Landscape, Biodiversity and Trees Supplementary Planning Document

December 2018

Basingstoke and Deane

Foreword

Basingstoke and Deane has a range of high quality natural environment assets that are greatly valued by residents and visitors alike. The Basingstoke and Deane Local Plan 2011-2029 sets out ambitious plans for growth, and it is important that any impacts on the natural environment are sensitively and appropriately considered to ensure that our valued green spaces, landscapes and habitats continue to contribute to the borough's environment.

This Supplementary Planning Document adds further detail to the natural environment policies in the Local Plan, providing guidance on how existing green infrastructure, landscape, biodiversity, and trees should shape development proposals and be considered as part of the planning process. The document will help to both protect and enhance the borough's landscapes, minimise impacts on and provide net gains for biodiversity, and ensure that the many environmental benefits of trees are recognised. As such, it will help to create distinctive, high quality and healthy places to live.

This document has been informed by extensive consultation including a seven week formal consultation with residents and stakeholder. It has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012 and is a material consideration in the determination of planning applications.

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1. Introduction

1.1 This Supplementary Planning Document (SPD) has been produced to expand upon the natural environment policies in the Basingstoke and Deane Local Plan (2011-2029). It addresses how landscape, biodiversity, and tree considerations should inform new development to deliver high quality, sustainable places to live, that enhance biodiversity and support healthy lifestyles.

1.2 The character of Basingstoke and Deane is enhanced by its varied built form, diverse species and habitats and green infrastructure. Beyond the principal settlement of Basingstoke, the rural area is characterised by a network of dispersed towns and villages, many of which have heritage interest that is enhanced by its landscape setting. The landscape of the borough is predominantly rural and agricultural, and is made up of a number of different character areas, each of which contain their own special and distinctive qualities.

1.3 Part of the north west of the borough contains 80 square miles of the North Wessex Downs Area of Outstanding Natural Beauty (AONB) which is recognised as a landscape of national importance. The borough supports a wide range of habitats and species including a number of species representative of some very special habitats such as chalk rivers and ancient semi-natural woodlands. There is also a range of nationally and locally designated sites important for biodiversity including Sites of Special Scientific Interest (SSSIs), Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs). Together with the borough's other natural and green open spaces, these form an interconnected green infrastructure network.

1.4 The importance of landscape, biodiversity and tree considerations is reflected in national and local planning policy and through a range of council plans and strategies (as set out in greater detail in Chapter 2). In particular, the SPD seeks to deliver the planning-related objectives of the council's Green Infrastructure Strategy[1].

1.5 The Local Plan provides for the delivery of 850 new dwellings per annum principally focused on the expansion of the borough's towns and villages, and particularly Basingstoke. The impact of this level of growth upon the natural environment will need to be managed sensitively. Development should be informed by natural features, and seek to protect and enhance important features to create distinctive, high quality and healthy places to live.

Purpose of this Supplementary Planning Document

1.6 The SPD explains how landscape, biodiversity and tree considerations should be integrated into the development process from the outset, to ensure that legislation and Local Plan policy requirements are met and best practice standards are achieved. It expands upon the policies in the Local Plan and details the council's requirements for new development that must be met to achieve planning permission. Where development does not accord with the guidance set out in this document it may be refused.

[1] BDBC Green Infrastructure Strategy (2018): https://www.basingstoke.gov.uk/ENV09

What types of development does this Supplementary Planning Document apply to?

1.7 The guidance is relevant to all scales of development (including those that require a statutory Environmental Impact Assessment) although it is recognised that not all the requirements will be relevant to every type of proposal. The council will seek information proportionate to the scale of the development proposed and the extent to which it is likely to impact upon the natural environment (for example, development in designated landscapes or adjacent to designated habitats will generally require a greater level of information). It is recognised that household applications and small scale proposals will usually have more limited impacts upon the natural environment.

1.8 For ease of use, the document is structured thematically and identifies good practice at all stages of the planning and development process. It therefore:

- Sets out the planning policy and legislative context, and explains how this document links to the Green Infrastructure Strategy (Chapters 2 and 3);
- Sets out the council's approach to landscape design to promote high quality, well-maintained landscapes and open spaces (Chapter 4);
- Provides advice about how proposals should take account of biodiversity including opportunities to provide enhancement (Chapter 5);
- Provides advice on how trees and hedges should be surveyed and integrated into masterplans (Chapter 6); and

1.9 The document contains a number of 'principles' that are set in green boxes to highlight the SPD's key requirements. It is also supported by a number of appendices including a glossary of terms (**Appendix 1**).

1.10 The landscape, biodiversity, and tree considerations identified in this document should be brought together with other site considerations and other design objectives to inform the overall design and layout of development.

Professional sources of advice

1.11 It is recommended that appropriate professional advice is sought when addressing the requirements of this SPD. A list of appropriately qualified experts can be found at:

- Landscape - The Landscape Institute (www.landscapeinstitute.org)
- Biodiversity – Chartered Institute of Ecology and Environmental Management (CIEEM) (www.cieem.net)
- Trees – The Arboricultural Association (www.trees.org.uk)

2. Policy context

2.1 The National Planning Policy Framework (NPPF, 2018) sets out that the purpose of the planning system is to contribute to the achievement of sustainable development. Chapter 15 sets out the Government's objectives with regards to 'Conserving and Enhancing the Natural Environment', including through protecting and enhancing valued landscapes and sites of biodiversity or geological value; recognising the intrinsic character and beauty of the countryside; and minimising impacts on and providing net gains for biodiversity.

2.2 The value of the natural environment is recognised in the Council Plan (2016-20). This identifies the council's priorities over the coming years including the specific objective to 'maintain and enhance our built and natural environment'.

2.3 The Local Plan's 2029 Vision places the natural environment at its core. It seeks to deliver:

'an environmentally responsible and distinctive place where:

- We live in harmony with the natural elements and systems on which we depend, and are responding to climate change;
- The local built and natural environments are in tune and continue to provide opportunities for the economy and people's enjoyment; they are well managed to provide for the future;
- We enrich the different characters of and links between towns, villages and the countryside, in the way we plan, such as the North Wessex Downs Area of Outstanding Natural Beauty and the River Loddon area;
- We insist on the highest quality design and environmental standards to demonstrate pride in our place'.

2.4 The adopted Local Plan also includes the following objective to:

'N) Protect and enhance the borough's biodiversity and the locally distinctive character of our priority habitats and landscape, such as the North Wessex Downs AONB, through protection, partnership working, conservation and active management'.

2.5 This SPD therefore seeks to assist in the delivery of these objectives by providing further detail to support the implementation of the following Local Plan policies:

- Policy SS3 and SS3.1-12 (Greenfield Site Allocations)
- Policy EM1 (Landscape);
- Policy EM3 (Thames Basin Heaths Special Protection Area);
- Policy EM4 (Biodiversity, Geodiversity and Nature Conservation); and
- Policy EM5 (Green Infrastructure)
- Policy EM10 (Delivering High Quality Development)
- Policy EM11 (Historic Environment)

2.6 The SPD should also be read in conjunction with the council's other planning policy documents including:

- Design and Sustainability SPD (2018), which provides advice on how the natural environment should be assessed alongside other opportunities and constraints to inform high quality design;
- Planning Obligations for Infrastructure SPD (2018) which sets out when developer contributions will be sought including open space requirements;
- Guidance on the historic environment including the emerging Historic Environment SPD (which will provide guidance about how development should respond to the historic environment) and Conservation Area Appraisal SPDs; and
- Development Brief SPDs published for the Local Plan allocated sites.

2.7 The SPD also supports relevant policies within neighbourhood plans. These are plans produced by local communities to influence development in their local areas that contain policies which are used in the determination of planning applications. The borough has a significant number of 'made' neighbourhood plans including for areas such as Whitchurch, Overton, Bramley and Oakley. Details of made and emerging neighbourhood plans across the borough can be found on the council's website.[2]

[2] BDBC neighbourhood planning information: www.basingstoke.gov.uk/neighbourhood-planning.

3. Green Infrastructure

Principle GI1: Green Infrastructure

Development must contribute to the overall themes, strategic policies and actions set out within the Green Infrastructure (GI) Strategy. This must be demonstrated as part of any planning application and extends to the existing GI resource as well as the creation of new GI. This can be best articulated through a plan.

It is important that all areas of green infrastructure within developments serve a useful range of functions where these are compatible with each other. They will need to be designed in order to fulfil these functions. Such functions can include recreation, wildlife habitat (in the form of habitat corridors or stepping stones), screening and sustainable drainage.

3.1 The SPD is a key element in the delivery of the council's new Green Infrastructure (GI) Strategy (2018)[3], which encompasses biodiversity, landscape and trees amongst other elements. It relates to the existing GI resource throughout the borough, along with the creation of new GI in new development.

3.2 Green Infrastructure is a network of green spaces and other environmental features which contribute to the quality of life for residents and the health of flora and fauna. Landscape design, biodiversity enhancements, tree considerations and requirements for multi-functional green space on site are all factors that will form part of the GI of a site and its surroundings. GI will also encompass access to, from and through the site including links to adjacent GI resources (e.g. links to hedges on surrounding land), opportunities for recreation, sustainability (e.g. climate change, pollutant filtration, Sustainable Drainage systems (SuDS), swales, low water demanding planting species, use of FSC sustainably managed timber products and soil products) and community involvement.

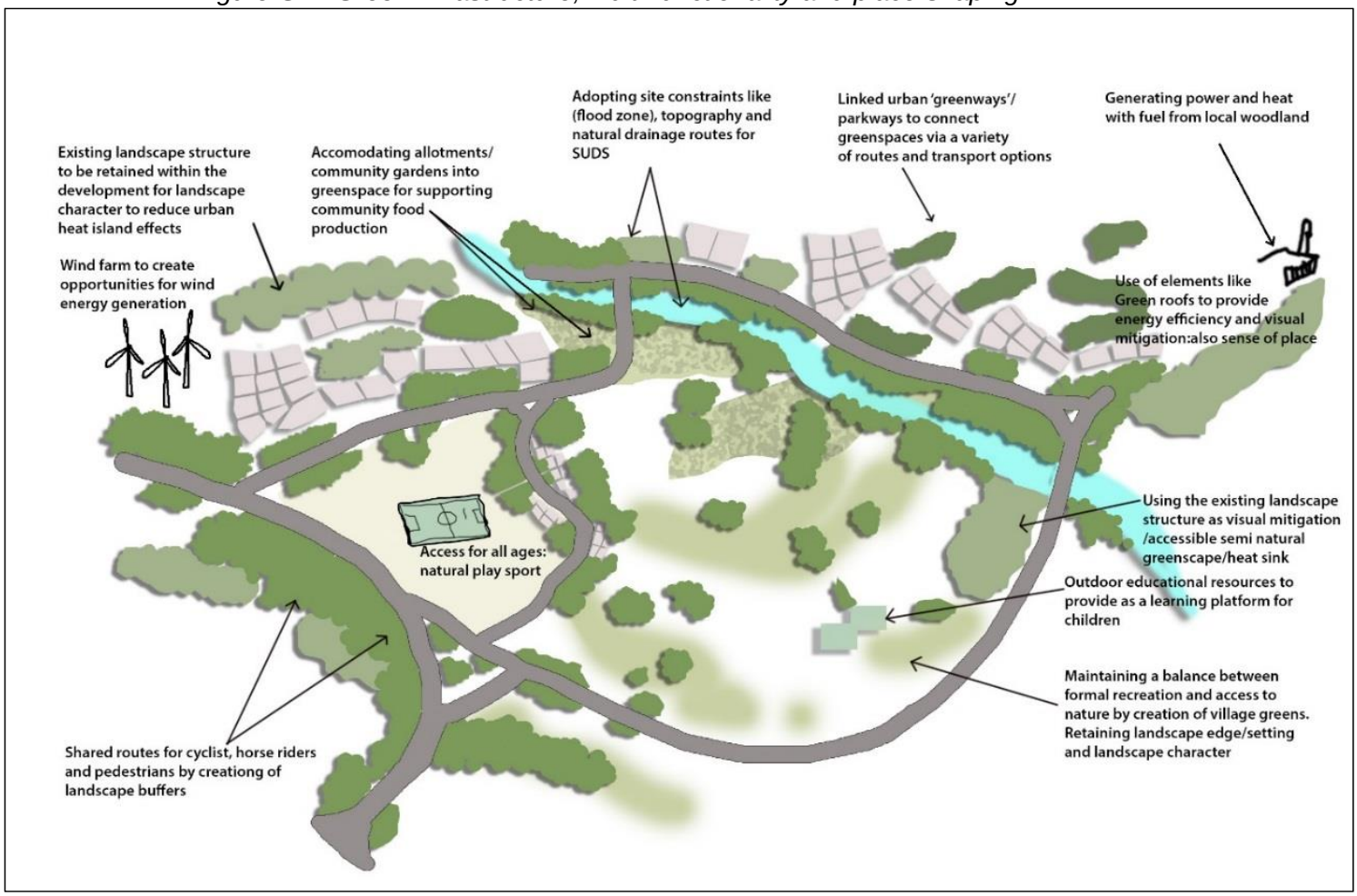
3.3 The strategy identifies the green infrastructure resource of the borough, highlights and the areas of deficiency, and a number of strategic priorities to address these. The strategy identifies the importance of producing this SPD to set out best practice in the 'design, delivery and management of GI', and highlights the opportunity for new development to provide multi-functional greenspace as set out within Local Plan Policy EM5. This policy states that development proposals will only be permitted where they do not prejudice the delivery of this strategy or result in the fragmentation of the green infrastructure network by severing important corridors and links.

3.4 The strategy also sets out the broad themes that characterise green infrastructure within the borough, including landscape and heritage, biodiversity, trees and woodlands, the economic benefits of green infrastructure and access and recreational use of green space. The strategy lays out a number of strategic policies based upon these themes in order to deliver an integrated connected network of green space throughout the borough. During the development of a planning application, applicants will need to demonstrate how the proposed development could impact green infrastructure and how the proposals will be utilised in order to enhance the GI

[3] BDBC Green Infrastructure Strategy (2018): https://www.basingstoke.gov.uk/ENV09

network. This can be best communicated via a plan showing the GI infrastructure of a development. This must include the council's Green Space Standards which must be met, including quantity and distribution of multi-functional green space and equipped play which are set out in the Local Plan and explained further in Section 4 of this document.

Figure GI1: Green infrastructure, multi-functionality and place-shaping



4. Landscape

Introduction

4.1 The borough is largely rural in character and includes many locally distinctive, high quality landscapes which are greatly valued by both residents and visitors. The purpose of this chapter of the SPD is to provide advice about how landscape considerations should inform development proposals to maintain and enhance these qualities.

Policy context

4.2 National policy is set out in the National Planning Policy Framework (NPPF, 2018) and the Planning Practice Guidance. The NPPF recognises the importance of protecting and enhancing valued landscapes (recognising the particular landscape and scenic beauty of the Area of Outstanding Natural Beauty), and requires good quality design including through appropriate landscaping and the provision of high quality open spaces.

4.3 Local Plan Policy EM1 requires new development to respect, conserve and enhance the elements of landscape character and visual amenity that contribute to its many qualities. This approach is supported by a range of planning policy and evidence base documents, as set out in Box L1.

Box L1: Key local planning policy and evidence base documents that should inform the design of development proposals

- Design and Sustainability SPD[4] (BDBC, 2018)
- Borough Landscape Assessment[5] (BDBC, July 2001)
- Countryside Design Summary (BDBC, **Appendix 4.1** of this document)
- Urban Character Study for Basingstoke[6] (BDBC, 2008)
- North Wessex Downs AONB Management Plan[7]
- Made and emerging Neighbourhood Plans[8]
- Historic Landscape Characterisations[9]
- Conservation area appraisal SPDs
- Village Design Statements[10]

4.4 Given the nature of soft and hard landscape considerations there are areas of overlap with both biodiversity and tree issues that are dealt with elsewhere in this document. In addition, they also link to other parts of the design process such as highway design, conservation and heritage issues, along with urban design. Other planning policy requirements will need to be taken into account as appropriate.

[4] BDBC Supplementary Planning Documents: https://www.basingstoke.gov.uk/supplementary-planning-documents
[5] Borough Landscape Assessment: https://www.basingstoke.gov.uk/ENV08
[6] Urban Character Study for Basingstoke: https://www.basingstoke.gov.uk/content/doclib/636.pdf
[7] North Wessex Downs AONB Management Plan www.northwessexdowns.org.uk/uploads/File_Management/NWD_Docs/About_Us/Management_Plan/NWD_AONB_Management_Plan_2014-19.pdf
[8] BDBC Neighbourhood Plans: https://www.basingstoke.gov.uk/neighbourhood-planning
[9] Hampshire County Council Historic Landscape Characterisation: https://www.hants.gov.uk/landplanningandenvironment/environment/historicenvironment/landscape
[10] Village Design Statements: https://www.basingstoke.gov.uk/planningpolicyguidance

Overview of how to create a strong landscape structure

4.5 This SPD identifies three stages that the applicant will need to follow to arrive at a high quality design solution that responds to the site's context. This should be proportionate to the type of development proposed and typically, smaller developments would not require this amount of supporting information, except in exceptional circumstances (such as dwellings within the AONB and larger dwellings in the countryside). The stages are as follows:

- **Stage One: Understanding the site.** This should be informed by a survey of the site and its surroundings including the physical elements such as landform, land-use and vegetation, and the identification of other considerations such as heritage assets. It should also include a survey of the visibility of the site from the surrounding area.
- **Stage Two: Analysis and evaluation of landscape information**. This will require an assessment of the survey to identify constraints and opportunities to inform proposals. These will need to be integrated with the wider contextual survey and analysis process set out in the Design and Sustainability SPD.
- **Stage Three: Design.** Landscape opportunities and constraints should inform the landscape structure within the proposed layout, using appropriately considered techniques and materials. This stage will also need to take account of the site's ongoing management to ensure that the landscape structure establishes and performs its functions.

4.6 A successful development will in part be determined by how well it responds to the local landscape and the many elements that combine to give an area a unique character – including the shape of the landform, land use (natural and built), vegetation, landscape features, heritage assets, historical significance and views. These provide the context for development and are an important element that needs to be assessed and used to inform a strong landscape structure that is part of any proposal. The landscape structure will include:

- Soft landscaping – existing and proposed trees, shrubs, hedges, thickets, grassed and herbaceous areas
- Hard landscaping – types of surface treatments, boundaries, and street furniture (including bins, seats, lighting)
- Open space – different types and functions (such as kickabout, play areas, multi-functional green space)

Principle L1: A strong landscape structure integral to the design proposal

i. Development proposals must include a strong landscape structure that responds positively to the local landscape and the site's context. This should be a key driver of the design process and a fundamental part of the final design.

ii. A strong landscape structure will respond to a survey and assessment of the landscape character and visual amenity of the site and its local area.

iii. Elements that contribute to a successful landscape structure include open spaces, sufficient and appropriate structural landscaping in the right places (e.g. hedges, trees, native species), retention and enhancement of existing landscape features as focal points within the development (e.g. trees or views in/out of site), and appropriate detailing that supports the structural landscape (e.g. use of SuDS, boundary treatments, surfacing and street furniture).

STAGE ONE: Understanding a site - Survey of the site and its surroundings

4.7 A survey will be required to gain a full understanding of a site, including the features that exist that may provide opportunities or constraints to a design and how they combine together to create the character of the area. A survey of the visual amenity will identify significant viewpoints, vistas and features that might be affected by a proposal. These elements will help to inform an understanding of the landscape opportunities and constraints (Stage 2), and will provide the basis for the landscape strategy for a site (Stage 3).

4.8 The Guidelines for Landscape and Visual Impact Assessment (GLVIA) sets out recommendations for the extent of information required to inform landscape character and visual impact assessments that are required to accompany a planning application and will help to establish landscape opportunities and constraints for development. Other guidance from Natural England including their Landscape Character Assessment[11] can be used to help develop the character assessment.

4.9 The types of survey required will depend on the characteristics to site and its surroundings and also the nature of the development and its location. It will be more complex for larger developments in sensitive locations but could be relatively simple for single dwellings. The extent of the survey area will vary depending on the nature of the proposal, its location and the extent of potential impacts. As the details of the proposal will not be known at this pre-design stage, the survey area should be defined on a precautionary basis and may require land around the site to be surveyed.

4.10 Surveys should address (but should not necessarily be limited to):

- Location – including the site's relationship to other settlements and built form
- Landform – including geology, drainage and topography
- Land use – including how the land is managed, what its use is, and public rights of way
- Vegetation – including trees, woodlands, copses, thickets, tree belts, shrubs, hedges, grassland, wetland, heathland etc.
- Visual amenity – this should include a record of the location, nature and extent of views that are possible within and looking out of the site
- Green Infrastructure
- Designations – this should include any designation likely to affect landscape issues
- Heritage (including Historic Registered and unregistered Parks and Gardens)
- Subterranean infrastructure including non -mains drainage. Plant and easements may need to be included within the application site and this will impact landscape features.

4.11 Additional surveys that are carried out as part of biodiversity and tree assessments will also have an impact on the landscape structure and these will need to be considered as part of this process.

[11] Landscape Character Assessment sets down a robust, auditable and transparent, baseline process to help understand the landscape, which will assist in informing judgements and decisions concerning the management of change.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691184/landscape-character-assessment.pdf

STAGE TWO: Analysis - Evaluation of landscape information

Principle L2: Using existing landscape features and characteristics

The survey information collected in Stage 1 will inform the landscape character and visual amenity of a site. This information should be assessed to identify landscape opportunities and constraints and how the scheme can respond to its wider context.

4.12 This stage involves evaluating the surveys collected in Stage 1 to establish the landscape character and visual amenity of an area to inform a landscape strategy for a development. This analysis will need to take account of potential cumulative impacts of any consented applications that might exist near to the site.

4.13 It is recognized that some developments will require a more detailed assessment that others. Based upon the GLVIA, it is generally advised that a full landscape character and visual amenity assessment will be required for the following types of development:

- Any residential development over 10 dwellings (gross) within the Settlement Policy Boundary (SPB) of Basingstoke (which includes Chineham);
- Any residential development over 5 dwellings within a SPB outside of Basingstoke;
- Single dwellings in the countryside (outside SPBs);
- Most forms of development within the North Wessex Downs AONB, depending upon the nature of development and its location;
- Large industrial/commercial developments within an urban area. This will be dependent upon the nature of the proposal and its context; and
- Industrial/commercial development (including anaerobic digesters, wind and solar energy) within the countryside. This would exclude individual agricultural buildings associated within the footprint of existing farmstead building complexes, stables and maneges.

4.14 This list is provided as a general guide, however, there may be other development proposals where this level of detail is also required. This will depend on particular characteristics of the site and the type of proposed development. If you are in any doubt about the level of detail required, please contact the council's Natural Environment Team.

Landscape character

4.15 Landscape character assessment should be carried out to enable the significance of impacts to be judged during the design stages.

4.16 The elements making up landscape character, such as landform, vegetation and land-use patterns, must be judged in terms of their attractiveness, local distinctiveness, naturalness and historic value. These will help to identify constraints and opportunities within a development layout. Local distinctiveness can be assessed by reference to the GLVIA. It is also necessary to take into account local resources including the Borough Landscape Assessment (2011) and the council's Countryside Design

Summary (**Appendix 4.1**), which identifies the design relationship between the borough's landscape, settlement patterns and buildings[12].

4.17 It is recognised that there are many important and high quality landscapes across the borough, but national and local planning policy highlight the particular significance of the North Wessex Downs AONB. The NPPF (2018, para 172) states that 'great weight should be given to conserving and enhancing landscape and scenic beauty in… Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues'. The significance of landscape elements within the AONB should be assessed with reference to the AONB Landscape Character Assessment[13] and the aims of the North Wessex Downs AONB Management Plan[14].

4.18 In completing the assessment, it is important to consider the overall combination and pattern of the various elements in forming local landscape character. Individual features that should be conserved, enhanced, or possibly removed if intrusive must also influence the design proposal.

Visual amenity

4.19 The visual amenity assessment involves consideration of the intervisibility between the site and the surrounding landscape, particularly public rights of way, public spaces and existing houses. This should include an assessment of all user groups affected and the level and type of use of the publically accessible areas from which the proposals will be seen.

4.20 Landscape features that screen or otherwise influence views should be assessed taking into account seasonal effects and approximate life span in the case of trees.

4.21 The scope for mitigating the visual impacts of development, by enhancing or creating additional screening (taking into account the time it will take for it to become effective), should form part of this assessment.

4.22 Computer methods can be used to assist with this, but should be supplemented by assessment in the field and the proposals supported by photographs. Further guidance is given in GLVIA.

Other factors to be considered in the assessment process

4.23 In assessing landscape opportunities and constraints within a development proposal, the following will also influence the design and landscape strategy, and will need to be considered:

Green infrastructure

4.24 As set out in Chapter 3, Principle GI1 (Green Infrastructure) requires schemes to contribute towards green infrastructure and these issues are elements that will need to be incorporated into the landscape masterplan. In particular, consideration should be given to corridors through sites and links to adjacent green infrastructure provision.

[12] The Basingstoke and Deane Countryside Design Summary was formerly an appendix to the Design and Sustainability SPD (2008).
[13] North Wessex Downs AONB Landscape Character Assessment http://www.northwessexdowns.org.uk/publications-resources/landscape-2.html
[14] North Wessex Downs AONB Management Plan www.northwessexdowns.org.uk/uploads/File_Management/NWD_Docs/About_Us/Management_Plan/NWD_AONB_Management_Plan_2014-19.pdf

Heritage assets

4.25 It will also need to take into account any potential impacts upon the historic environment, in accordance with the National Planning Policy Framework, Local Plan Policy EM11 (The Historic Environment) and the emerging Heritage SPD.

4.26 **Historic parks and gardens** are designed landscapes of special historic interest. There are two tiers of historic parks and gardens in the borough:

- Those registered by Historic England[15] (of national significance); and
- Those registered at county level[16].

4.27 Although they are not protected by a separate consent regime, the inclusion of a historic park and garden on the Historic England Register is a material consideration in the determination of planning applications. Those on the Historic England Register are designated heritage assets and great weight will be given to their conservation when determining applications for planning permission, in accordance with the National Planning Policy Framework and Local Plan Policy EM11 (The Historic Environment).

4.28 If the proposal could affect a historic park or garden, specialists in garden history and restoration should be engaged to evaluate the importance of features in terms of conserving the historic interest of the site, having regard to any designation applying. This should include the use of Heritage Impact Assessments to assess the historic significance of the site and impacts of development. Restoration potential must also be assessed, unless a restoration plan has already been prepared. Conservation Management Plans are a useful tool in securing the long-term endurance of the significance of parks and gardens, and can be secured through a Section 106 agreement.

4.29 **Conservation areas** are designated for their special character and appearance. The buildings are central to this, but the spaces between them, views in to and out from conservation areas, landscape features including trees, and, in some cases, the wider landscape, are also key components. Open Areas of Townscape Significance make a particularly significant contribution to the conservation area and sometimes to the character and visual amenity of an area and these will need to be preserved as part of any proposal The significance of conservation areas should be assessed with reference to the conservation appraisals and management plans. When considering detailed design, it is particularly important to avoid generic landscaping schemes, which are insensitive to the historic context, surrounding heritage assets, and to retain important landscape features.

Landscape Strategy

4.30 The assessment of landscape character and visual amenity will help to identify opportunities and constraints for development proposals at any location within the borough. These elements should help to inform the landscape strategy for the development.

4.31 A landscape strategy should be provided for large scale planning applications and as part of outline planning applications, where the detailed design is not yet established. Where a detailed landscape masterplan is provided with the planning application, it will not always be necessary to submit a landscape strategy document, but the same

[15] https://historicengland.org.uk/listing/selection-criteria/pag-selection/
[16] http://research.hgt.org.uk/list-of-sites/

thought process should underpin the design. Where a landscape strategy is provided, it should include both a plan and also a written submission which should explain those elements that are not represented on the plan.

Principle L3: Requirements of the Landscape Strategy

A Landscape Strategy should be provided as part of the planning application showing the areas that make up the proposed development. This will also demonstrate that green infrastructure has been considered as an integral part of the design process.

The siting and detailed design of green space and hard and soft landscape within a development should complement that of the built form and the wider landscape structure as part of a holistic approach to creating a high quality environment and streetscene.

4.32 The assessment of the landscape character and visual amenity is a key element in the design process for a successful proposal. The opportunities and constraints identified will influence other elements of the design such as circulation, building form, massing and density and materials plus location of green spaces. Other guidance will need to be taken into consideration as part of this process, as previously set out in Box L1.

4.33 The landscape strategy should provide enough detail to show the outline landscape structure that is to be included as part of the design proposal and should include the following:

- Principal areas of the landscape structure and note what they provide to the development. This should include all retained features (e.g. woodland, meadow) as well as proposed areas (e.g. areas of MFGS, structural planting, buffers, equipped play, SUDs, important views, new areas of green infrastructure (GI) and any links to GI outside of the site); and
- General principles for hard and soft landscaping (e.g. shared surfaces; retaining walls; porous driveways, low native planting; native hedge; native woodland etc.).

STAGE THREE: Design

Formulating a good design

4.34 New development (other than householder development) should be informed by a landscape strategy and submitted with a Landscape Masterplan. These should be informed by the evaluation in stage 2 to ensure design responds appropriately to the site's constraints and opportunities.

