



Construction Environmental Management Plan

The Green Cottage, 23 Langstone High Street, PO9 1RY

Colin Monk

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Guidelines

This assessment has been designed to meet:

- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England.

(BS 42020, 2013)

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Ltd. was commissioned by Colin Monk to produce a CEMP for The Green Cottage, 23 Langstone High Street, PO9 1RY

This follows a Preliminary Ecological Appraisal (PEA) (Arbtech 2019). The site is currently undergoing bat emergence and re-entry surveys which will be completed on 19th June 2019. Following completion, an update to this CEMP will be provided.

1.2 Site location

The survey area is located at National Grid Reference SU 7190 0482 and measures approx. 0.1ha. The site lies in Chichester Harbour Area of Outstanding Natural Beauty (AONB) immediately adjacent to Chichester Harbour Site of Special Scientific Interest (SSSI), Chichester and Langstone Harbours Ramsar Site and Special Protection Area (SPA) and Solent Maritime Special Area of Conservation (SAC).

1.3 Previous ecological survey results

The site's features are summarised below from the PEA (Arbtech 2019). For the desk study, please refer to the PEA for full details. The habitat map can be seen in figure 1 below, with a landscape map as figure 2.

Ecological receptors and habitats:

J3.6 Buildings and Hard Standing

There are four building on site referenced as B1-B4 and illustrated in Appendix 1.

B1 exterior

B1 is a Grade II Listed property of brick and stone construction. The original building was extended to the south. The photograph to the right shows the eastern elevation of the original part of the building with part of the extension visible to the far left of the picture. The roof is gabled and clad in clay tiles and there is a single brick chimney stack. There are three hipped roof dormer windows on the eastern elevation. Fascia boards and windows are timber and tight fitting.



The photograph to the right shows the two-storey extension to the south of the original building. The roof is hipped and clad in clay tiles. The eaves are overhanging with roof lining visible. The eaves in this area provide a likely access point into the loft and could also provide crevice dwelling bat roost access onto the wall tops. Roof works will be undertaken in this area.



The roof tiles on the extension are raised providing suitable roosting habitat for crevice dwelling bats. The photograph to the right shows the southern elevation.



The roof tiles throughout the original building are raised and damaged providing suitable roosting habitat for crevice dwelling bats. The photograph opposite shows the eastern elevation. Minor roof works will be carried out to replace missing and damaged tiles.



The photograph opposite shows the western elevations of B1.



On the western elevation there is a hipped sub-roof clad in clay tiles. This is the area where the two-storey extension will be added.



The roof tiles on the sub-roof are raised providing suitable roosting habitat for crevice dwelling bats.



The tiles on the main roof above this sub-roof are also raised providing further roosting habitat.



Attached to the southern elevation of B1 is a single storey, flat roofed extension which connects to a garage. The roof is tight fitting bitumen felt and the fascia boards are timber and tight fitting.



The interior of the garage area is plastered and unsuitable for bat roosting.



B1 interior

There are two loft voids within B1. Loft 1 is the original loft and could not be fully accessed due to the small size of the access point, obstructing rafters and lack of safe boarding. Much of the loft could be seen from the vantage point of the loft hatch. The roof is lined with bitumen felt which is loose in places and could potentially provide bat access into the loft. There are modern and traditional timber rafters and ridge beam on which bats could perch. There is an exposed brick gable end at the northern end of the building. The ridge height is approx. 1.2m. The loft measures approx. 10m long by 3m wide. There was no evidence of bat use visible from the area around the loft hatch.

Loft 2 is above the two-storey extension. The roof is lined with bitumen felt and there are modern timber rafters and ridge beam present on which bats can perch. The floor is boarded, and the loft is fully accessible. There is daylight visible around the eaves indicating the likely access point for the bat roost. The loft measures approx. 4m x 4m with a 2.5m ridge.



Clustered below each apex where the rafters meet were two small piles of bat droppings. The droppings were varying in colour and condition indicating long term, occasional use by a single bat. The size, shape and location are consistent with brown long-eared bats. Samples have been retained for DNA analysis. It is assessed that the most recent droppings are likely from the 2018 active season, with older droppings from previous years.



