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Biodiversity Supplementary Planning Document

For Northamptonshire

November 2014

Statutory status of the Biodiversity Supplementary Planning Document

This Supplementary Planning Document (SPD) has been prepared under the 2004 Planning and Compulsory Purchase Act (the "2004 Act"). The Biodiversity SPD is a statutory Local Development Document (LDD). It will cover the whole of Northamptonshire, but will be adopted be each Local Planning Authority as a statutory SPD.

The Biodiversity SPD was prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012 (Statutory Instrument 2012 No. 767) (the "2012 Regulations"), which set out the minimum requirements for the preparation of an SPD. It is essential for these requirements to be met in order for this document to be classified as a statutory LDD, thereby supplementing statutory Local Plans.

This SPD will supplement policies within the North Northamptonshire Core Spatial Strategy, adopted June 2008 and West Northamptonshire Joint Core Strategy Local Plan (Part 1), adopted [December 2014]. The specific preparation process for the Biodiversity SPD is directed by 2012 Regulations 12-14 and 35. The process also needs to have regard to the relevant Statements of Community Involvement (SCI).

Consultation process and timeline

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1. Introduction

Biodiversity is a key aspect of sustainable development. Every local authority has a statutory duty to have regard, so far as is consistent with the proper exercise of its functions, to the purpose of conserving biodiversity.[1] This duty is addressed in part by including nature conservation policies in Northamptonshire's core strategies and saved policies in the old Local Plan or Local Plan Part 2 for each borough/district.

Application

This Supplementary Planning Document (SPD) is designed to be used by those considering and applying for planning permission in Northamptonshire. It will also be a useful tool for those developing planning policy and making site allocations.

Aims

This SPD explains how biodiversity shall be integrated into the development process to ensure that legislation and policy requirements are met and best practice standards are achieved. It offers a standardised approach which all applicants should follow. The SPD expands on the main principles set out in the National Planning Policy Framework and relevant local planning policies, and should be used together with expert ecological assessment of the details of each specific case.

2. Definitions

Biodiversity (a contraction of 'biological diversity') refers to the number, variety and variability of living organisms. It is often defined in terms of genes, species and ecosystems. Biodiversity is widely considered to be a measure of ecosystem quality or health: greater biodiversity indicates better health.

Biodiversity features include:

- Species and their habitats (including feeding, resting and breeding areas): note this may include features like trees and buildings that could hold protected species (*e.g.* owls, bats)
- Statutory and non-statutory nature conservation sites
- UK and Local Biodiversity Action Plan habitats and species
- Habitats and Species of Principal Importance for England (under section 41 of the Natural Environment and Rural Communities Act 2006)
- Features which provide links/corridors or stepping stones from one habitat to another.

Biodiversity impacts include but are not limited to:

- Loss of, or damage to, all or part of an important site for biodiversity
- Habitat fragmentation, isolation and removal or severance of wildlife corridors (Figure 1)
- Introduction or spread of invasive non-native species

[1] Natural Environment and Rural Communities Act (2006) Section 40.

- Soil, air or water contamination
- Disturbance and/or displacement, *e.g.* from recreational activity
- Predation and/or harassment by domestic pets
- Light pollution
- Reduction/loss of species resources (*e.g.* food, water, shelter)
- Interruption to an established management regime, habitat neglect

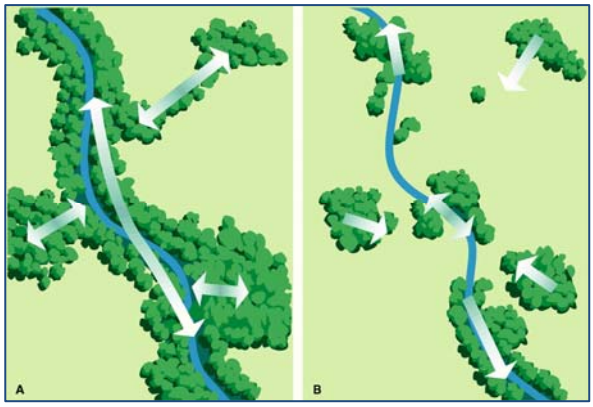


Figure 1 Habitat corridors (L) allow species to move through the landscape. Where corridors are severed (R) species are confined to small patches of habitat, leading to increased local extinction.

Biodiversity impacts can be:

- Permanent or temporary
- Direct or indirect
- Short-term or long-term
- Cumulative (i.e. significant when the impacts of multiple small developments are taken into account)

Natural England should be consulted as early as possible where a development could impact a European Site[2]. Where a European Protected Species could be affected, applicants should consult as early as possible Natural England's standing advice on protected species.[3] If one or more European Protected Species are likely to be affected then Natural England's licensing process must be followed.

Certain types of development must be assessed in more detail through Environmental Impact Assessment (EIA)[4] or Habitats Regulation Assessment (HRA)[5] procedures. Please refer to relevant guidance[6] for more information on these requirements.

[2] In Northamptonshire, the Upper Nene Valley Gravel Pits Special Protection Area (SPA)

[3] Available at GOV.UK. 2014. Planning and development guidance – Protected species and sites: how to review planning proposals [ONLINE]. https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals. Accessed 20 November 2014.

[4] EIA Directive (85/33/EEC as amended by 97/11/EC and 2003/35/EC)

[5] Habitats Directive (92/43/EEC), which concerns development proposals that may directly or indirectly affect the designated interest of European protected sites.

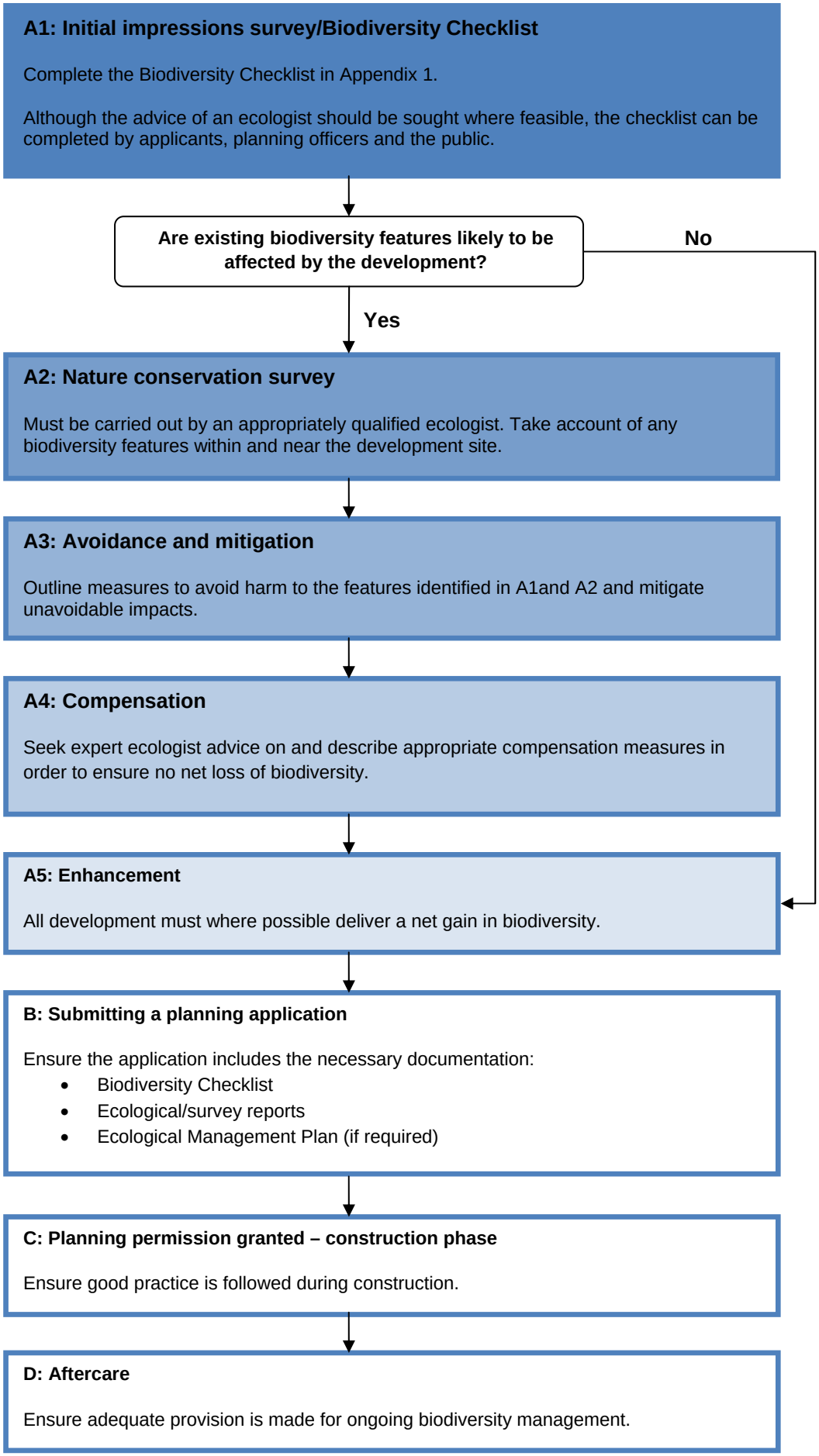
[6] Re EIA, Planning Practice Guidance explains the requirements of the Town and Country Planning (EIA) Regulations 2011. Please see http://planningguidance.planningportal.gov.uk/blog/guidance/environmental-impact-assessment/. HRA guidance is available from the European Commission (European Commission. 2002. Assessment of plans and projects significantly affecting Natura 2000 sites. Luxembourg: Office for Official Publications of the European Communities. Available at http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf.) Accessed 21 October 2014.

3. Legislation and policy base: key messages

Biodiversity conservation planning policy is supported by a national and international legal and policy base (Annex 2). Key messages for development include:

- Local planning authorities have a statutory duty to have regard to conserving biodiversity as part of the planning process.
- Local planning authorities are expected to ensure their planning decisions are based on up to date information.
- Biodiversity features of value frequently occur outside designated sites and these should be conserved, enhanced and additional features created as part of development.
- Maintaining current levels of biodiversity is not sufficient. Development should provide a net gain in biodiversity where possible, guided in part by the local Biodiversity Action Plan.
- Northamptonshire supports a range of sites, habitats and species of national and international importance (Annex 1). Local authorities have a particular responsibility to promote their maintenance and long term conservation as part of the planning process.

4. A step by step guide to building nature into development (hyperlinks to be inserted)



5. Stage A: Preparing to submit a planning application

Biodiversity impacts are most easily avoided when identified in the earliest stages of development. Recognising biodiversity features early on also offers the best chance of incorporating them into the development design. It is essential that applicants ensure they have all necessary ecological and planning policy information. Doing this as at the outset reduces the risk of delays or objections caused by lack of information. Most ecological surveys can only be carried out at specific times of year so it is important that this be built into the development schedule (refer to Survey Calendar in Appendix 2).