Key design principles

Principle L4: Initial site-led design principles

Where there are existing landscape features on site, they must be used to enhance the structure of the layout proposals and will provide constraints. Examples include:

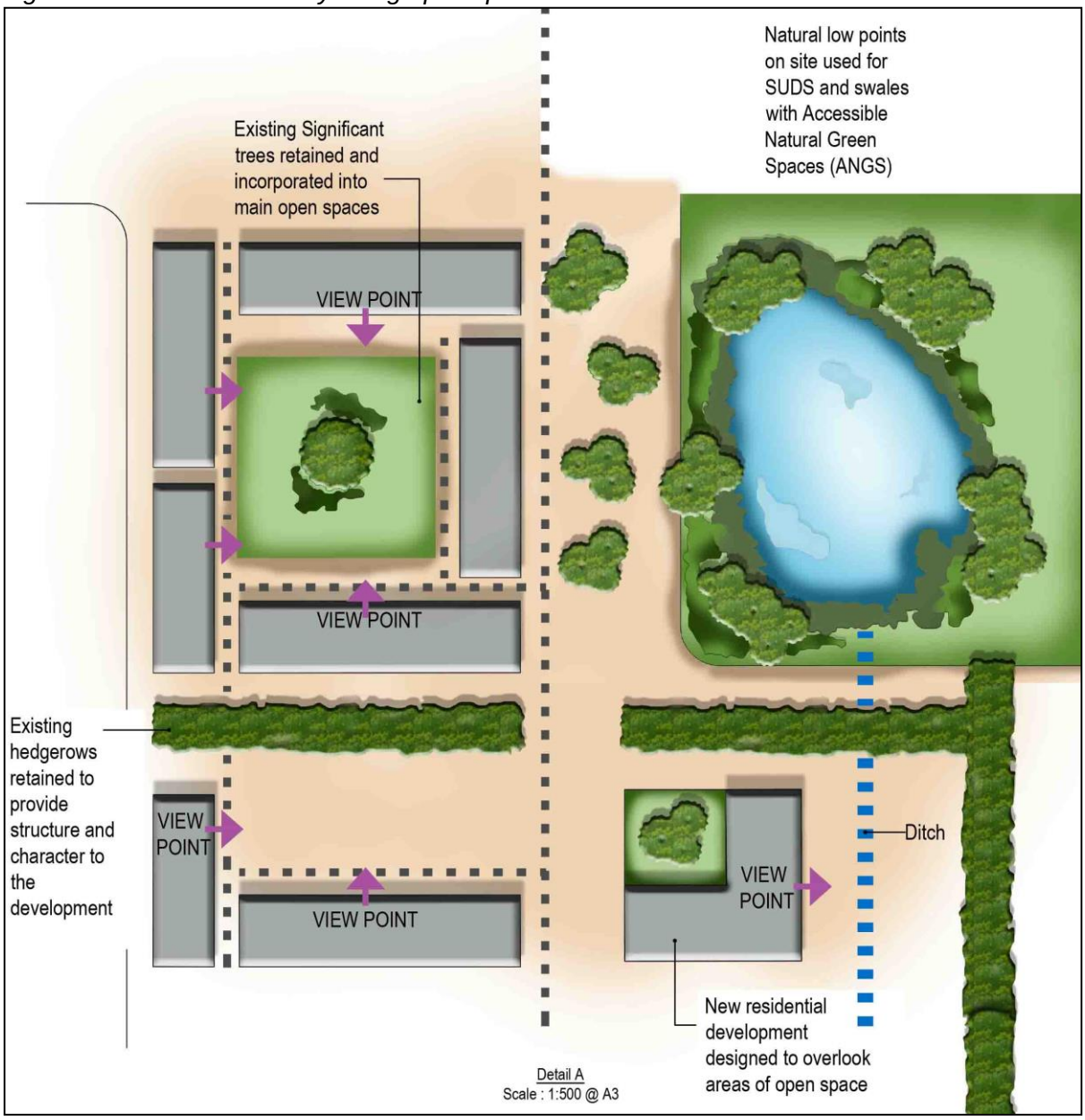
i. Housing must face onto areas of existing woodland and main rivers, with appropriate buffers (see Box B6);
ii. Existing important trees must be retained within an area that ensure their ongoing health and maintenance (see guidance in Chapter 6);
iii. Existing important hedgerows must be retained within an area that ensures their ongoing health and maintenance (see guidance in Chapter 5, Box B6);
iv. Existing public rights of way that are within the site must be retained and given an appropriate setting in order that they can still be enjoyed by users;
v. The design should also consider using other existing site features such as old allotments or informal play areas, as part of any proposal;
vi. Historic features must include appropriate settings that form part of the landscape structure; and
vii. Notable views in and out of the site should be incorporated within the proposed site layout.
viii. Development should be informed by topography. Natural low points should be used for SUDs and swales with Accessible Natural Green Spaces (ANGS).

Opportunities should be taken to include features or parts of the site as focal points or within vistas in layout proposals. The importance of features such as trees and hedgerows will need to be established through relevant professional surveys.

Green space and civic areas should be sited and shaped to be visually prominent and be a significant landmark within the development. They should complement other uses such as built form, street patterns, community centres, shops and recreational facilities and where required incorporate appropriate buffers. Appropriate hard and soft landscape materials should be used to support this high quality environment, defining the character of the development and creating a high level of visual amenity.

Key design principles are illustrated in Figure L1.

Figure L1: Illustration of key design principles



Landscape masterplan requirements

Principle L5: Landscape Masterplan requirements

A landscape masterplan should be provided as part of the planning application showing landscape elements and proposed green spaces in sufficient detail to demonstrate how they will form a cohesive external environment that will contribute to a successful development.

This must show:

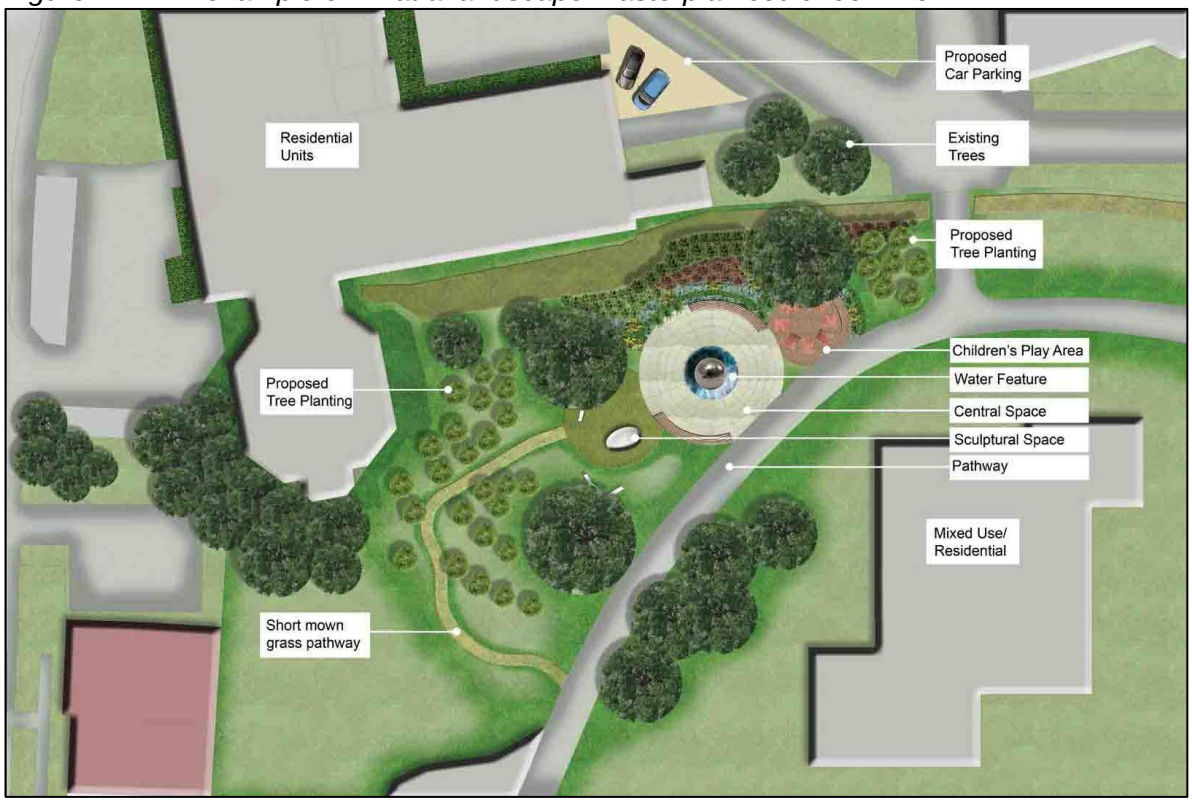
- The layout of the site identifying key areas of open space in relation to the proposed areas of built form;
- Full hard and soft landscaping proposals;
- Hard surfaced areas including car parking, landscaping, squares and play spaces;

- Structural landscaping elements including SuDS and details of how the entrance and exit points will be landscaped.

The council's expectations in relation to these elements are set out below.

4.35 The landscape masterplan should develop the principles set out in the Landscape Strategy and detail all aspects of the design and show how multiple use areas will function together to make a balanced, cohesive outdoor living environment. It should show the landscape elements and green spaces that make up the proposal in context with other design elements in order that their relationships can be understood and the overall proposal can be assessed. An example is shown in Figure L2 (below).

Figure L2: An example of what a landscape masterplan could look like



4.36 For simple projects, such as developments up to 10 houses (except where there are complex landscape issues to be communicated), a landscape masterplan will could also show the hard and soft landscape details. However, for larger developments it is likely that there will be too much information to be included on one masterplan plan and in these instances separate soft and hard landscape details will need to be provided. The plans must be supplemented with additional sections and construction drawings, where necessary to show details. Reference should be made to the council's Landscape Specification[17] which sets out requirements for soft and hard landscape elements in proposals.

[17] https://www.basingstoke.gov.uk/ENV07

Landscape design requirements

4.37 The landscape proposals should be informed by the considerations set out in this section.

Green space provision

4.38 Areas of planting and open space make a significant contribution to a successful scheme and could take a number of years of management and maintenance before they fully establish. In order that sufficient open space is provided, and that it is properly considered and accounted for early in the planning process, all areas of green space within a development that are proposed for adoption by the council will need to be identified when a planning application is submitted.

4.39 It is important that all areas of green space within developments are useful and, ideally, serve a range of functions, such as recreation, wildlife habitat, screening, and sustainable drainage. Small areas that cannot be accessed for maintenance purposes and do not contribute to any of these functions should be avoided.

4.40 The council has adopted Green Space Standards for different types of recreational green space. These are set out in Local Plan Policy EM5 and Appendix 4 of the adopted Local Plan and further explained in the Green Infrastructure Strategy and the council's Section 106 Planning Obligations SPD and Community Infrastructure Levy planning guidance. These requirements must be taken into account at the outset of any project to ensure that not only the quantity standard is met but also the distance thresholds and minimum size standards. Details about the different types of green space are set out in **Appendix 4.2** of this SPD, and the detailed design of green spaces should show how the design requirements set out in the definitions will be achieved for each type of Green Space.

Principle L6: Quantity, accessibility and function of Green Space

In order that green space meets the recreational needs of the new residents, there must be not only sufficient quantity but it must also be accessible within the adopted distance thresholds and large enough to fulfil the required function. The Landscape Masterplan should demonstrate how the Green Space standards are to be met.

In addition to meeting the quantity, accessibility and minimum size standards, green spaces should be of a high quality and designed to provide a range of functions required to meet the needs of new residents. Design guidance is set out in Appendix 4.2.

It is important to ensure the practical usability of green space is considered in its design, location and relationship with surrounding development. Buffers are required between green spaces that provide for children's play and ball games and the edge of residential buildings as follows:

- Amenity green space required for kickabout - 10m
- Local equipped area of play (LEAP) - 20m
- Neighbourhood equipped area of play (NEAP) - 30m

The type of green space required will depend on existing provision within the adopted distance thresholds and the particular needs of the development and will be assessed as part of the scoping exercise for S106 planning obligations.

4.41 The number of additional residents and therefore the quantity of green space required will be calculated on the basis of the council's standard occupancy rates as set out in the council's Section 106 Planning Obligations guidance.

4.42 The council will require developments to meet the relevant Quantity Standard in all situations and will only accept a variation from this requirement in exceptional circumstances where this is fully justified by the applicant. In no circumstances will the provision of green space below the Absolute Minimum Requirement (of 20 sqm per person) be accepted.

4.43 Multi-functional green space and equipped play will normally be provided on site however consideration will be given to an off-site financial contribution towards the enhancement of existing facilities, where:

(1) The quantity standard for the number of additional residents does not result in a requirement for green space which meets the minimum size standard for a particular green space (for example, the number of additional residents may not be sufficient to trigger the requirement for a space that is big enough to accommodate a kickabout area, so an offsite contribution would be required instead); and/or

(2) It can be demonstrated that the needs of new residents can be met in this way without adversely impacting on the quality of life of existing residents. For example, this may be acceptable if there is multi-functional green space and/or play provision within the distance thresholds, and the capacity of this existing green space and/or play provision can be adequately increased through enhancement to meet the need.

(3) It is otherwise compatible with the Community Infrastructure Levy Regulations and council's Regulation 123 list[18].

4.44 When new development takes place, opportunities to improve existing green space in surrounding areas will be considered in addition to, or instead of, provision of new green space on site in order to ensure the best access to high quality green spaces for all residents. Enhancement of existing green space provision within the vicinity of the site in lieu of new provision on site, where this is considered appropriate and necessary to make the development acceptable, would be achieved through developer contributions via a S106 agreement.

4.45 The Local Plan includes Green Space Standards for multi-functional green space that vary according to the location of the site. When assessing which standards to apply to a new development, any site that is within or immediately adjacent to Basingstoke will be required to fulfill the 'urban' standards. Similarly, if a development would become linked to Basingstoke by the development of an intervening Local Plan housing allocation site, then again, the 'urban' standards will apply. For other developments outside Basingstoke, the 'rural' standards' will apply. For the purposes of green space planning, 'Basingstoke' is considered to include Basingstoke, Chineham and Old Basing.

4.46 It is important to ensure that there is sufficient distance between housing and green spaces designed for formal children's play and kickabout to avoid conflict and nuisance for adjacent residents. These buffers are set out in Principle L6 (above).

[18] Basingstoke and Deane BC, Community Infrastructure Levy www.basingstoke.gov.uk/CIL

Soft and hard landscaping

4.47 Close coordination between landscape design and other aspects of external detailing, including utilities, is crucial for good design. Failure to achieve this can result in an uncoordinated mix of features that conflict with one another, detract from an overall sense of place, and impair the functions the landscaping is aiming to fulfil. As noted above, the nature of landscape details will be influenced by the context of the site and therefore should relate well to materials and species found within the site and the locality. They will link with biodiversity and tree considerations within the design proposals, which are dealt with elsewhere in this document.

4.48 It will also be necessary to cross refer to other elements of the design such as highways, conservation and urban design and the relevant SPD documents as set out earlier in this document.

Principle L7: Soft Landscaping

New planting must be an integral part of the design of a development rather than as an afterthought. It should be used in prominent locations and must consider its function, context, scale, texture along with colour and seasonal qualities. Such design features could include:

i. Planting to frame views within and out of the site and provide visual enclosure;
ii. Trees and planting to screen and soften the 'hardness' of an area dominated by trees and roads;
iii. Planting to provide visual features, such as avenues of trees, hedges to define public/private boundaries thus 'greening' up the street; and,
iv. Planting to frame and highlight other design features within the proposal.

When preparing the detailed design of layouts, the implications of the future function will need to be taken into account, ensuring that the design does not cause problems for future maintenance and management. For example, benches/bins/fences should be located on hard standing rather than within grass, as it will not be possible to maintain grassed areas underneath them. Also refer to Principles L11 and L12.

In order to ensure the successful establishment of soft landscaping, it is key that appropriate measures are taken in the preparation of sites and also during the post planting period. These should include:

v. Remedial treatment where the soils in planting areas are unsatisfactory, such as incorporation of soil amendments or decompaction. These should be applied to the whole planting area, not just to planting holes;
vi. Native new planting that reflects the local character, except where landscape character considerations suggest otherwise (for example, planting that is in keeping with areas of historic character, or within 'on-plot' residential planting in urban areas);
vii. Sufficient space to allow retained planting to continue growing healthily and for future management to be carried out,
viii. Species that help to promote biodiversity, reflect climate change and contribute to enhancing green infrastructure;
ix. Sufficient space for soft landscaping within the layout. The space needs to be sufficient for suitable species and numbers of trees to be provided and reach maturity without creating conflicts with buildings and infrastructure.

x. Tree pits that are big enough for their eventual heights and be located with enough room to accommodate their eventual canopy spread;
xi. Planting buffers that are big enough to appropriately perform that function; and
xii. Adequate provision for planting areas to allow for future management and maintenance (including access routes within buffers and screening planting).

4.49 Species will need to be chosen to ensure adequate diversity and resilience to pests and disease, both within the development and across the wider landscape. Native species of local provenance should be used, except where landscape character considerations suggest otherwise.

4.50 New planting should be substantially naturalistic in character. However, non-native planting and mown grass may be more appropriate to the town centre, areas within the immediate vicinity of housing, public and commercial premises and defined areas of parks and gardens. Native species should be used next to watercourses or waterbodies to maintain their biodiversity value and the spread of invasive alien species must be avoided. The following link provides further guidance on invasive species - https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants

Showing how sufficient space has been provided around an existing tree to allow it to continue growing healthily and for future management to be carried out.

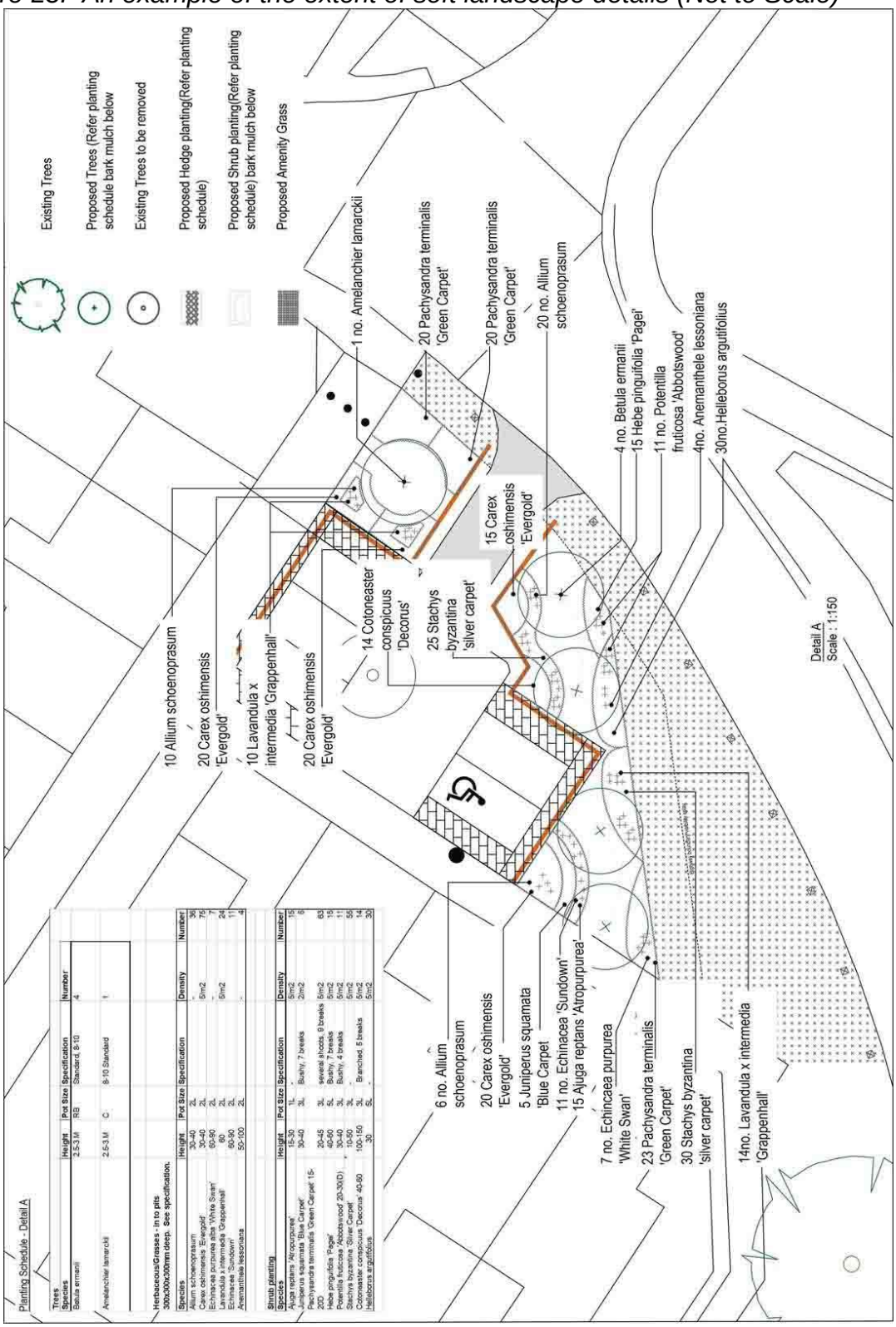
4.51 Street tree species and varieties should be chosen taking into account compatibility with access and movement and their relationship to buildings and utilities. Their potential size and growth rate must also be taken into account. Where the trees are to be planted on land that will be adopted by the highway authority, there should be prior discussion with them at the early stages of the design process in order to establish if trees can be located and maintained within land to be maintained by them.

4.52 Large growing tree species should be integrated into development due to the many environmental benefits they have to offer. Where space permits, such trees should be used to create landmark and skyline features. As with street trees, adequate space must be given to allow large trees to grow to maturity without causing conflict with

surrounding buildings and infrastructure. Further guidance about new tree planting is set out in the Section 6 on trees.

4.53 An example of the soft landscaping details that should be provided with a planning application is set out in Figure L3.

Figure L3: An example of the extent of soft landscape details (Not to Scale)



Principle L8: Hard Landscaping, structures and surfaces

Hard landscape detailing makes a significant contribution to a successful scheme and details showing the layout, positions and construction of the following are required as part of planning submissions:

a. Civic areas, village squares and courtyards;
b. Walls, fences, gates, rails;
c. All hard surfaces – including ramps, steps, drainage, footpaths, roof gardens, green walls, gabion walls, parking areas and highways;
d. Play equipment – which must accord with the requirements for the particular play area type as noted in Play Area Criteria Specification Revision[19];
e. Street furniture – including seating, litter bins, bollards, and lighting (Use of sites by key nocturnal species will need to be considered in any lighting schemes and mitigation undertaken if necessary).
f. Structures for bin stores, cycle stores.

The choice of materials for hard landscape detailing within the design will need to consider the following:

i. They should complement the character of the wider development and the context of the surrounding area;
ii. They should be suitable for the function which the landscaping area is intended to form (e.g. civic areas, village squares and courtyards);
iii. They should be sufficiently robust and of a nature that allows an appropriate level of future maintenance without compromising the appearance. For example footpaths should not require sweeping to manage loose materials such as gravel; and
iv. Boundary treatments which are appropriate for the character, streetscene, function and residential amenity of a development. Boundary treatments should be high quality and able to perform their required function.
v. The appearance of any acoustic fencing (including its height, materials and how it is screened with vegetation) should be appropriate for its location and should aim to enhance local visual amenity as well as fulfilling its sound attenuation function.
vi. They should allow for wildlife movement within development – for example providing gaps at the bases of rear garden fences to allow hedgehogs to move throughout a wider area.
vii. Lighting should consider the need to avoid adverse impacts on dark skies and wildlife corridors. Where these issues have been identified through the analysis process, the design of lighting should seek to avoid impacts on them.

4.54 There are a number of common design issues that often result in problems following implementation and will also need to be addressed in order to deliver a good standard of public amenity:

- Public facing garden boundaries should be constructed in brick rather than timber paneling, which has a relatively short lifespan and can result in a poor visual appearance when it falls into disrepair;
- The use of low walls or railings/hedges along plot frontages should be considered as a treatment to provide a landscape structure within a street;

[19] https://www.basingstoke.gov.uk/ENV07

- Lamp columns should not be located within 5 metres of existing and newly planted trees, in order to avoid future conflicts of tree canopies obscuring lighting;
- Planting beds should be wide enough to allow planting to establish properly without becoming short-cuts and planting on desire lines should be avoided. Where planting is located around parking bays, a 300mm hardstanding strip should be located around the edge of planting to for access to/from cars and to prevent it becoming trampled; and
- Porous paving must be used in unadopted areas order to help to reduce surface water run-off.
- Responding to the range of materials used in historic hard surfacing and boundaries, to preserve both the landscape and historic character of an area (particularly within or adjacent to Heritage Assets)

Showing how a well-designed brick garden wall can be used to enhance the visual amenity of a public area. (Source: BDBC)

4.55 As with the soft landscaping details, hard landscape proposals will need to be an integral part of the design rather than as an afterthought. Their inclusion and the choice of materials used will need to consider the function that they are providing, the context within which they are located, complementing other design features such as built form, massing, spaces and soft landscaping.

4.56 The plans below provide examples of the type of hard landscaping information required as part of planning applications.

Figure L4: Example of a hard landscaping layout (not to scale)

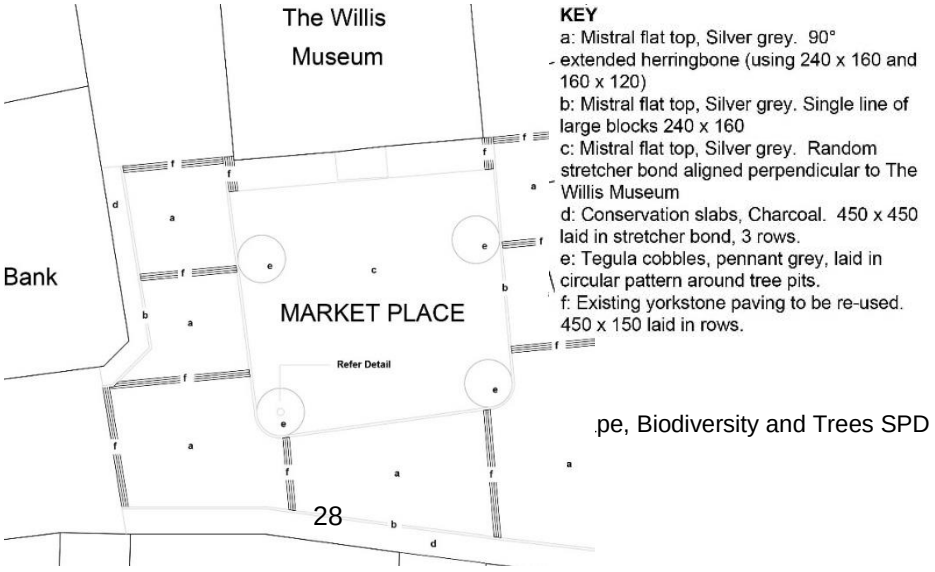


Figure L5: An example of a paving detail from the hard landscape layout (Not to Scale)

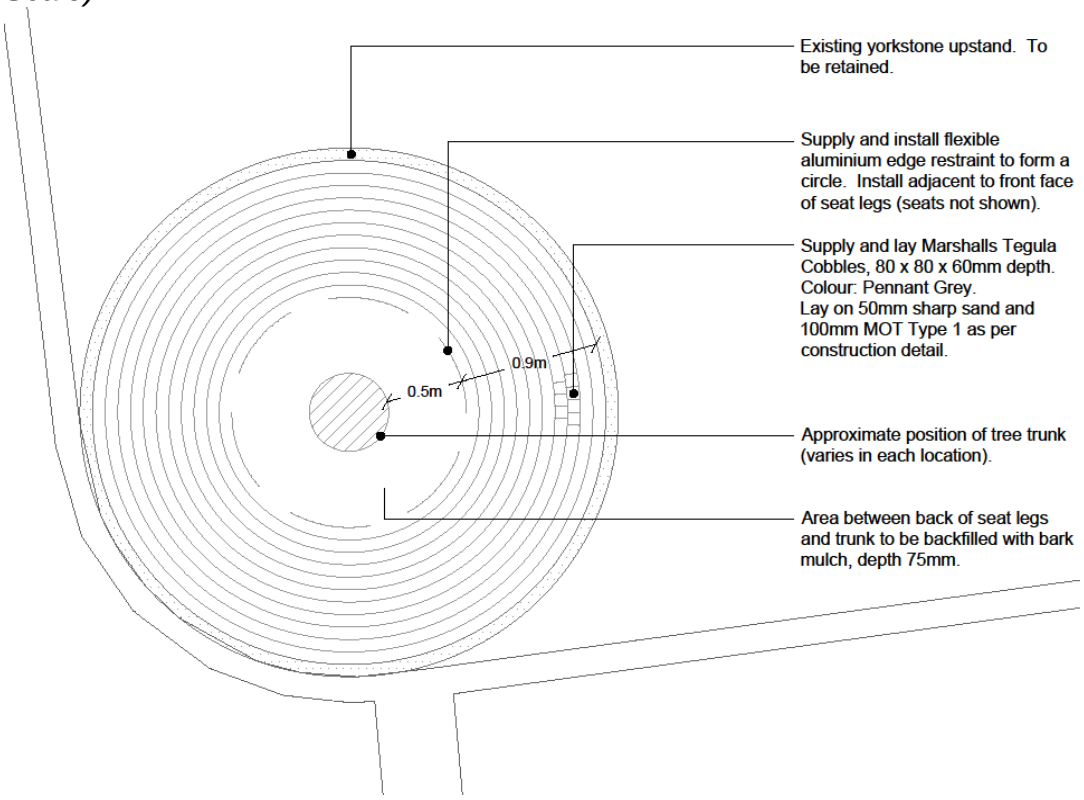
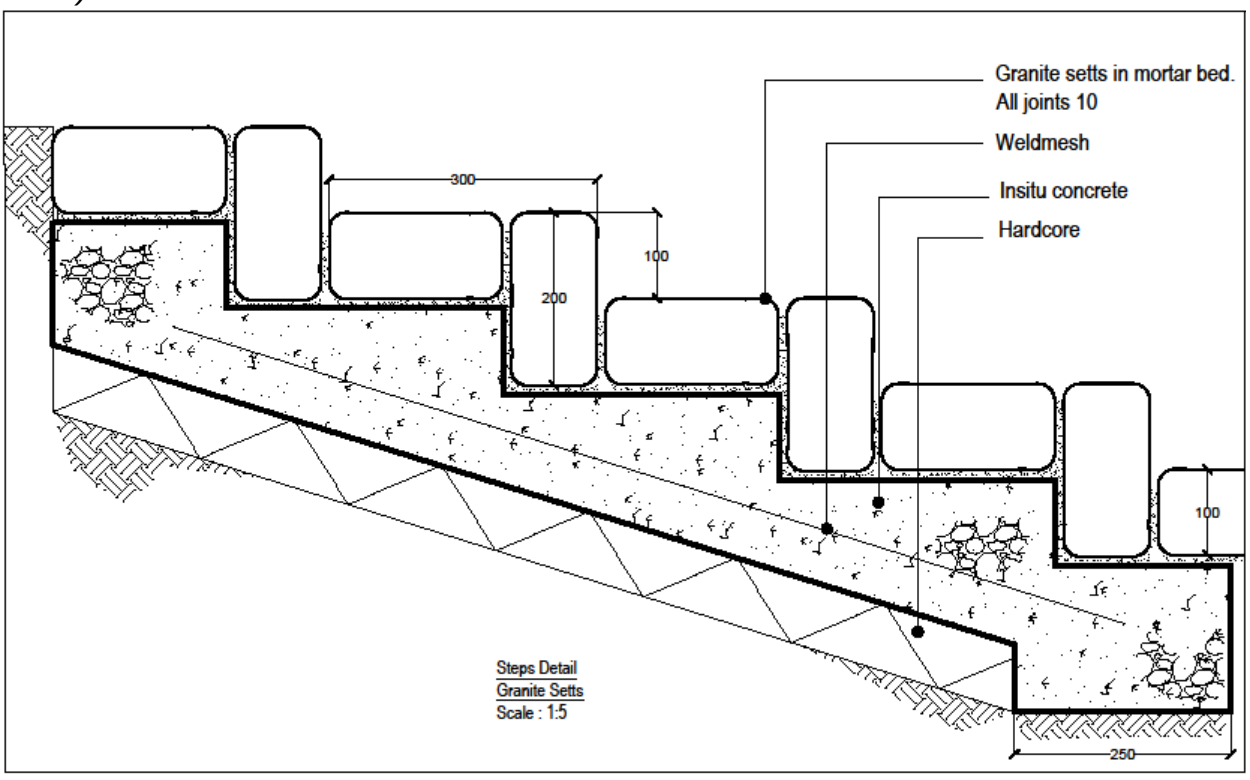


Figure L6: An example of a section detail for hard landscape proposals (Not to Scale)



Sustainable drainage systems (SuDS)

Principle L9: SuDS and Swales

New developments must/should incorporate sustainable drainage systems (SuDS) in order to prevent excessive run-off of storm water; to respond to the council's Green Infrastructure and Climate Change strategies.