B2 Exterior and interior

B2 is a detached, brick built two storey annex with a hipped, clay tiled roof. The roof and soffit boxes are tight fitting with no visible suitable bat roosting features.

The loft was inspected and there were no signs of bat use.

This building will not be impacted by the current development.



B3 Exterior and interior

B3 is a detached garage adjacent to B2 as shown above. The bitumen felt roof and fascia boards are tight fitting and do not provide any suitable bat roosting features.

This will not be impacted by the development and does not have any suitable bat roosting features.

**B4 Exterior**

B4 is a small storage building in the garden of B1. It is brick built with a sloped, clay tiled roof. The roof tiles have gaps beneath them that could potentially be used by crevice dwelling bats. This building will be demolished.



B5 Exterior

B5 is a small, glass fronted outbuilding with a flat roof and brick walls. The building does not present any suitable bat habitat.

**J1.2 Amenity Grassland/Gardens**

There is a well-manicured garden associated with the property which lies to the west of B1. The garden has closely mown amenity grassland with introduced shrub and scattered trees.



To the east of the property there is a public footpath and a narrow strip of amenity grassland leading to the shoreline.



The driveway leading to the property is gravel with planted borders and scattered trees.



Figure 1: Phase 1 Habitat Survey Map (Arbtech 2019)

