proposals Map.
10. Protects the best and most versatile agricultural land that has the greatest potential for local food security.
11. Responds to the emerging evidence from the Solent Disturbance and Mitigation Project, the published recommendations, and future related research.

DM8 Conservation, Protection and Enhancement of Existing Natural Features

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:

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

DM9 Development in the Coastal Zone

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 SINC 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.

Ecological Assessment Method

Assessment Guidelines

Introduction

The IEEM guidelines (2006) & updated guidelines CIEEM (2016) provide three principal reasons for an ecological feature being valued and therefore included within the EcIA: biodiversity value, social/community value, and economic value.

The evaluation and assessment undertaken assigns one of a number of value labels based on a geographic scale as follows:

- International
- National
- Regional
- County
- District
- Local (Parish)
- Within the zone of influence

Value is determined with reference to the following factors:

- level of designation (sites) or biodiversity-based protection (legal and policy);
- biodiversity value (e.g. inclusion in Biodiversity Action Plans, rarity, position in ecosystem, assemblages and communities, size and diversity);
- social and economic value;
- legal issues (eg protected sites).

All impacts of the scheme on features of local importance or greater are assessed in the impact assessment stage

Assessment of Likely Impacts

The ecological impact assessment methodology used is based on the following considerations.

Characterisation of Likely Impacts

The potential impacts identified as a result of the proposals are characterised according to the following parameters:

- Positive or negative
- Magnitude (and extent if not synonymous)
- Duration
- Reversibility
- Timing and frequency

Significance of Impact

A significant impact on a valued ecological feature (whether negative or positive) is defined in IEEM's guidelines as an impact on the integrity of a defined site or ecosystem, and/or the conservation status of habitats or species within a given geographical area. These terms are defined below.

Integrity

Integrity is defined as follows. '*The integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.*' A site or ecosystem that achieves this is considered to be at favourable conservation status.

Conservation Status

For habitats, conservation status is determined by the sum of the influences acting on the habitat and its typical species, which may affect its long-term distribution, structure and functions as well as the long-term survival of its typical species within a given geographical area.

For species, conservation status is determined by the sum of the influences acting on the species, which may affect the long-term distribution and abundance of its populations within a given geographical area.

Impact Prediction

For guidance as to whether an impact is likely to result in an adverse effect on the integrity or conservation status of a feature, reference has been made to the conservation objectives for that feature where they are available, for example in habitat and species action plans. Otherwise professional judgement has been made based on available information.

The confidence in the prediction that an activity will give rise to a significant adverse impact on a valued ecological feature is given based on a four point scale:

- Certain (or near-certain);
- Probable;
- Unlikely; and
- Extremely unlikely

Drawing Assessment Together

The above factors – value, integrity and conservations status of the feature, prediction and characterisation of the impact and overall significance of the impact is brought together in the final assessment. This is done without additional mitigation measures that may be proposed. An impact is then summarised as significant or not.

Mitigation, Compensation and Enhancement

Where impacts are characterised as significant mitigation or compensation may be offered to prevent, reduce or offset such impacts. In addition enhancement measures may be built into a scheme to ensure that the scheme is compliant with the proactive measures outlined in the latest Government policy on nature conservation.

Technical Appendix 5

Reptile Translocation Results

Translocation Results

As part of an agreed reptile translocation strategy, a small scale translocation of reptiles was undertaken on site during Spring - Autumn 2015. This involved the following:

- Preparation vegetation manipulation to remove the vegetation layer down to 10-20cm with a cut of woody and grassy vegetation within the proposed works area;
- A second careful cut of vegetation to open proposed works area and encourage Slow Worm movement to retained habitats around the edge of the works area, to c10cm;
- Deployment of artificial reptile refugia at a suitable density according to best practice guidelines in potentially suitable habitat in the works area;
- A translocation of the populations of reptiles on suitable dates during autumn 2014 and spring 2015 – a total of 37 visits were made to translocate animals;
- Visits were undertaken in suitable weather conditions when refugia were warmer than surrounding vegetation and temperatures were usually between 12-17c.
- A methodical destructive search of the site with an ecologist.

The results of the reptile translocation are provided in **Table A1** below.

Summary

The reptile translocation on site was undertaken during periods when reptiles are most likely to use artificial refugia. A number of trapping days was undertaken with capture gradually reducing to allow a destructive search of the habitats within the works area. The mitigation measures and detailed strategy is outlined in the ecology report (Aluco Ecology, 2014) for reptiles and biodiversity gain should ensure that the reptile populations are retained in situ on the wider site.

A total of 37 Slow Worm were translocated to Nore Barn Woods Receptor site.

A total of 3 Grass Snake were translocated to Brook Meadow Nature Reserve, which is in proximity to the development site.

The translocation and destructive search also translocated a total of 24 Common Toad and 20 Common Frog. These animals were taken to Brook Meadows Nature Reserve.

Table A1: Results of Reptile Translocation Slow Worm to Nore Barn Woods, Grass Snake to Brook Meadows

Translocation		Slow Worm				Grass Snake		
Date	Comments	Male	Female	Sub Adult	Juvenile	Male	Female	Sub Adult
	Survey Set up							
12/05/2015	1 Toad	1	2					
14/05/2015		2	2					
15/05/2015		1	1					
18/05/2015		1			1			
19/05/2015		1						
20/05/2015			1					
22/05/2015					2			
23/05/2015		1	1		1			
26/05/2015			1		1			
28/05/2015	strim phase 2, 1 Toad							
30/05/2015					1			
03/06/2015			2					
06/06/2015			2					
07/06/2015	1 Toad	1						
13/06/2015								
16/06/2015	Strim phase 1	1	1					
18/06/2015		2						
19/06/2015				1				
22/06/2015	1 Toad. reptiles in site access area = 0			1				
23/06/2015	reptiles in site access area = 0					1		
25/06/2015	reptiles in site access area = 0			1				
02/07/2015	reptiles in site access area = 0					1		
11/07/2015	reptiles in site access area = 0							
14/07/2015	Destructive of entrance area for site access (3 Toad)		1					

21/07/2015								
28/07/2015								
05/08/2015				1				
14/08/2015					1			
22/08/2015			1					
27/08/2015								
04/09/2015	Strim remaining habitat again							
10/09/2015								
11/09/2015								
16/09/2015	Destructive Search 8 Toad, 9 Common Frog							
17/09/2015	Destructive Search 6 Toad, 4 Common Frog		1					
18/09/2015	Destructive Search 3 Toad, 4 Common Frog							
12/10/2015	Final section of destructive, 3 Common Frog							
	Total = 37 Slow Worm	11	14	5	7	3	0	0