4.57 Landscapes can be designed to aid site drainage and provide other functions including green space, structure planting, and enhanced biodiversity through the creation of balancing ponds, reed beds and swales. Features such as green roofs and walls can also make a significant contribution to sustainable drainage as well as Green Infrastructure and green spaces. As well as reducing run-off, the use of permeable hard surfaces can aid the survival of trees and other plants growing in paved areas.

4.58 The design of elements such as SuDS, green roofs and walls will need to be a fundamental part of the process and can contribute to other aspects of design such as biodiversity and visual amenity, making a contribution to place making and focal points. Other examples of approaches to consider can include on-site features such as;-

- Greywater recycling (harvesting and re-use of bath/shower/sink water);
- Rainwater harvesting (will decrease the volume of run-off requiring SuDS treatment)
- Rain gardens;
- Filter trenches around driveways and road (to aid infiltration and act as temporary storage);
- Swales and filter strips (with undulating depressions and long tussocky vegetation to slow the flow-rate and allow settlement of particles); and,
- Planting to encourage habitat creation and development.

4.59 Early consideration must be given to future maintenance of sustainable drainage systems. The council will generally be able to adopt the above ground elements forming part of a sustainable drainage system, providing they also function as public green infrastructure and an appropriate commuted sum has been paid for future management. However the council is unable to adopt features and infrastructure that require specialist maintenance, such as subterranean SuDS features and de-silting. The repair, maintenance and replacement of such infrastructure will remain the responsibility of the developer (see guidance on management and maintenance, below).

Artwork

Principle L10: Artwork

Where artwork is included within a design proposal, sufficient details will need to be submitted with the application to ensure that it is:

- Safe and accessible (according with any relevant safety regulations); and
- Maintainable (and if necessary, a commuted sum will be secured where the artwork is adopted by the council).

4.60 Where artwork is provided as part of a development, it can take a number of forms, for example some form of sculpture, bespoke railings/boundaries, inlays in surfaces/walls, living sculptures (such as willow tunnels), or street furniture. It should reflect particular site characteristics such as plant species, landform or historical associations.

4.61 As a permanent feature within areas that are accessible to the public, safety and ongoing maintenance are key elements that will have to be included and costed within the development stage of any artwork. These will need to be submitted and approved as part of the planning application.

4.62 Artwork is often a feature included within a design proposal, secured as part of a S106 agreement and involving liaison with council officers. Further information is provided in the Planning Obligations for Infrastructure SPD.

Artwork used to enhance an open space. The design reflects the surrounding deciduous woodland.

Other design considerations

Accessibility

4.63 An integral part of the landscape design process is to ensure that everyone can move through the site and enjoy the external environment, regardless of age, disability, ethnicity or social grouping. Particular considerations are:

- Barriers to pedestrians, including those with wheelchairs, pushchairs and prams, must be avoided;
- Signage must be designed to maximise clarity, avoiding poorly contrasting lettering/symbols and background, and it must be positioned at a height readable by all site users; and
- Views must be considered from the height of all users, including small children.

Secure by Design

4.64 The design of external environments can significantly affect opportunities for crime and anti-social behaviour, as well as the fear of these activities, and the ability to detect them. Initial site assessment, and opportunities and constraints mapping should identify existing problem areas. Addressing these, as well as minimising the risks associated with newly-created landscape features and green space, should be a key aim of the design process. This is linked to the aims of creating attractive environments in which the local community takes pride, and has a sense of responsibility for.

4.65 In order to ensure that any anti-social behaviour issues are minimised, the following issues will need to be addressed when designing the site:

- Areas of planting should be designed (both in layout and species choice) to avoid providing locations that can be hidden in, or used to obscure anti-social activities;
- The design of open spaces should ensure that there are clear entrances and exits;
- Narrow, uncomfortable alleyways and spaces should be avoided;
- The location and layout of open spaces, along with planting species choice should allow for natural surveillance for pedestrians (such as with overlooking properties);
- Locations that could become anti-social gathering points should be avoided;
- Street furniture should be located away from property boundaries where they may become focal points for anti-social behaviour;
- The layout and design of street furniture should be such that it deters use for 'free-running' and 'parkour';
- Avoid areas of grass adjacent to gable ends of properties where they may become used for inappropriate ball games; and,
- Trees in open spaces should be positioned to avoid their use as goal posts, particularly in positions close to properties and car parks where damage to property may occur.

Showing how the use of low growing shrubs and clear stemmed trees can help to ensure good surveillance in public areas.

Maintenance and Management

Landscape management plan

Principle L11: Landscape management plan

In order to ensure the successful establishment and future management of the landscape structure within a development, a landscape management plan will need to be submitted with relevant planning applications. The level of detail should be proportionate to the nature of the development.

It is not considered that this would generally be required for householder applications.

4.66 Landscape management plans, which may be required as part of a Section 106 Planning Obligation, should be prepared for all green infrastructure formal landscaped areas and wildlife habitats, whether or not the council is to adopt the land. Management plans should set out the aftercare of new landscape planting and newly created habitats to ensure successful establishment, and the long-term management required to maintain the green infrastructure in perpetuity. They should include:

- Background information about the site that will aid future site managers;
- Explanation of the design concept and the long-term aims and objectives of the planting proposals and operations (and frequencies thereof) required to achieve them;
- The mechanisms (legal and other) to ensure effective long term management;
- Identification of management agency (or agencies);
- Arrangements for quality control, monitoring, inspection and handover;
- Provisions for review (at least every five years);
- Land ownerships and boundary responsibilities; and
- A five year work programme including maintenance regimes and/or schedules for hard and soft landscape areas including grass, ornamental planting, paving and structures, play areas, naturalistic planting, woodland, watercourses and other habitats.

Adoption

Principle L12: Adoption of Green Space by the Council

The council would prefer, in principle, to adopt green space which has a public value in order to ensure long term management. Where green space (including associated soft and hard landscape features) is adopted, the council will require a one off payment to cover the ongoing cost of management. The maintenance of green space not adopted by the borough council will remain the responsibility of the developer.

The arrangements for ongoing management will be set out in a S106 agreement between the Council and the applicant and should initially be discussed at the pre-application stage.

All areas of green infrastructure within a development that are proposed for adoption should be identified with any full planning application and with a reserved matters application where the layout is not known at the outline stage. In the latter instances, an

indication as to whether areas of land are to be offered for adoption will need to be provided.

4.67 All green spaces to be adopted by the council will be inspected to ensure that they have been delivered in accordance with the approved plans and the S106 agreement. They will only be adopted if they have been implemented in accordance with these standards and a one off payment to cover ongoing maintenance costs has been received by the Borough Council.

4.68 The rates used to calculate the one off payment are reviewed annually and the current Schedule of Rates is available to view on the council's website.

4.69 Footpaths within green spaces to be adopted by the council should not be lit unless they are to be adopted and maintained by the highway authority rather than by the borough council.

5. Biodiversity

Introduction

5.1 Biodiversity can be defined as the variety of all animal and plant species, the genetic diversity within them and the variety of communities and natural processes they give rise to. In the UK many species and habitats are protected under legislation and planning policy. Measures are required to avoid or mitigate impacts from development to protect these species and habitats and to provide biodiversity enhancement.

5.2 The purpose of this chapter is to show how issues relating to biodiversity will need to be assessed to inform the planning process. The chapter sets out how biodiversity issues should be considered and how net gain for biodiversity should be delivered. The council will expect all proposals to enhance the biodiversity of the receiving environment thereby providing the necessary biodiversity net gain over and above any residual losses from development.

The borough's biodiversity

5.3 Basingstoke and Deane Borough and the surrounding areas support a wide variety of wildlife-rich habitat. Over 850 protected or notable species have been recorded in the borough[20] reflecting the variety of habitats present in the area. Many of these are identified as key habitat types because of their important biodiversity value. Examples in the borough include the River Test and River Loddon which are nationally important rivers and provide suitable habitats for otter and water vole; numerous ancient semi-natural woodlands which support diverse ground floras and chalk grassland which is of particular importance to a number of butterflies. Legally protected or notable wildlife are also found outside these designated sites including hedgehogs, slow worms, swifts and bats.

5.4 Many of the borough's habitats can be categorised as important sites for wildlife and/or are defined as a key habitat type in line with the designations or descriptions below:

Box B1: Designated sites and key habitats

Designated sites

Internationally Designated Statutory Nature Conservation Sites:

- Special Protection Areas (SPAs)
- Special Areas of Conservation (SACs)
- RAMSAR sites

Nationally Designated Statutory Nature Conservation Sites:

- Site of Special Scientific Interest (SSSIs)
- National Nature Reserves (NNRs)
- Local Nature Reserves (LNRs)

Locally Designated Non-statutory Sites:

- Sites of Importance for Nature Conservation (SINCs)

[20] Appendix 1 of BDBC Living Landscapes Strategy www.basingstoke.gov.uk/ENV09

Key habitats

Key habitats within the borough which are material considerations in the context of planning policy, are listed in **Appendix 5.1**. They incorporate Habitats of Principal Importance in England (as listed in Basingstoke and Deane Borough Council's Living Landscapes Strategy[21]). Examples include ancient semi-natural woodland, species rich hedgerows, calcareous grassland and chalk rivers.

5.5 In addition to designated sites and key habitats, additional areas have been identified as having potential to restore or create key habitat types. These are known as Biodiversity Opportunity Areas (BOAs), Biodiversity Priority Areas (BPAs) and Ecological Network Mapping. The sites are shown in Appendix 5.3 (Map 2) and described below:

- Biodiversity Opportunity Areas (BOAs) have been identified across South-East England to provide a landscape-scale framework for delivering the maintenance, restoration and creation of wildlife habitats. Their purpose is to identify areas where there is the most potential for improving biodiversity and subsequently serve as a focus for where conservation effort and resources can have the greatest benefit.

- Biodiversity Priority Areas (BPAs) are identified in the council's GI Strategy and are based on the borough's two main river corridors the River Test and the River Loddon. They were chosen because these represent cohesive linear geographic areas that contain interrelated habitats in need of protection and sensitive management.

- An Ecological Network Map within the Borough has been produced by the Hampshire Biodiversity Information Centre (HBIC) on behalf of the Hampshire Local Nature Partnership (LNP). It consists of areas identified as being suitable for habitat creation based on habitat mapping for the county and other factors such as geology, hydrology and topography. A policy framework will accompany the mapping to embed the use of the network opportunity mapping within local plan policy across Hampshire.

5.6 None of the above sites infer any constraints to development or land use but should be used where appropriate to inform proposals to achieve net gain for biodiversity as part of the planning application process.

[21] http://www3.hants.gov.uk/basingstoke_and_deane_biodiversity_action_plan.pdf

Policy context

5.7 There is a wide variety of legislation and policy provision relating to biodiversity from an international level through to a local level. The following key legislation to protect the natural environment is applicable to the planning process:

Box B2: Relevant legislation used within the planning process

- Habitat and Species Regulations 2017 – gives protection to European Protected Species and Sites
- Water Framework Directive 2000 - protects and enhances and thereby improves the state of rivers across Europe
- Wildlife & Countryside (W&C) Act 1981 – protects variety of wild animals and nesting birds and SSSIs
- Countryside and Rights of Way Act 2000 – strengthens the W&C Act
- Protection of Badgers Act 1992
- Natural Environment & Rural Communities (NERC) Act 2006 – gives LPAs responsibility to consider 'general' biodiversity, not just legally protected species/sites. The species and habitats to be considered are listed in Section 41 of the Act.

5.8 With respect to the NERC Act 2006, this places a legal duty on Local Authorities to have regard to biodiversity conservation (including opportunities for restoration and enhancement) in carrying out their functions. The determination of planning applications would be an example of one such function. Importantly the duty includes habitats and species found outside sites designated for their nature conservation interest but which are considered of principal importance for the conservation of biodiversity (known as priority habitats and species). Examples include species-rich hedgerows and species such as hedgehogs and toads.

5.9 Relevant national policy is contained in the National Planning Policy Framework and Planning Practice Guidance. The council seeks to meet the requirements of national policy and legislation, including the requirements of the NERC Act, through the Local Plan, which is part of the statutory development plan for the area. Local Plan Policy EM4 (Biodiversity, Geodiversity and Nature Conservation) only permits development if significant harm to biodiversity can be avoided or, if that is not possible adequately mitigated, and indicates that the weight given to the protection of nature conservation interests will depend on the national or local significance and any designation or protection applying to the site habitat or species concerned. The weight afforded to different nature conservation designations is set out in Box B3.

Box B3: Weight given to different types of nature conservation site designations and irreplaceable habitats

Statutory nature conservation sites include internationally designated sites such as Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), and nationally designated sites such as National Nature Reserves (NNRs) and Sites of Special Scientific Interest (SSSIs) and Local Nature Reserves (LNRs).

International statutory designations:
There are no SPAs or SACs within the Borough of Basingstoke and Deane, but the Thames Basin Heaths SPA and River Itchen SAC can potentially be affected by activities within the borough. These sites have the strongest level of protection in planning under The Conservation of Habitats and Species Regulations 2017 which restricts the granting of planning permission for development which is likely to have a significant effect on a SPA or SAC. The approach to such applications is set out in Local Plan Policy EM3 (Thames Basin Heaths Special Protection Area).

National statutory designations:
In terms of SSSIs, the National Planning Policy Framework includes a presumption against development that would, on its own or in combination with other developments, adversely affect a SSSI. NPPF para 175 states that:

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

Non-statutory designations:
Non-statutory nature conservation sites include Sites of Importance for Nature Conservation (SINCs).

These have no statutory protection, but there is a presumption, in Policy EM4 of the Basingstoke and Deane Borough Local Plan 2011-2029 against the granting of planning permission that would result in harm to them.

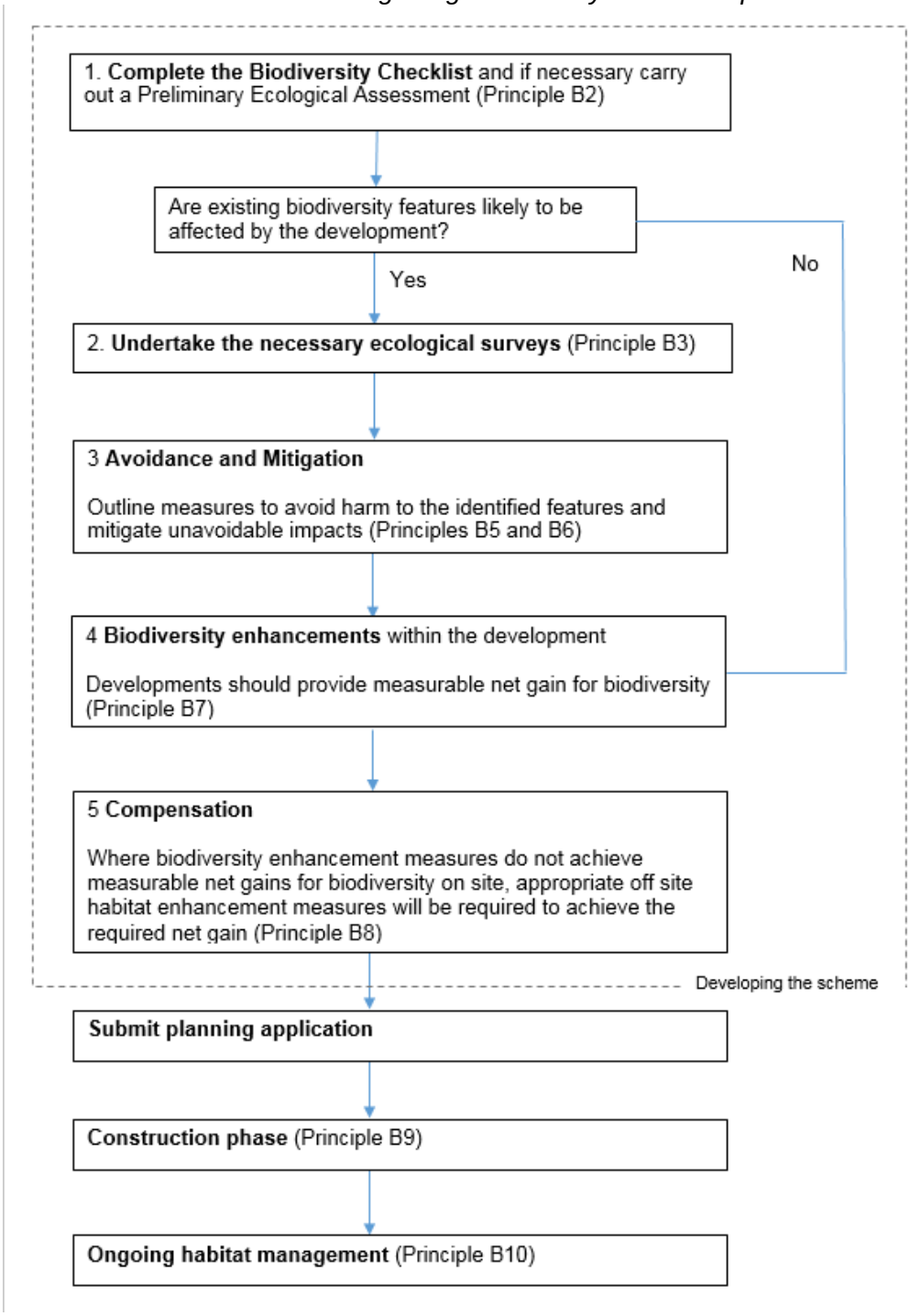
Irreplaceable habitats:
Paragraph 175 of the NPPF includes a presumption against development that would result in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Biodiversity and the planning process

5.10 New development and construction activities can have sudden and severe negative impacts on important habitats and wildlife. However, in the right place, carefully-planned development can and should positively contribute to biodiversity.

5.11 Figure B1 outlines the general procedure to follow to ensure biodiversity is properly addressed through all stages of the planning process. Advice about the council's expectations at these different stages is set out in the following sections of this SPD.

Figure B1: Process for successful integrating biodiversity into development



STAGE ONE: Understanding the site's biodiversity importance

Principle B1: Biodiversity information requirements

In accordance with legislation and planning policy, adequate and proportionate information must be provided with planning applications to allow the impacts on biodiversity to be assessed.

5.12 Where a proposed development may have possible impacts on features of biodiversity interest, planning applications must include information on the existing biodiversity interests of the site and its zone of influence. This needs to be accompanied by an assessment of the likely impacts of the proposed development to be considered. In the case of protected species, Circular 06/2005[22] states that,

> 'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. **The use of conditions to request protected species surveys should only be used in exceptional circumstances**'.

5.13 Understanding the site's biodiversity importance is a two-step process:

1. **Biodiversity checklist** - This should be used to identify features in and around any application site which may be of biodiversity value.

2. **Habitat and species surveys** - If the biodiversity checklist identifies features of potential value or the council Biodiversity Officer requests further information due to their assessment of the site, a more thorough assessment of those features should be carried out.

Biodiversity checklist

Principle B2: Biodiversity checklist

A biodiversity checklist should be completed to help inform the scope of the biodiversity information needed to validate and determine the planning application.

5.14 The council has a biodiversity checklist (two variations; one for householder applications[23], and one for all other applications[24]) that should be submitted with all planning applications likely to impact on biodiversity. If an applicant is unsure whether their proposal will impact biodiversity, the checklist can help identify the types or locations of developments most likely to impact biodiversity.

5.15 This checklist can be completed by developers and members of the public, as well as professional ecologists. Its purpose is to help assess the nature conservation value of

[22] ODPM Government Circular: 06/2005 Biodiversity and Geological Conservation
[23] http://documents.hants.gov.uk/biodiversity/BiodiversityChecklisthouseholdersforwebsite2013-09-25.docx
[24] http://documents.hants.gov.uk/biodiversity/BiodiversityChecklistFullApp.docx

a proposed development site and its surroundings and to enable applicants to establish whether their proposal is likely to affect biodiversity, and whether specific surveys are required. It includes a number of tick-box questions to identify whether development may potentially have an adverse impact on designated sites, priority or other notable habitats or legally protected or notable species.

5.16 The checklist will need to be informed by a desk-based study to understand whether the site is within or close to any designated sites or a key habitat, or is likely to contain any key species (as set out in **Appendix 5.1**) that may be impacted. This data can be used to assess impacts from the development and provide information on the opportunities for biodiversity enhancement to secure a biodiversity net gain. Designated sites and key habitats are defined in Box B1. Further information about these can be found via:

- Magic maps[25] – provides information on the location of statutory designated wildlife sites and ancient woodlands[26] within the borough;
- The council's on-line mapping system[27] – provides information on the location of non-statutory designated wildlife sites known as Sites of Importance for Nature Conservation (SINCs) within the borough; and
- Hampshire Biodiversity Information Centre (HBIC)[28] – provides comprehensive habitat and species data, including the designation details of SINCs. There may be a charge for this service.

5.17 The biodiversity checklist sets out triggers for where and when surveys are likely to be required, and further information is set out in **Appendix 5.2.**

5.18 If the biodiversity checklist reveals that nature conservation features may be affected, planning applications must be supported by the relevant surveys and reports. The only circumstance in which those reports would not be required would be where an applicant is able to provide pre-application correspondence from the council's Biodiversity Officers or Natural England which confirms that they are satisfied that the proposal will not have an adverse impact. It should be noted that the biodiversity checklists are not exhaustive, and professional advisers may recommend, or the council may require, surveys in other circumstances.

[25] Magic maps: www.magic.gov.uk
[26] Only ancient woodlands greater than 2ha appear on the Ancient Woodland Inventory on the Magic maps website. Therefore woodlands below 2ha may be ancient even if absent from the Inventory. Such woodlands would need to be surveyed at the appropriate time of year to assess their importance.
[27] http://www.arcgis.com/apps/Viewer/index.html?appid=7a6aba6613324537ac852932fe1ec518
[28] https://www.hants.gov.uk/landplanningandenvironment/environment/biodiversity/informationcentre

General survey requirements

Principle B3: Biodiversity surveys

Where development may potentially have an adverse impact on designated sites, a key habitat type, or legally protected or key species, biodiversity surveys must be provided.

These must:
i. Be undertaken by a suitably qualified ecologist and follow best practice guidance;
ii. Be undertaken at an appropriate time of year;
iii. Be up-to-date; and
iv. Cover the full area likely to be impacted by the development.

The survey report should include a desk-based study which includes up-to-date biodiversity data where this exists.

Surveys must be undertaken by a suitably qualified ecologist and follow best practice

5.19 All ecological survey and impact assessment work should be undertaken by a suitably qualified ecologist. Information on where to find a suitably qualified ecological consultant can be found on the Chartered Institute of Ecology and Environmental Management's (CIEEM) website[29].

5.20 Ecological surveys and impact assessments will be expected to be undertaken in line with best practice guidance (where this exists) and ecological reports will be written in line with the Chartered Institute of Ecology and Environmental Management's (CIEEM) technical guidance[30] and the British Standard 42020 Biodiversity – Code of Practice for Planning and Development. The survey report should include all relevant up-to-date biodiversity data sourced from the Hampshire Biodiversity Information Centre (HBIC) and any other relevant sources. It is expected that following the completion of surveys, all relevant biodiversity data collected will be submitted to HBIC as appropriate in line with CIEEM guidelines. Data can be submitted direct to HBIC or through the Consultants' Portal[31].

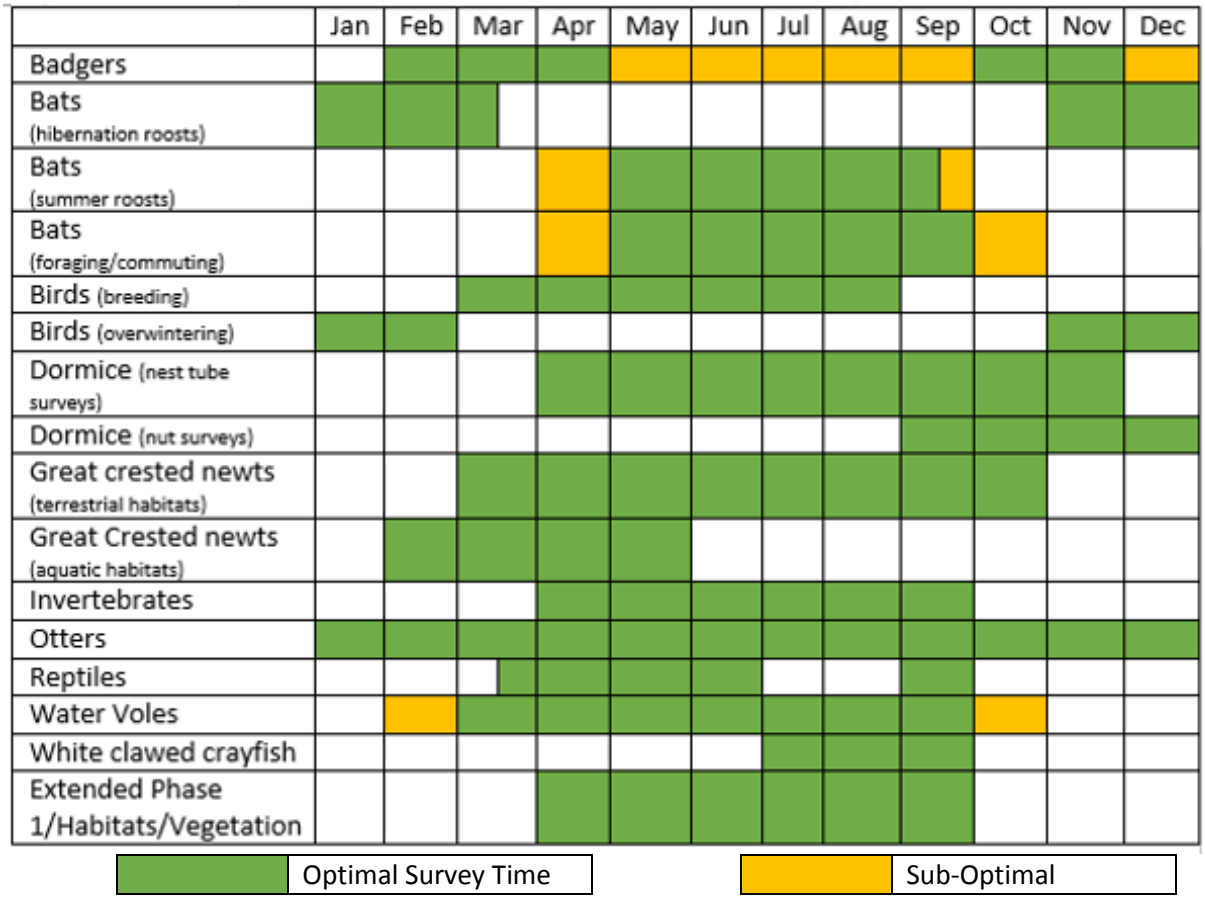
Surveys must be undertaken at the appropriate time of year

5.21 Ecological surveys should be planned in advance because they have to be undertaken at an appropriate time of year for the species or habitats concerned. Multiple visits may be required over a surveying season to provide meaningful results. Ecological mitigation work can also take a considerable time to implement and may have to be completed before any developments can begin.