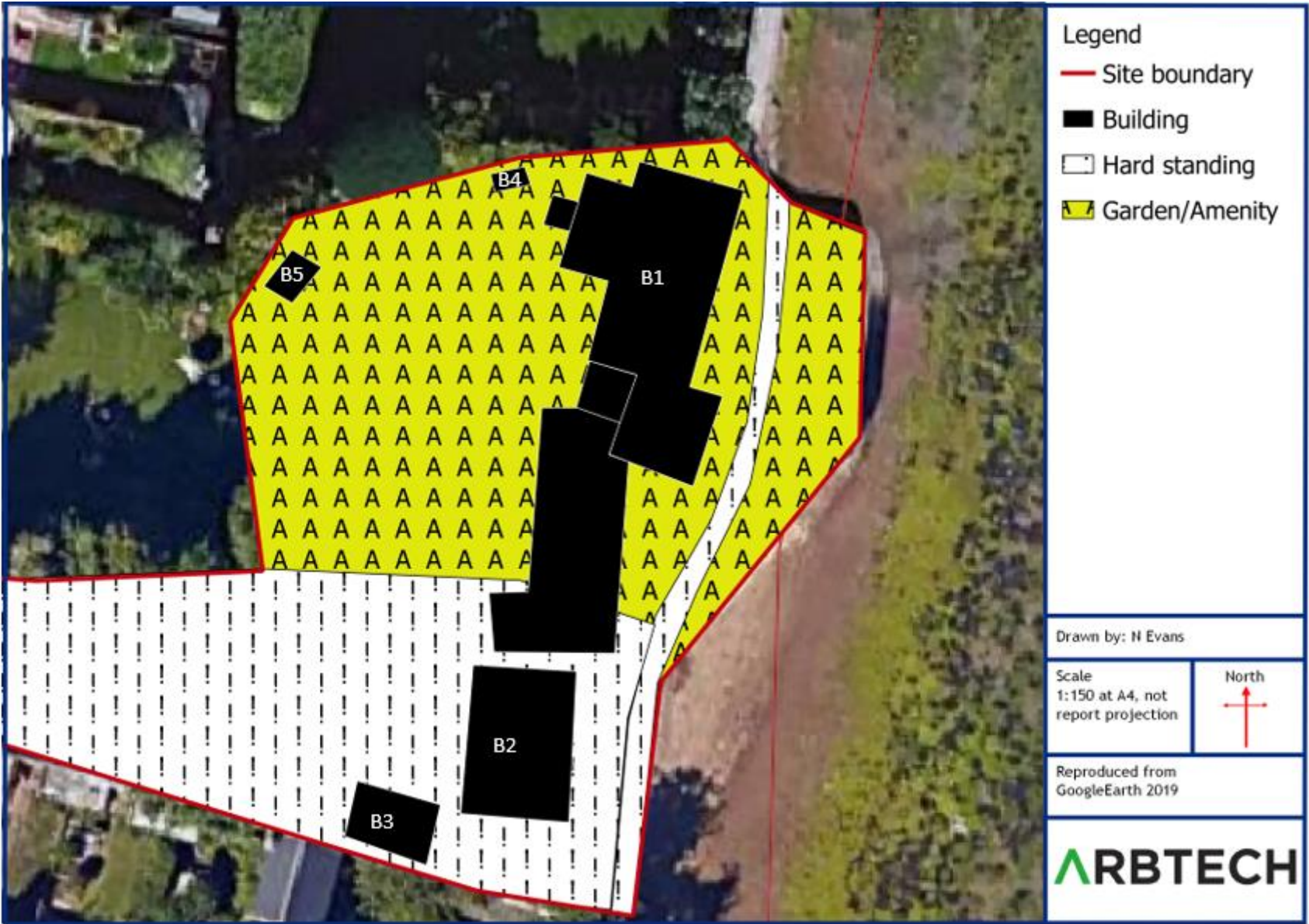


Figure 2: Preliminary Roost Assessment Map

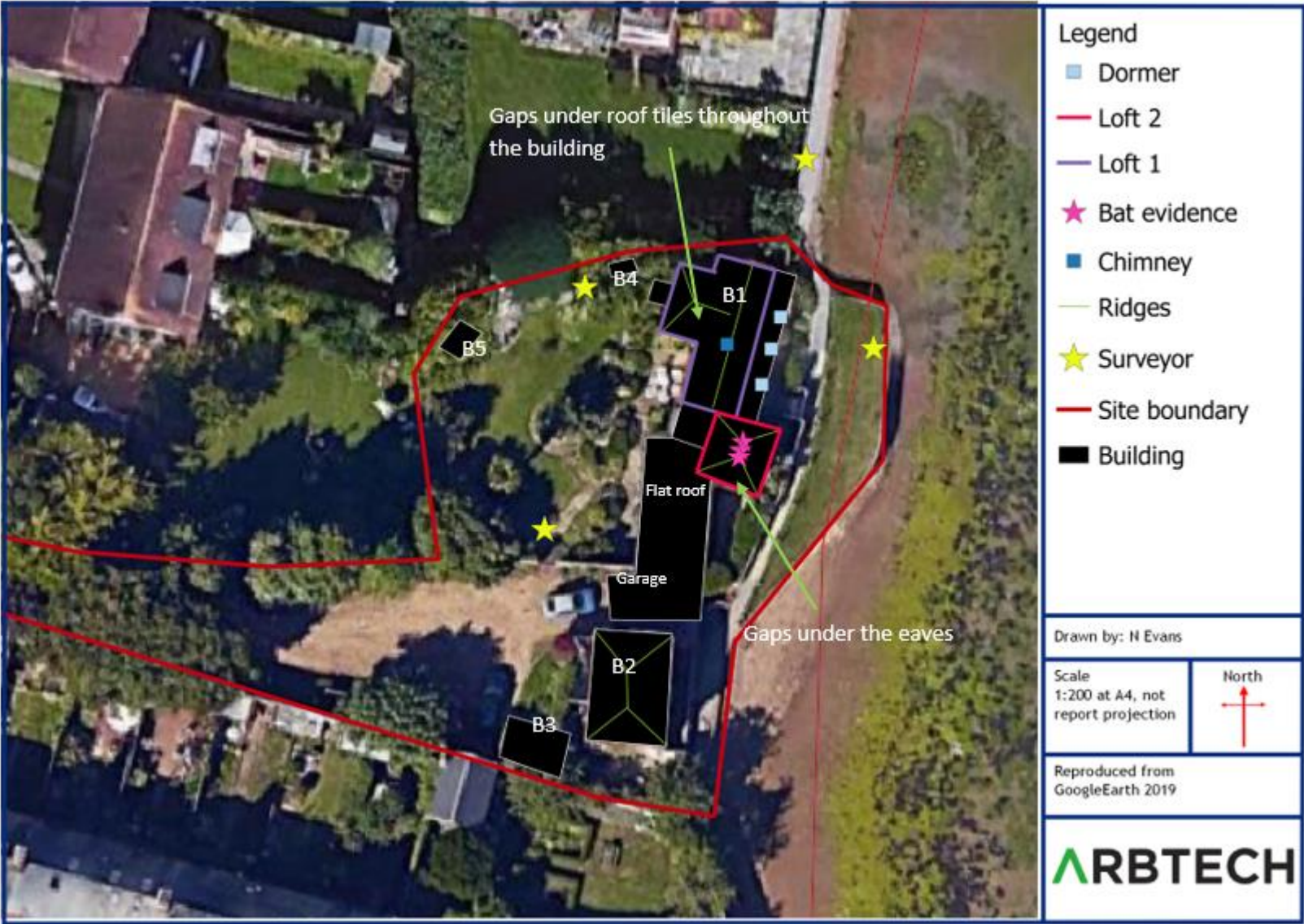




Figure 3: Local landscape map

Main conclusions from the previous surveys regarding protected species ecological receptors (taken from PEA Arbtech 2019):

Ecological Factor	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations
Designated sites	The site is adjacent to the Chichester and Langstone Harbour, Solent Maritime SAC/SPA/SSSI/Ramsar complex. The site is within the Chichester Harbour Area of Outstanding Natural Beauty (AONB).	The proposed development will have a temporary indirect impact on the adjacent designated areas as there will be an increase in noise disturbance and dust at certain times during the construction and excavation work. Full covered scaffolding around the building during the works will help minimize impacts. There will be no direct or long-term impacts on the adjacent sites or habitats.	The adjacent designated sites will be protected using the following measures: Dust Typical fall-out zone for aerially mobilised construction dust is 50m. To limit the creation of dust the site will; · Avoid dust creating activities during hot, dry periods · Activities creating dust will be damped down, especially during dry weather · Ensure there is a supply of water to the site to enable damping down, if not, arrange an alternative source of water or dust suppressant and have it on stand-by should it be required. · Locate stockpiles out of the wind, or provide wind breaks to minimise dust creation

			· Plant and equipment shall be fitted with dust suppression equipment or water suppressant systems where required. Noise Best practice as defined in the Control of Pollution Act 1974 will be used on site to avoid unacceptable levels of noise and vibrations. Further guidance can be found in British Standard 5228-1:2009. Noise pollution during construction work could disrupt overwintering wildfowl for which the adjacent sites are designated. Any work that will produce high levels of noise and vibration must be carried out between May and August. Activities with a lower impact such as work utilising hand tools can be carried out at any time of year. The site manager must consider: · Alternative working methods to utilise quiet or low noise equipment. Lighting Lighting will be controlled across the developed site. No lighting will be installed that illuminates the adjacent habitats to the east. Chemical and Fuel Storage