It is equally important to make sure there is not a long gap between conducting surveys and submitting the application. Some ecological data may become out of date after only a couple of years. Applicants are advised to ensure that all supporting information is current and ready to be submitted as a single package.

Collecting ecological information is a two step process:

1. Biodiversity Checklist: complete this form to identify features in and around the application site which may be of biodiversity value.

2. Ecological survey: if the Biodiversity Checklist identifies features of potential value, a more thorough assessment of those features should be carried out.

It is commonly thought that habitat and species surveys can be postponed until after determination and then addressed by condition. ***Part IV of ODPM Circular 06/2005 makes it clear that this practice is not acceptable in almost all cases.*** This is supported by legal precedent[7]. If surveys are carried out after planning permission has been granted and they reveal major impacts on wildlife, there is no reasonable way for the local planning authority to exercise additional control, amend the application or revoke permission.

Stage A1: Initial impressions survey/Biodiversity Checklist

The Biodiversity Checklist (Appendix 1) is a simple survey that should be used to detect features that could be at risk and identify any surveys required. The Checklist can be completed by the applicant, although ecological advice at this stage is advised.

Checklist answers must be transferred to the '1APP' planning application form (Question 13: Biodiversity and Geological Conservation). ***If the answer is yes to any part of 1APP Question 13, the relevant surveys must be provided with the application for the biodiversity impact to be assessed.***

[7] R (on the application of Simon Woolley) v Cheshire East Borough Council. 2009. The judgment clarifies for the first time the legal duty of a Local Planning Authority when determining a planning application for a development which may have an impact on European Protected Species.

Where the Biodiversity Checklist (Appendix 1) detects that an application could affect the Upper Nene Valley Gravel Pits SPA, applicants should consult the Upper Nene Valley Gravel Pits SPA Supplementary Planning Document.

The Biodiversity Checklist has been designed to detect the majority of biodiversity features which could be affected by development. It is important to note however that protected species can occur in very unlikely places.

Attempts to exclude or remove biodiversity features could constitute a criminal offence and should not be undertaken.

Stage A2: Nature Conservation Survey

Survey Methodology

Surveys should take account of all the possible biodiversity features identified by the Biodiversity Checklist and any others which may later become apparent. Standard survey methods should be used: a list of these is available at http://www.cieem.net/sources-of-survey-methods-sosm-.[8] Where protected species surveys are required, applicants should refer to government planning advice[9], available at https://www.gov.uk/construction-near-protected-areas-and-wildlife.

Most species surveys can only be conducted at certain times of year. If it is necessary to vary the method used from accepted good practice the reason should be explained clearly (and ideally agreed with relevant experts before submitting the application), as should the effect on the reliability of the results. Optimal habitat and species survey times are presented in the Ecological Survey Calendar in Appendix 2.

All ecological surveys should also include an 'extended Phase I Habitat Survey' to assess the plant communities and habitat types present on site. Areas identified as being of botanical interest should be re-surveyed in detail to confirm their extent and conservation value.

Consultants should take account of previous species records for the site. These are available from the Northamptonshire Biodiversity Records Centre (NBRC) http://www.northantsbrc.org.uk, and for certain species (*e.g.* bats) from county specialists. These data, along with initial survey work, may identify further survey needs that were not apparent from the Checklist (*e.g.* past use of the site by protected species). As long as there is a reasonable likelihood of a species being present and affected by the development specific surveys must be conducted to confirm its presence or absence.

[8] Chartered Institute of Ecology and Environmental Management. 2014. Sources of Survey Methods (SoSM) [ONLINE]. Available at http://www.cieem.net/sources-of-survey-methods-sosm-. Accessed 24 March 2014.

[9] GOV.UK. 2014. Planning and development – guidance: Construction near protected areas and wildlife [ONLINE]. Available at https://www.gov.uk/construction-near-protected-areas-and-wildlife. Accessed 21 October 2014.

Some species records are also available from the National Biodiversity Network Gateway (NBN) https://data.nbn.org.uk/. *Please note that NBN data are supplementary to, and not a substitute for, locally derived NBRC records. Reliance solely on NBN data is not acceptable and may constitute a violation of NBN Terms and Conditions.*

Biodiversity features near the site need to be assessed as well as those on the site. 'Near' will vary in its meaning depending on the development's zone of influence and the relative sensitivity of species and habitats in the surrounding landscape.

Applicants of major or complex proposals, or proposals in ecologically sensitive areas, are encouraged to consult with relevant nature conservation organisations about the proposal and the scope of ecological surveys to be undertaken. A list of contacts and organisations is provided in Annex 3 to this SPD.

The methods, results and conclusions of any survey must be compiled and submitted in writing as part of the planning application.

Choosing Consultants

Ecological surveys should be undertaken by competent persons and following appropriate survey methods. The Chartered Institute of Ecology and Environmental Management CIEEM maintains a list of members who offer commercial consultancy services. The Environmental Consultants Directory website offers a similar search.

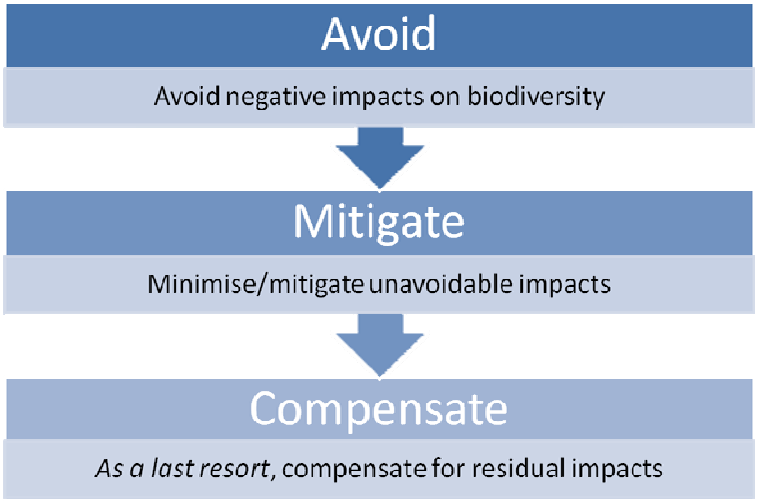
Before appointing an ecological consultant, it would be prudent to make enquiries about their abilities and experience. Prospective clients may wish to ask about the following:

- Membership of an appropriate professional body. Individuals employed by any consultancy should be eligible for membership of the Chartered Institute for Ecology and Environmental Management (CIEEM). *The use of CIEEM members is strongly advised.*
- Possession of relevant wildlife licence(s) (where applicable). Some protected species can only be handled or trapped by personnel holding specific government licences.
- Previous experience. Consultants should be asked for examples of recent work and a list of references so you can verify the standard of work and value for money.
- Knowledge of the local area. Ecologists with local knowledge may be better able to assess the implications of a scheme within the local context.
- Costs. These vary widely so you may wish to seek more than one quotation. As with any sort of professional service, it is helpful to be as clear as possible about what is required and what will be included in the quoted price.

Stage A3: Avoidance and mitigation

Ecological survey findings should be carefully considered from the earliest design stage of a development. The overall objectives should be to avoid harm, mitigate potentially negative impacts and integrate existing biodiversity into the scheme. This involves following the 'mitigation hierarchy' (Figure 2).

Figure 2 Mitigation hierarchy for addressing impacts on biodiversity features



Steps must first be taken to ***avoid*** any likely significant impacts to biodiversity, for example by:

- Designing the site in such a way as to retain any important biodiversity features
- Scheduling works when key species are not active or breeding.

Avoidance is often the cheapest and most effective way of reducing potential impacts but it requires biodiversity to be considered at the very earliest stages of planning.

Unavoidable impacts should be mitigated. ***Mitigation*** means taking steps on the site itself to minimise the duration, intensity and/or extent of impacts that cannot be avoided entirely. This might include:

- Adapting construction methods to reduce pollution
- Altering site plans to minimise disturbance to sensitive species or habitats.

Effective mitigation can eliminate some negative impacts. Mitigation should not be confused with compensation, which is covered in the next section.

Stage A4: Compensation

All on-site mitigation options should be exhausted before compensation is even considered.[10] Compensation schemes are rarely successful in replacing what has been lost[11], and it is far better not to cause damage in the first place than to try to compensate for it later. Unlike mitigation, compensation is usually carried out off-site and often involves major habitat restoration or creation to make up for what is being lost to development.

Compensation measures should adhere to the following principles:

- Successful recreation or translocation of the biodiversity feature should be reasonably certain.
- Wherever possible, compensation habitats should be created to a suitable quality before damage takes place, allowing species to colonise it from the area to be lost. Some features (*e.g*. hedgerows, ponds, badger setts) need time to mature and function ecologically before they will offer effective alternative habitat.
- Compensation will often require delivering much more habitat than what has been lost, to account for failure risk, climate change effects or other factors.
- Measures should be in place to secure the ongoing management of the compensation.

Biodiversity is extremely complex: even with full knowledge it would not be easy to quantify. It is therefore beyond the scope of this SPD to define how to calculate required compensation. Instead, each situation must be treated individually and expert ecological advice should be sought. *Compensation will be acceptable only where independent expert advice indicates that there will be a high probability of success*.

In accordance with the UK Government Sustainable Development Strategy (2005), environmental costs should fall on those who impose them (the 'polluter pays' principle).[12]

"If significant harm [to biodiversity] cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused."[13]

[10] The Parliamentary Office of Science and Technology. 2011. POSTNOTE Number 369: Biodiversity Offsetting [ONLINE]. Available at http://www.parliament.uk/documents/post/postpn_369-biodiversity-offsetting.pdf. Accessed 21 October 2014.

[11] South West Ecological Surveys, Levett-Therivel Sustainability Consultants and Oxford Brookes University. 2004. Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners. Report to Countryside Council for Wales, English Nature, Environment Agency and Royal Society for the Protection of Birds [ONLINE}. Available at http://publications.naturalengland.org.uk/file/69025. Accessed 21 October 2014.

[12] HM Government. 2005. Securing the future: delivering UK sustainable development strategy. London: TSO, p. 16.

[13] Communities and Local Government. 2012. National Planning Policy Framework, paragraph 118.

Stage A5: Enhancement: delivering 'net gain' in biodiversity

Even in cases where mitigation or compensation is deemed unnecessary, planning policy requires new development to provide a net gain in biodiversity where possible[14]. This should be appropriate to the scale, type and location of the development.