5.22 Figure B2 provides guidance on suitable times of year to survey for different groups of species and habitats. This includes sub-optimal times when survey work may provide information on possible constraints. However, surveys undertaken during these times will not necessarily be sufficient to support planning applications.

[29] http://events.cieem.net/ProfessionalDirectory/Professional-Directory.aspx
[30] https://www.cieem.net/technical-guidance-series-tgs
[31] http://www.consultantsportal.uk/

Figure B2: Survey times for protected species and habitat surveys[32]



Surveys must be up-to-date

5.23 All surveys will need to be up-to-date (no more than two to three years old, particularly in the case of more mobile species) unless justification is provided on why conditions on site are unlikely to have changed in the intervening period since any previous survey work was undertaken.

Surveys must cover the development's zone of influence

5.24 The survey area should accord with best practice as set out in the Guidelines for Ecological Impact Assessment in the UK and Ireland[33]. This should be determined by a competent ecologist and will depend upon the extent of potential impacts (or zone of influence) from the proposed development, and the sensitivity of habitats and species. At the pre-planning stage, zones should be defined on a precautionary basis. This must include all areas that might be affected, given the type of development envisaged and the size and location of the site. These preliminary zones of influence can then by refined during the design and impact assessment process.

[32] Chart reproduced by kind permission of Mike Oxford, Association of Local Government Ecologists

[33] www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf

Requirements of habitat surveys

Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey)

5.25 Where it has been determined that a site survey is required due to the nature or location of the proposed development, this should start with a Preliminary Ecological Appraisal (PEA). This involves recording the habitat types present, assessing the potential for protected or notable species (as set out in **Appendix 5.1**) to be present and assessing the key processes influencing the ecology of the site. This must cover the whole zone of influence, and it may also be necessary to extend the study beyond the basic zone of influence, if only part of a site or ecosystem falls within it. This is so the effects of the development on the integrity of the site or ecosystem as a whole can be assessed.

5.26 It is expected that the PEA will record information about:

- Habitat types and main plant communities;
- Proximity of designated statutory/non statutory sites;
- Features of potential importance for nature conservation including hedges, veteran trees, green lanes, old walls and traditional rural buildings;
- Presence, or potential for presence of legally protected species, principal species of biodiversity importance and/or notable species in Hampshire (known as Key Species, as set out in **Appendix 5.1**);
- Presence of invasive/problem species, such as Japanese knotweed, *Rhododendron ponticum*, Australian swamp stonecrop or signal crayfish, as well as evidence of heavy browsing by deer or rabbits;
- Processes, natural or otherwise, that influence biodiversity within the zone of influence (for example evidence of periodic flooding and the type of farming practices); and
- Opportunities for biodiversity enhancements (considering whether the development could also deliver such enhancements within Biodiversity Opportunity Areas (BOAs), the Hampshire Local Nature Partnership's Ecological Network Map and/or the council's Biodiversity Priority Areas (BPAs) where appropriate, as shown on Map 2 in **Appendix 5.3**).

5.27 If wetland habitats are likely to be affected, hydrological surveys may be required.

Requirements of species surveys

5.28 Ecological surveys must be submitted with the planning application for all species that are identified as requiring a survey by the biodiversity checklist, the council's Biodiversity Officer or the PEA.

5.29 If the PEA identifies that particular habitats of conservation significance are present or there is a likelihood of species being present that are legally protected or recognised as being of conservation concern (key species) (see **Appendix 5.1**) species surveys or more detailed assessments of plant communities must be undertaken.

5.30 All species surveys must include a thorough evaluation of the site and surrounding area in terms of habitat and resource requirements for the species or species group concerned.

Box B4: Bat surveys

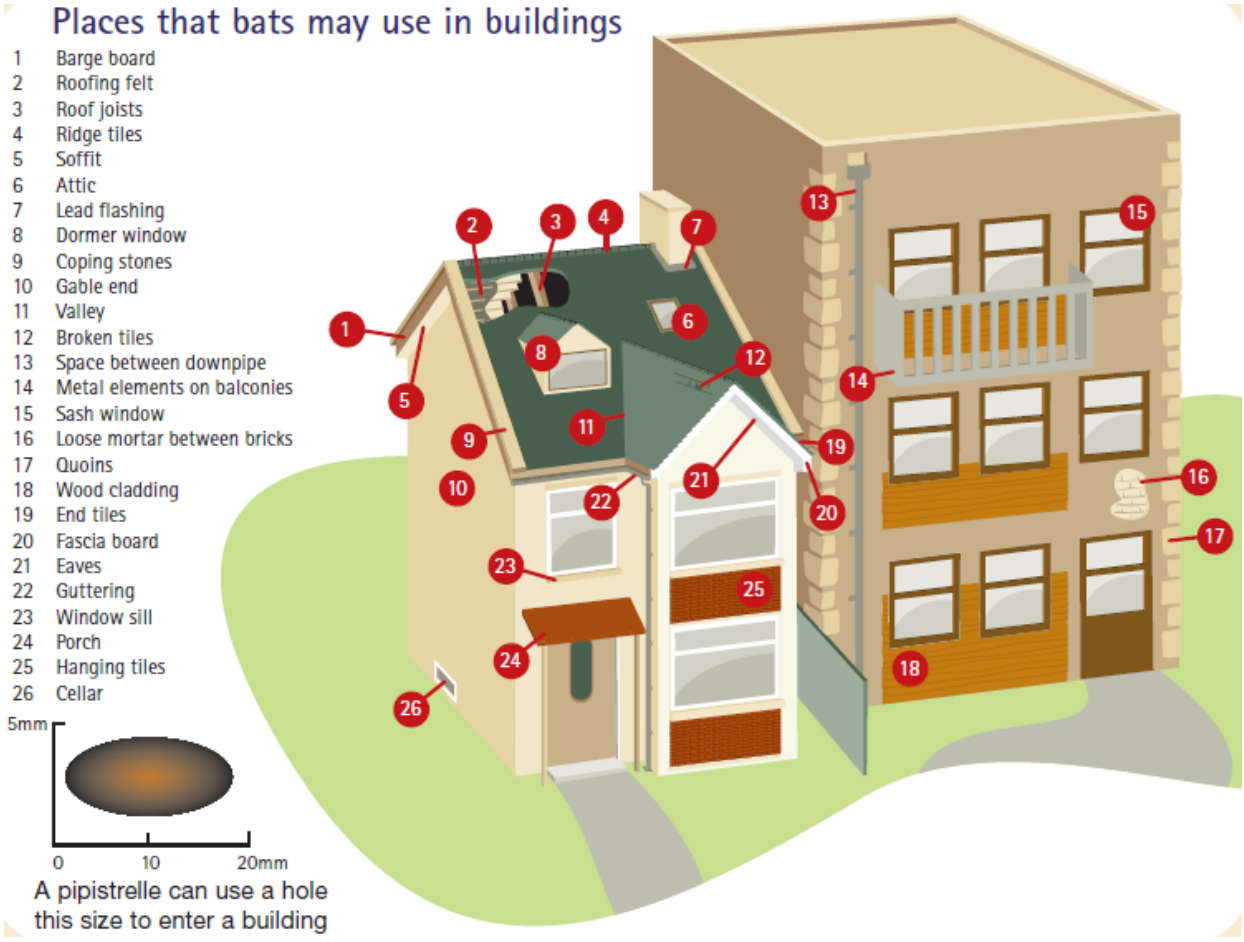
Bats are one of the species most likely to be affected by developments to existing buildings and/or tree works. They are protected by European legislation and tend to favour older buildings. As a result bat surveys must be undertaken if the proposals involve modification, conversion, demolition, or removal of buildings which are[34]:

- rural buildings (e.g. farmhouses, outbuildings and barns) of traditional brick or stone construction and/or with exposed wooden beams and/or
- buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water and/or
- pre-1960 detached buildings and structures within 200m of woodland and/or water and/or
- pre-1914 buildings within 400m of woodland and/or water and/or
- pre-1914 buildings with gable ends or slate roofs, regardless of location and/or
- located within, or immediately adjacent to woodland and/or immediately adjacent to water and/or
- demolition, in full or part, of any other building constructed prior to 1 July 1948 which is within the curtilage of a listed building and/or
- removal or pruning of trees that are mature, and/or have obvious holes, cracks or cavities, and/or that are covered in mature ivy and/or have a girth greater than 1m at 1.5 metres from ground level

If bats are present and are likely to be adversely affected by the proposed development it may be necessary to obtain a European Protected Species licence.

[34] *Taken from the Association for Local Government Ecologists (ALGE) template for biodiversity and geological conservation validation checklists 2007, available from* *http://alge.org.uk/publications/index.php*

Figure B3: Places that bats may use in buildings (Source: Bat Conservation Trust © www.bats.org.uk)



5.31 If the proposals involve conversion or demolition of a rural building, surveys for barn owls may also be required depending on if features suitable for the species to nest or roost exist. Buildings can also be used by other nesting birds such as house sparrows, house martins, swifts and swallows.

STAGE TWO: Evaluating the survey information

5.32 The desk-based study and survey information must be evaluated to understand the site's opportunities and constraints, and to inform the design of new development. The importance of any key habitat types, notable species populations and/or designated sites and the extent these may be affected by any potential impacts from the development needs to be fully considered.

Habitats

Principle B4: Protecting designated sites and key habitat types

Development proposals must not result in harm to nationally or locally designated sites or lead to the loss or deterioration of a key habitat type or harm the integrity of linkages between them within the proposed development site and the surrounding area.

Designated sites

5.33 As set out in Local Plan Policy EM4, the weight given to the protection of nature conservation interests will depend on the national or local significance and any designation or protection applying to the site, habitat or species concerned (see Box B3).

Lowland heathland at Tadley Common is an example of a key habitat type

Key Habitats

5.34 It is necessary to consider whether the site and surrounding zone of influence contains any key habitat types (see **Appendix 5.1**).

Linkages between designated sites and key habitats

5.35 The extent of connectivity between habitats and the role of individual habitats and features in providing corridors and stepping stones to aid in the movement of wildlife across the landscape should be assessed. The potential for improving connectivity through the creation of new habitat features should also be included. Map 2 in **Appendix 5.3** shows the location of Biodiversity Opportunity Areas (BOAs), Biodiversity Priority Areas (BPAs) and Ecological Network Mapping in the borough where such enhancements could be focused to bring the biggest benefits.

5.36 An assessment of the support value of land adjacent to habitats should also be made. This should include an assessment of how the present habitats on site may be affecting adjacent important habitats and should be carried out as part of a preliminary ecological assessment by a suitably qualified ecologist. Some areas, for example,

may provide valuable buffers around important habitats like semi-natural woodlands. Improved pasture, of low biodiversity value, may be important in ensuring the viability of grazing, which is necessary to maintain adjacent unimproved grasslands of high biodiversity value.

Importance of features within the site

5.37 Features within habitats must be independently evaluated for their wildlife value. Trees, for example, should be assessed in terms of any notable species they support or intrinsic habitat value created by features such as cavities or rot holes and deadwood.

5.38 Any hedges comprising native species should be evaluated to determine whether they qualify as an important hedgerow under the Hedgerow Regulations 1997, or fall within the definition of ancient or species rich hedgerows (see **Appendix 5.2**).

Beggarwood Park is a Local Nature Reserve which supports chalk grassland and ancient woodland

Example of species rich hedgerow

5.39 Habitats and populations of species must be evaluated for their enhancement potential. Where SSSIs are concerned, this evaluation must take into account the condition status as assessed by Natural England[35].

5.40 Processes affecting the ecology of the site and surrounding area, such as surface or ground water flows, must be evaluated in terms of their importance in maintaining the biodiversity of the area.

5.41 The social value of semi-natural green space should also be evaluated in terms of the opportunities it provides for public access and learning about wildlife. Its relative contribution to the amount of accessible green space in an area should form part of this assessment.

[35] https://designatedsites.naturalengland.org.uk/

Species

Key Species

5.42 Species must be evaluated in terms of the level of legal protection that apply to them, and whether they are listed as "Species of Principal Importance in England" or (local) "Notable Species" which are set out in Appendix 1 of the council's Living Landscapes Strategy[36].

5.43 Many key species are in decline nationally and as part of the council's duties under the NERC Act it will expect to see measures within development proposals that will avoid the loss of key species, and see such populations enhanced. If this cannot be achieved, developments will be expected to deliver mitigation which can clearly demonstrate plausible net gains for key species.

Invasive Species

5.44 Any invasive/problem species, such as Japanese Knotweed, must be evaluated in terms of legal considerations, implications for the biodiversity of the site, and options/opportunities for control or disposal.

New Zealand Pigmyweed, Crassula helmsii, is an example of a highly invasive, non-native plant species which grows in ponds and lakes

Species licences

5.45 If protected species are identified from surveys and are likely to be adversely affected by the development proposal, it will often be necessary to obtain a licence from the Natural England Wildlife Management and Licensing Service in addition to obtaining planning permission. Licence applications must be made by suitably experienced ecologists/wildlife specialists, and will generally require mitigation and/or compensation measures to offset any negative impacts. Natural England can advise on requirements through their Discretionary Advice Service[37] (there is a charge for this service) for proposals affecting legally protected species; however licences can only be applied for after planning permission has been obtained. Where a protected species licence is required it should be noted that submission of the survey data obtained to the local environmental record centre (HBIC) is a requirement of the licence.

[36] https://www.basingstoke.gov.uk/content/page/48903/Living%20landscapes%20appendices.pdf
[37] https://www.gov.uk/guidance/pre-submission-screening-service-advice-on-planning-proposals-affecting-protected-species

5.46 For licences that need to be obtained because the development will affect a European Protected Species (EPS) (such as bats, dormice, great crested newts or otters), the council needs to consider whether an EPS licence is likely to be granted ahead of granting planning permission. To do this the council has a duty to address the three tests contained in the Conservation (Natural Habitats &c) Regulations 2017 when determining planning applications affecting EPS. These tests are:

- that there should be no satisfactory alternative to the plan or project as a whole or in the way it is implemented
- that the plan or project must be "in the interests of preserving public health or public safety, or for other imperative reasons of overriding public interest (IROPI), including those of a social or economic nature and beneficial consequences of importance for the environment"
- and that the favourable conservation status of the species affected must be maintained

Great crested newt

5.47 The cumulative impacts of development within the local area will also need to be considered in terms of maintaining the favourable conservation status of the species concerned.

5.48 In the case of bats in certain circumstances, such as small scale housing developments and home improvements, if the bat population concerned is not of regional or national importance then reasoned statements addressing the first two tests listed above are not required. These are known as bat low impact class licences (BLICL). Further guidance on all these requirements can be provided by an experienced ecologist or one of the council's biodiversity officers.

5.49 Any mitigation or compensation measures required may influence the design of the development. Therefore, as outlined above, any protected species issues must be addressed as part of the planning application. A full report, detailing survey results, implications and proposed mitigation and compensation must support the planning application and not be deferred to by condition. If, despite mitigation and compensation measures, the proposals are deemed likely to have an adverse impact on the species concerned, the application is liable to be refused.

STAGE THREE: Designing for biodiversity

5.50 The ecological survey and evaluation information should be carefully considered from the earliest stage of a development so that it can be used to inform the opportunities and constraints plan. It will be expected that this will be used to plan the layout and thereby show how certain impacts have been avoided from the outset. Box B5 below outlines some of the potential biodiversity impacts from development.

Box B5: Potential biodiversity impacts from development

- Changes to water table height and hydrology of the area and the subsequent impact on habitats and important plant communities.
- Changes to stream/river flow and the resulting impacts on aquatic and riparian ecology.
- Pollution of water courses from run-off from roads and parking areas.
- Impacts of any archaeological investigations or remediation of contaminated land on habitats not identified through constraints mapping.
- Wildlife disturbance and damage to habitats through construction, recreation and increased risks of unlawful activities, such as trespass, vandalism and introduction of non-native species. This should extend to offsite effects via public rights of way, other publicly accessible land, permissive routes and potential routes of trespass.
- Loss of foraging/commuting habitat for important species.
- Loss of general ecological resources needed to support biodiversity, such as water sources, food plants and nectar sources, and nest sites and song posts for birds.
- Effects of lighting, especially any strong floodlighting, on important nocturnal species such as bats.
- Effects of pet predation on important species.
- Disturbance of important species due to construction work, and the intended use of the proposed development.
- Risk of pollution from construction materials/effluents, such as dust/cement powder or cement washings.
- Storage of materials, location of site huts, construction traffic (parking, turning areas, routes and site access).
- Effects on the long-term viability of land management required to conserve important habitats.
- Effects on bats from construction materials such breathable roof membranes which pose a risk to bats through entanglement.

5.51 As set out in the NPPF and Local Plan Policy EM4, if significant harm to biodiversity cannot be avoided (through modifying the design or locating on an alternative less harmful site), it should be adequately mitigated, or as a last resort, compensated for. This series of sequential, hierarchical steps that need to be taken to limit, as far as possible, the negative impacts on biodiversity from development is known as the mitigation hierarchy. It should be followed for every development. Each of the stages is described in more detail below.

5.52 There may be circumstances when it is not possible to avoid all constraints. In addition, there will be indirect impacts that are not obvious from simple overlays of development proposals. Impacts should be assessed in accordance with professional best practice, as set out in Guidelines for Ecological Impact Assessment in the United Kingdom[38].

[38] https://www.cieem.net/news/293/guidelines-on-ecological-impact-assessment-second-edition

Cumulative impacts on species from other recent developments within the wider area should also be considered.

Avoidance

Principle B5: Biodiversity and site design

The layout and design of new development should avoid, wherever possible, and minimise harm to the identified features of nature conservation.

Where appropriate, the timing of works should be altered so that the site is left undisturbed during sensitive times, such as the breeding season or avoiding night working involving flood lights and noisy machinery to avoid impacts on nocturnal species.

Loss of or harm to irreplaceable habitats (such as ancient woodland and aged or veteran trees), will, by definition, always entail net loss of biodiversity, so should be avoided.

5.53 To avoid any impacts that are identified, changes to the design should first be considered. Only when this option has been exhausted, should consideration be given to ways of mitigating the remaining impacts.

5.54 One example of avoidance would be the retention of dark corridors especially on tree lines or woodlands throughout developments in order to prevent impacts on nocturnal wildlife. Construction Method Statements should be used to demonstrate how harmful impacts on important biodiversity features will be avoided during construction.

Mitigation

Principle B6: Mitigating impacts upon biodiversity

Where impacts cannot be avoided, measures must be taken to reduce adverse impacts on the biodiversity interests of the site.

Existing landscape features should be retained and integrated into development with adequate buffer zones to mitigate impacts on these features (as set out in Box B6).

Mitigation measures

5.55 Unavoidable impacts should be mitigated. Mitigation means taking steps on the site itself to minimise the duration, intensity and/or impacts that cannot be avoided entirely. For example, tunnels under roads to allow wildlife to pass from one side to the other unharmed, or the use of low level lighting or shield/hoods to street lighting to retain dark corridors thereby avoiding disturbing nocturnal wildlife.

Tunnels under the roads at Marnel Park in Popley allow Great Crested Newts to move through the development

5.56 When considering mitigation measures, the following points must be taken into account:

- Unproven mitigation methods will be treated as such by the council. The uncertainty and risk of failure will be taken into account when assessing the proposals against planning policies;
- All relevant professionals must be involved in developing mitigation solutions (engineers, for example, may need to work with tree specialists to design hard landscape elements that reduce impacts on trees whilst meeting other performance requirements);
- Measures designed to mitigate one impact, may give rise to other impacts which need to be taken into account (for example, extensive tree belts for screening may adversely impact on the character of open downland and be inappropriate);
- Planting intended to provide screening or habitat replacement may take a considerable amount of time to take effect and realistic growth rates must be taken into account when considering this type of mitigation;
- Mitigation involving control over construction activities must be considered at this stage, to ensure feasibility. For example, temporary protective fencing may conflict with working room for scaffolding, if there is insufficient space between proposed buildings and the features to be protected;
- Mitigation measures need to be sufficient to maintain and improve the continued ecological functionality for the species or habitat to be impacted on site. Measures employed will need to be based on best practice guidance, where these exist, and the council will request monitoring where this is considered appropriate to measure the success of such measures. This monitoring information will be used to inform future responses to planning applications;
- The optimal mitigation times for development activities to avoid negative impacts on key and protected species are set out in Figure B4 below.

Figure B4: Optimal mitigation times for key species (based upon Natural England guidelines)

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Badgers												
Bats												
Birds - breeding												
Birds - overwintering												
Dormice - above ground removal												
Dormice - complete vegetation clearance												
Great Crested Newts												
Invertebrates	Species Dependent											
Otters	Site Dependent											
Reptiles												
Water Voles	Site Dependent											
White clawed crayfish												

5.57 Where initial assessments suggest that existing landscape features/habitats can be integrated into development without adverse effects, it is important to allow for adequate buffer zones between the feature and the buildings or hard landscape elements.

Box B6: Buffer zones for biodiversity

Aquatic habitats

For main rivers, minimum buffer zones of 20 metres width should be provided on both sides of the channel unless exceptional circumstances can be demonstrated that would justify this being reduced to an absolute minimum of 10 metres. 5 metre buffer zones should be provided for non-main rivers, ditches, or ponds as a minimum. These measurements should be taken from the top of the adjacent bank rather than mid-channel (see diagram below).

Buffers zones to watercourses and water features are required for the following purposes:

- To allow the watercourse to undergo natural processes of erosion and deposition, and associated changes in alignment and bank profile, without the need for artificial bank protection works and the associated destruction of natural bank habitat;
- To provide for the terrestrial life stages of aquatic insects, for nesting water-related bird species, and for bank dwelling small mammals;

- To provide a wildlife corridor bringing more general benefits by linking a number of habitats and affording species a wider and therefore more robust and sustainable range of linked habitats;
- To allow for the maintenance of a zone of natural character with vegetation that gives rise to a range of conditions of light and shade in the watercourse itself. This mix of conditions encourages proliferation of a wide range of aquatic species, including fish;
- To allow, where appropriate, for the re-grading of banks to a lower and safer profile, in areas where there is public access;
- To prevent overshadowing of watercourses by buildings; and to reduce the risk of accidental pollution from run-off.

Tree belts and woodlands

Buffer zones should be created that provide a naturally graded edge to woodlands and allow for maintenance access. In the case of semi-natural woodlands, the buffer zone should also allow the natural processes of tree death and decay to occur without unnecessary risk to people or property.

A minimum buffer of 20 metres should be provided between the edge of the woodland/tree belt and the development. Where a minimum buffer is proposed, information will be required to demonstrate that this will be adequate to prevent any adverse impact upon the woodland or tree belt feature.

Where it is considered the woodland and/or tree belt form part of an important wildlife corridor, for example of particular importance to bats, or where the woodland is ancient in origin, then the council will expect buffers exceeding the 20 meters minimum as a precautionary principle and especially for major development.

When designing housing schemes close to woodland, housing must face onto the areas of existing woodland. For the purposes of measuring the buffer, the edge of the woodland should normally be considered as the outer edge of the tree canopy (unless other woodland edge habitat is also in place and is a functional component of the woodland, in which case this should also be considered as part of the existing woodland). The edge of the canopy will be the agreed measured point at the time layout plans are approved.

It will also be necessary to provide buffers around individual trees to avoid encroachment into the tree's root protection area. Further guidance is provided in Section 6 of this SPD.

Important hedgerow habitats

Important hedgerows on site or those hedgerows particularly important for a key species, such as dormice, should be given a minimum 5 metre buffer distance between the hedgerow and the development (including gardens), unless it can be demonstrated that adverse impacts on the hedgerow habitat can be satisfactorily addressed if a lesser distance is applied. The starting point of the buffer should normally be considered as the outer edge of the hedgerow (see diagram below). The design layout should allow for compatible land uses, such as green space rather than private gardens, adjacent to such hedgerows so that they can receive the necessary management to conserve them.

Figure B5: Illustration of the biodiversity buffers

5.58 Failure to provide a sufficient distance between dwellings and tree belts or woodlands can result in reduced quality of life for residents, due to heavy shading and perceived danger, as well as adversely affecting the ecology of the tree belt or woodland, due to dumping of garden rubbish, light and noise pollution and pressure for lopping trees and removing valuable deadwood habitat. Rear gardens that abut woodland can also reduce the security of dwellings. Similar issues relate to industrial units which impact ecology of woodland or tree belts through the dumping of industrial rubbish, the effects of light and noise pollution, lopping of trees, root compaction and the effects of over shading.

5.59 Buffer zones could incorporate other uses such as accessible natural green space, where this is compatible with the buffer function. Buffers to protect woodlands could incorporate the following features depending on the size and nature of the woodland:

- Woodland edge (gradation of vegetation from the woodland canopy through understory and shrub layer to the field layer (ecotone);
- Inaccessible buffer, comprising woodland edge habitat sufficient to manage / prevent human entry into the woodland from the developed area (where ecological sensitivities merit this);

- Habitat for hunting by domestic cats to reduce predation pressure in the woodland area;
- Sufficient space for an appropriately surfaced desire line footpath outside the woodland edge habitat to reduce access pressure on the woodland if required;
- Links to existing footpaths if these run through the woodland if necessary;
- Information signage relating to the protected woodland habitat and/or directional signage
- Appropriate fencing, if required, in order to maintain limited access to the buffer and/or woodland
- An appropriately planned and funded long-term management plan of the buffer and affected woodland, with the principal objectives of nature conservation and woodland protection.

5.60 Given the purpose of buffers is to protect and enhance aquatic, woodland and/or hedgerow habitats, below is a list of some of the features that would be considered to be part of the development and should not be included within the buffer area:

- Private gardens
- Hard surfacing such as roads and pavements
- Allotments
- Formally managed areas, including sports pitches and kick about areas, parking areas or unwarranted vehicular access which could be utilised for fly tipping (access for maintenance should however be included)
- High level lighting, including flood lighting, which would cause disturbance to nocturnal species.
- Inappropriate planting species, such non-native species or densely planted species which may shade out an aquatic habitat for example

Thames Basin Heaths SPA

5.61 Development in some parts of the borough has the potential to have an adverse impact upon the Thames Basin Heaths SPA (see Map 1 in Appendix 5.3).

5.62 Mitigation will be required for residential development that is likely to have a significant effect on the ecological integrity of the Thames Basin Heaths SPA, in accordance with Local Plan Policy EM3. This policy seeks to avoid the impact of recreation and urbanisation on the internationally important breeding habitat for three rare species of bird populations (Dartford Warbler, Woodlark and Nightjar) through increased housing within close proximity of the SPA. As a result, if such developments fall within the 5 km buffer zone around the Thames Basin Heaths SPA, a separate assessment, known as an Appropriate Assessment under the Habitats Regulations 2017, will be required. Appropriate Assessments may also be required for large scale residential development within 5-7 km of the SPA along with bespoke mitigation.

Securing mitigation measures

5.63 In order to secure any necessary protection and mitigation the council may impose a condition requiring the applicant to submit and have approved a Wildlife Protection and Mitigation Plan (WPMP). Such plans need to avoid the use of tentative language and should detail precisely what measures will be taken on site to ensure they are enforceable.

Enhancement

Principle B7: Biodiversity enhancement

The council will expect all proposals to enhance the biodiversity of the receiving environment. Developments must result in no net loss of biodiversity and provide a measurable net gain. This will be in proportion to the nature of the development proposed.

Information should be provided on the amount of any key semi-natural habitat lost to development and the amount of habitat created/restored.

Opportunities should be taken to enhance and extend existing biodiversity and ecological networks that exist within the site and also to provide links to those networks which run through and beyond the site boundaries (as shown in **Appendix 5.3**).

5.64 Basingstoke and Deane Borough Local Plan Policy EM4 and the NPPF require that new developments deliver a net gain for biodiversity. The government has international and national commitments to achieve net gains in biodiversity and development can contribute towards realising these commitments. Recent guidance[39] has been published on the principles to achieving this. The council will expect developments to demonstrate how a net gain has been achieved, through quantitative information (i.e. number or area) within ecological reports outlining what biodiversity features will be lost and what biodiversity features will be restored, created and/or enhanced. The council intends to adopt a Biodiversity Compensation Framework that will provide a measurement metric to calculate biodiversity net loss or gain (see section on 'Compensation', below). Once this has been adopted, the council will expect developers to use this to demonstrate how biodiversity enhancements have been achieved. In the meantime developers are encouraged to use one of the metrics in use by other local planning authorities in the country, such as Warwickshire County Council[40]. These are based on the metric developed by Defra.