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			There is to be no storage of fuel, oil and chemicals within 20m of the designated site boundary. Standard pollution prevention guidelines will be followed.
Notable habitats and plants	There are no notable habitats on the development site. Adjacent to the east are coastal habitats associated with Chichester Harbour.	The proposed development will have a temporary indirect impact on the adjacent habitats as there will be an increase in noise disturbance and dust at certain times during the construction and excavation work. There will be no direct impact on the adjacent habitats.	See measures above to avoid impact on notable habitats.
Invasive / Non-native species	None visible above ground	No impact	No further surveys
Bats	B1 is a confirmed roost due to bat droppings found within loft 2. There are also a high number of highly suitable roosting features externally on the building that could be utilised by crevice dwelling bats. B2-B5 are not suitable for bat use.	The roost within loft 2 will be disturbed and modified but retained long-term. Any bat roosts in the areas on the western elevation that are to be demolished and extended will be destroyed. Bat roosts in other parts of the building could be disturbed. Bats may be injured or killed.	Three bat emergence/re-entry surveys are required during the active bat season (May – September). To comply with national guidelines at least two of the surveys should be completed during the optimal survey period (mid-May to August), and one of the surveys must be a dawn re-entry survey. Four surveyors are required to provide full coverage of the building.
Breeding Birds	Garden birds could nest in trees and shrubs on site.	There will be no vegetation removal as a result of the development therefore no impact on nesting birds.	No further work required.