Biodiversity enhancements should adhere to the following principles:

- Management plans and long-term funding must *both* be in place to ensure enhancements are sustainable and result in a lasting benefit to biodiversity.
- Enhancements should add to existing habitat networks where they exist. This is particularly important on sites within or adjacent to the Nene Valley Nature Improvement Area (NIA) (Figure 3), where developments of a scale to contribute a significant, quantifiable benefit, or conversely undermine the delivery of NIA objectives will be expected to enhance and improve the ecological network of the NIA.
- Public open space should include natural and semi-natural habitats. Larger spaces are logistically easier and more cost effective to manage than smaller ones. They also make a greater wildlife and amenity contribution. In areas with several contiguous development sites applicants should consider working together to create larger and more effective habitat areas.
- Enhancements should seek to contribute to Biodiversity Action Plan objectives.[15]
- Enhancements which also provide flood attenuation or sustainable drainage, improve ecosystem services or deliver other benefits will be welcomed.
- Opportunities should be taken to incorporate biodiversity into the fabric of buildings, for example:
    - Living roofs and/or living walls. These promote urban biodiversity while reducing storm water runoff and providing building insulation, reducing cooling costs in summer (not appropriate for Listed Buildings or most traditional buildings).
    - Swift and swallow bricks, which are mortared directly into brick walls
    - Bat access tiles for roofs, bat bricks, bat cavities for walls.[16]
- Where possible and practical, native species should be used in the landscaping scheme. Native species should be appropriate to the local environment and to the extent possible sourced from local seed.

[14] Communities and Local Government. 2012. National Planning Policy Framework, paragraph 109.

[15] Northamptonshire Biodiversity Partnership. 2008. Northamptonshire Biodiversity Action Plan http://www.northamptonshirebiodiversity.org.

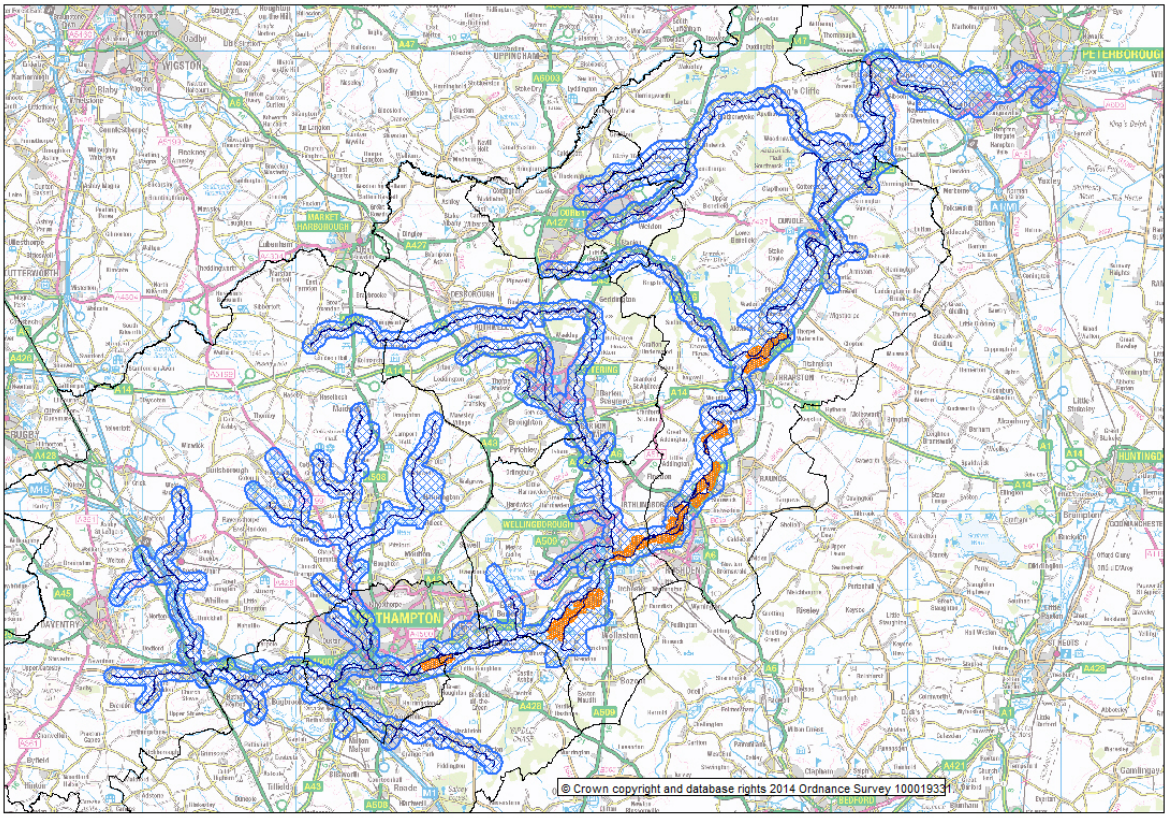
[16] More ideas can be found in: Murphy B, Gunnell K and Williams C. 2013. Designing for Biodiversity: A Technical Guide for New and Existing Buildings, 2nd edition. London: RIBA Publishing, 176 p.

Many species which are native to the UK are not in fact found in Northamptonshire, and some species are only found in certain parts of the county. Seed and planting mixes should include species appropriate to the location. Information on species distribution can be found in *The Flora of Northamptonshire and the Soke of Peterborough*, available at some libraries. The Flora Locale website (www.floralocale.org) has a directory of suppliers of locally sourced seed and plants.

- Ornamental plantings should include a substantial proportion of species and varieties which support bumblebees, butterflies and other pollinators. Landscaping schemes should include plants which flower at different times throughout the year. The RHS 'Perfect for Pollinators' lists[17] are an excellent starting point for creating pollinator-friendly landscaping.

- Tree species should be considered within both the existing ecological context and predicted climate change conditions. The Forest Research website (www.forestresearch.gov.uk) offers advice on choosing trees for climate change resilience.

Figure 3 **Nene Valley Nature Improvement Area (NIA). The Upper Nene Valley Gravel Pits SPA is shown in orange.**



[17] The Royal Horticultural Society. 2014. Plants for Pollinators [ONLINE}. http://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators. Accessed 16 May 2014.

Stage B: Submitting a Planning Application

By the time a planning application is ready for submission, the Biodiversity Checklist should have been completed and depending on the outcome, all relevant ecological surveys should have been completed. The process described in stages A3 to A5 of this SPD should also have been documented. Planning applications should include:

- Survey reports for any biodiversity features identified as at risk in the Biodiversity Checklist. If there are none, a statement should be included explaining why and acknowledging that the applicant is aware that it is a criminal offence to disturb or harm protected species should they subsequently be found or disturbed.
- A statement explaining the steps planned to address the conservation of any existing biodiversity features, so far as possible
- Appropriate proposals for biodiversity enhancement
- Ecological Management Plan (EMP) if required (see Section D below).

Detailed validation requirements need to be checked with each authority as they can differ. If it is identified that the application will affect features clearly specified in the validation requirements (*e.g.* a designated site or a feature likely to contain protected species), then in the absence of relevant biodiversity information the planning authority may judge the application to be invalid.[18]

Ecological reports

Ecological survey reports should:

- Describe how stages A1 and A2 have been achieved
- Locate and describe existing biodiversity features and their significance, with scale plans where appropriate
- Describe how stages A3, A4, A5, C and D would be achieved
- Provide contact details, qualifications and experience of all relevant personnel.

Following good practice as set out in this SPD will avoid unnecessary delay during the determination process.

Applicants are advised to also consider other SPDs which may be in place in the local authority.

Stage C: Planning Permission Granted: the Construction Phase

As a project progresses to the construction phase the mitigation strategies outlined in the environmental statement (or other ecological reports) must be put into practice. A Construction

[18] Town and Country Planning (Development Management Procedure)(England)Order 2010 SI 2010 No 2184 Article 10(5)

Environmental Management Plan (CEMP) is best practice and helps manage the environmental effects of construction[19]. A CEMP includes a risk assessment identifying all aspects of construction that could have an environmental impact and outlines management measures designed to eliminate and/or minimise the identified impacts.

Where the ecological impacts of a development are significant or the development site is large and includes a range of ecological features, an Ecological Clerk of Works (ECoW) should be employed. The ECoW's role is to guide and advise on how to avoid or minimise ecological impacts during site preparation and construction[20]. An ECoW will oversee the construction period and advise on the resolution of ecological issues as they arise, to protect the on-site features, habitats and species. An ECoW will ensure that all landscaping and ecological works, including habitat creation projects and mitigation for protected species, are undertaken in accordance with the Ecological Management Plan (see below) and the various method statements agreed with the Local Planning Authority.

The decommissioning or demolition of some structures may also require employment of an ECoW, where the potential impacts on biodiversity features may be significant.

Stage D: Aftercare

Habitats retained or created through development should be maintained in perpetuity. 'In perpetuity' means for the life of the development, or in legal terms 99 years.[21] Temporary developments may require shorter-term management.

Where a significant amount of habitat is to be retained, restored or created the local planning authority may use a planning condition to require the production of an Ecological Management Plan (EMP)[22]. The EMP identifies the biodiversity features which will be managed to maintain and enhance the site's nature conservation value. It sets out objectives for these habitats, with detailed management specifications and a monitoring programme of ten years or more. The EMP must be fully costed and specify how the management and monitoring will be funded.

Applicants who envisage a non-governmental or public sector organisation taking on a role in long term management should contact the appropriate organisations as early as possible, and certainly well before submitting a planning application.

Case studies: to be integrated into text

[19] [BSI] British Standards Institution. 2013. BS42020:2013 Biodiversity – Code of practice for planning and development. Section 10.2 Construction environmental management plan (CEMP). London: BSI.
[20] The Association of Environmental & Ecological Clerks of Works. 2011. About AEECoW: Role of an Env/ECoW? [ONLINE]. http://www.aeecow.com/role. Accessed 19 November 2014.
[21] The Environment Bank Ltd (2013). Frequently asked questions: biodiversity offsetting [ONLINE] http://www.environmentbank.com/docs/FAQs_Offsetting.pdf Accessed 19 September 2014.
[22] British Standards Institution. 2013. BS42020:2013 Biodiversity – Code of practice for planning and development. Section 9.2.3 Conditioning biodiversity/ecological strategies, plans and schemes. London: BSI.

Glossary

Compensation: measures such as habitat creation, taken off-site, which offset the residual ecological impacts after avoidance and mitigation have been undertaken. Compensation is a last resort and should only be considered where there are residual biodiversity impacts which cannot be mitigated. Strict tests must be met before compensation is considered.

Construction Environmental Management Plan (CEMP): a document that details the principles, practices and procedures for monitoring and managing the environmental effects of a project in the run up to and during the construction phase.

Ecological Clerk of Works (ECoW): an environmental or construction professional with direct responsibility for monitoring compliance with environmental legislation, policy or mitigation. An ECoW may be engaged during the construction or operation phase of any development where environmental compliance requires monitoring or auditing. An ECoW will usually be an appropriately qualified professional such as an environmental consultant, civil engineer, surveyor, project manager or ecologist.