5.65 **Appendix 5.3** (Map 2) shows the location of Biodiversity Opportunity Areas (BOAs), Biodiversity Priority Areas (BPAs) and Ecological Network Mapping in the borough. These are areas have been identified as having potential to restore or create key habitat types or to provide habitat patches that species can use to move easily between sites thereby maintaining ecological function and conserving biodiversity. The BOAs and 'Network Opportunities' components of this mapping should be used to inform proposals to achieve net gain for biodiversity as part of the planning process. In particular the 'Network Opportunities' mapping can be used to target potentially the best areas for offsetting habitat loss, if this is required. The council can provide details on this mapping for individual developments until such time as the information becomes publicly available.

5.66 Site analysis undertaken earlier in the design process will have helped identify the opportunities for habitat creation and enhancement. The creation of viable habitats is a specialist task and must involve suitably experienced ecologists, working with landscape architects. Additional site investigations to establish soil characteristics and hydrological factors may be required. Key points are:

[39] Biodiversity Net Gain – Principles and Guidance for UK Construction and Developments (CIEEM, CIRIA, IEMA) 2016.

[40] https://www.warwickshire.gov.uk/biodiversityoffsetting

- proposed habitat types reflect the soils, geology and hydrology of the site
- proposed habitat types support the implementation of habitats of principal importance (Section 41 list – see **Appendix 5.1**)
- native plants of local origin are specified to help conserve genetic diversity
- long-term management requirements are financially viable and practical

5.67 Green or brown roofs and green walls are a good way of securing biodiversity contributions, especially in high density schemes where there are limited opportunities for habitat creation. They also have benefits in terms of sustainable drainage and insulating buildings, making them more energy efficient in line with the council's climate change strategy, and can provide additional private amenity space. In areas with more space other sustainable drainage systems utilising land form such as swales or retention basins can deliver wetland habitats in areas where they are lacking.

5.68 Green bridges and culverts are also good ways of securing biodiversity contributions and are effective in retaining habitat links for species through built environments which are divided by roads and other transport links.

5.69 In order to secure any necessary biodiversity enhancement the council may impose a condition requiring the applicant to provide a Habitat Enhancement Plan (HEP). The purpose of the HEP is to detail habitat creation (where a habitat type is created on a site that does not already contain it) or restoration (where poor quality habitat already present is managed in such a way as to increase its species diversity and richness) in order to achieve a net gain for biodiversity. The plan must avoid the use of any tentative language, and should detail precisely what measures will be taken on site to ensure it is enforceable.

Enhancing biodiversity on buildings

5.70 As set out in Box B4, earlier in this SPD, any works relating to buildings with certain features may have the potential to impact roosting bats. If present and likely to be adversely affected by the works, mitigation will need to be put in place to retain the 'favourable conservation status' of any bat populations present. This could be achieved, for example, by retaining bat access into developed roofs through the use bat access roof tiles and bat bricks. Purpose built bat lofts of recommended dimensions[41] can be introduced into the roof structures of buildings with access provided by bat access roof tiles. If for a particular reason the retention of a bat loft roost within a building is not possible then the erection of bat roost boxes could be considered instead in suitable locations to provide alternative roosting opportunities depending on the species concerned.

5.71 A number of birds also utilise buildings for nesting including barn owls and species such as swifts, swallows and house martins all of which are protected under the Wildlife and Countryside Act 1981.

5.72 New development creates opportunities to enhance sites for such species within routine building practices by providing breeding spaces for them. Artificial house martin or swallow nests can easily be fitted under eaves to encourage nesting following development and swift bricks or boxes can be installed into walls or beneath roof structures. Colony nesting species such as house sparrows can be catered for using artificial nesting boxes which house three or more nests and can be fitted to walls.

[41] Natural England Bat mitigation guidelines

5.73 Barn owls use quiet barns and cavities in trees for nesting and roosting. Enhancements for this species can be made by installing a barn owl nest box in a suitable position.

5.74 In relation to larger buildings the introduction of green roofs or walls with high numbers of nectar rich flowering plants can provide the opportunity for the installation of artificial insect nesting boxes.

Compensation

Principle B8: Biodiversity compensation

Where the effects of development cannot be fully avoided or mitigated, compensation will be required as a last resort.

Harm or loss of irreplaceable habitats, such as ancient woodland, by definition cannot be compensated and will always result in net loss of biodiversity which is contrary to planning policy.

5.75 If mitigation is unable to fully address impacts and deliver measureable net gains for biodiversity, compensation should then be considered (for example, by creating substitute habitats or features elsewhere). The acceptability of compensation measures will depend on the extent to which that habitat or feature can be satisfactorily recreated. Compensation would not, for example, be able to address the loss of irreplaceable habitats such as ancient woodland. It will be expected that the amount of habitat to be created/restored as compensation will be more than that to be lost to achieve a net gain for biodiversity.

5.76 Following the adoption of this SPD, the council will develop a Biodiversity Compensation Framework that will seek to achieve a more reliable measured net gain for biodiversity across developments. The council will seek to gradually roll out this new approach across mainly major developments as they arise working with Natural England's recommendation that all developments over 0.1ha should show measurable net gain in biodiversity. It is envisaged the Framework will help compensate in particular those sites that do not currently carry a site designation or support a key habitat type or species but never the less have some intrinsic biodiversity value.

5.77 Where offsite compensation measures may be required, the council will seek opportunities to support strategic initiatives, where these exist and are appropriate. Current examples include habitat creation, restoration and/or management within the council's Biodiversity Priority Areas or the areas mapped as 'Network Opportunities' within the Borough (see paragraph 5.5). Other strategic initiatives may be developed following the adoption of the Biodiversity Compensation Framework.

Case study of hedgerow planting to compensate hedgerow loss

When hedgerows are removed for reasons of access or construction the council will expect compensatory hedgerows to be planted to re-establish habitat connectivity within or around the boundaries of a site. These hedgerows will be expected to be of a representative native species mix of shrub and trees indicative to the area concerned. Native hedgerows will be expected to be planted in at least double rows with 3 plants to 1m. Spiral or some other form of protective guard will be expected to protect individual plants within their first years of growth as will ongoing regimes to maintain the hedgerows and replace dead stock as necessary within a set time frame.

5.78 Any residual impacts of the planning proposals, i.e. those impacts that remain following the implementation of the mitigation measures proposed, will be considered. Where residual impacts are identified and planning applications are approved, the development will be conditioned to comply with any mitigation and compensation strategies required within the information supplied to make the development proposal acceptable. The Community Infrastructure Levy (CIL)[42] may be used to fund the strategic creation, restoration and/or management of habitat infrastructure to off-set cumulative residual impacts of major development on biodiversity.

During construction and long-term maintenance

Principle B9: Protecting biodiversity during construction and post development

A wildlife protection and mitigation plan (WPMP) and/or a Construction Method Statement (CMS) will be required where necessary to demonstrate that important biodiversity features will be safeguarded from harm during construction and/or occupation of the development.

5.79 If planning permission is granted where there are biodiversity implications it is likely to be subject to conditions and legal obligations relating to the protection of biodiversity features and the mitigation measures required to reduce biodiversity impacts. It is essential that working drawings and contract documents accurately reflect the proposals as approved.

[42] https://www.basingstoke.gov.uk/cil

Case study showing how biodiversity can be effectively protected

The use of 2 metre-high Heras fencing and reptile fencing has protected an identified ecological buffer zone from construction activities. Slow worms from the entire development site were placed within this identified area which is to be retained as habitat following completion of the development. Clear signage can be seen on the fence line informing construction operatives of the nature and importance of the area.

5.80 Where protective fencing is proposed, it must enclose buffer zones identified by the relevant experts.

5.81 The protection plan must be accompanied by method statements and specifications for any mitigation measures required that clearly identify what actions will be taken in relation to different phases of construction (i.e. with a timetable of implementation).

5.82 Where the ecological features of development are significant or the development site is large and includes a range of ecological features, an Ecological Clerk of Works will be required to ensure ecological method statements and plans are adhered to

5.83 Where protected species are involved, a licence may have to be obtained once planning permission has been granted. This is a separate process, independent of the planning system. However, the details of the planning decision will be taken into account by the licensing authority, in determining whether there is an overriding public interest reason for granting a licence (see earlier advice on meeting the derogation tests within the licensing process in Section 5.46). It is important that any mitigation required as a condition of the licence, is integrated with the general biodiversity elements of the approved planning permission.

Management and monitoring

Principle B10: Long term management and monitoring of biodiversity features

Where appropriate, a habitat management plan will be required to ensure habitats retained or created through development are maintained in perpetuity.

5.84 Where a significant amount of habitat is to be retained, restored or created, the Local Planning Authority may use a planning condition or Section 106 Planning Obligation to require the production of a Habitat Management Plan. The Management Plan should identify the biodiversity features which will be managed to maintain and enhance the site's nature conservation value. It should set out objectives for these habitats with detailed management specifications and a monitoring program of ten years or more. Paragraph 6.60 of the SPD provides specific guidance on the requirements for Woodland Management Plans.

5.85 All Management Plans must be fully costed and specify how the management or monitoring will be funded. They should be prepared for wildlife habitats, whether or not the council is to adopt the land. They should include:

- Purpose, aims and conservation objectives for the scheme
- A review of the site's ecological potential and any constraints
- Description of the target habitats and range of species appropriate for the site;
- Detailed working methods for site preparation and to achieve stated objectives.
- Extent and location/area of proposed works on appropriate scale maps and plans.
- Type and source of materials to be used (e.g. planting stock).
- Timetable for implementation demonstrating that works are aligned with the proposed phasing of development.
- Persons responsible for implementing the works.
- Details of initial aftercare and long-term maintenance including mechanisms (legal and other) to ensure effective long term management.
- Details for monitoring and remedial measures.
- Details for disposal of any wastes arising from the works.

5.86 Where land is to be adopted, the council has a schedule of costs for different habitat management costs which will be used to calculate the appropriate commuted sum (see guidance on green space adoption in the Landscape chapter – Principle L12).

6. Trees, woodlands and hedgerows

Introduction

6.1 Trees, woodlands and hedgerows offer many environmental benefits. As well as capturing carbon dioxide and providing oxygen, trees remove pollution from the air and improve the quality of water. Trees provide food and shelter for wildlife including bats, birds and insects. Visually, trees and woodlands often form significant landscape features, being seen across a wide area. In urban areas they can be important historic features which help to soften the built form and provide more desirable places to live and work. In rural areas they provide a character to the landscape and contribute to the mosaic of land use and habitats. All the above has a direct positive impact on our health and wellbeing and demonstrates the importance of maintaining a healthy and diverse tree resource. Retained and new tree planting can also help to add value to new development (as trees have been shown to increase the value of nearby properties), and create more positive perceptions of new development.

6.2 The purpose of this chapter is to show how issues relating to trees will need to be assessed to in the planning process to ensure these benefits can be achieved. Whilst this document outlines broad tree considerations, it is strongly advised that landowners and developers should seek advice from a specialist arboriculturist from the outset.

Policy context

6.3 National Planning Policy Framework includes a number of sub-sections towards achieving sustainable development that relate to trees. These include: Requiring good design; promoting healthy communities; meeting the challenge of climate change; and conserving and enhancing the natural environment. The NPPF (2018, para 175) provides particular protection for ancient woodland and aged or veteran trees.

6.4 The principal Local Plan policy for determining planning applications including trees is Policy EM1 (Landscape). This seeks to ensure that development proposals respect, enhance and are not detrimental to the character or visual amenity of the landscape likely to be affected paying regard to its natural features including trees, ancient woodland and hedgerows. Policy EM4 (Biodiversity, Geodiversity and Nature

Conservation) seeks to ensure there would be no loss or deterioration of key habitat types including veteran trees.

6.5 Trees of special landscape, cultural or ecological importance may be subject to a Tree preservation order (TPO). Within a conservation area, all trees with a trunk diameter exceeding 75mm at a point measured 1.5m above ground level are also protected. However, all trees are a material consideration in the planning process and this section of the SPD provides guidance on how to incorporate new and existing trees into development.

Trees and the planning process

6.6 When determining applications for development, the council will require that important hedgerows, trees and woodlands are safeguarded and adequate provision is made for the planting of new trees. In order to do this successfully, it is essential that trees are considered from the very outset of the development planning process.

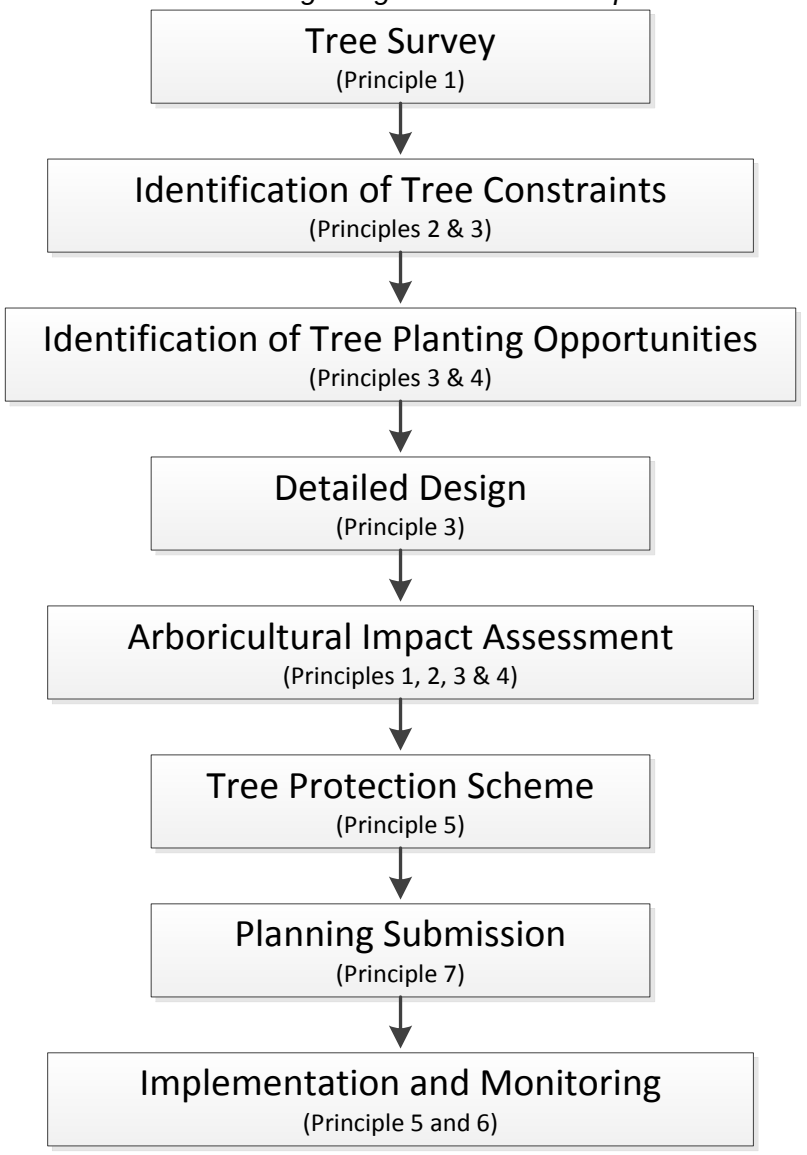
6.7 Design will need to ensure that the development integrates with trees, rather than conflicting with their current and future growth. During the construction phase, trees will need to be protected to prevent accidental damage and long-term management plans may be required to ensure that their value is retained for future generations.

6.8 Where the correct design process is not followed and trees are pre-emptively removed before progressing a planning application, the council will require substantive replacement tree planting of similar species to demonstrate compliance with Local Plan Policy EM1. This will ensure development respects and enhances the visual amenity of the landscape. Early engagement of a professional arboriculturist[43] will help to identify those trees that should be retained and those which should be removed to achieve a sustainable development. This may also reduce the likelihood of unauthorised tree works being undertaken, which could result in a prosecution.

6.9 Figure T1 sets out the process for considering trees through the development process.

[43] The Arboricultural Association maintain a list of independently approved arboriculturists. This can be downloaded from their website at https://www.trees.org.uk

Figure T1: Process for successful integrating trees into development



Understanding the tree resource

Principle T1: Site Survey requirements

Where there are trees on or within falling distance of a site, a tree survey shall be carried out by an arboriculturist in accordance with the British Standard 5837.

6.10 To ensure that development proposals take full account of trees, hedgerows and woodlands, a tree survey will need to be undertaken in accordance with the current British Standard 5837 as a part of the initial site investigations. This should record all trees with a stem diameter greater than 7.5cm at a point 1.5 metres from ground level, along with an accurate location. The survey must include all trees within the site, as well as trees within falling distance of the site.

Groups of Trees and Woodlands

6.11 Where trees are growing in groups or woodlands, it may be more appropriate to record these as single entities, mapping their outer crown spread and recording their age range, overall height and species mix. Woodlands shall be classified in accordance with the National Vegetation Classification system[32] and where appropriate, they should be compartmentalised into smaller areas based on species composition and/or age class. If development is proposed within or on the edge of groups or woodlands, it will be necessary to record trees that might be affected as individuals.

Hedgerows

6.12 Hedgerow surveys should include those within and around the site. Their position should be recorded, along with details of species composition, condition, height, width and approximate age.

Offsite trees

6.13 It may be necessary to survey trees or hedgerows on adjacent land. If these cannot be accessed for measuring, an estimate should be made. It must clearly state on the drawings where estimates have been made.

Evaluating the trees

6.14 Trees shall be categorised according to their landscape, ecological and cultural value, and awarded a rating from A to C based on its quality and remaining life expectancy. Low quality trees with little estimated life expectancy, or those that may be easily replaced are rated U. It is important that results of the landscape and biodiversity evaluations are used in assigning these values, and this should not be an isolated exercise. Groups of trees and woodlands should be given an overall grading, rather than attempting to grade each individual tree within the entity; however, individual trees of particular importance within such areas should be recorded individually.

Tree works

6.15 Any required work to trees shall be identified during the tree survey, having consideration to the proposed use of the site. This should not ordinarily be carried out until planning permission has been granted; however, if critical work is necessary for reasons of safety then you should take advice from your arboriculturist and notify the local planning authority as soon as possible. All works should be carried out in accordance with the current British Standard 3998.

6.16 It is recommended that the council's Natural Environment Team is contacted in order to confirm whether any trees on or potentially affected by a proposed development site are subject to a tree preservation order (TPO) or if the site is located within a conservation area. More information can be found online here: https://www.basingstoke.gov.uk/protectedtrees.

Selecting trees for retention

Principle T2: Retention of trees

Important trees shall be retained and integrated into the development, with no loss of key habitat types and/or irreplaceable habitats.

6.17 The BS5837 tree survey will form the basis of a tree constraints plan clearly demonstrating the crown and root constraints (Root Protection Area, RPA) associated

with each tree, group, woodland or hedgerow. A tree's RPA may need to be adjusted where existing infrastructure has influenced its root distribution. The tree constraints plan is a design tool to help inform the proposed site layout as the design evolves.

Tree Categorisation

6.18 Those trees assessed as category A or B in accordance with the British Standard 5837 shall be retained, unless the need for development in that location clearly outweighs the loss of such trees and adequate mitigation can be provided. Those assessed as category C trees should be retained wherever appropriate. Where there are only category C trees on the site, it may be appropriate to retain them until new tree planting can be established. Where a tree has been identified as having serious defects, or if it is unlikely that a tree will survive the construction process, then it will need to be clearly marked using a dashed outline, unless it is desirable and practicable to retain the tree to preserve its conservation value.

Irreplaceable habitats and key habitat types

6.19 Whilst all trees are a material consideration when determining planning applications, the National Planning Policy Framework places special emphasis on irreplaceable habitats

6.20 Development resulting in the loss of ancient woodland or ancient and veteran trees shall be refused, unless there are wholly exceptional reasons, as outlined in the NPPF, and a suitable compensation strategy exists.

6.21 Other priority habitats include species-rich hedgerows, native broadleaved woodland, wood pasture and traditional orchards. Development that results in the loss of such hedgerows, trees and/or woodland shall be refused in accordance with criteria (e) of policy EM4 of the Local Plan.

Impact on heritage assets

6.22 Local planning authorities are under a duty to protect the setting of listed buildings and to preserve or enhance the character or appearance of conservation areas. This is further detailed in the council's emerging Historic Environment SPD. Important trees which contribute to the setting of a heritage asset or the character and appearance of a conservation area must be retained.

Box T1: Canopy cover change

The council is committed to mitigating the effects of climate change in the borough. Tree canopy cover can help by locking carbon, filtering pollutants and reducing surface water flooding.

The council therefore requires developers to provide an assessment of the overall gain or loss of canopy cover across a site, taking into account tree removals and the ultimate size of new tree planting for the following types of development:

- Residential developments of more than 5 dwellings (gross); and
- Major non-residential development.

The change should be expressed as a % increase or % decrease, using the tree survey as a baseline before taking into account the mature size of new tree planting and any tree removals.

The information will be used to monitor, maintain and enhance net canopy cover in accordance with the council's Green Infrastructure Strategy[44].

The council will seek to enhance canopy cover wherever appropriate.

Incorporating trees into development

Principle T3: Integrating trees into new development

Adequate space shall be given to retained trees, woodlands and hedgerows to allow for their retention and future growth without conflicting with the design and purpose of the development itself.

6.23 All trees, whether they are retained existing trees or proposed new trees, must be sustainably integrated into the proposed development. They must be given sufficient space to develop, both above the ground for future canopy growth without the need for overly burdensome pruning work, and below the ground for root development.

Providing buffers

6.24 Adequate separation will need to be provided from windows to allow natural daylight into buildings. For large growing trees such as ash, sycamore and oak, there should be a separation of at least 4m from the edge of the ultimate canopy spread, when viewed from above. This distance may need to be increased if the RPA of the tree is closer than the prescribed separation distance, but should not be reduced without justification. Trees should not unduly overhang gardens and as a general rule, no more than 1/3 of a garden's total useable area (excluding drives and outbuildings etc.) should be beneath tree canopy.

6.25 For larger developments, the layout should be designed in such a way that large growing trees and woodland are located and integrated into areas of publicly accessible open space, rather than being incorporated into private gardens. To safeguard woodlands and tree belts, adequate buffers must be provided to separate them from nearby development. Section 5 (Biodiversity) and Box B6 provides more information on providing buffers around woodlands and tree belts.

6.26 Development should be planned to avoid any encroachment into a tree's root protection area (RPA). Only where there is unavoidable conflict and the developer has demonstrated that all other options have been exhausted, will the council consider the use of engineered design solutions and tree-tolerant methods of working to allow low impact uses within the RPA. Such uses may include hard surfacing, placement of services and low impact foundations. Full justification will be required and each case will be considered on an individual basis, weighing the importance of the tree against the likelihood of it tolerating the encroachment.

6.27 Due to their special status, the council will resist any encroachment into the root protection area of ancient or veteran trees. This is a buffer zone at least 15 times larger than the trunk diameter of the tree, or 5m from the edge of its canopy, if that is greater.

[44] https://www.basingstoke.gov.uk/ENV09

Development requirements within RPAs:

Hardstanding	Where hard standing within the RPA is unavoidable, only 'no-dig' construction techniques that minimise soil compaction and is permeable to air and water will be permissible. Development proposals must demonstrate that the tree will tolerate the surface, having regard to existing ground levels, the extent of encroachment (expressed as a % of the tree's total RPA), the condition of the tree and its ability to tolerate root disturbance. Cross sections will be required to demonstrate existing and proposed ground levels as well as section drawings of the proposed hard standing. Please note that no-dig type surfaces may not be adopted by the highway authority and so should be avoided in such circumstances.
Foundations	Strip foundations within the RPA will not be accepted, except for category C trees, where the encroachment is minor and it can be shown that the tree is likely to survive the incursion. In some instances, specially designed foundations such as mini piles, that minimise harm to roots may be acceptable to facilitate greater encroachment; however, full justification will be required, having regard to the extent of encroachment, the likelihood of root growth, the tree's ability to tolerate root disturbance and the nature of the structure itself. Cross sections will be required to demonstrate existing and proposed ground levels as well as section drawings of the foundation.
Services	Underground services will only be permissible within a tree's RPA once all other options have been exhausted. Development proposals must demonstrate that the services can be constructed and maintained in accordance with the National Joint Utilities Group recommendations (Street Works UK volume 4) - Guidance for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees. New overhead services, such as streetlights, signage and CCTV should be positioned where they will not conflict with the mature canopy spread of retained trees.

6.28 An assessment should also be made, taking into account desk studies of geology/follow up soil surveys, of the risk of existing or new trees causing subsidence to proposed buildings. This can then be used to inform foundation design.

Arboricultural Impact Assessment

6.29 Once the development has evolved into a proposal that is ready for submission to the local planning authority, it will be necessary to produce an Arboricultural Impact Assessment (AIA). In addition to the identification of trees to be removed, the AIA will need to consider any post development impact that the development will have on retained trees.

6.30 The document will need to address each of the following common areas where trees can be affected by development:

- Proposed demolition
- Proposed access and driveways
- Proposed new buildings, including garages and other outbuildings
- Existing and proposed services, to include (but not restricted to):
    - Drainage, including SUDS and soakaways
    - Fresh water
    - Telecommunications
    - Gas & Electricity
    - Lighting, signage and CCTC
    - Solar panels/collectors and ground source heat pumps
- Sightlines where there is a likely increase to traffic using the site
- Proposed hard and soft landscaping
- Level changes required for other constraints, such as contaminated land remediation and archaeology (or a statement to confirm that this is not applicable)

6.31 This list is for guidance only and a statement may be provided to outline why any item has been discounted. Conversely, this list is not exhaustive and other potential conflicts should be included where necessary. Whilst the exact locations of some of these elements may not be known at the evaluation stage, indicative drawings will need to be submitted to demonstrate that it is feasible to avoid the RPA of retained trees.

Box T2: Arboricultural Masterplan

The potential conflicts outlined in the Arboricultural Impact Assessment (AIA) should be shown on a single Arboricultural Masterplan drawing of at least 1:1,000 scale.

Where a full Arboricultural Masterplan is not provided in the AIA, the document must signpost the location of the relevant drawings.

In addition to the normal submission documents, the council would encourage developers to submit a multi-layered digital version of the Arboricultural Masterplan to assist analysis.

6.32 Where the AIA identifies encroachment into a tree's root protection area, working method statements and design drawings will be required up front with the application, to enable the council to fully appreciate how the trees can be protected before granting consent.

Tree planting

Principle T4: New tree planting

New tree planting shall be selected and established to enhance tree cover within the development and to strengthen the tree resource in the borough. Further design issues relating to tree planting which are included in Chapter 2 (Landscape), should also be taken into account.

6.33 Young trees are an essential component of the landscape, providing the next generation of mature canopy cover. New development provides an opportunity for trees to be planted in the right place, increasing the sustainability of the scheme. Adequate provision must therefore be made for new trees to be planted with all the necessary aftercare to ensure they successfully establish. All new planting should be included in the calculation of canopy cover change as set out in Box T1.

Choosing and planting trees

6.34 Tree selection and planting techniques will need careful consideration to ensure that the trees are able to successfully establish and tolerate the surrounding environment. Species will need to be chosen to ensure adequate diversity both within the development site and across the wider landscape.

6.35 Tree species should be compatible with access and movement arrangements, with sufficient space provided around them to ensure that they will not conflict with buildings and utilities.

6.36 Tree pits and ancillaries will need to provide adequate soil volume, irrigation, drainage, aeration and support and protection for the tree. Full specifications, with a breakdown of available soil volume, for each tree will be required. When planting in areas of hard standing, the use of structural cell systems may be necessary to provide adequate rooting space for the tree to establish.

6.37 Large growing tree species should be integrated into development due to the many environmental benefits they have to offer. Where space permits, such trees should be used to create landmark and skyline features and should be planted as extra heavy standard size[45] or semi-mature for instant impact. Again, adequate space must be provided in order to allow large trees to grow to maturity without causing conflict with surrounding buildings and infrastructure.

6.38 Local soils, surrounding land use and the required function of the tree will help to inform the types of tree planted on each site. However, it is important to ensure that there is a diverse range of species across the landscape to ensure long term resilience. Developments should look to achieve a composition to include no more than 10% of the same species, 20% of the same genus and no more than 30% of the same family. Adjustments to these targets may be appropriate in the context of the wider landscape.

6.39 Where the trees are to be planted on land that will ultimately be adopted by the highway authority, there should be prior discussion with them at the early stages of the design process in order to establish if trees can be located and maintained within land to be maintained by them.

[45] Sizes in accordance with the HTA National Plant Specification.

6.40 Non-residential development provides unique opportunities to plant large growing trees that can grow to maturity without causing the associated disbenefits often seen when planting trees too close to homes. A good example is areas of hard standing, such as car parks, where trees can significantly reduce the urban heat island effect. For larger developments, consideration should be given to planting community orchards.

Caring for new trees

6.41 Planting a new tree is counterproductive when adequate care isn't given to its future maintenance. As part of a soft landscape strategy, the council will expect to see a commitment to ensuring the successful establishment of all new trees. This will include (but not be limited to) watering, weeding, mulching and formative pruning, wherever necessary.