Overwintering birds	The area within which the site lies is renowned for is outstanding populations of overwintering birds.	The proposed development could have a temporary indirect impact on overwintering birds as there will be an increase in noise disturbance and dust at certain times during the construction and excavation work. There will be no loss of habitat.	The construction period will avoid the winter months so as not to disturb overwintering wildfowl.
Reptiles	The well-maintained gardens do not provide the necessary cover and refugia to support a reptile population.	No impact	No further work required
Great crested newts (GCN)	The closely mown amenity grassland on site does not present suitable habitat for GCN. Although there are ponds within 500m there is far more high value habitat in close proximity to these ponds than on site.	Due to the small amount of unsuitable habitat that will be impacted by the development, there are no foreseen impacts on GCN.	No further surveys required.
Other Terrestrial Mammals	Hedgehogs may be present in garden habitats.	No impact due to the small amount of garden that is to be impacted by the proposal.	No further surveys required

1.4 Project Description

The development proposal is for 'Demolition of single storey rear extension and erection of two storey rear extension. Single storey extension with slate roof over and flat roofed link following partial demolition of single storey kitchen. Part demolition of two storey flat roofed bathroom, erection of two storey tiled cat slide roof extension and alterations to fenestration. Extend stone garden east facing wall.' The application has been submitted to Havant Borough Council.

1.5 Scope of this report

The purpose of the following report is to provide mitigation, compensation and enhancement measures to protect habitats, species and designated sites on and within the zone of influence of the development site.

2.0 Ecological mitigation and enhancement details

2.1 Informative

The following Tables 1 and 2 detail the mitigation, enhancement and management of the site for biodiversity during and post construction.

The enhancements will include a range of site-specific, suitable and achievable biodiversity gains. Best-practice management regimes will be implemented to further increase the ecological interest of the site. These are detailed below and should be undertaken in Year 1 of the ecology enhancement plan.

This is an iterative document and may be superseded by any further findings on site, especially in relation to any taxa that require a European protected species license (ESPL).

Table 1: Mitigation, Capital Works and Enhancements in Year 1

Habitat/Species/Works	Specification
Chichester and Langstone Harbour, Solent Maritime SAC/SPA/SSSI/Ramsar complex and associated habitats.	Dust, lighting and noise during construction poses risks to the adjacent designated sites and their associated habitats and species. The adjacent designated sites and associated habitats will be protected during construction using the following measures: Dust Typical fall-out zone for aerially mobilised construction dust is 50m. To limit the creation of dust the site will; · Site speed limit will be set at 5mph for all vehicles on site · Ensure loading and unloading of materials is at the lowest drop height · Ensure vehicles carrying dusty materials e.g. muck away, skips etc are securely and properly sheeted before leaving site · Avoid dust creating activities during hot, dry periods · Activities creating dust will be damped down, especially during dry weather · Ensure there is a supply of water to the site to enable damping down, if not arrange an alternative source of water or dust suppressant and have it on stand by should it be required. · Locate stockpiles out of the wind, or provide wind breaks to minimise dust creation · Plant and equipment fitted shall be fitted with dust suppression equipment or water suppressant systems where required. Fencing and physical barriers The development zone will be fenced off to minimise dust entering the adjacent habitat and also provide some acoustic protection. A timber framed hoarding would provide such mitigation and security. The building will be fitted with full protective scaffolding with sheeting to prevent dust entering the adjacent designated sites and to dampen any noise pollution.

Noise

Best practice as defined in the Control of Pollution Act 1974 will be used on site to avoid unacceptable levels of noise and vibrations. Further guidance can be found in British Standard 5228-1:2009. Noise disturbance is a consideration due to the presence of Chichester and Langstone Harbour, Solent Maritime SAC/SPA/SSSI/Ramsar complex adjacent to the site which is designated for its internationally important populations of overwintering birds. Noise pollution during construction work could disturb bird populations and reduce foraging habitat. All work that will produce high levels of noise and vibration must be carried out outside of the winter season which runs from September to March inclusive.