Ecological Management Plan (EMP): a site-specific document that includes the processes and instructions to manage a site and its operations in such a way as to protect and enhance the biodiversity and ecology of the site and surrounding area. The scope and content of an EMP will depend on the scale and type of project or development for which it is to be used.

Ecosystem services: the benefits which the natural environment provides to humans. These are generally classified as 1) supporting services (*e.g.* soil formation, photosynthesis), 2) provisioning services (*e.g.* food, fibre, fresh water), 3) regulating services (*e.g.* pollination, water purification) and 4) cultural services (*e.g.* recreation, spiritual enrichment).

Enhancement: adding to the pre-existing ecological value of a site for its continued benefit for wildlife. Enhancement measures are additional to any avoidance, mitigation or compensation. Biodiversity enhancement is required where possible per paragraph 109 of the National Planning Policy Framework.

Environmental Impact Assessment (EIA): a process of evaluating the likely environmental impacts of a proposed project or development, taking into account interrelated socio-economic, cultural and human health impacts, both beneficial and adverse. In EU member states the EIA process is governed by the EIA Directive (85/337/ECC) as amended.

European Protected Species: species of plants and animals – not including birds – listed in annexes II and IV of the EU Habitats Directive and protected by law throughout the European Union. Bird species receive separate protection under the Birds Directive.

European Site: one of two types of European statutory nature conservation designations. Special Protection Areas (SPA) are classified under Council Directive 2009/147/EC on the conservation of wild birds (this is the codified version of Council Directive 79/409/EEC as amended). This is generally known as the Birds Directive and protects rare, threatened or vulnerable birds listed in Annex I of the Directive. Special Areas of Conservation (SAC) are classified under Council Directive 92/43/EEC

on the Conservation of natural habitats and of wild fauna and flora (known as the Habitats Directive) which protects habitats (annex I) and species (annex II) of the Directive. The entire suite of European Sites is known as the Natura 2000 Network. Northamptonshire's only European Site is the Upper Nene Valley Gravel Pits SPA.

Habitat connectivity: the degree to which the landscape facilitates or impedes species movement between patches of habitat. Connectivity influences local gene flow, adaptation, colonisation and extinction, affecting in particular the ability of organisms to move through the landscape in response to climate change.

Habitat fragmentation: the process by which habitat loss results in the division of larger, continuous habitats into smaller, more isolated remnants. Fragmentation disrupts ecological processes, isolates species populations and leads to reduced species richness (i.e. reduced biodiversity).

Habitats Regulations Assessment (HRA): required under Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (The Habitats Directive), the process of determining likely significant effects and (where appropriate) assessing adverse impacts on the integrity of a European Site.

Local Biodiversity Action Plan (LBAP): a framework for habitat and species conservation at the local – in most cases county – level. LBAPs highlight species and habitats that are of particular value locally and nationally, and outline measures for their conservation. They are usually guided by an LBAP partnership of local authorities, statutory agencies and conservation organisations.

Mitigation: measures that aim to reduce and/or minimise the risk of an impact on wildlife, for example changes to timing, engineering design or technique. Depending on the kind of impact and the location of the development, mitigation may be necessary outside the site boundary.

Nene Valley Nature Improvement Area (NIA): one of the original 12 ecological networks recognised in the National Planning Policy Framework and established to reconnect wildlife habitats and help species respond to the challenges of climate change. The Nene Valley NIA extends from Daventry to Peterborough and includes the River Nene and its main tributaries. [LINK TO MAP]

Non-statutory nature conservation site: an area of land designated for its nature conservation value but which does not receive statutory protection. Some non-statutory sites may however receive a degree of protection under national or local policy. In Northamptonshire these sites include Local Wildlife Sites (LWS), Local Geological Sites (LGS), Potential Wildlife Sites (PWS) and Protected Wildflower Verges (PWV).

Northamptonshire Biological Records Centre (NBRC): the biological and geological information centre for Northamptonshire County. The NBRC operates as a non-profit organisation providing access to information about species, designated wildlife sites and geological sites. Data held at the NBRC come from a number of sources including local voluntary recorders and conservation organisations.

Phase I Habitat Survey: a standardised system for classifying and mapping wildlife habitats in all parts of Great Britain, including urban areas. A Phase I Habitat Survey will also include target notes

on any features of interest, for example the presence of rare species, veteran trees or important habitat. An 'Extended' Phase I Survey is more detailed, particularly with regard to vegetation. Phase I surveys can be conducted at any time of year although vegetation is easier to identify in spring or summer.

Semi-natural habitat: any habitat that is human managed (*e.g.* mown, grazed, coppiced, burned) or where human-induced changes can be detected, but which still seems a natural habitat in terms of species diversity and ecological complexity. Semi-natural habitats have resulted from human activities – mostly traditional agriculture and shepherding – and have evolved into plant and animal communities of great interest and high biological diversity. They are therefore part of Britain's agrarian and social history.

Statutory nature conservation site: an area of land which receives some form of statutory protection for its nature conservation value. In Northamptonshire these include Special Protection Areas (SPA), National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR).

Veteran tree: a tree that is of interest biologically, culturally or aesthetically because of its age, size or condition. Some trees are instantly recognisable as veterans but many (*e.g*. old coppice stools) are less obvious. The girth of a tree is not a reliable criterion because different species and individuals of tree have very different life spans and grow at different rates.

Image credits: etc.

Appendix 1 Biodiversity Checklist

Section 1A Designated Sites and Priority Habitats (1APP Question 13b)

Please answer ALL questions		Please tick as appropriate	
Q1	Is the application for any of the following: • Residential development which would increase the number of units (*e.g.* C1, C2, C3) • Tourism or leisure facilities (*e.g.* D2) • New car park, or an increase to capacity of an existing car park **AND** Within 3km of the Upper Nene Valley Gravel Pits SPA?	**YES ☐**	**NO ☐**
Q2	Is the application for Industrial development/warehousing (*e.g.* B2, B8) **AND** Within 1km of the Upper Nene Valley Gravel Pits SPA?	**YES ☐**	**NO ☐**
If you have answered YES to Q1 or Q2 above, please contact Natural England and refer to the *Upper Nene Valley Gravel Pits SPA Supplementary Planning Document*			
Q3	Is the application for any of the following: • Power station • Sewage treatment works • Industrial/agricultural development next to or discharging pollutants into a watercourse • New road or rail scheme • Any new housing units • Any new industrial units • Other infrastructure and services • Industrial estate • Petrol filling station and services • Golf course • Leisure centre/stadium • Car park • Industrial or agricultural unit with large powder or liquid discharges AND Within 500m of a SSSI or NNR?	**YES ☐**	**NO ☐**
Q4	Is the development on or within 100m of a Local Wildlife Site, Potential Wildlife Site or Local Nature Reserve?	**YES ☐**	**NO ☐**
Q5	Are there any of the following: • Semi-natural habitats (*e.g.* woodland, grassland, pond, reedbed, orchard) • Previously developed (brownfield) land • Watercourse (*e.g.* stream, lake, ditch) on, adjacent to or near the development site?	**YES ☐**	**NO ☐**
If you have answered YES to ANY of the questions above Further information is required to support your application to show how the proposal has accounted for the potential impacts **Answer 'YES' in response to 1APP Question 13b**			**Please go to section 1B**
If you have answered NO to ALL Questions 1-5 above **Answer 'NO' in response to 1APP Question 13b**			**Please go to section 2A**

Section 1B

If the answer is 'YES' to any of the questions in section 1A, the application documents must include a Biodiversity Statement which demonstrates the following:

- Extent and location of habitats and features that could be affected
- Likely impacts to designations/priority habitat
- How alternative designs and locations have been considered
- How adverse impacts will be avoided
- How any unavoidable impacts will be mitigated[23] or reduced
- How impacts that cannot be avoided or mitigated will be compensated[24]
- Proposals for biodiversity enhancements

Any protected species statements required as indicated by section 2 below should be integrated within the Biodiversity Statement. These reports may form part of a wider Environmental Impact Assessment.

Reports might not be required where applicants are able to provide pre-application correspondence from Natural England which confirms that they are satisfied that the proposal will not have an adverse impact on the **SPA** or **any SSSI or NNR**.

NOW PLEASE COMPLETE SECTION 2

Section 2

Section 2A Protected Species (1APP Question 13a)

Please answer ALL of the questions in column A below, and tick the box in column B if the answer is 'YES'.
For each question, the black dots in column C indicate which species surveys are required.
In the shaded row please tick the appropriate boxes to summarise all species surveys required.

[23] Mitigation = measures which minimise the duration, intensity and/or extent of impacts which cannot be avoided entirely
[24] Compensation = measures which counterbalance the impacts, amending damage or loss

A	B	C Species protected by law and for which further surveys will be required								
DEVELOPMENT PROPOSALS THAT WILL TRIGGER A PROTECTED SPECIES SURVEY	**Tick if YES ☑**	**Bats**	**Barn owl**	**Dormouse**	**Breeding birds[25]**	**Amphibians**	**Water vole**	**Badger**	**Otter**	**Reptiles**
Will the proposed works affect[26] existing buildings/ structures with **ANY** of the following features? • Clay-tiled pitched roofs • Loft spaces (including bell towers etc) • Hanging tiles • Wooden cladding • Open soffits • Underground structures such as (but not exclusively) cellars, air raid shelters, ice-houses, tunnels • Bridge structures, aqueducts or viaducts especially over water or wet ground • Dense climbing plants • Bird boxes (especially owl boxes) or bat boxes which have previously been fitted • Large agricultural buildings, particularly but not exclusively those of a traditional construction • Other buildings in a derelict or decayed state in a rural location	☐	●	●		●					
Are there streams, rivers, lakes or other watercourses/ aquatic habitat on or within 200m of the proposals?	☐	●			●		●		●	
Will the proposals affect[23] any areas of mature deciduous woodland, field hedgerows over 1m tall and over 0.5m thick, or scrub well connected to woodland or hedgerows on or adjacent to the site?	☐	●		●	●			●		
Will the proposals affect[23] any of the following • Old and veteran trees • Trees with obvious holes, cracks, cavities or heavy vegetation • Trees with a girth over 1m at chest height	☐	●	●		●					
Is the proposal a major application within 500m or any other application within 200m of a pond?	☐					●				
Will the proposal affect[23] mature/overgrown gardens over 0.25ha, any rough grassland or derelict/brownfield land, railway land, allotments, on or adjacent to the site?	☐				●	●				●
Will the proposal affect species-rich meadows or grassland on or directly adjacent to the site?	☐				●					
Please tick boxes to indicate all protected species that may be affected by the development		☐	☐	☐	☐	☐	☐	☐	☐	☐

[25] In Northamptonshire most likely kingfisher, little ringed plover, peregrine, hobby, red kite, quail and Cetti's warbler.