6.42 Management plans for young tree care will be required by enforceable conditions attached to planning consents. These will usually require the immediate replacement of a tree that dies within a period of 5 years from the completion of development.

6.43 The planning, design and planting of new trees should be in accordance with the British Standard 8545 "Trees: from nursery to independence in the landscape – Recommendations". Further information on selecting and planting trees has been prepared by the Trees & Design Action Group (TDAG).[46]

Box T3: Biosecurity

Trees are under increasing threat from the spread of pests and disease. In line with the Arboricultural Association's Biosecurity Position Statement, the council advocates the use of UK grown and nursed specimens avoiding directly imported stock.

Where trees are being moved or imported, it is important to check plant passport and registration requirements with the Animal and Plant Health Agency (APHA). More information can be found at www.gov.uk/guidance/plant-health-controls.

[46] Tree Species Selection for Green Infrastructure: A Guide for Specifiers, Trees in Hard Landscapes: A Guide for Delivery & Trees in the Townscape: A Guide for Decision Makers are all downloadable from http://www.tdag.org.uk/

Developing a scheme for tree protection

Principle T5: Tree protection

Trees will need to be protected for the duration of any demolition and construction work.

6.44 Trees can be easily damaged during demolition and construction operations so it is necessary to prepare a tree protection scheme to demonstrate how the risk of damage will be minimised. A tree protection scheme will usually involve the preparation of a tree protection drawing and a tree protection method statement.

6.45 For larger developments, the working methodologies outlined in the Tree protection scheme will need to be incorporated into the Construction Method Statement.

6.46 The tree protection scheme will normally be required with the planning application, although for simpler sites where there is clearly sufficient working room, without encroachment into the RPA of retained trees, the scheme may be required under a condition in the event that consent is granted. Either way, the working methodologies laid out within the tree protection scheme shall be conditioned and enforced by the council and should follow the following steps:

Step 1 – Tree works

6.47 Once planning permission is granted and before any works commence, it will be necessary to carry out the tree work that was identified during the initial tree survey. All works will need to be carried out by a competent arboriculturist in accordance with British Standard 3998 “Tree work – Recommendations”. If the tree survey is no longer in date (older than 12 months) at the time of implementation, then a follow up survey may be required.

Step 2 – Installation of tree protection

6.48 Temporary protective fencing will need to be placed around trees to close off and protect the RPA. Where the RPA cannot be fully closed off, ground protection will be required to prevent soil compaction and root damage. Where there is insufficient space to install protective fencing, as may be the case with street trees, then hoarding will need to be placed around the trunk. The specification for fencing and ground protection will need to be in accordance with the British Standard 5837.

6.49 Once the tree protection is in place, it must not be moved for the duration of the development. The only exception may be to relocate fencing and ground protection between demolition and construction phases. Therefore, it is important to allow sufficient space elsewhere on the development site for the storage of materials, equipment, site huts and other facilities as well as for the installation and use of scaffolding. Such details will need to be included on the tree protection drawing.

6.50 Areas for new tree planting will need to be protected or otherwise soil de-compaction may be required prior to planting.

Step 3 – Demolition and construction

6.51 If there are sensitive operations being carried out within the RPA of retained trees, such as the removal and/or installation of hard standing, foundations and services then operation-specific method statements should be prepared as part of the Tree Protection Method Statement.

Step 4 - Monitoring and mitigation

6.52 A scheme of monitoring and mitigation will need to be prepared as part of the Tree Protection Scheme to outline what steps will be taken in the event that the tree protection scheme is breached or if amendments need to be made during the implementation phase.

6.53 Sensitive operations within the RPA, such as the installation of low impact driveways, must be carried out under supervision of an arboriculturist and commitment to this will need to be explicit within the document. Where engineered tree pits have been specified, inspection reports will be required to demonstrate that they have been installed to the approved specification.

6.54 The tree protection drawing will need to demonstrate each of the above steps and will be made available to anyone that enters the development site, usually by displaying it at the site office.

6.55 Post-completion conditions will normally be applied to approved applications to ensure that site monitoring is carried out for the duration of the development, including pre-commencement site meetings and completion visits by the project arboriculturist.

6.56 Evidence that the approved tree protection measures have been implemented fully may be required in order to satisfactorily discharge any tree protection conditions once the development is complete. In some cases, the council may also monitor the progress of the site, especially where works are taking place close to important trees.

Post-development management

Principle T6: Tree and woodland management plans

Tree and woodland management plans shall be provided where trees are located in publically accessible areas.

6.57 Where trees are located on land that is either to be adopted by the council or are located on areas of public open space that will be passed to a management company, an arboriculturist shall be required to complete a post development / pre-occupancy tree safety survey.

6.58 Any tree work recommendations will need to be made in accordance with BS3998 and implemented to the satisfaction of the council. Recommendations will also need to be made for appropriate routine re-inspections.

6.59 Where trees are being adopted by the council, the tree survey will be required in a digital format that can be imported into the council's tree maintenance database.

Woodlands

6.60 For woodland areas, a Woodland Management Plan will be required. This shall normally cover a minimum period of 20 years and shall:

- Set out the short term management aims to be completed prior to occupation of the development.
- Set out the long term management aims with a view to maximising the recreational, ecological, silvicultural and landscape value of the woodland.

- Set out the management operations to be carried out, including details of how those operations are to be carried out and their frequency.
- Set out details of a scheme of review to ensure that the management will always be appropriate to secure the continual cover and management of the woodland.
- Be presented in a format to be integrated into the council's own tree database and that can be submitted to the Forestry Commission for approval, where applicable.

6.61 All operations identified by the Woodland Management Plan, including the scheme of review, shall be implemented in full to the satisfaction of the council until such time that the woodland ownership is transferred to the council.

Planning application information requirements

Principle T7: Information requirements

Development may be refused where there is insufficient information to determine what impact it will have on trees.

6.62 Where there are trees on or within falling distance of the site, a tree survey shall be carried out in accordance with the British Standard 5837. Where this clearly demonstrates that all existing trees can be retained and there is sufficient space for development then this may be sufficient for the purposes of determining your application.

6.63 If trees are being removed, or if there is development within the RPA of trees it will be necessary to provide an Arboricultural Impact Assessment in accordance with box T4

Box T4: Requirements of an Arboricultural Impact Assessment

- BS5837 Tree Survey
- Tree removal/retention and evaluation of the impact of this
- Application of tree buffers
- Identification of any works within the RPA or under the canopy of trees
- Proposed new tree planting
- Arboricultural Masterplan
- Canopy Cover Change Assessment
- Tree Protection Scheme to include a Tree Protection Plan and Method Statement

6.64 Where appropriate, the council will add conditions for tree protection in the event that a planning application is approved. If not already supplied, this may require a tree protection scheme. Conditions will also seek to ensure that development is carried out in accordance with the approved drawings, and as such these may not be discharged until the development is complete.

Appendices

Appendix 1 Glossary of Terms

Ancient and/or Species Rich Hedgerows - ancient hedgerows are defined as those which were in existence before the Enclosure Acts, passed mainly between 1720 and 1840. Species-rich hedgerows are those which contain five or more native woody species on average in a thirty metre length.

Ancient or veteran tree – Veteran trees have cultural, historical, landscape and nature conservation value because of their age, size, or condition. Ancient trees are ancient in years, with consideration given to the species, climate, soil type and other factors that influence the growth rate and longevity of trees.

Ancient Woodland – woodland that has been present since at least 1600.

Area of Outstanding Natural Beauty (AONB) – An Area of Outstanding Natural Beauty is an area of countryside in England, Wales or Northern Ireland which has been designated for conservation due its significant landscape value. The North Wessex Downs AONB covers much of the western part of the borough.

Balancing Ponds – Ponds designed to control flow rates by storing floodwater and releasing it slowly once the risk of flooding has passed.

Biodiversity – the variety of species, the genetic diversity within them, and the variety of communities and natural processes they give rise to.

Biodiversity Net Gain – where development leaves biodiversity in a measurably better state than before. This will require all residual losses of biodiversity to be offset on-site or off-site using an appropriate metric.

Biodiversity Opportunity Area (BOA) - a targeted landscape-scale approach to conserving biodiversity. They are areas where resources can be focused to have the greatest positive impact for wildlife through habitat creation and restoration..

Buffer Zone – transitional areas adjoining habitats whose use and management is intended to reduce the impact of development.

Community Infrastructure Levy (CIL) - is a planning charge, introduced under the Planning Act 2008 as a tool for local authorities in England and Wales to help deliver infrastructure and support community development in their area.

Compensation – creation of new features (for example wildlife habitats), which may be on or offsite, depending on particular circumstances, to help make up for the loss of, or damage to, landscape or biodiversity features. Compensation is the last resort when impacts cannot be satisfactorily mitigated.

Conservation areas - a statutory designation of an area which is considered to be 'an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance'.

Construction Method Statement – a document that details a safe system of work, explaining in detail the work to be undertaken.

Contaminated Land – is any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that –

a. Significant harm is being caused or there is a significant possibility of such harm being caused; or
b. Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.

Defra – The UK government department responsible for safeguarding the natural environment, supporting food and farming industries and the rural economy.

Ecosystem – a distinctive unit formed by organisms interacting with their physical environment and one another. Ecosystems exist at a wide range of scales, from small ponds, for example, to large forests.

Ecotone – An ecotone is a transition area between two biomes.

Environmental Impact Assessment (EIA) – The aim of Environmental Impact Assessment is to protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process.

Equipped play – a defined area of formal play which contains pieces of specifically design play equipment such as swings and climbing frames.

European Protected Species (EPS) – Animals and plants that are listed in Annex IV of the European Habitats Directive. As such, they receive protection in the UK under the following Regulations: Regulation 41of The Conservation of Habitats and Species Regulations (2017).

Forestry Stewardship Council (FSC) - is an international non-profit, multi-stakeholder organisation established in 1993 to promote responsible management of the world's forests. The FSC does this by setting standards on forest products, along with certifying and labelling them eco-friendly.

Geodiversity - The range of rocks, minerals, fossils soils and landforms

Green Infrastructure - A network of multifunctional greenspace (including watercourses and wetlands) within urban and rural areas which is capable of delivering a wide range of environmental and quality of life benefits.

Heritage Asset – A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions because of its heritage interest. Heritage assets include designated heritage assets (including scheduled monuments, listed buildings and conservation areas), and assets identified by the local planning authority (including locally listed buildings and structures).

Important hedgerows – A hedgerow is important (and is protected) if it's at least 30 years old and meets at least one of eight criteria identified by the Hedgerow Regulations 1997.

Key Habitats – these are semi-natural or other special types of habitat that, in the context of planning policy, are those listed in the Council's Living Landscapes natural environment strategy.

Key Species - An umbrella term to cover legally protected species, Species of Principal Importance in England and Notable Species in the borough.

Landscape – All the visible features of an area of land. Within the SPD this relates especially to visual features within a development and on a larger scale how that development impacts visually upon the surrounding area.

Landscape structure - its composition and arrangement, and the resulting spatial relationships between its individual elements

Landscaping – Hard - Elements within a designed landscape comprised of construction materials including bricks, stone, concrete and timber, such as walls, paving and fencing. Hard landscaping also typically includes furniture such as seating, signage and bins.

Landscaping – Soft - The vegetative materials which are used to improve a designed landscape, including soil, trees, shrubs, herbaceous planting, and grass.

Listed Buildings - A building or structure which has been included on the National Heritage List for England maintained by Historic England, for its special historic or architectural interest. Local planning authorities must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

Local Nature Reserve (LNR) – A statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the National Environment and Rural Communities Act 2006 by principal local authorities.

Local Plan – The adopted Local Plan forms part of the statutory development plan for the borough It sets out the council's vision and strategy for the area until 2029 and will provide the basis for decisions on planning applications

Local Planning Authority (LPA) - The public authority whose duty it is to carry out specific planning functions for a particular area, in this case Basingstoke and Deane Borough Council

Major Development – For housing, development where 10 or more homes will be provided or the site has an area of 0.5ha or more. For non-residential development it means a floorspace of 1,000m^2 or more, or a site of 1 hectare or more, or as otherwise provided in the Town and Country Planning (Development Management Procedure) (England) Order 2015.

Mitigation – changes or additions to development proposals in order to reduce or avoid negative impacts on the landscape or biodiversity interests.

Mitigation hierarchy– series of sequential steps that must be taken in order to limit negative impacts on biodiversity and achieve a biodiversity net gain: Avoid, Mitigate, Enhance and Compensate.

Multi-functional Green Space (MFGS) – the element of Green Infrastructure that provides for public recreation made up of Amenity Greenspace, Parks and Accessible Natural Green Space. Refer to the adopted Green Space Standards for further detail.

National Nature Reserve (NNR) – sites designated under the National Parks and Access to the Countryside Act 1949 and the provisions of the Wildlife and Countryside Act 1981 by Natural England. They protect important habitats, species and/or geology

National Planning Policy Framework (NPPF) – Acts as guidance from the government for local planning authorities and decision makes in drawing up plans and making decisions about planning applications.

Natural England – Government's advisor for the Natural Environment in England.

Natural Environment and Rural Communities (NERC) Act – Sections 40 to 41 of the NERC Act 2006 concern the duty to conserve biodiversity. Section 40 covers the duty on public authorities in England to conserve biodiversity. Section 41 concerns the list of species published by the Secretary of State for the Environment which are considered of "principle importance" for the purposes of conserving biodiversity in England.

Neighbourhood Development Plans – A means by which local communities can propose land use and development in line with the development plan of the local planning authority.

Origin – Used in relation to planting material to refer to the geographic location that the most remote traceable ancestor of the plant comes from. Should not be confused with provenance, which simply means the location of the seed lot or parent plant from which cuttings were taken.

Outline Planning Application – Applications for outline planning permission seek to establish whether the scale and nature of a proposed development would be acceptable to the local planning authority, before a fully detailed proposal is put forward.

Preliminary Ecological Assessment (PEA) – A preliminary ecological appraisal (also known as an Extended Phase 1 Habitat Survey) is an ecological assessment method which evaluates the existing ecological value of a site and identifies any ecological constraints to a proposed development.

Priority habitats and species – species and habitats of principle importance in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.

Protected Species – Includes European Protected Species listed in Annex IV of the European Habitats Directive which receive protection in the UK under Regulation 41 of The Conservation of Habitats and Species Regulations (2017) and a large number of species which are specially protected under The Wildlife & Countryside Act (1981). These are listed in Schedules 1, 5, 7 and 8 of the Act or in other legislation such as the Protection of Badgers Act 1992.

Ramsar Sites – Wetlands of international importance, designated under the 1971 Ramsar Convention. Wetland SAC or SPA's would be classified as RAMSAR sites.

Regulation 123 List – A list of infrastructure projects that the Borough Council intends to use the Community Infrastructure Levy to fund in whole or in part.

Registered Battlefield - A site included on the Register of Battlefields in England, maintained by Historic England. Registered battlefields are designated heritage assets and subject to the planning policies within the NPPF.

Registered Park and Garden - A site included on the Register of Historic Parks and Gardens in England. Registered parks and gardens are designated heritage assets and subject to the planning policies within the NPPF.

Reserved Matters – Where outline permission has been granted, you may, within three years of the outline approval, make an application for the outstanding reserved matters, i.e. the information excluded from the initial outline planning application. This will typically include information about the layout, access, scale and appearance of the development.

Root Protection Area – A zone around trees that are to be retained within a development scheme which is intended to protect enough of the root system and soil to avoid significant damage occurring.

Section 41 List – A list of habitats and species of principal importance covered under Section 41 of the Natural Environment and Rural Communities Act 2006.

Significance (for heritage policy) - The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

Significant Harm (to biodiversity) – A development proposal would be considered to result in significant harm to biodiversity if it cannot meet the criteria given in points a to f of Section 1 of Planning Policy EM4 or results in a biodiversity net loss as calculated using a Biodiversity Compensation Framework.

Section 106 (S106) – Are private agreements made between local authorities and developers. They derive from The 1990 Town and Country Planning Act.

Site of Importance for Nature Conservation (SINC) – Locally important sites designated for their habitat and/or species interests after assessment against a set of agreed criteria by Hampshire County Council, Natural England and the Hampshire and Isle of Wight Wildlife Trust.

Site of Special Scientific Interest (SSSI) – An area of land designated by Natural England under The Wildlife and Countryside Act 1981 (as amended) for its nationally significant wildlife or geological interest.

Special Areas of Conservation (SACs) – strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended).

Special Protection Areas (SPAs) - strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex 1 of the Directive) and for regularly occurring migratory species.

Stepping stones – Smaller areas of quality habitat that are intended to aid movement of species by serving as islands of favourable habitat in between larger core habitat areas.

Strategic Environmental Assessment – An assessment to ensure that environmental consequences of plans and programmes are identified and assessed during their preparation and before their adoption (see Sustainability Appraisal definition). Derived from Environmental Assessment of Plans and Programmes Regulations 2004.

Supplementary Planning Document (SPD) – Documents which provide further guidance on policies contained within the Local Plan.

Sustainability Appraisal - A tool for appraising policies to ensure that they reflect sustainable development objectives (i.e. economic, social and environmental factors) it incorporates.

Sustainable Environmental Assessment (SEA) - Sustainability Appraisal is required under the Planning and Compulsory Purchase Act 2004, to be carried out on all Development Plan Documents.

Swales – As referred to in the SPD, these are shallow, broad and vegetated channels designed to store and/or convey runoff and pollutants.

Tree Preservation Order (TPO) – a legal order made by a local planning authority which prohibits the felling, pruning, damage or destruction of specified trees, without the consent of the local planning authority.

Watercourses – Comprising the water body and the land immediately adjacent to it.

Wildlife corridor - Areas of habitat connecting wildlife populations and/or habitat patches that would otherwise be isolated.

Zone of Influence – the geographic extent over which a development may affect landscape and biodiversity.

Appendix 4.1 Basingstoke and Deane Borough Countryside Design Summary

1. Introduction

Centuries of human activity interacting with natural processes has resulted in a varied landscape within the Borough of Basingstoke and Deane. From the wide open spaces of the chalk downlands, to the complex enclosed landscapes of the river valleys, this variation gives rise to distinctive landscape character areas. These character areas are defined by a combination of landform, geology, soil, field patterns, woodlands, rivers, farmsteads, settlement patterns and the style and materials of buildings.

Ellisfield

The local distinctiveness of the landscape is fundamental to creating a 'sense of place' and it makes an important contribution to the quality of life enjoyed by the borough's residents and visitors. However, these qualities are under threat – not from change itself, but from standardisation. There has been an erosion of local character, in recent years, through standardised building design that has failed to respond to local traditions. This suggests that the borough council needs to be more explicit in setting out the components of the high design standards that we seek. To address this issue, the council has prepared this Countryside Design Summary (CDS), to show how new development can be accommodated in such a way that the distinctive and diverse characteristics of the countryside and rural settlements are sustained and enhanced.

The Basingstoke and Deane CDS explains, in simple terms, the essential design relationship between the borough's landscape, settlement patterns and buildings. It provides design criteria against which any future development can be assessed and aims to ensure that careful consideration is given to the way in which new development will relate to its surroundings.

Houses on Laverstoke Lane, Laverstoke

Whilst the CDS emphasises good design in terms of traditional building forms, the council does not wish to inhibit good modern design or limit progress on sustainability issues, such as improved energy efficiency. Modern design that reflects local style and is responsive to local character is to be welcomed, and on some sites innovative contrasts can be an appropriate and acceptable response to the specific location.

Most villages in the borough are designated as conservation areas. Each conservation area has a character appraisal which describes in detail the typical building types, forms and materials in each settlement. All appraisals can be found on the council's web site. Where a proposal relates to a village for which a Village Design Statement has been produced, this should be read in conjunction with the CDS.

Countryside Character

The Borough of Basingstoke and Deane lies across the boundary of two distinct geological formations, which have a strong influence upon the character of the area. The southern part of the borough is dominated by high chalk downlands, which fall southwards away from a steep chalk escarpment. The northern part of the borough is underlain by clay, sand and gravel.

Some twenty Landscape Character Areas have been identified within the borough and are described in the Basingstoke and Deane Landscape Assessment (2001). For the purpose of this document, Landscape Character Areas that have the same implications for the design of new buildings in the countryside have been amalgamated to form six Countryside Design Areas, which are shown on Map 1.

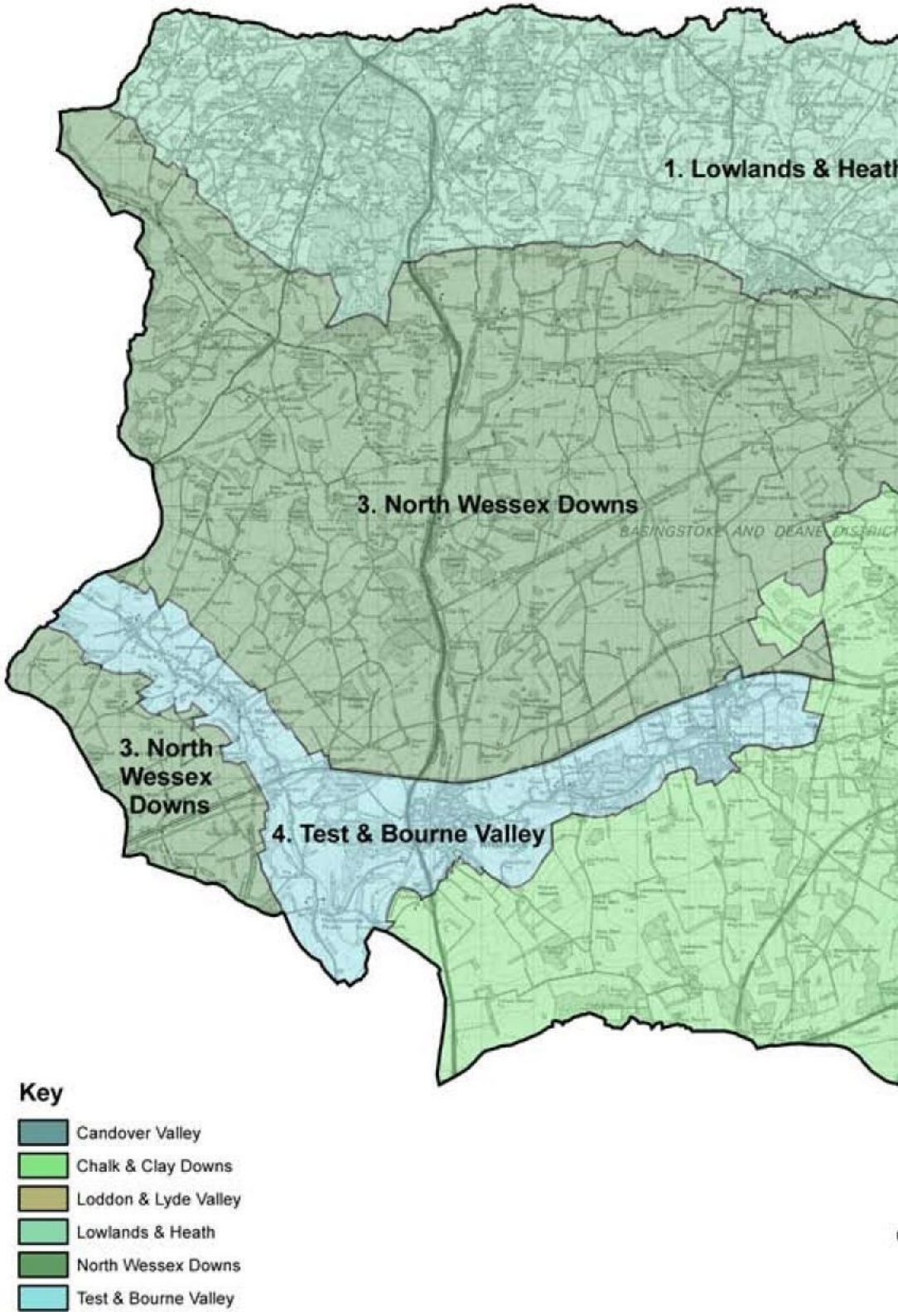
Area 1: Lowlands and Heath
Area 2: Loddon and Lyde Valley
Area 3: North Wessex Downs
Area 4: Test and Bourne Valley
Area 5: Chalk and Clay Downs
Area 6: Candover Valley

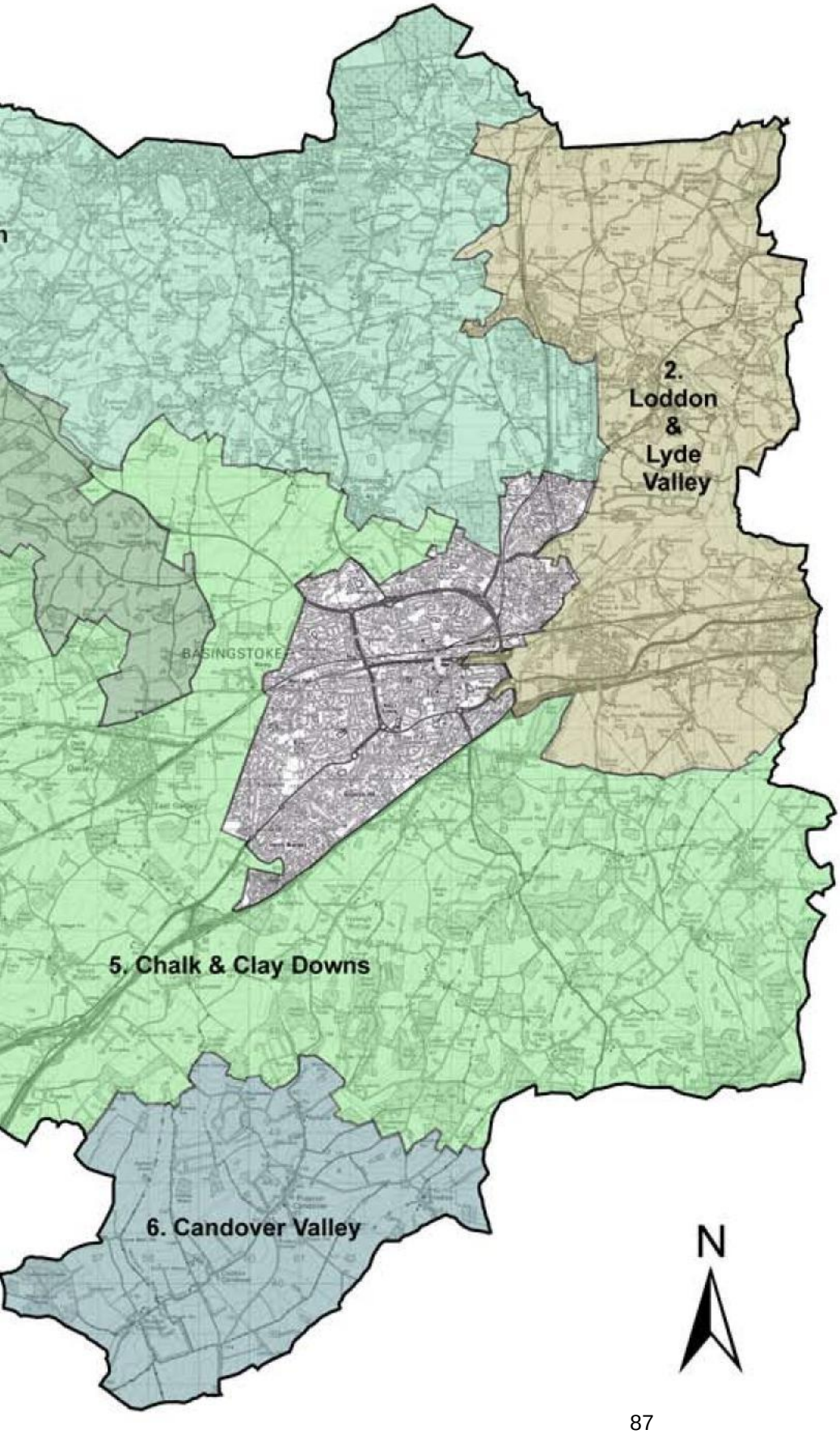
The areas have been defined by analysis of the design relationship between: **landscape** - geology, landform, vegetation and ecology, land use, roads, paths and landmarks; **settlement patterns** – settlement form, location, density, history and patterns of growth; and **building types and materials** - types, heights, massing, materials and detailing.

Each area reflects similarities in the relationship between its landscape, settlement patterns and buildings, and has its own distinct set of characteristics.

Analysing and defining the six Countryside Design Areas has enabled the identification of design implications for each area. These principles can be used to guide the form and appearance of new development in the countryside, encouraging a more locally-based approach to design and planning in the borough. The following chapters examine each character area in more detail.

Map 1: Countryside Design Areas





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1. Lowlands and Heath

General Description

A low, gently undulating landscape that contrasts with the steep chalk scarp and downs to the south. There is mixed use of the landscape, with fields of small to medium size used as pasture and arable land. There are numerous woodlands. Settlements are scattered throughout, with a greater number of settlements in the west of the area, just south of Newbury. The North Wessex Downs Area of Outstanding Natural Beauty (AONB) covers the area west of the A34, including Highclere and Woolton Hill, and also the area east of the A34 to the south and west of Burghclere.

Landscape

Clay, permeable sand and gravel have formed a low, undulating landform. Many streams run south-north across the area, fed by a line of springs, which arise at the junction of the chalk and clay.