The site manager must consider:

- Alternative working methods to utilise quiet or low noise equipment.
- Noisy plant will be kept as far away as possible from sensitive receptors along the eastern boundaries.
- The site will work to set working hours to restrict noisy activities to the period between 9am and 5pm. This may be controlled by planning permission.
- Minimise drop heights into hoppers, lorries or other plant.
- Consider screening off sources of noise.
- Ensure plant is shut down when not in use.

Lighting

Lighting will be controlled across the developed site:

No lighting will be installed that illuminates the adjacent designated sites to the east.

Low impact lighting strategies will be adopted from the guidance outlined in the Bat Conservation Trust's 'Bats and Lighting' publications:

http://www.bats.org.uk/pages/bats_and_lighting.html

The lighting on the site will:

- Use narrow spectrum light sources to lower the range of species affected by lighting
- Use light sources that emit minimal ultra-violet light
- Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin.
- Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal.

	Light spill will be reduced via the use of low level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available. Chemical and Fuel Storage There is to be no storage of fuel, oil and chemicals within 10m of the site boundaries.
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Herptiles	There will be minimal vegetation clearance required as part of the development, therefore any risk to herptiles is considered low-negligible. As a precautionary measure: Vegetation Clearance (where required) – undertaken between March and October to avoid hibernation period All ground level vegetation must be strimmed/cut to around 300mm moving east to west to encourage any animals present to disperse into surrounding habitats. A second cut to 150mm should then be taken 24 to 48 hours later. All arising should be removed.
Nesting bird's	The building and vegetation on site provide suitable nesting habitat for birds. Active nests are at risk from damage or disturbance during site works. No roof works, vegetation or tree clearance will take place until a nesting bird check has been carried out (if the works are undertaken between March and August inclusive). If this time frame can be avoided, then no survey will be required. The new extension should incorporate the following integrated or wall mounted boxes: 1 x Schwegler 1SP sparrow terraces 3 x integrated swift brick or 1 x external Schwegler 17 triple chamber external box.

	Boxes should be placed at eaves level in a sheltered location.
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Terrestrial mammals	Hedgehogs –Individual animals could be killed or injured during development if pits are left open. The following recommendations are given in order to mitigate against potential harm to terrestrial mammals during the development works. - Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. - Security lighting to be directed away from the undergrowth. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. Enhancements A hedgehog box should be added on site.
Bats	Dusk emergence and dawn re-entry surveys were undertaken on 10th May 24th May and 4th July 2019 (see accompanying report for full results – Arbtech 2019). A transitional roost of brown long-eared bats (identified by DNA analysis on droppings) and s day roost of soprano pipistrelle x 1 are present in the building. The low number of droppings in the loft (approx. 50) combined with the general lack of brown long-eared bat activity around the site, and no emergences or re-entries, confirms the assessment that the roost is of low conservation value. As the surveys were undertaken during the optimal survey season this rules out a maternity roost. The number of droppings suggests a single brown long-eared bat is likely to be present. A European protected species mitigation licence (EPSML) will be required from Natural England prior to the commencement of works, once planning has been granted. As there are 2 bat roosts of low numbers of common species present the works can be completed under a Natural England bat mitigation class licence (low impact). The works will result in the destruction of a soprano pipistrelle day roost and the modification and disturbance of a brown long-eared bat transitional roost. The following mitigation and compensation will be required as part of the licence conditions (to be superseded by the details within the licence application): There will be no timing restrictions on the works.