[26] Direct impacts such as removal or modification, or indirect through disturbance such as runoff, noise, dust, lighting or increased recreational use

If ANY of the boxes in column B have been ticked in response to any of the questions **tick 'YES' in response to 1APP Question 13a**, and go to **section 2B**

If NONE of the boxes in column B have been marked X in response to any of the questions **tick 'NO' in response to 1APP Question 13a**, and go to **section 3**

Please note that the above list does not include all protected species and all circumstances where species may be affected. In all circumstances legislation pertaining to protected species still applies and it is the responsibility of the developer to ensure that protected species and habitats are not impacted as a result of development. If protected species are found during the course of development, work should be halted and advice sought.

Section 2B Assessments ONLY for those species potentially impacted by the development as identified in section 2A

For any species identified in section 2A as potentially impacted by the proposed development:

1. Contact the Northamptonshire Biodiversity Records Centre (www.northantsbrc.org.uk) for existing species records for the area
2. Conduct preliminary survey[27] to establish potential for habitat to support the species
3. Using the results of the preliminary survey, determine whether A or B below applies.

Please mark the relevant box below and attach corresponding assessment to application

A	**IF THE PRELIMINARY SURVEY INDICATES MODERATE/HIGH LIKELIHOOD OF PROTECTED SPECIES BEING PRESENT, A FULL SURVEY AND MITIGATION STATEMENT ARE REQUIRED**	

PLEASE INCLUDE:

- Extent and location of species populations (including supporting habitats and features) that could be affected (more detailed surveys will be required)
- Likely impacts on species populations
- How alternative designs and location have been considered
- How adverse impacts will be avoided wherever possible
- How unavoidable impacts will be mitigated or reduced
- How impacts that cannot be avoided or mitigated with be compensated
- Proposals for biodiversity enhancements

Please note: a protected species licence may be required in order to carry out these works. Please refer to Natural England guidance.

B	**IF THE PRELIMINARY SURVEY INDICATES LITTLE OR NO LIKELIHOOD OF PROTECTED SPECIES BEING PRESENT, OR THERE ARE NO LIKELY IMPACTS TO SPECIES, FULL SURVEY IS NOT REQUIRED**	

Please provide the information required to demonstrate that there will be little or no likelihood of protected species being present, or there are no likely impacts on species. This can be in the form of a brief statement or letter from a suitably qualified person.

Please note that in all circumstances legislation pertaining to protected species still applies and it is the responsibility of the developer to ensure that protected species are not impacted as a result of this development. If protected species are found during the course of the development, work should be halted and advice sought.

To improve the quality of the data held by the Northamptonshire Biodiversity Records Centre, applicants are encouraged to submit to the Centre data generated by protected species surveys.

If a biodiversity statement is to be submitted with the application as required by section 1B, then please include any species surveys as well.

[27] Surveys should:

- Be of appropriate scope and detail
- Be conducted at an appropriate time of year, in suitable weather conditions and using recognised methodologies
- Be undertaken by an appropriately qualified and experienced person
- Include copies of any correspondence with nature conservation organisations (such as Natural England, Environment Agency)

NOW PLEASE COMPLETE SECTION 3

Section 3 Validation checklist

Please mark with an X in the shaded column ALL biodiversity information included with this application resulting from the prompting of the biodiversity checklist.

Please note that if all required information is not included with the application then it will NOT be validated.

		Office use only	
	Tick if included	**Required**	**Attached**
Biodiversity Checklist SECTION 1A* (designated sites and priority habitats)		**X**	
Section 1B Biodiversity Statement			
Biodiversity Checklist SECTION 2A* (protected species)		**X**	
Section 2B Protected Species Statement(s)			
Bats			
Barn owl			
Dormouse			
Breeding birds			
Amphibians			
Water vole			
Badger			
Otter			
Reptiles			
Correspondence from nature conservation organisation/local authority/other (as indicated by the checklist)			

*** required for all applications**

Thank you for completing this checklist. Please return to the local authority all completed sections, along with the application and all supplementary information indicated above.

Appendix 2 Ecological survey seasons

	Licence required?	J	F	M	A	M	J	J	A	S	O	N	D
Badgers	Y												
Bats (hibernation roosts)	Y												
Bats (summer roosts)	Y												
Bats (foraging/commuting)	Y												
Birds (breeding)	N												
Birds (overwintering)	N												
Dormice (nut searches)	N												
Dormice (nest searches)	Y												
Dormice (cage traps/hair tube surveys)	Y												
Fish	some	Optimal survey season varies with species											
Great crested newts (terrestrial surveys)	Y												
Great crested newts (aquatic surveys: ponds etc)	Y												
Invertebrates	N												
Otters	Y												
Reptiles: common lizard	Y												
Reptiles: other	N												
Water voles	Y												
Habitats: Phase I surveys	N												
Vegetation: mosses, lichens	N												
Vegetation: higher plants	N												

Annex 1 Habitats and species of importance in Northamptonshire

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
BIRDS					
Barn owl	*Tyto alba*	W&C Act Schedule 1			Y
Bewick's swan	*Cygnus columbianus bewickii*	W&C Act Schedule 1	Y	Y	
Black redstart	*Phoenicurus ochruros*	W&C Act Schedule 1			
Black-necked grebe	*Podiceps nigricollis*	W&C Act Schedule 1			
Black-tailed godwit	*Limosa limosa limosa*	W&C Act Schedule 1, 'red list' birds of conservation concern	Y	Y	
Brambling	*Fringilla montifringilla*	W&C Act Schedule 1			
Common bullfinch	*Pyrrhula pyrrhula pileata*		Y	Y	
Common cuckoo	*Cuculus canorus*	'red list' birds of conservation concern	Y	Y	
Common grasshopper warbler	*Locustella naevia*	'red list' birds of conservation concern	Y	Y	
Common linnet	*Carduelis cannabina autochthona/cannabina*	'red list' birds of conservation concern	Y	Y	
Common starling	*Sturnus vulgaris vulgaris*	'red list' birds of conservation concern	Y	Y	
Corncrake	*Crex crex*	W&C Act Schedule 1, 'red list' birds of conservation concern	Y	Y	
Corn bunting	*Milaria calandra calandra/clanceyi*	'red list' birds of conservation concern	Y	Y	
Dunnock/hedge accentor	*Prunella modularis occidentalis*		Y	Y	
Eurasian curlew	*Numenius arquata*		Y	Y	
Eurasian tree sparrow	*Passer montanus*	'red list' birds of conservation concern	Y	Y	
Eurasian wryneck	*Jynx torquilla*	W&C Act Schedule 1, 'red list' birds of conservation concern	Y	Y	
European nightjar	*Caprimulgus europaeus*		Y	Y	
European turtle dove	*Streptopelia turtur*	'red list' birds of conservation concern	Y	Y	
Fieldfare	*Turdus pilaris*	W&C Act Schedule 1, 'red list' birds of conservation concern			
Firecrest	*Regulus ignicapilla*	W&C Act Schedule 1			
Garganey	*Anas querquedula*	W&C Act Schedule 1			
Goshawk	*Accipiter gentilis*	W&C Act Schedule 1			
Great bittern	*Botaurus stellaris*	W&C Act Schedule 1, 'red list' birds of conservation concern	Y	Y	
Greater scaup	*Aythya marila*	'red list' birds of conservation concern	Y	Y	
Green sandpiper	*Tringa ochropus*	W&C Act Schedule 1			

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
Grey partridge	*Perdix perdix*	'red list' birds of conservation concern	Y	Y	
Hawfinch	*Coccothraustes coccothraustes*	'red list' birds of conservation concern	Y	Y	
Herring gull	*Larus argentatus argenteus*	'red list' birds of conservation concern	Y	Y	
Hobby	*Falco subbuteo*	W&C Act Schedule 1			
Honey buzzard	*Pernis apivorus*	W&C Act Schedule 1			
House sparrow	*Passer domesticus*	'red list' birds of conservation concern	Y	Y	
Kingfisher	*Alcedo atthis*	W&C Act Schedule 1			
Lesser redpoll	*Carduelis cabaret*	'red list' birds of conservation concern	Y	Y	
Lesser spotted woodpecker	*Dendrocopos minor comminutus*	'red list' birds of conservation concern	Y	Y	
Little ringed plover	*Charadrius alexandrines*	W&C Act Schedule 1			
Marsh tit	*Parus palustris palustris/dresseri*	'red list' birds of conservation concern	Y	Y	
Merlin	*Falco columbarius*	W&C Act Schedule 1			
Montagu's harrier	*Circus pygargus*	W&C Act Schedule 1			
Nightingale	*Luscinia megarhynchos*				Y
Northern goshawk	*Accipiter gentilis*	W&C Act Schedule 1			
Northern lapwing	*Vanellus vanellus*	'red list' birds of conservation concern	Y	Y	
Peregrine	*Falco peregrines*	W&C Act Schedule 1			
Quail	*Coturnix coturnix*	W&C Act Schedule 1			
Red kite	*Milvus milvus*	W&C Act Schedule 1			
Red-backed shrike	*Lanius collurio*	W&C Act Schedule 1, 'red list' birds of conservation concern	Y	Y	
Redwing	*Turdus iliacus*	W&C Act Schedule 1, 'red list' birds of conservation concern			
Reed bunting	*Emberiza schoeniclus*		Y	Y	
Savi's warbler	*Locustella luscinioides*	W&C Act Schedule 1, 'red list' birds of conservation concern	Y	Y	
Skylark	*Alauda arvensis*	'red list' birds of conservation concern	Y	Y	
Song thrush	*Turdus philomelos clarkei*	'red list' birds of conservation concern	Y	Y	
Spotted flycatcher	*Musciapa striata*	'red list' birds of conservation concern	Y	Y	
Tree pipit	*Anthus trivialis*	'red list' birds of conservation concern	Y	Y	
Willow tit	*Parus montanus kleinschmidti*	'red list' birds of conservation concern	Y	Y	
Wood warbler	*Phylloscopus sibilatrix*	'red list' birds of conservation concern	Y	Y	
Yellowhammer	*Emberiza citrinella*	'red list' birds of conservation concern	Y	Y	
Yellow wagtail	*Motacilla flava flavissima*	'red list' birds of conservation concern	Y	Y	
Fishes					