Landscape near North Sydmonton

Much of the area is covered by mixed farmland and woodland and is relatively enclosed. Fields are generally small to medium scale with a strong structure of hedgerows and trees. There are many broadleaf woodlands and copses, particularly in the area around Wolverton. The predominant tree cover is Oak, with Alder growing in the wetter areas.

Typical hedgerow species include Hawthorn, Blackthorn, Hazel, Dog Rose and Holly. The farmland is mostly pasture or arable, with numerous paddocks and stud farms in the west of the area.

Gravel in the north has given rise to heath soils. Extensive areas of coniferous woodland and heath associated vegetation are found around Highclere and Burghclere in the north-west, and Silchester in the north-east. Silver Birch, Scots Pine and Oak are the dominant tree species in these areas. Hawthorn, Blackthorn, Holly, Alder Buckthorn and Gorse are typically found on the heath soils.

Distinctive parkland landscapes are found at Highclere (Grade I), The Vyne (Grade II), Beaurepaire Park and Ewhurst Park.

Kingsclere is so well integrated into the surrounding landscape that it can barely be seen from White Hill

The roads are relatively straight and direct within the coniferous plantations around Silchester. Elsewhere, narrow winding lanes, many of which follow the south-north running valleys, connect the scattered settlements. There is a dense network of public paths across the area.

There is some visual and noise intrusion from the A34 in the west of the area. There are many Scheduled Ancient Monuments in the east. Of particular importance is the preserved Roman town of Calleva Atrebatum (Silchester) and its associated earthworks, which were built on an existing Iron Age settlement.

Examples of scarce habitat types have been designated as Sites of Special Scientific Interest (SSSIs) and Sites of Importance for Nature Conservation (SINCs), including ancient semi-natural woodland, unimproved meadows, heathland and neutral acidic unimproved grasslands.

Settlements

There are many farms and individual properties scattered across the area. Villages have developed on sites raised above the streams, away from the risk of flooding , for example, Headley, Ball Hill and East End.

There is a series of spring-line settlements in the south of the area, approximately one mile to the north of the scarp. This follows a secondary ridge where the chalk meets the low-lying clay. Ecchinswell, as the name suggests, is one of these settlements.

Around Highclere and Woolton Hill in the west of the area, the local population is relatively high with numerous small villages, hamlets, farms and residential properties. The villages are characteristically surrounded by woodland and have many mature trees within them. Consequently, they are well integrated into the surrounding landscape.

The scarp slope forms a backdrop to many of the villages in the south.

Streams and ponds are important features in Ecchinswell, Sherborne St John and Kingsclere. The former market area in Kingsclere is a distinctive focal point.

Village greens form the centre of East End and Silchester.

Near the centre of Kingsclere, continuous built frontages face on to the streets and are an important characteristic of the settlement. Within the smaller villages, such as Ramsdell, Ashford Hill and Highclere, buildings are traditionally set back from the road with small front gardens, and there are often fields between adjacent buildings.

Much development has taken place over the last forty years, largely due to the growth of the Atomic Weapons Establishment and the former Greenham Common Air Base to the north of the borough. Development has occurred in and around Tadley and new settlements have been created at Bishops Green and Penwood.

Continuous built frontages face directly on to Swan Street, Kingsclere

These recent developments have tended to ignore traditional building materials, styles and layouts.
There are Conservation Areas in Kingsclere, East End and North End, Ecchinswell, Monk Sherborne, Tadley, Silchester, Ramsdell and Sherborne St John.

Buildings
Buildings are generally two-storey or single-storey with dormer windows. They are domestic in character and predominantly detached or semi-detached.

Most buildings are brick built, reflecting the proximity of the local clay fields. Red brick has commonly been used in all types of building.

Red brick with blue brick patterning is a particular feature across the area, most notably in and around Kingsclere where grey bricks made from a mixture of chalk and clay are also well used. Traditionally, limited use has also been made of yellow bricks and 'specials' for decoration.

In Kingsclere, near the chalk scarp and downlands, there has been limited use of flint in older buildings.

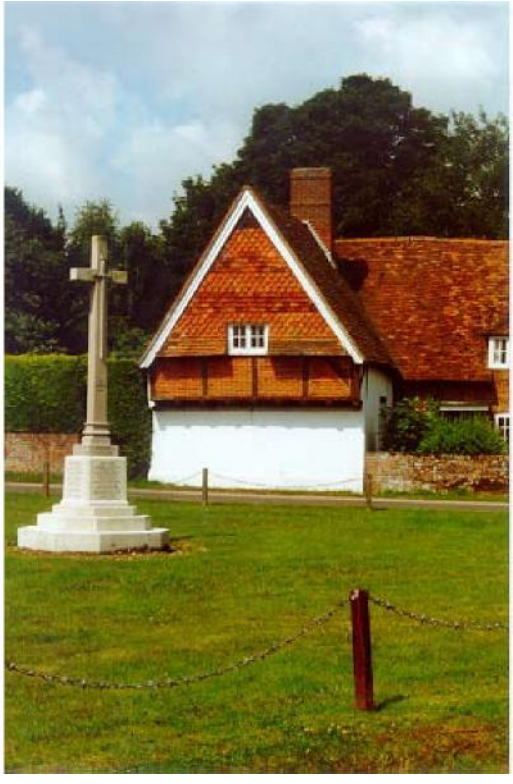
Timber framed buildings are characteristic of the area, often combined with brick infill and thatch.

Plain red clay roof tiles are the predominant roofing material, but slate and thatch have also been used. Cat slide roofs are a feature of some of the older buildings in Kingsclere.

Vertical clay tile hangings are a particular feature on wall elevations in East End, Highclere and Ashmansworth.

Windows are traditionally casement and sash.

Boundary walls are traditionally constructed of red brick and these are a particular feature in Sherborne St John. Brick and flint have occasionally been used together in the south of the area.



Vertical clay tiles and a red clay tile roof by the village green in East End

Design Implications

The west of the area lies within the North Wessex Downs AONB, where extensive development would not be considered.

The many woodland blocks and mature trees in this area are important features within and around the settlements and should be maintained.

Siting of any new development should take into account views to and from the scarp and the wider landscape.

New development should be associated with existing settlements and sited above the many streams that cross the area to reduce the risk of flooding. Wherever possible, existing woodlands, hedgerows and trees should be used to integrate new development into the landscape.

Where necessary, new development should allow sufficient room for a framework of trees and shrubs to be planted, to integrate the built form into the surrounding landscape. Native trees and shrubs should be planted around developments adjacent to open countryside.

The density of new development should be in keeping with that in the existing settlements. Buildings should generally be two-storey and face onto the road. Boundaries facing onto the road should be marked by hedgerows or red brick walls as appropriate to the local area.

Public paths should be retained and new development linked to the wider countryside wherever possible.

New development should reflect the form, scale and proportions of existing vernacular buildings in the area and pick up on the traditional building styles, materials, colours and textures, as set out above.

Narrow country lanes should be protected from unnecessary improvements and urbanisation.

Red brick boundary walls are a particular feature in Sherborne St John

2. Loddon and Lyde Valley

General Description

This area contains the broad valley of the rivers Loddon and Lyde, which rise at the junction of the chalk and clay, and run south-north. It is a diverse landscape with varying land cover, ranging from mixed farmland and woodland to open arable fields. Settlement density is low, with a number of villages and isolated farms scattered throughout the area.

Landscape
The broad and gentle slopes of the Lyde and Loddon river valleys are predominantly underlain by clay.

The Lyde rises on the north-facing chalk slope in the south of the area, where the change in geology is marked by larger-scale, open arable fields.

View from Long Bridge by Longbridge Mill, Sherfield on Loddon

Enclosed fields with a stronger hedgerow structure and an increased percentage of woodland cover, form the mid-section of the area.

In the north of the area, there are large arable fields, low well-trimmed hedgerows with isolated oak trees, and limited woodland cover.

The valley floor pasture has a distinctive pattern of willow-lined watercourses, drainage ditches, water meadows and watercress beds. Much of the land is subject to localised flooding or standing water, especially in winter.

Typical hedgerow species include Hawthorn, Blackthorn, Hazel, Dog Rose and Privet.

The rivers restrict cross-valley routes, and settlements are linked by a small number of narrow winding lanes. Many farm tracks and public paths cross the area.

Valley Floor, north of Sherfield on Loddon

There are many Scheduled Ancient Monuments.

The remote and quiet character of the valley is disturbed where the A33, A30 and M3 roads cross the area. There is also visual intrusion in some areas by a railway line, electricity pylons and the incinerator.

The empty channel of the Basingstoke Canal is a feature of the landscape in Mapledurwell and Old Basing.

There are three SSSIs in the area, at Mapledurwell Fen, Stanford End Mills and the Greywell Tunnel.

Settlements

Away from the adjoining urban areas of Basingstoke and Chineham, settlement density is low.

The dispersed villages were originally centred around road junctions. There are isolated hamlets and farms throughout. The settlements are located on slopes above the valley floor to avoid the risk of flooding.

Houses face onto the large village greens in Bramley, Sherfield on Loddon and Newnham. The greens are important focal points in these settlements.

Houses facing on to the large village green at Newnham

Village ponds are characteristic of many of the settlements.

The rivers and the associated watercress beds are important features in Mapledurwell and Old Basing.

Development over the last forty years has led to the significant expansion of Bramley, Sherfield on Loddon and Old Basing. The developments have tended to ignore the traditional building materials, styles and layouts in the area, and in some cases have detracted from the original character of the settlements.

The village pond and river are important features in Mapledurwell

There are Conservation Areas in Old Basing, Mapledurwell, Sherfield-on- Loddon, Bramley, Up Nately and the Basingstoke Canal.

Buildings

Buildings are generally two-storey and domestic in character. They are predominantly detached or semi-detached.

Timber framed and thatched house in Old Basing

Red brick is used extensively throughout the area, reflecting the fact that the valley is underlain by clay. In Old Basing, brick has been used in all types of building work and bricks from the demolished Basing House were widely used in the 17th Century.

Red brick has occasionally been used with blue headers.

In and around the chalk landscape in the south of the area, flint has been used more frequently in buildings and boundary walls. For example, Up Nately, Mapledurwell and Old Basing.

A typical casement window in a vernacular red brick and clay tile house, Old Basing

Historically, the quality of the farmland supported some good traditional farm buildings, many of which were timber-framed. There are many examples in Old Basing.

Typical roof coverings are red clay roof tiles, slate and thatch. Thatch is a distinctive characteristic of Mapledurwell. Hipped and half-hipped roofs are common throughout. Tile hung facades with scalloped bands are a feature in Bramley.

Windows are traditionally casement and sash. Many of the vernacular buildings have large central or end chimney stacks. A number of buildings have them at each end of the main facade. Some early chimney stacks are ornate, with twisting, interconnected chimneys.

Design Implications

The water meadows and watercress beds are important features of the river floodplain and should be retained and maintained.

Siting of new built development should reflect the way in which the existing settlements relate to the surrounding landscape. It should be kept on the lower valley slopes, away from the risk of flooding.

Local materials were used in this vernacular building

Where necessary, new development should allow sufficient room for a framework of trees to be planted, to integrate the built form into the surrounding landscape. Native trees and shrubs should be planted around developments adjacent to open countryside.

Existing public paths through the settlements should be linked to new development and the surrounding countryside wherever possible.

New development should reflect the form, scale and proportions of existing vernacular buildings in the area and pick up on the traditional building styles, materials, colours and textures, as set out above. Buildings should be two-storey and face the road.

Boundaries should be marked by hedgerows, brick walls, or by brick and flint walls as appropriate to the local area. Native hedges should be planted adjacent to open countryside.

Narrow country lanes should be protected from urbanisation.

Half-hipped clay tile roof, Old Basing

3. North Wessex Downs

General Description

The area comprises high open chalk downs and a plateau dissected by the Test and Bourne river valleys, which form a separate character area. In the north of the area, a steep chalk scarp falls northwards, away from the high downs, to a small area of sandstone, west of Kingsclere.

Areas where deposits of clay and flint overlay the chalk downs are generally more elevated, wooded and enclosed. Settlement density is very low, with small villages, hamlets and farms scattered across the area. Much of the area lies within the North Wessex Downs AONB.

Landscape

Low or infrequent hedgerows and little woodland cover over the high chalk downs form a very open landscape with long views over large-scale arable fields. A patchwork of arable fields and woodland blocks leads down to the Test and Bourne Valleys in the south of the area, creating a more enclosed landscape. Beech and Ash predominate, with Lime well represented in some of the villages.

Long views to Hannington over large arable fields

Hedgerows are typically species-rich, with chalk-loving species such as Wayfaring Tree, Spindle, Dogwood, Purging Buckthorn and Field Maple.

The scarp slopes are covered by open pasture with scrub and occasional woodland blocks.

Gallops are a prominent feature in the north of the area, near Kingsclere.

There is a relatively sparse road network. Routes are straight and direct on the high downs, but in the lower rolling chalkland, winding country lanes tend to follow the dry valley bottoms to link farms and hamlets. On the scarp slope, the lanes are sunken and overhung by woodland.

The Wayfarers Walk long distance footpath crosses the area, following the scarp line in the north, before dropping below Hannington to North Oakley.

The mast at Cottingtons Hill and the pylons that cross the area detract from its natural qualities, as does the A34 in the west. Elsewhere, there is limited intrusion from people and traffic and a sense of remoteness.

Hannington is centred around a village green on a high clay plateau

There are a great number of Scheduled Ancient Monuments across this area, many of which are round barrows on the ridges and hilltops. There is an Iron Age Fort at Beacon Hill. The Harroway and Portway Roman Road cross the area. Sidley Wood SSSI, south of Ashmansworth, contains an ancient hornbeam coppice. The chalk grassland on the steep scarp slopes includes six SSSIs, for example at Ladle Hill.

Settlements

Settlement density is low, particularly on the areas of open chalkland surrounding White Hill and the chalk scarp.

Villages and hamlets are infrequent and widely scattered. The villages of Hannington and Ashmansworth have developed on high clay plateaux and are centred around village greens. Other settlements are often loose-knit groups of cottages and farms that have developed along dry valley floors and are linear in nature (e.g. Binley and Egbury). Sydmonton and Old Burghclere are the only settlements on the sandstone in the north.

Farms are scattered across the area, with large-scale farms dispersed across the open chalk downs.

Small copses are associated with many of the hamlets.

Recent development has been very limited and small-scale. There are Conservation Areas in Hannington and Ashmansworth.

Flint and brick farm cottage, Binley

Buildings

Many buildings were traditionally farmhouses, farm workers cottages or barns. Houses are generally two-storey. Flint has been used extensively for all building types, reflecting the underlying geology of the area. Similarly, some of the older buildings have chalk cob walls, coated with a lime plaster.

Flint with red brick dressing is widespread. Red brick is common and blue brick header and stretcher patterning has been used in some areas.

Timber frame buildings with brick infill are found throughout, particularly in the older farm buildings.

Greensand stone has been used in a very small area around Old Burghclere, where there was a quarry for the stone.

The prevalent roofing materials are orange-red clay roof tiles, thatch and some slate. Hipped and gabled roofs are common.

Windows are traditionally casement and sash.

Brick and flint farm building with a half-hipped slate roof, Egbury

Barns are traditionally brick and flint or weatherboard. Buildings are generally set back from the road with small front gardens. Hedges, brick walls, and brick and flint walls are common boundary features.

Design Implications

Hedgerow restoration, and hedgerow and woodland management, are required to provide a stronger landscape framework.

A large proportion of this area lies within the North Wessex Downs AONB where extensive new development would not normally be considered. New development should be small-scale, reflecting the traditional patterns of settlement growth. Siting of new built development should take into account long views to and from the open downs and scarp.

Village green, Ashmansworth

Development should be associated with existing settlements and be placed carefully in relation to existing woodland, trees and hedgerows. Where necessary, it should be accompanied by native tree and shrub planting to create shelter and screening.

The traditional building styles and materials used across the area should be reflected in new development.

Narrow country lanes should be protected from urbanisation.

4. Test and Bourne Valley

General Description

The River Test and the Bourne Rivulet rise from the underlying chalk beds and dissect the North Wessex Downs character area. The valleys contain many woodland blocks and narrow woodland belts, which together with the sloping valley sides, form an enclosed landscape. The valleys widen and the landscape becomes more open, as the two rivers converge to the southwest of Whitchurch. Settlements are frequent along the valley floor and are characteristically linear in nature.

The Bourne Valley lies within the North Wessex Downs AONB.

Landscape

The valleys cut through an underlying geology of chalk beds, with small areas of clay deposits on higher ground.

Alluvial loams and valley gravels have been deposited by the rivers in the valley bottoms, resulting in vegetation that is very different from that of the surrounding chalkland. The valleys have flat floodplains with braided channels, watercress beds and water meadows used for grazing. The sloping valley sides are mostly used for pasture and arable farming.

The River Test, Freefolk

Small blocks of woodland are found throughout, particularly on the steeper valley sides where Beech and Ash predominate. Next to the rivers, there are many linear bands of Willow and Alder, together with some commercial Poplar plantations. Larger woodland blocks are found in and around the listed parkland landscapes of Laverstoke Park and Hurstbourne Park.

Hedgerows contain chalk-loving species such as Dogwood, Wayfaring Tree, Spindle, Privet, Field Maple and Hazel.

The main roads run along valley floors and lower valley sides. Minor roads are relatively infrequent and tend to cross the valleys at right angles.

The A34 cuts across the Test valley to the west of Whitchurch and has a significant impact upon the landscape, particularly where it is raised above the valley floor. The embankments and structures associated with the London-Salisbury railway line are also important features of the landscape, most notably the viaduct at St Mary Bourne.

Public paths and byeways follow the same pattern as the roads. The Test Way long-distance footpath follows the floor of the Bourne Valley for a short distance through St Mary Bourne.

The River Test has been designated as an SSSI, along with East Aston Common and Bere Mill Meadows.

Settlements

Settlement density is fairly high, particularly in the Test Valley.

Settlements have developed along the valley floor and lower valley sides and, as a result, are generally of a linear nature. Whitchurch and Overton show nucleated growth around important river crossing points.

The river channels, associated bridges and mills are important characteristics of the settlements. Watercress beds and water meadows form important open spaces.

The linear settlement of Stoke, on the floor of the Bourne Valley

Mature trees and woodland are a particular feature within and around the settlements in the Test Valley.

Buildings of different ages, styles and materials create an interesting street scene in the centre of Whitchurch

The historic cores of Whitchurch and Overton are focused in the valley bottom, not far from the river. Overton was a 13th century planned settlement laid out on a grid pattern.

As the towns have grown they have expanded outwards and recent development has tended to take place higher on the valley sides. This development has occasionally had an adverse impact on the wider landscape.

Large houses set in extensive grounds are found adjacent to the valley roads, together with their associated lodges, gates and driveways.

Narrow streets with continuous built frontages are found in the centre of the settlements with buildings often facing directly onto the street.

Numerous closes and small yards, surrounded by housing, are a feature in the centre of Whitchurch. For example, Laundry Yard and Vinery Close.

There are Conservation Areas in Whitchurch, Overton, Tufton, Hurstbourne Priors, St Mary Bourne and Stoke.

Buildings

Buildings are generally two-storey or single-storey with dormer windows. Terraced houses are common throughout.

Buildings of different ages, styles and materials create interesting street scenes in the centre of the settlements. Roof lines are broken by dormer windows, the varying pitches of the roofs, buildings of different heights, and houses occasionally set gable-end to the road. Flint has been used extensively for all building types, reflecting the underlying geology of the area. Similarly, some of the older buildings have chalk cob walls, coated with a lime plaster.

Coursed, knapped flints are a particular feature in Hurstborne Priors

Flint has been used either as random walling or as more ordered, coursed work characteristic of the 19th century. Coursed, knapped flints are a particular feature of the buildings in Hurstbourne Priors. The flint is most commonly used with red brick dressing.

Mellow red brick is a particular feature of this area and red brick is found widely throughout. Blue brick patterning has also been used, but is less common. Timber-framed buildings with brick infill are St Mary Bourne.

Brick, stucco or render painted in muted colours, contrasts with the bare brick.

Traditional sash window

Hipped and half-hipped roofs are common. Roofing materials are usually orange-red clay roof tiles, slate or thatch, the latter being particularly important in St Mary Bourne.
Flint and brick walls are common boundary features. Cob walls are less common, occasionally with thatch coping, for example in Tufton and Stoke.

Windows are traditionally casement or sash.

Many of the residential buildings constructed over recent years have been built in materials and styles that are not traditionally associated with the area.

Design Implications
The water meadows and watercress beds are important features of the river floodplain and settlements, and should be maintained.

The woodland blocks on the valley sides and linear bands of trees associated with the river, are important features within and around the settlements and should be maintained.

The Bourne Valley lies within the North Wessex Downs AONB, where extensive development would not normally be considered. The intimate scale of the landscape throughout the Test-Bourne Valley makes this area particularly sensitive to any form of large-scale development.

New development should allow sufficient room for a framework of native trees to be planted, to integrate the built form into the surrounding landscape. Native trees and shrubs should be planted around developments adjacent to open countryside.

Siting of new built development should take into account views from the wider landscape. Development should be kept on the lower valley slopes away from the risk of flooding and should be consistent with the existing linear form of the settlements. The coalescence of neighbouring villages and hamlets should be avoided.

The density of new development should be in keeping with that in the existing settlements. Buildings should generally be two-storey and face directly onto the road, or be located close to the street, with small front gardens.

Existing public paths through the settlements should be linked to new development and the surrounding countryside, wherever possible.

New development should reflect the patterns and proportions of existing vernacular buildings in the area and pick up on the traditional building forms, materials, colours and textures, as set out above.

Boundary walls should be built out of materials that are characteristic of the area, such as flint with red brick dressing or orange-red brick. Narrow country lanes should be protected from unnecessary improvements and urbanisation.

5. Chalk and Clay Downs

General Description

This area comprises rolling chalk downland with deposits of clay and flint. There is a flat clay plateau in the east, which merges southwards into a distinct ridge and valley landscape. The area is distinguished from the North Wessex Downs by the greater degree of woodland cover, trees and hedgerows, which create a more enclosed landscape. Settlements are small and dispersed.

Landscape

There is a pattern of medium to large-scale arable fields with large woodland blocks on the areas underlain by clay and flint. There are many trees and hedgerows throughout and varying intervisibility across the area.

Frequent blocks of ancient semi-natural woodland provide a sense of enclosure around Steventon and Oakley in the west and Upton Grey and Ellisfield in the east.

View from College Lane, Ellisfield

Beech and Ash predominate, with Oak on the higher areas where clay and flint overlay the chalk. Lime is well represented in some of the villages. Hedgerow species are typically Hazel, Hawthorn, Blackthorn, Field Maple, Spindle and Wayfaring Tree.

There are eight historic parkland landscapes in the area, including Hackwood Park in the east, and Oakley Park in the west. The associated gates, lodges and park fencing are important characteristics of the area.

The area has a generally quiet, unspoilt rural character but with visual and noise intrusion from the three major roads (M3, A303, A30) in the south of the area.

Away from the main roads, narrow winding lanes tend to follow dry valleys through the landscape, linking the dispersed settlements. These are sometimes sunken lanes, with high hedge banks.

There are many public paths in the area. The Wayfarers Walk longdistance footpath crosses the area just south of Oakley, passing through Dummer and down to the Candover Valley.

The spoil heaps at Micheldever form the only SSSI in the area.
The two railway lines and associated embankments and tunnels are features in the landscape.

Settlements

Settlement density is fairly low and dispersed. There are few long views of the settlements, which are well integrated into the landscape through their positioning in relation to landform, woodland, hedgerows and trees.

Villages and hamlets have tended to develop along the bottom of dry valley floors, for example, North Waltham, Deane, Steventon and Ellisfield and only occasionally on higher ground, for example, Dummer and Herriard. The settlements are generally linear in nature.

Buildings of different ages, styles and materials create interesting street scenes in the centre of Oakley, North Waltham and Upton Grey. Roof lines are broken by dormer windows, the varying pitches of the roofs and buildings of different heights. The majority of these buildings face onto the road and have small front gardens.

Village ponds are an important focal point in many of the settlements, such as Cliddesden, Upton Grey and Oakley.

The village pond is an important focal point in Oakley

The railway lines, tunnels and embankments in and aroundOakley and Steventon areimportant characteristics of the settlements.

There are Conservation Areas in North Waltham,Worting, Church Oakley, Dummer, Steventon, Upton Grey, Tunworth, Deane and Ellisfield.

Recent development has largely taken the form of detached housing built around wide culs-de-sac.

The developments have tended to ignore the traditional building materials, styles and layouts in the area, and in some cases have detracted from the character of the settlements.

Typical two-storey farmworkers' cottages in Tunworth

Buildings

Buildings are generally two-storey and domestic in character. Many were built as farmhouses and farm workers' cottages.

Red brick has been used throughout and blue brick header and stretcher patterning is characteristic of this area. Flint has traditionally been used in combination with red brick and some of the older buildings have chalk cob walls, reflecting the underlying geology. A large number of the older vernacular buildings have timber framing with brick infill and occasionally rendered wattle and daub. White painted brickwork and render contrast with the bare brick walls.

Mellow red bricks and orange-red roof tiles have been used in Deane and Oakley.

Decorative tile hangings are locally important in Deane and Upton Grey, and there is also some use of decorative bargeboards in Upton Grey.

Decorative tile hangings are a local characteristic of Upton Grey

There are many examples of timber framed barns with weatherboarding. Hipped and half-hipped roofs are widespread and roofing materials are traditionally red clay tile, thatch and slate. Many buildings in Tunworth and Upton Grey have large chimney stacks.

Traditional sash window (North Waltham)

Casement and sash are the traditional styles of windows. Flint and brick boundary walls are important features in many of the settlements, but hedges are the most common form of boundary treatment.

Design Implications

The woodlands, trees and hedgerows should be managed and conserved, to retain the sense of enclosure and avoid opening up long views.

The historic parkland landscapes and associated lodges and gateways should be appropriately managed and maintained.

New development should be carefully sited in the landscape with consideration for long distance views and traditional settlement form. Development should generally be located along the lower valley slopes, and be placed carefully in relation to existing woodland, trees and hedgerows.

Where necessary, new development should allow sufficient room for a framework of trees to be planted, to integrate the built form into the surrounding landscape. Native trees and shrubs should be planted around development adjacent to open countryside.

Consideration should be given to views of the countryside from the railway lines and from the Wayfarers Walk.

Timber-framed barn with weatherboarding (Tunworth)

Narrow country lanes should be protected from unnecessary improvements and urbanisation.

New development should reflect the traditional building styles, materials and colours. Boundaries should be marked by hedgerows or by walls that are built out of materials characteristic of the area, for example brick and flint.

6. Candover Valley

General Description

The Candover valley is a well-defined valley with sloping sides and a narrow bottom. It is underlain by chalk, with occasional deposits of clay and flint. The landscape is diverse with farmland, woodland and parkland unified by the valley form. Small villages have developed along the valley floor and are characteristically linear in nature. Elsewhere, farms and individual properties are widely dispersed.

Landscape

Large arable fields are found on the upper slopes, where there is limited woodland, low hedgerows and few hedgerow trees. Views from the upper slopes are open.

Candover Valley

The lower slopes and bottom of the valley are more enclosed with smaller fields and a stronger hedgerow structure. There is increased pastoral use on the lower valley slopes and bottom, and distinctive wetland vegetation is found on the valley floor, south of Preston Candover. Views from the lower valley are restricted by the hedgerows, trees and valley sides.

Hedgerow species are typically Hawthorn, Blackthorn, Field Maple, Spindle, Hazel and native Privet.

Parkland is a feature along much of the valley floor, giving the sense of a well managed landscape. A number of formal gateways lead off the main road, together with neat hedges and verges, large boundary walls, iron park fencing and some formal tree planting.

There are many Scheduled Ancient Monuments in the area.

The main road runs along the valley floor and the few minor roads that join it tend to follow the route of tributary valleys, meeting the main Candover Valley at right angles.

Public paths and byeways tend to follow the same pattern as the roads. The Wayfarers Walk long-distance footpath passes through Brown Candover.

There is limited intrusion from people and traffic.

The Candover stream runs adjacent to the main road towards the southern end of the valley.

Settlements

A series of linear villages have developed along the valley floor beside the main road. Settlement on the surrounding valley sides is restricted to isolated farm buildings. The village of Bradley has developed at the head of a smaller, tributary valley, which joins the Candover Valley at Preston Candover.

Large houses set in extensive grounds are a feature of the valley, with smaller properties tending to form the centre of the villages.

The villages are predominantly residential in character, although large agricultural buildings are also present.The Candover stream and associated vegetation are important features in Chilton Candover and Brown Candover.

Jack Stevens War Memorial is a landmark feature in Axford

Many settlements have a focal point/landmark feature, for example, the Jack Stevens War Memorial Pavilion at Axford, the village pond at Bradley and the village pump and War Memorial on the green at Preston Candover.

Fields and mature trees between the groups of houses within each settlement, integrate the built form into the landscape.

There are Conservation Areas in Bradley, Preston Candover, Brown Candover and Chilton Candover.

Buildings

Buildings are generally two-storey, although the larger houses are frequently two storey with dormer windows. They are predominantly detached or semi-detached properties.

Large chimneystacks are a particular feature in Chilton Candover

Iron park fencing is a boundary feature along the valley floor

Large domestic buildings are a feature. Old halls and manor houses, together with their associated lodges and farmhouses are found along the valley floor.