	Two bat boxes will be placed on retained trees prior to the start of work; 1 x Schwegler 1FF and 1 x Schwegler 2FN or suitable alternatives. The roof works will be supervised by the named ecologist on the licence or their accredited agent. Any bats found during the roof strip will be captured by hand by the ecologist and moved into the appropriate bat box. The area of roof which contains the brown long-eared bat roost will be disturbed and modified when the building is extended, this will result in the creation of a larger loft void in this area. No breathable roofing membrane can be used within this section of the roof. A bat adapted roof tile with a corresponding cut in the felt beneath will be added to the new roof to provide access into the loft void so that the loft can continue to be used by brown long-eared bats in the long-term. The bat boxes to be added on site will provide sufficient compensation for the loss of the single soprano pipistrelle day roost. All above details are subject to modification when the licence application is written. Exact details, specifications and locations of mitigation and compensation measures will be included in the licence application. The site will be enhanced for bats post-development as there will be an increase in available roosting habitat with the addition of the two bat boxes and larger loft void.
Waste materials	All waste materials and chemicals shall be stored and disposed of under COSHH regulations and Environment Agency guidance. Any waste materials arising from the development will be stored at least 20m away from the adjacent designated sites to the east and will be removed from the site at the earliest opportunity.
On site management and responsibility during construction	On Site Structure and Responsibility The Contractor shall provide a dedicated environmental specialist team and any other relevant specialist whom the contractor deems to be necessary. The Contractor's Project Manager will be responsible for: · Environmental Management and for the preparation review and implementation of this CEMP and any additional measures required; · Monthly review of EMP implementation; · Allocation of sufficient resource to implement all Environmental Management requirements including the CEMP during site works; · Review of environmental management reports prepared by the Environmental Manager/Co-ordinator; · Signing off all permits, authorisations and consents; and will be the main point of contact with the Client (or the Client's Representative) regarding Environmental Management on site. The Contractor's Environmental Manager/Co-ordinator shall have experience as an Environmental Manager/Co-ordinator, preferably on similar development schemes together with good communication skills and shall be responsible for:

	· Developing and on-going review of the CEMP and relevant procedures; · Ensuring that all environmental standards and commitments are adhered to; carrying out environmental induction and training; · Monitoring compliance of construction activities with the CEMP; · Conducting inspections and reporting non-compliances to the Contractor's Project Manager; · Liaising with the Contractor's management and operatives on all matters regarding environment; · Undertaking environmental inspections and audits throughout the works; -recording and reporting all environmental works; · Maintenance of related records; · As far as reasonably possible, attendance at any environmental incidents on site;
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Table 2 - Post Development Monitoring, Management and Maintenance

Activity	Year 1	Years 2 onwards
Bat and bird boxes	To be confirmed following further survey work.	

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Appendix 1: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive the, Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe in order to conserve the 189 habitats and 788 species (non- bird) identified in Annexes I and II of the Directive (as amended).

SPAs are classified under Article 2 of the EC Birds Directive both for rare bird species (as listed on Annex I) and for important migratory species.

SACs and SPAs up to 12 nautical miles (nm) from the coast are afforded protection in the UK under the Conservation of Habitats and Species Regulations 2010 which consolidate all amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994. In Scotland, the requirements of Habitats Directive are implemented through a combination of the 1994 and the 2010 (reserved matters) Regulations. The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a means for designating and protecting SACs in UK offshore waters (from 12-200 nm).

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres” however they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally. Further provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and the Nature Conservation (Scotland) Act 2004.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Habitats Directive

The EC Habitats Directive aims to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those species of European importance. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 (the Conservation Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). The following notes are relevant for all species protected under the EC Habitats Directive:

In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

The Habitats Regulations do not define the act of 'migration' and, therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.

In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests':

the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment;

- There is no satisfactory alternative; and
- The action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.
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The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof
- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

Effects on development works:

A development licence will be required from the relevant countryside agency for any development works liable to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is not possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

Effects on development works:

Works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Herpetofauna (Amphibians and reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

Effects on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair

their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

Effects on development works:

If development works are liable to affect habitats known to support water voles, the relevant countryside agency must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency (e.g. Natural England) for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

Effects on development works:

An EPSM Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
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Effects on development works:

Works which are liable to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSM licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Dormice

Dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;

- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

Effects on development works:

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSM licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White clawed crayfish

The white clawed crayfish *Austropotamobius pallipes* receives partial protection under Schedule 5 of the WCA in respect of Sections 9(1) and 9(5). This makes it an offence to:

- Intentionally take (capture) white-clawed crayfish.

Effects on development works:

The relevant countryside agency will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants.

An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
 - Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
 - Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

Effects on development works:

An EPSM licence will be required from the relevant countryside agency for works which are liable to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England and Wales to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

Effects on development works:

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site however it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any land owner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY (ENGLAND)**National Planning Policy Framework**

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.