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
Brown/sea trout	*Salmo trutta*		Y	Y	
European eel	*Anguilla anguilla*		Y	Y	
Spined loach	*Cobitis taenia*		Y	Y	
Fungi (including lichens)					
A lichen	*Physcia clementii*				Y
Violet crowncup	*Sarcosphaera coronaria*		Y	Y	
Yellow bird's nest	*Monotropa hypopitys*		Y	Y	
Herpetiles					
Adder	*Vipera berus*	W&C Act Schedule 5 killing and injuring s.9(1); sale s.9(5)	Y	Y	
Common lizard	*Lacerta vivipara*		Y	Y	
Common toad	*Bufo bufo*		Y	Y	
Grass snake	*Natrix natrix*	W&C Act Schedule 5 killing and injuring s.9(1)(part); sale s.9(5)	Y	Y	
Great crested newt	*Triturus cristatus*	W&C Act Schedule 5 (full protection), Habitat Regs s.2	Y	Y	
Palmate newt	*Triturus helveticus*				Y
Slow-worm	*Anguis fragilis*	W&C Act Schedule 5 killing and injuring s.9(1)(part); sale s9(5)	Y	Y	
Invertebrates					
Argent and sable	*Rheumaptera hastata*		Y	Y	
August thorn	*Ennomos quercinaria*		Y	Y	
Barred tooth-striped	*Trichopteryx polycommata*		Y	Y	
Beaded chestnut	*Agrochola lychnidis*		Y	Y	
Black hairstreak	*Satyrium pruni*				Y
Blood-vein	*Timandra comae*		Y	Y	
Brindled beauty	*Lycia hirtaria*		Y	Y	
Broom moth	*Melanchra pisi*		Y	Y	
Brown-spot pinion	*Agrochola litura*		Y	Y	
Buff ermine	*Spilosoma luteum*		Y	Y	
Centre-barred sallow	*Atethmia centrago*		Y	Y	
Chalk carpet	*Scotopteryx bipunctaria*		Y	Y	
Cinnabar	*Tyria jacobaeae*		Y	Y	
Common fan-foot	*Pechipogo strigilata*		Y	Y	
The concolourous	*Chortodes extrema*		Y	Y	
The crescent	*Celaena leucostigma*		Y	Y	
Dark brocade	*Blepharita adusta*		Y	Y	
Dark spinach	*Pelurga comitata*		Y	Y	
Dark-barred twin-spot carpet	*Xanthorhoe ferrugata*		Y	Y	
Deep-brown dart	*Aporophyla lutulenta*		Y	Y	

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
Depressed/compressed river mussel	*Pseudanodonta complanata*		Y	Y	
Dingy skipper	*Erynnis tages*		Y	Y	
Dot moth	*Melanchra persicariae*		Y	Y	
Double dart	*Graphiphora augur*		Y	Y	
Dusky-lemon sallow	*Xanthia gilvago*		Y	Y	
Dusky brocade	*Apamea remissa*		Y	Y	
Dusky thorn	*Ennomos fuscantaria*		Y	Y	
Ear moth	*Amphipoea oculea*		Y	Y	
False mocha	*Cyclophora porata*		Y	Y	
Feathered gothic	*Tholera decimalis*		Y	Y	
Figure of eight	*Diloba caeruleocephala*		Y	Y	
Flounced chestnut	*Agrochola helvola*		Y	Y	
The forester	*Adscita statices*		Y	Y	
Four-spotted moth	*Tyta luctuosa*		Y	Y	
Galium carpet	*Epirrhoe galiata*		Y	Y	
Garden dart	*Euxoa nigricans*		Y	Y	
Garden tiger	*Arctia caja*		Y	Y	
Ghost moth	*Hepialus humuli*		Y	Y	
Goat moth	*Cossus cossus*		Y	Y	
Grass rivulet	*Perizoma albulata albulata*		Y	Y	
Green-brindled crescent	*Allophyes oxyacanthae*		Y	Y	
Grey dagger	*Acronicta psi*		Y	Y	
Grizzled skipper	*Pyrgus malvae*		Y	Y	
Heart moth	*Dicycla oo*		Y	Y	
Heath rustic	*Xestia agathina*		Y	Y	
Hedge rustic	*Tholera cespitis*		Y	Y	
Knot grass	*Acronicta rumicis*		Y	Y	
The lackey	*Malacosoma neustria*		Y	Y	
Large nutmeg	*Apamea anceps*		Y	Y	
Latticed heath	*Chiasmia clathrata*		Y	Y	
Lime bark beetle	*Emoporus tiliae [panzer]*				Y
Mellet's downy-back	*Ophonus melletii*		Y	Y	
Minor shoulder-knot	*Brachylomia viminalis*		Y	Y	
Mottled rustic	*Caradrina morpheus*		Y	Y	
Mouse moth	*Amphipyra tragopogonis*		Y	Y	

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
Mullein wave	*Scopula marginepunctata*		Y	Y	
Neglected rustic	*Xestia castanea*		Y	Y	
Oak hook-tip	*Watsonalla binaria*		Y	Y	
Oak lutestring	*Cymatophorima diluta*		Y	Y	
Oblique carpet	*Orthonama vittata*		Y	Y	
Oolite downy-back	*Ophonus stictus*		Y	Y	
Pale eggar	*Trichiura crataegi*		Y	Y	
Pale shining brown	*Polia bombycina*		Y	Y	
Phoenix fly	*Dorycera graminum*		Y	Y	
Powdered quaker	*Orthosia gracilis*		Y	Y	
Pretty chalk carpet	*Melanthia procellata*		Y	Y	
Rosy minor	*Mesoligia literosa*		Y	Y	
Rosy rustic	*Hydraecia micacea*		Y	Y	
The rustic	*Hoplodrina blanda*		Y	Y	
The sallow	*Xanthia icteritia*		Y	Y	
Scarce four-dot pin-palp	*Bembidion quadripustulatum*		Y	Y	
September thorn	*Ennomos erosaria*		Y	Y	
Set-aside downy-back	*Ophonus laticollis* (= *Harpalus punctatulus*)		Y	Y	
Shaded broad-bar	*Scotopteryx chenopodiata*		Y	Y	
Shoulder-striped wainscot	*Mythimna comma*		Y	Y	
Small blue	*Cupido minimus*		Y	Y	
Small emerald	*Hemistola chrysoprasaria*		Y	Y	
Small heath	*Coenonympha pamphilus*		Y	Y	
Small phoenix	*Ecliptoptera silaceata*		Y	Y	
Small square-spot	*Diarsia rubi*		Y	Y	
The spinach	*Eulithis mellinata*		Y	Y	
The sprawler	*Asteroscopus sphinx*		Y	Y	
Stag beetle	*Lucanus cervus*		Y	Y	
The streak	*Chesias legatella*		Y	Y	
V-moth	*Macaria wauaria*		Y	Y	
White-clawed crayfish	*Austropotamobius pallipes*		Y	Y	
White-spotted pinion	*Cosmia diffinis*		Y	Y	
White admiral	*Liminitis camilla*		Y	Y	
White ermine	*Spilosoma lubricipeda*		Y	Y	

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
White letter hairstreak	*Satyrium w-album*		Y	Y	
Wood white	*Leptidea sinapis*		Y	Y	
Mammals					
Badger	*Meles meles*	Protection of Badgers Act 1992			
Barbastelle bat	*Barbastella barbastellus*	W&C Act Schedule 5 disturbance s.9(4)(part); sale s.9(5), Habitat Regs s.2	Y	Y	
Bats (all)	Vespertilionidae and Rinolophidae	W&C Act Schedule 5 disturbance s.9(4)(part); sale s.9(5), Habitat Regs s.2	(some)	(some)	
Brown hare	*Lepus europaeus*		Y	Y	
Brown long-eared bat	*Plecotus auritus*		Y	Y	
Harvest mouse	*Micromys minutus*		Y	Y	
Hazel dormouse	*Muscardinus avellanarius*	W&C Act Schedule 5 disturbance s.9(4)(part); sale s.9(5), Habitat Regs s.2	Y	Y	
Noctule	*Nyctalus noctula*		Y	Y	
Otter	*Lutra lutra*	W&C Act Schedule 5 disturbance s.9(4)(part); sale s.9(5), Habitat Regs s.2	Y	Y	Y
Polecat	*Mustela putorius*	Habitat Regs s.4	Y	Y	
Soprano pipistrelle	*Pipistrellus pygmaeus*		Y	Y	
Water vole	*Arvicola amphibius*	W&C Act Schedule 5 killing and injuring s.9(1)	Y	Y	Y
West European hedgehog	*Erinaceus europaeus*		Y	Y	
Non-vascular plants					
Clustered earth-moss	*Ephemerum cohaerens*		Y	Y	
Vascular plants					
Annual knawel	*Scleranthus annuus*		Y	Y	
Basil thyme	*Clinopodium acinos*		Y	Y	
Black poplar	*Populus nigra ssp. betuifolia*				Y
Bluebell	*Hyacinthoides non-scripta*	W&C Act Schedule 8			
Corn buttercup	*Ranunculus arvensis*		Y	Y	
Flat-sedge	*Blysmus compressus*		Y	Y	
Fly orchid	*Ophrys insectifera*		Y	Y	
Frog orchid	*Dactylorhiza viridis*		Y	Y	
Grass-wrack pondweed	*Potamogeton compressus*		Y	Y	
Greater water parsnip	*Sium latifolium*		Y	Y	
Man orchid	*Orchis anthrophora*		Y	Y	
Marsh stitchwort	*Stellaria palustris*		Y	Y	
Pennyroyal	*Mentha pulegium*		Y	Y	
Plot's elm	*Ulmus plotii*				Y
Purple milk-vetch	*Astragalus danicus*		Y	Y	
Rare spring-sedge	*Carex ericetorum*		Y	Y	

Feature – species					
Common name	**Scientific name**	**Legal/policy protection**	**NERC section 41**	**UK BAP**	**Northants BAP**
Red hemp-nettle	*Galeopsis angustifolia*		Y	Y	
Shepherd's needle	*Scandix pecten-veneris*		Y	Y	
Tubular water dropwort	*Oenanthe fistulosa*		Y	Y	
White helleborine	*Cephalanthera damasonium*		Y	Y	

Habitat	Legal/policy protection	NERC Section 41*	UK BAP	Northants BAP
Eutrophic standing waters		Y	Y	Y
Floodplain grazing marsh		Y	Y	Y
Hedgerows	Hedgerows Regulations	Y	Y	Y
Lowland calcareous grassland		Y	Y	Y
Lowland dry acid grassland		Y	Y	Y
Lowland fen		Y	Y	Y
Lowland heathland		Y	Y	Y
Lowland meadow		Y	Y	Y
Lowland mixed deciduous woodland	NPPF (ancient woodland)	Y	Y	Y
Open mosaics on previously developed land		Y	Y	Y
Ponds		Y	Y	Y
Reedbed		Y	Y	Y
Rivers		Y	Y	Y
Traditional orchard		Y	Y	Y
Wet woodland		Y	Y	Y
Wood-pasture and parkland		Y	Y	Y

ANNEX 2 Legislation, policy and biodiversity conservation

Legislation

1. **The Wildlife and Countryside Act 1981** includes the following offences relevant to development control:

   Subject to exceptions, it is a criminal offence to intentionally kill, injure, or take any wild bird or their eggs or nests. Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of intentionally or recklessly disturbing these birds at their nests, or their dependent young.

   Subject to exceptions, it is a criminal offence to intentionally kill, injure or take, possess, or trade in any wild animal listed in Schedule 5. The Act also prohibits interference with places used by them for shelter or protection and intentional or reckless disturbance go animals occupying such places.