Old farmhouses, farm workers' cottages and barns are all built in traditional materials. The prevalent traditional materials are red brick, flint with red brick dressing, thatch (notably long straw in Preston Candover), red clay tiles and slate. Blue brick patterning has occasionally been used.

Brick frontages painted in pale colours, contrast with the bare brick and flint. Gable, hipped and half-hipped roofs are common. Large chimneystacks are a particular feature in Chilton Candover.

Traditionally, casement windows have been used throughout. Brick, flint and chalk cob have traditionally been used in the extensive boundary walls. There are also stretches of iron park fencing.

Design Implications

Mature trees, woodlands and hedgerows within and around the villages should be conserved and managed to retain the existing character of the settlements. The stream and associated wetland vegetation are important features in and around Chilton Candover and Brown Candover, and should be appropriately managed and conserved.

Flint and brick have frequently been used in boundary walls such as this one in Nutley

The parkland landscapes and associated gateways and lodges should be appropriately managed and maintained.

New development should reflect the linear form of the existing villages and should be kept on the valley floor and lower valley slopes, away from the risk of flooding. Development should be small-scale and should reflect the proportions of existing vernacular buildings in the area, picking up on the traditional building styles, materials and colours, as set out above.

Linear development on the edge of the settlements should be avoided to prevent the coalescence of neighbouring villages and hamlets.
Hedgerows, or brick and flint boundary walls, should mark boundaries adjacent to the road.

Native trees and shrubs should be planted in association with development adjacent to the open countryside, to integrate the new buildings into the landscape. Sufficient space should be allowed to plant large tree species.

Typical Building Styles and Materials

1. Lowlands and Heath

Highclere. Half-hipped roof with red clay tiles.

East End. Vertical clay tile hangings.

Kingsclere. Traditional materials.

Highclere. Typical use of brick and clay tiles with sash windows.

Ecchinswell. Patterned brickwork.

Highclere. Red clay tile hangings.

2. Loddon and Lyde Valley

Old Basing. Brick boundary wall and buildings.

Stratfield Saye. Distinctive casement windows.

Old Basing. Many of the traditional buildings have first floor casement windows immediately beneath the eaves.

Old Basing. Timber frame and thatch.

Bramley. Clay tile hanging.

Old Basing. Traditional brick buildings.

3. North Wessex Downs

Egbury. Bands of brick and flint are a feature of many vernacular buildings.

Ashmansworth. Red clay tiles are a traditional roofing material.

Ashmansworth. Hipped roofs are common.

Binley. Bands of brick and flint, with a dentil course of bricks below the gabled roof.

Hannington. Hedges and brick walls are common boundary features.

Cole Henley. Traditional sash windows with flint and red brick dressing.

4. Test and Bourne Valley

St. Mary Bourne. Terraced houses are common throughout the Test and Bourne Valley.

Stoke. Traditional sash windows and a low brick boundary wall.

Stoke. Traditional casement window and chimney detail.

Laverstoke. Dormer windows are characteristic of the village.

Hurstborne Priors. Flint with redbrick dressing

Hurstbourne Priors. Coursed, knapped flints are a particular feature.

5. Chalk and Clay Downs

North Waltham. Example of a typical single storey property with dormer windows.

North Waltham. Sash windows are common.

Upton Grey. Clay tile hangings.

Steventon. Flint and brick boundary wall.

North Waltham. Flint with red brick dressing around a casement window.

Tunworth. Brick patterning is characteristic of the area.

6. Candover Valley

Brown Candover. Brick and flint boundary walls at a formal gateway.

Brown Candover. Large domestic buildings are a feature of the Candover Valley.

Preston Candover. The War Memorial is a focal point in the linear village.

Axford. Iron park fencing and lodge houses are a feature of the valley.

Brown Candover. Red clay tiles, brick and flint are common materials.

Brown Candover. Larger houses are frequently two storey with dormer windows.

Examples of Good Development in the Borough

Binley. An example of innovative sustainable design.

Freefolk. Small development in keeping with the scale of building, design details and materials traditionally found in the Test and Bourne Valley.

Whitchurch. Two and three storey development in the town centre on the site of an old jam factory. Three storey buildings are distinctive features in the centre of Overton and Whitchurch.

Cliddesden. Small development in the centre of the village, which is in keeping with the traditional building styles of the area.

Cliddesden. The new village hall has picked up on local design details.

Preston Candover. Two storey brick and flint house of a style and scale that adds to the scene along the main road through the village.

Laverstoke. New flint and brick housing detailed with gabled dormers. These add to the street scene and complement the style of the older houses in the background.

St Mary Bourne. High quality materials have been used to build a large house adjacent to the valley road.

Bradley. Traditional materials and interesting detailing on a relatively new property overlooking the village pond.

Brown Candover. An individual style of flint and brick house with a hipped roof.

Overton. Infill terraced houses in the village centre give continuity to the street scene by picking up on local building styles and scale.

Whitchurch. Although the windows are not traditional in design, the scale of the building together with the colour and style of materials used ensure that it fits in with the general street scene.

Conclusion

The council strongly supports the concept that new development in the countryside can and should, contribute to a sense of local identity and diversity.

The principles outlined in the document will help encourage a more locally-based approach to design and planning, and all future relevant planning applications will be expected to respond to the guidance. The document will also provide an objective basis for the preparation of any site-specific development briefs, and assist in forward planning by ensuring that design impact is considered when potential development sites are identified.

The description of appropriate forms of development in the CDS does not, in itself, imply that any particular development is acceptable. Development would have to comply with all the relevant planning policies to be considered appropriate.

Annex 1: Glossary

Bargeboards. Projecting boards placed against the incline of the gable of a building, hiding the ends of the horizontal roof timbers.

Casement window. A window with the glazed frame hinged to open outwards or inwards.

Catslide roof. A long, sloping roof, especially one where the main roof-slope on a two-storey building is continued down to cover a single-storey outshot.

Cob. Walling material made of chalk or clay mixed with straw, gravel and sand.
Course. A parallel layer of bricks, blocks, tiles etc.

Dormer window. A window placed vertically in a sloping roof and with a roof of its own.

Gable. The triangular upper portion of a wall at the end of a pitched roof.

Gable roof. A roof with gables at one or both ends.

Half-hipped roof. A gabled roof but with a small hip at the highest point.

Header. A brick laid across a wall to bond together its two sides.

Hipped roof. A roof which has four slopes instead of two. The shorter sides are roofed with sloping triangles – the hipped ends.

Knapped flint. Flint split in two and laid so that the smooth black surfaces of the split sides form the facing of a wall.

Sash window. A window with two sliding glazed frames that open by sliding vertically.

Special brick. A brick which is not the usual rectangular shape.

Spring-line settlements. In chalk landscapes, settlements that were originally based around springs that lie at the foot of scarp slopes, where the chalk rests on impermeable rock, such as clay.

Stretcher. A brick laid lengthways in a wall.

Tile hanging. A wall covering of overlapping rows of tiles on a timber structure.

Vernacular. A term to describe local regional traditional building forms and types, constructed using locally available materials, following traditional building practice and patterns.

Wattle and Daub. A method of wall construction consisting of branches (wattle) roughly plastered over with mud or clay (daub).

Weatherboarding. Overlapping horizontal boards covering a timber framed wall.

Appendix 4.2 Definitions of green space types

Amenity Green Space – green space suitable for team games and robust play including kickabout space (rectangular area of mown grass minimum 1600 sqm plus a buffer of 10m to housing, minimum width 25m, maximum gradient 1:40), with tree and shrub planting.

Parks - green spaces that have well defined boundaries and a strong sense of place and design. They contain a range of facilities which cater for a wide range of users including young children, teenagers, families, office workers and the elderly. Facilities should include:

- Open grassed areas including space for informal team games;
- Tree and shrub planting;
- NEAP and informal sports facilities (e.g. multi-use games areas, basketball hoops and ball walls);
- Sitting areas and ornamental garden areas;
- Space for community and cultural events;
- Wildlife areas;
- Signage.

The precise combination of facilities will depend on existing provision and local need.

Accessible Natural Green Space (ANGS) - green space which is designed and/or managed to encourage biodiversity but is freely accessible to people for informal recreation (subject to ecological sensitivities) and where a feeling of naturalness is allowed to predominate. Provision for informal recreation may include a network of paths, seating, interpretation etc. Types of ANGS include:

- Woodlands
- Grasslands (managed for floristic diversity)
- Waterways, water bodies and wetlands.
- Heathland
- Landscape features, green corridors and buffers – areas whose primary purpose is for wildlife protection/enhancement; protection of important landscape features; provision of pedestrian, cycle and/or wildlife transport links and/or buffering.

Equipped Play - outdoor sites with equipment and facilities aimed specifically at children and young people and where play is the predominant use of the site:

- Local Play Area (LEAP) provides for children aged 0–10 (20m buffer to housing)
- Neighbourhood (NEAP) and Strategic Play Areas provide for children and young people aged 0–18 (30m buffer to housing)

Allotments – a suitable site for growing fruit and vegetables with facilities to meet the needs of allotment holders including appropriate perimeter fencing and gates to prevent unauthorised access, water supply, waste storage, hard access for pedestrians and vehicles.

Minimum sizes – The minimum sizes set out in Local Plan Appendix 4 will allow the accommodation of the above features and functions. The actual size of a green space will depend on local need and the level and type of existing provision.

Appendix 5.1 Key species and habitats

Key Species

Key species is an umbrella term to cover legally protected species, Species of Principal Importance in England and Notable Species in Hampshire. Legally protected species mean those given statutory protection for nature conservation reasons. Specifically, this means those species given protection under the Wildlife and Countryside Act 1981, the Conservation of Habitats and Species Regulations 2010 and the Protection of Badgers Act 1992. Species of Principal Importance in England are those listed under the provisions of Section 41 of the Natural Environment and Rural Communities Act 2006.

National Level

A list of Species of Principal Importance in England[3] can be downloaded from: http://jncc.defra.gov.uk/page-5705

County Level

Notable Species in Hampshire are listed in Appendix 1 of the Council's Living Landscapes strategy: https://www.basingstoke.gov.uk/content/page/48903/Living%20landscapes%20appendices.pdf

Species action plans on a county basis for some of these can be downloaded from: http://www.hampshirebiodiversity.org.uk/species.htm

Key Habitats

Lowland Mixed Deciduous Woodland; Lowland Beech and Yew Woodland; Wet Woodland (incorporating Ancient Semi-Natural Woodland)

Semi-natural woodlands are those that have arisen from natural colonisation by tree seedlings, as opposed to plantation woodlands grown as a timber crop. Semi-natural woodlands that have been continuously wooded since 1600 (a date before which plantations were very uncommon) are known as ancient. The great age of ancient semi-natural woodlands means that, typically, they have been colonised by a far greater range of species than recent secondary woodland. Native trees on some ancient woodland sites have been replaced by conifers, originally planted for commercial timber production. These sites, known as Plantations on Ancient Woodland Sites (PAWS), are still of significant potential for restoration and, therefore, it is important to safeguarded them within the planning system.

Semi-natural woodlands include those woodland habitat types listed in Section 41 of the Natural Environment and Rural Communities (NERC) Act, i.e. Lowland Mixed Deciduous Woodland, Lowland Beech and Yew Woodland and Wet Woodland. Many of these woodlands are ancient but they do not necessarily have to be ancient to meet the habitat definition.

Wood-pasture and Parkland

These habitats are the relics of a traditional practice of managing land for grazing and woodland products. Trees were managed by pollarding, a process of removing the crown of the tree, above the reach of browsing animals. This allows new shoots to develop for several years, to provide small-diameter wood products. Cutting was repeated every few years to maintain the supply. This practice, which occurred on wooded commons, and in private deer parks, has given rise to grass dominated landscapes dotted with mature trees. Now the practice has mostly been abandoned, the trees provide a niche for fungi which, in turn, create cavities, providing a habitat for invertebrates, roost sites for bats, and nest holes for birds. Such 'veteran' trees can also host rare lichens and bryophytes. In addition to their habitat value, veteran trees that are relicts of traditional pollard management are an important part of the borough's cultural and historic heritage.

Arable Field Margins

Uncultivated field margins provide an important refuge for flowering plants and other wildlife that were once a familiar sight in the farmed landscape. Such margins can also play a valuable role in helping to buffer adjacent semi-natural habitats from the effects of fertiliser and pesticide use.

Those field margins which are cultivated but uncropped are a vital resource for rare arable plants such as pheasants-eye.

Ancient and/or Species Rich Hedgerows

Hedgerows form a network over much of the borough creating distinctive field patterns and providing an important refuge for wildlife. They are a primary habitat for nine of the Hampshire Priority Species and a secondary habitat for a further twenty-eight. Ancient hedgerows, defined as pre-dating those planted during the enclosures of the 18th and 19th Centuries, can be particularly biodiverse.

However, more recent hedges can also be very important. Those containing five, or more, woody species per thirty-metre section, or having a particularly diverse range of non-woody plants at their base, are deemed to be species rich, in relation to Policy EM4.

Lowland meadows (incorporating unimproved neutral grassland)

These grasslands include both dry and wet 'fen' types, associated with floodplains and springs. The unimproved aspect relates to the fact that they have not been subjected to herbicide treatment, or nutrient enrichment through the addition of artificial fertilisers. As a consequence, plant diversity is much greater than in improved grassland, where relatively few species tend to dominate.

Calcareous grassland

This is the typical chalk grassland of less intensively farmed parts of the North Wessex Downs. It is a historical product of sheep farming, which reached its peak in the 16th Century. The combination of soil chemistry, and selective grazing by sheep and rabbits, results in a rich flora and a close-fitting land cover revealing the subtleties of the downland terrain. Chalk grassland is of particular importance for several butterfly species. Juniper, blackthorn and yew scrub is a natural component of this habitat adding to its diversity, but blackthorn and yew needs careful management, to ensure it does not dominate. Chalk grassland has been drastically reduced over recent decades, and now only a few fragments remain in the borough.

Floodplain grazing marsh / wet grassland

Grassland situated in river floodplains and periodically inundated, has become a scarce habitat, due to drainage and, in some cases, conversion to arable farmland. Where they remain, these areas are important for wading birds and wintering wildfowl.

Lowland heathland/bog/acid grassland

Characterised by purple-flowering heather, with occasional yellow splashes of flowering gorse, lowland heath, a remnant of historical grazing practices, is an internationally important habitat type. This habitat is particularly important for rare birds, including nightjar and Dartford warbler, and silver-studded blue and grayling butterflies, both of which are declining nationally. Diversity is added by bogs, occurring in valleys with impeded drainage, giving rise to sphagnum moss dominated plant communities. This habitat occurs on acid soils and was once widespread across the north of the borough. It is now restricted to a few fragments, including Tadley and Silchester Commons. Closely associated acid grassland also occurs in the north of the borough, including nationally important examples at the Ashford Hill Meadows National Nature Reserve.

Wetlands (incorporating fen/marsh/swamp/reedbed)

These habitats tend to occur together forming mosaics, the different patches representing different stages of succession from open water to species-poor fen— the latter commonly grading into alder and willow woodland (carr or wet woodland). Because of the decline in traditional management, at some sites these different stages are deliberately held in check through conservation management in order to maintain habitat diversity. These habitats are important for a range of plants, birds and invertebrates. Examples in the borough include Mapledurwell Fen and Basing Fen.

Ponds and other standing open water

There are numerous ponds and lakes across the borough, many of which have been deliberately created for utilitarian or ornamental purposes. Collectively, these provide an important habitat for freshwater plants and animals. In particular, they play a vital role in the life cycles of amphibians, including the European protected Great Crested Newt.

Chalk rivers and streams

Chalk rivers are fed from ground water aquifers. The subsequent water chemistry, combined with relatively stable flows and cool temperature regimes, results in a rich plant and invertebrate diversity. These rivers are also important for game fish, such as Atlantic salmon and brown trout. These can provide suitable habitats for otters, water vole and white-clawed crayfish, all of which are UK and Hampshire Priority Species. Chalk rivers in the borough include the Test and the upper reaches of the Loddon and Lyde.

Open mosaic habitats on previously developed land

The identification of this habitat type relies on the habitat meeting certain criteria including a known history of disturbance at the site through major historical industrial use or development and the site supporting early successional plant communities. They can be a valuable habitat for invertebrates and birds and tend to be located in urban or urban fringe areas.

Traditional Orchards

Where they might exist in the Borough this habitat type is defined as groups of fruit and nut trees planted on vigorous rootstocks at low densities in permanent grassland; and managed in a low intensity way.

Green Lanes

Unsurfaced green lanes, such as the Harrow Way, with their combination of verges, hedges, bare earth and sheltered micro-climates, can have particularly good habitat, as well as aesthetic, value.

Basingstoke Canal

Canal habitats, in contrast to rivers, provide stable aquatic environments, giving rise to particular combinations of plants, both in the main channel and at the margins. Adjacent bank habitats play an important role in the life cycle of many canal species, including water vole, dragonflies and damselflies. The section in the Borough of Basingstoke and Deane is cut off from the rest of the canal by the collapsed Greywell Tunnel, an internationally important site for its bat populations.

Appendix 5.2 Triggers for ecological surveys

Please note the following is a guide to situations where surveys are likely to be required. But it is not exhaustive, and professional advisors may recommend, or the Council may require, surveys in other circumstances. Biodiversity Checklists are also available for Full or Householder Planning Applications to assist applicants in defining the biodiversity submission required in order to supply the relevant biodiversity information needed to validate and determine planning applications. These can be also useful to help determine if an application is likely to affect a key or priority habitat type:

http://documents.hants.gov.uk/biodiversity/BiodiversityChecklisthouseholdersforwebsite2013-09-25.docx
http://documents.hants.gov.uk/biodiversity/BiodiversityChecklistFullApp.docx

Development activities	Surveys required
Householder Applications: Where there is a Site of Special Scientific Interest, National Nature Reserve, Local Nature Reserve, Site of Importance for Nature Conservation or Key Habitat type within 50 metres of the site. Full Applications: Where there is a Site of Special Scientific Interest or National Nature Reserve within 500 metres of the site or a Local Nature Reserve or Site of Importance for Nature Conservation or Key Habitat type within 100 metres of the site.	Survey and report on condition and status of any features for which the site is designated, plus any species surveys identified, as necessary from the initial extended phase 1 survey.
Development of the following types where the proposed work involves modification, conversion, demolition or removal of dwellings and structures (especially roof voids): • All buildings with weather boarding and/or hanging tiles that are within 200m of woodland OR water; • Pre-1960 detached buildings and structures within 200m of woodland OR water; • Pre-1914 buildings within 400m of woodland OR water; • Pre-1914 buildings with gable ends or slate roofs, regardless of location; • Buildings located within, or immediately adjacent to woodland and/or immediately adjacent to water	Bats
Rural buildings (e.g. farmhouses, outbuildings and barns) particularly those of traditional brick or stone construction and/or with exposed wooden beams	Bats and birds, including barn owls and other nesting birds such as swifts, swallows, house martins and house sparrows

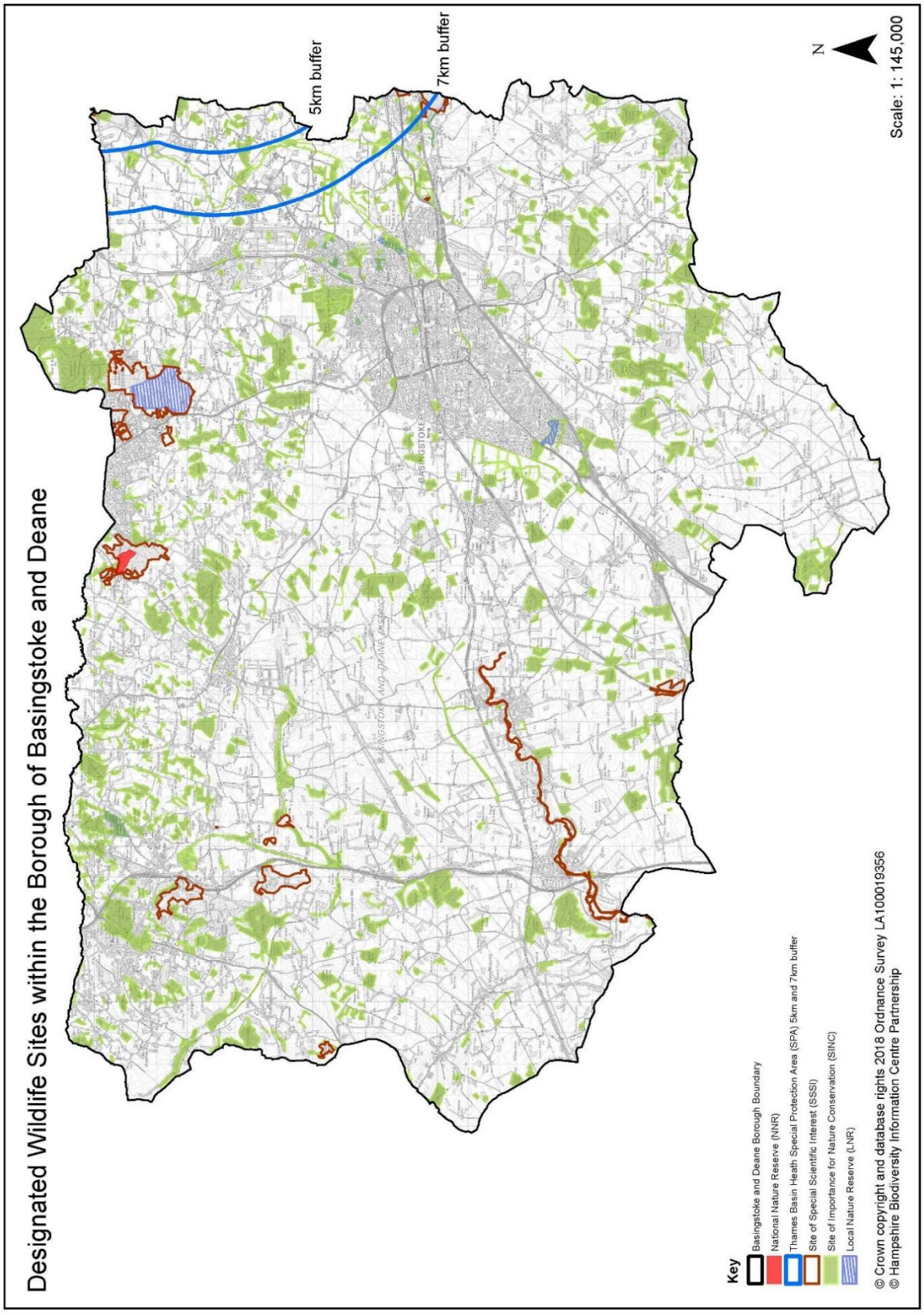
Development activities	Surveys required
All developments affecting buildings, structures or other features where bats, barn owls and breeding birds are known to be present.	Appropriate surveys for the species known to be present
Any development, including vegetation clearance or management within 100m of a pond, ditch or other non-flowing water body.	Amphibians with particular respect to Great Crested Newts (GCN). <u>Exceptions:</u> GCN may not be an issue if it can be shown there are permanent obstacles between known breeding ponds and the proposed development site that would stop GCN reaching the site. Obstacles may include major rivers, roads (with curb stones both sides), or heavily developed areas. However, advice from an ecological consultant/wildlife consultant must be sought, and a statement provided to support a case for not undertaking a survey.
Development in, or adjacent to, rivers, canals, ditches, lakes, ponds and other aquatic habitats.	Water vole, otter, Schedule 1 birds, such as kingfisher, all breeding birds, amphibians and reptiles, white clawed crayfish, foraging bats and notable/priority invertebrate and plant species. • Plus, where the proposals involve alterations to watercourses, changes in flow rate, sediment load, licensed discharges or risk of pollution to watercourses:, the above surveys should be continued downstream for the whole zone of influence. • where a Site of Special Scientific Interest, Local Nature Reserve or Site of Importance for Nature Conservation designation applies to the river or associated wetland/floodplain habitats, an extended phase 1 habitat survey and report on condition and status of any features for which the site is designated, plus any further species surveys identified as necessary from the initial extended phase 1 survey.

Development activities	Surveys required
Developments affecting woodland, rural hedgerows, tree belts and scrub.	Dormouse, reptiles, badgers, bats, Schedule 1 birds[47] and notable/priority invertebrate and plant species.
Developments affecting woodland, rural hedgerows, tree belts and scrub where elm and/or beech is present.	White-letter hairstreak butterfly (with respect to elm), white helleborine (with respect to beech).
Development that may involve removal or pruning of trees that are mature, and/or have obvious holes, cracks or cavities, and/or that are covered in mature ivy and/or a girth greater than 1m at 1.5 metres from ground level.	Bats, Schedule 1 birds such as barn owl, all birds when nesting/breeding and notable/priority invertebrate species.
Developments affecting existing mature gardens, allotments, 'derelict' land, brownfield sites, or railway land or road verges where there is rough grassland, scrub, and/or other vegetation has colonised parts of the site.	Reptiles, nesting birds, notable/priority plant and invertebrate species.
Developments affecting flower-rich meadows or grassland on or directly adjacent to the site.	Nesting birds, notable/priority plant and invertebrate species.
Developments affecting cultivated but uncropped arable field margins	Rare arable flora.
Developments affecting any features or locations where protected and/or notable species are known to be present, which may be brought to the attention of applicants during pre-application discussions.	Any relevant protected and/or notable species notified to the applicant.

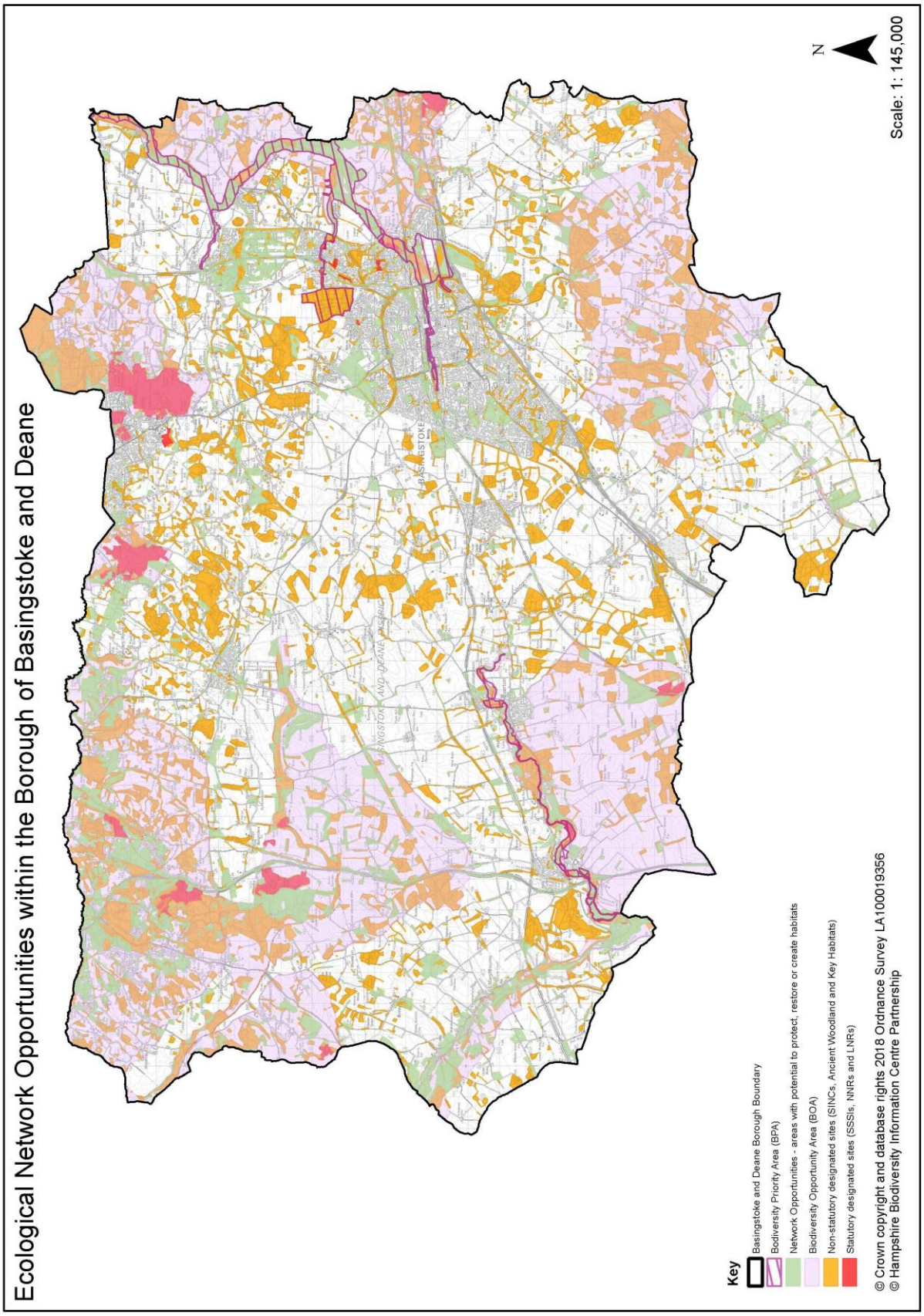
[47] Schedule 1 birds are those that appear on Schedule 1 Part 1 of the Wildlife & Countryside Act and for which it is an offence to intentionally or recklessly disturb birds and their young at, on or near an active nest.

Appendix 5.3 Biodiversity maps

Map 1: International, national and local biodiversity designations (at 13 December 2018)



Map 2: Ecological Network Opportunities



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