   Subject to exceptions, to pick, uproot or possess (for the purposes of trade) any wild plant listed in Schedule 8. The Act also prohibits the unauthorised intentional uprooting of such plants.

   Annex 1 of this SPD includes the species listed in Schedules 1, 5 and 8 of the Wildlife & Countryside Act which could occur on development sites in Northamptonshire.

   The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, including prohibition of the release of animals and the introduction of a plant to the wild or to otherwise cause it to grow or spread there of plants in Schedule 9.

2. **The Conservation of Habitats and Species Regulations 2010** provide for the designation and protection of European Sites, the protection of European Protected Species and the adaptation of planning and other controls for the protection of European Sites.

   Under the Regulations, the local planning authority has a general duty, in the exercise of its functions, to have regard to the EC Habitats Directive.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy or trade in the plants listed in Schedule 4. Species listed in Schedule 2 or 4 of the Regulations which may occur on development sites in Northamptonshire are listed in Annex 1 of this SPD.

3. **The Countryside and Rights of Way (CROW) Act 2000** Schedule 9 places a duty on public bodies to further the conservation and enhancement of Sites of Special Scientific Interest (SSSI).

   Schedule 12 of the Act strengthens the legal protection for threatened species. This includes making certain offences 'arrestable' and establishing the offence of 'reckless disturbance'.

4. **The Natural Environment and Rural Communities (NERC) Act 2006** Section 40 places a duty on all public bodies to have regard, so far as is consistent with the proper exercise of their functions, to the purpose of conserving biodiversity.

   Section 41 places a duty on the Secretary of State to maintain a list of species and habitats of principal importance for which conservation steps should be taken or promoted. The Government has published a list of these habitats and species. Annex 1 of this SPD lists NERC Section 41 habitats and species which may occur on development sites in Northamptonshire.

5. **The Protection of Badgers Act 1992** makes it an offence to interfere with a badger sett, whether by obstructing the entrance, destroying the sett or in any way disturbing the occupant. The 1992 Act defines a badger sett as 'any structure or place which displays signs indicating current use by a badger'.

6. **The Town and Country Planning (Environmental Impact Assessment) Regulations 2011** require the submission of Environmental Impact Assessments for certain types of larger developments (listed in Schedules 1 and 2 of the Regulations) which are likely to have significant effects on the environment.

Policy

1. **The National Planning Policy Framework (NPPF)** states that the planning system should minimise impacts on biodiversity and provide net gains in biodiversity where possible (paragraph 109). Key sections for biodiversity are paragraph 117 regarding planning policy and biodiversity impacts, and paragraph 118 which includes principles for determining planning applications.

The NPPF requires that the mitigation hierarchy be used in making planning decisions. This means that the following steps must be implemented in order:

- Anticipated biodiversity losses should first be *avoided*
- Impacts considered unavoidable should be *mitigated*
- Only then should compensation be considered to address residual impacts.

2. **West Northamptonshire Joint Core Strategy (submission version)** relevant policies include:

- BN1 Green Infrastructure Connections
- BN2 Biodiversity
- BN3 Woodland Enhancement and Creation
- BN4 Upper Nene Valley Gravel Pits Special Protection Area
- BN8 The River Nene Strategic River Corridor
- N3 Northampton North SUE
- N4 Northampton West SUE
- N5 Northampton South SUE
- N6 Northampton South of Brackmills SUE
- N7 Northampton Kings Heath SUE
- N8 Northampton North of Whitehills SUE
- N9 Northampton Upton Park SUE
- N9A Northampton Norwood Farm/Upton Lodge SUE
- R1 Spatial Strategy for the Rural Areas

3. **North Northamptonshire Core Spatial Strategy (adopted 2008)** relevant policies include:

- 5 Green Infrastructure
- 13 General Sustainable Development Principles
- 16 Sustainable Urban Extensions

4. **Local plan saved policies** include (this list is not exhaustive and further plans and policy should be considered as they emerge):

South Northamptonshire	Daventry	Northampton	Wellingborough	Kettering	Corby	East Northamptonshire
EV19 Trees and Woodlands	GN1, G2 General	E2 Riverside Landscape	G18 Sites of Nature Conservation Value	K3 Ise Valley	P1(E) Environmental Protection on Development Sites	EN8 Protection of SSSIs, NNRs and LNRs
EV21 Hedgerows, Ponds and Other Landscape Features	EN10 Green Wedges	E4 Water Environment		K4 Slade Valley	P7(E), P8(E), P9(E) Wildlife, Geological and Protection	EN9 Safeguarding Sites of Local Conservation Interest
EV24 Species Protection	EN11 Rural Access Areas	E10, E11, E12 Hedgerows, Trees and Woodland			P14(E) Nature Conservation Strategy	
EV25 Wildlife Corridors, Rivers and Waterways	EN12 Green Links	E17 Nature Conservation				*Rural North, Oundle and Thrapston Plan:*
EV28 Historic Parks, Gardens and Battlefields	EN25 Comprehensive Landscaping Schemes	E18 Sites of Acknowledged Nature Conservation Value				10 Protection of Local Sites of Conservation Interest and Designation of Local Nature Reserves
EV29 Landscape Proposals	EN35 Ecologically Important Sites in Daventry	L16 River Valley Policy Area				11 Enhancing Biodiversity

Additional local strategies to be considered:

- Northamptonshire Biodiversity Action Plan
- Nene Valley Strategic Plan
- The Northamptonshire Arc
- Northamptonshire's Environmental Character and Green Infrastructure Suite
- Nene Integrated Catchment Management Plan
- Nene Valley Nature Improvement Area

Annex 3 Resources and further information

Mention on this list does not necessarily constitute endorsement by the Councils of any company, supplier or organisation, their services or products and any associated claims made by them. Neither is it necessarily a full or complete list of suppliers. Inclusion of companies and suppliers on this list is at the discretion of the Councils.

The Councils accept no liability whatsoever for the omission of a company or supplier from this list, any claims or consequences arising from the publication of this list, or resulting from any trade undertaken or advice provided by companies or individuals included in or omitted from this list.

Further advice

Amphibian and Reptile Conservation Trust: 665A Christchurch Road, Boscome, Bournemouth, Dorset BH1 4AP. Tel: 01202 391319 Email: enquiries@arc-trust.org Web: www.arc-trust.org

Bat Conservation Trust: 5th Floor, Quadrant House, 250 Kennington Lane, London SE11 5RD. Email: enquiries@bats.org.uk Web: www.bats.org.uk

Buglife (The Invertebrate Conservation Trust): Bug House, Ham Lane, Orton Waterville, Peterborough PE2 5UU. Tel: 01733 201210 Email: info@buglife.org.uk Web: www.buglife.org.uk

Butterfly Conservation Bedfordshire and Northamptonshire branch: Web: http://butterfly-conservation.org/296/bedfordshire--northamptonshire-branch.html

Chartered Institute of Ecology and Environmental Management (CIEEM): 43 Southgate Street, Winchester, Hampshire SO23 9EH. Tel: 01962 868626 Email: enquiries@cieem.net Web: www.cieem.net

Environment Agency Anglian Regional Office: Kingfisher House, Goldhay Way, Orton Goldhay, Peterborough PE2 5ZR. Tel: 0370 8506506 Email: enquiries@environment-agency.gov.uk Web: www.environment-agency.gov.uk

Floodplain Meadows Partnership: Department of Environment, Earth and Ecosystems, The Open University, Walton Hall, Milton Keynes MK7 6AL. Email: floodplain-meadows-partnership@open.ac.uk Web: www.floodplainmeadows.org.uk

Freshwater Habitats Trust (formerly Pond Conservation): First Floor, Bury Knowle House, North Place, Headington, Oxford OX3 9HY. Tel: 01865 595505. Email: info@freshwaterhabitats.org.uk Web: www.freshwaterhabitats.org.uk

Hedgelink: % Emily Ledder, Natural England, 25 Queen Street, Leeds LS1 2UN. Web: www.hedgelink.org.uk (contact form on website)

Institute of Environmental Management & Assessment (IEMA): Saracen House, Crusader Road, City Office Park, Tritton Road, Lincoln LN6 7AS. Tel: 01522 540069 Email: info@iema.net Web: www.iema.net

Northamptonshire Biodiversity Action Plan: Web: www.northamptonshirebiodiversity.org

Northamptonshire Biodiversity Records Centre: % The Wildlife Trust, Lings House, Lings Way, Billing Lings, Northampton NN3 8BE. Tel: 01604 400448 Email: nbrc@wildlifebcn.org Web: www.northantsbrc.org.uk

People's Trust for Endangered Species: 3 Cloisters House, 8 Battersea Park Road, London SW8 4BG. Tel: 020 7498 4533 Email: enquiries@ptes.org Web: www.ptes.org

Plantlife: 14 Rollestone Street, Salisbury, Wiltshire SP1 1DX. Tel: 01722 342730 Email: enquiries@plantlife.org.uk Web: www.plantlife.org.uk

Royal Society for the Protection of Birds (RSPB): Midlands Regional Office, 46 The Green, South Bar, Banbury, Oxfordshire OX16 9AB. Tel: 01295 253330 Web: www.rspb.org.uk

Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire: Lings House, Lings Way, Billing Lings, Northampton NN3 8BE. Tel: 01604 405285 Email: Northamptonshire@wildlifebcn.org Web: www.wildlifebcn.org

Woodland Trust: Kempton Way, Grantham, Lincolnshire NG31 6LL. Tel: 01476 581135 Email: England@woodlandtrust.org.uk Web: www.woodlandtrust.org.uk

Advice on environmentally conscious building techniques

Association for Environment Conscious Building: PO Box 32, Llandysul SA44 5ZA. Tel: 0845 4569773 Web: www.aecb.net

CIRIA: Griffin Court, 15 Long Lane, London EC1A 9PN Tel: 020 7549 3300 Email: enquiries@ciria.org Web: www.ciria.org

Livingroofs: http://livingroofs.org. *A member of the European Federation of Green Roof Associations, an online resource for all things to do with green roofs and living roofs.*

Native wildflower, shrub and tree suppliers

British Wildflower Plants: Burlingham Gardens, 31 Main Road, North Burlingham, Norfolk NR13 4TA. Tel: 01603 711615 Email: office@wildflowers.co.uk Web: www.wildflowers.co.uk

The Conservation Volunteers: Retail Service Team Tel: 01302 388828 Email: retail@tcv.org.uk Web: http://store.tcv.org.uk

Emorsgate Seeds: Limes Farm, Tilney All Saints, King's Lynn, Norfolk PE34 4RT. Tel: 01553 829028 Email: enquiries@emorsgateseeds.com Web: http://wildseed.co.uk

Flora Locale: % North Wessex Downs AONB, Units 3-4 Denford Manor, Hungerford RG17 0UN. Tel: 01488 686186 Email: info@floralocale.org Web: www.floralocale.org. *The Flora Locale website includes a directory of specialist growers and suppliers of British native plants*

Germinal Seeds GB (formerly British Seed Houses): Camp Road, Witham St Hughs, Lincoln LN6 9QJ. Tel: 01522 868714 Email: Lincoln@germinal.com Web: www.germinalamenity.com

Heritage Fruit Tree Company: Tel 01295 810516/07950 006813 Email: johoward@metronet.co.uk Web: www.heritagefruittrees.co.uk. *Supplier of hand-grafted local and regional fruit varieties for individual or orchard planting*. *Specialises in varieties from Buckinghamshire, Northamptonshire, Oxfordshire and Warwickshire*.

Landlife Wildflowers: National Wildflower Centre, Court Hey Park, Roby Road, Knowsley, Liverpool L16 3NA. Tel: 0151 737 1819 Web: www.wildflower.org.uk

OHL Limited: the Ashton Estate sells 'Miriam Rothschild Meadow Mix' from its own meadow at Ashton, Northamptonshire. Tel: 01832 272264 Email: wildflower@ashton.ohllimited.com Web: www.ohllimited.co.uk/ashtonweb/servlet/SoftContent?PageID=7

Phoenix Amenity Supplies Ltd: The Bakery, The Old Vicarage, Hanley Castle, Worcestershire WR8 0BJ. Tel: 01684 212020 Email: support@phoenixamenity.co.uk Web: www.phoenixamenity.co.uk

Other specialist suppliers

Nest bricks and boxes

Bird Brick Houses: Willow Cottage, Harebeating Lane Hailsham East Sussex BN27 1EP Tel: 01323 849322/07415 067051 Email: enquiries@birdbrickhouses.co.uk Web: www.birdbrickhouses.co.uk. *Product range also includes bat bricks/boxes.*

CJ Wildlife: The Rea, Upton Magna, Shrewsbury SY4 4UR Tel: 0800 7312820 Email: sales@birdfood.co.uk Web: www.birdfood.co.uk. *A wide range of nest boxes for bats and different bird species. Includes products made from WoodStone®, a robust, durable mix of cement and wood fibres which offers protection from predators and a more consistent internal temperature.*

Ecosurv Ltd: 21 High Green, Great Ayton North, Yorkshire TS9 6BJ Tel: 01642 724800 Email: enquiries@ecosurv.co.uk Web: www.ecosurv.co.uk. *Bat, bird and insect boxes*

Ibstock Brick Ltd: Ibstock, Leicestershire LE67 6HS. Tel: 0844 800 4575 Email: enquiries@ibstock.co.uk Web: www.ibstock.co.uk.

Schwegler: www.schwegler-natur.de/index.php?main=produkte&sub=gebaeudebrueter. *An extensive product range for many different species.*

Other

Alana Ecology (now part of NHBS): 2-3 Wills Road, Totnes Devon TQ9 5XN Tel: 01803 865913 Email: customer.services@nhbs.com Web: www.nhbs.com//equipment/?ad_id=1206.

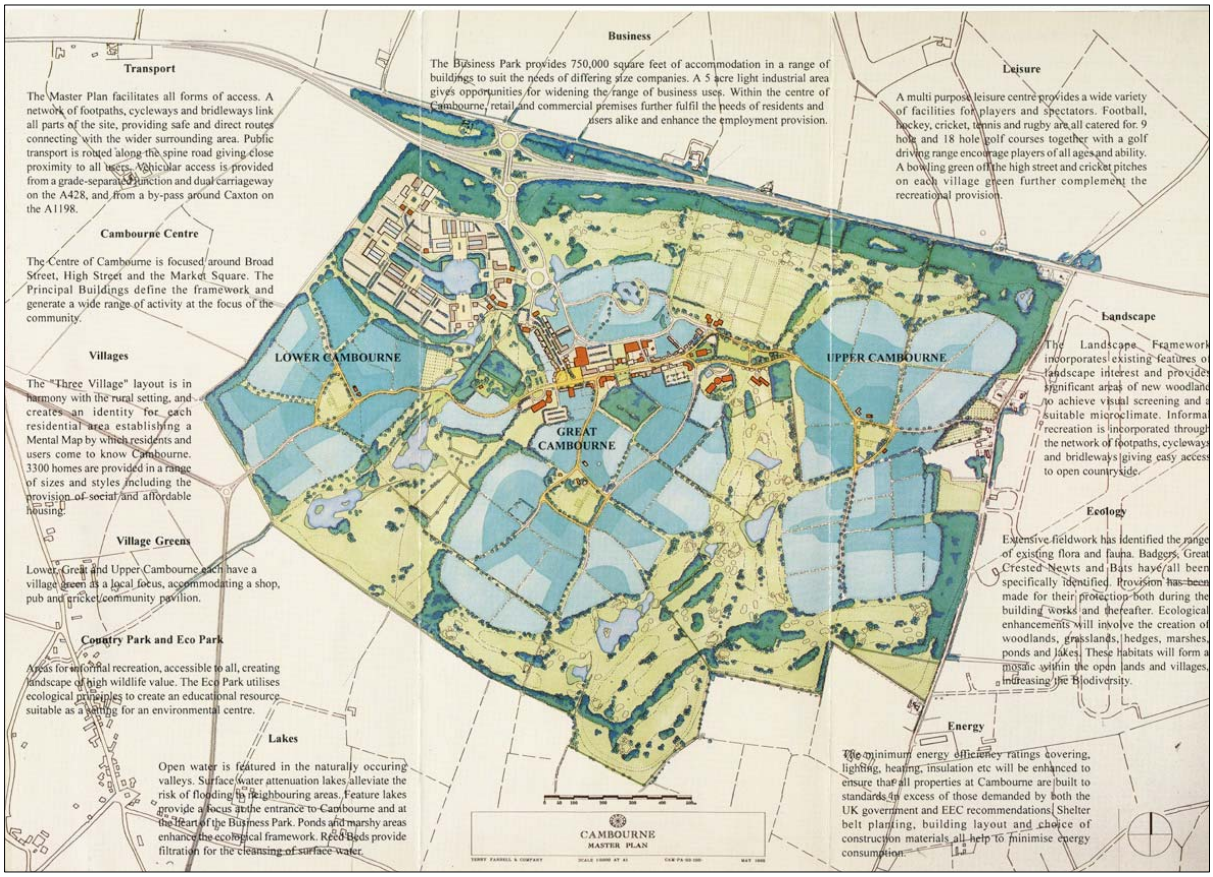
The UK Green Roofs Directory: http://greenroofdirectory.org. *A comprehensive online directory of green roof related businesses and resources.*

Annex 4 Best practice case study: Cambourne, Cambridgeshire

Examples relating to other types of development can be found at http://www.biodiversityplanningtoolkit.com/default.asp

The creation of a new settlement between Cambridge and Bedford which contains 4,200 new homes shows how biodiversity conservation formed an integral part of the development masterplan. Natural features are being used to enhance the quality of life for existing and future residents. Biodiversity was considered at an early stage of this development, with the developers employing ecologists as part of the design team. The design process involved identifying, protecting and managing all existing valuable biodiversity features as part of a green infrastructure, creating new areas of habitat and incorporating ecological corridors which provide pedestrian and cycle ways through the site. The design is intended to bring nature in Cambourne right up to residents' doorsteps.

This good practice example shows how the existing biodiversity (which was relatively limited) was protected and how areas of new wildlife interest can be created. The long-term management of the green spaces for biodiversity and people has been secured through a Section 106 agreement. Two members of staff are employed to manage 80 ha of land for nature conservation, including woodland, grassland, lakes and Sustainable Urban Drainage System wetlands.



Cambourne Masterplan 1995 (Terry Farrell & Partners)

The process

Information gathering

Surveys in 1994 indicated that the proposed site contained:

- Four square kilometres of arable land
- A few ditches
- Hedges
- Isolated houses and gardens
- Small scattered woodlands
- An active badger population
- A small great crested newt population
- Bats were present
- Considerable invertebrate interest in one of the woodlands.

Impact assessment

- Loss of existing hedgerows was likely.
- Possible negative impact on badgers and great crested newts was identified.
- Further isolation and degradation of woodlands was probable due to separation by housing development and road infrastructure and increased use by people.
- Run-off into ditches and watercourses was likely to increase in volume and decrease in quality.

Avoidance and mitigation

- All important hedgerows have been retained and 11 miles of new hedgerow planted.
- Strategies were produced and implemented to avoid any harm to badgers or great crested newts.
- The badger population has been protected and continues to thrive. Custom-designed ditches provide new sett locations and badger tunnels are well-used.
- All existing woodland has been retained and enhanced and 160 acres of new woodland has been planted.
- Sustainable Urban Drainage systems have been put in place to ensure water quality and quantity is managed within the site.

Compensation

None needed

Enhancement

- Two ‘valleys’ separating the ‘villages’ were deepened (using subsoil from road and building foundations) and designed as Country Park areas with hedged fields, streams, lakes, grassland and trees.
- An EcoPark has been created around existing woodland and the enhanced stream, with new reedbeds, marshes, ‘ridge and furrow’ grasslands, and a small area of wood pasture.
- Bat and bird boxes have been erected in suitable habitats across the site.
- Seven on-line lakes, connected by streams, have been created in the two valleys.

- Greenways connect green habitat to the village centres.
- Beyond the built-up areas all planting is confined to native species found in Cambridgeshire.

Construction and aftercare

- The employment of an Ecologist to oversee the construction phase was ensured through the Section 106 agreement. Surveys and studies have been ongoing on the site to ensure the success of the management plan.

Conditions and obligations

- S.106 agreement covering the production of an Ecological Management Plan and implementation and monitoring of the management plan, by organisations agreed by the Council.
- Conditions to ensure:
    - Production of a landscaping scheme
    - Scheme for phased provision of public open space and its permanent maintenance
    - Great crested newt and badger survey updates and schemes for the protection of these species.

Achievements to date

- The population of great crested newts is expanding in both numbers and range as the new water bodies mature.
- Water voles and water shrews have colonised the site and are taking advantage of the new lakes and ditches.
- 115 species of bird have been recorded on site, about 40 of which are new since 1996.
- 65 bird species have bred on the site and as new lakes mature, the number and variety of waterfowl is increasing.
- The number of butterfly and dragonfly species has increased steadily to 25 and 17 respectively.
- Pipistrelle bats now breed on the site and noctules and Daubenton's bats have also been recorded.
- The residents are enthusiastic about their environment and many, particularly the children, take a considerable interest in the wildlife around them.

"The landscape and environment are exceptional – the open spaces and their value for people and wildlife. It wasn't expensive though. A lot of detailed thought went into it."

Dick Longdin, Master Planner (Randall Thorpe, Landscape Master Planners)[1]

[1] Platt S. 2007. Lessons from Cambourne.