

Chapter Four

Development Management Policies

Development Management Policies

- 4.1 The following development management policies apply to the whole of the District unless specific locations are indicated within them. They cover four broad categories that interlink and all applications for development will be judged against the full suite. The categories are:
- natural environment and green infrastructure;
 - historic environment;
 - design; and
 - environmental policies.

Natural Environment and Green Infrastructure

- 4.2 Policy SP 7 sets the context for Policies DM 1 – DM 6 which reinforce the approach of this plan to provide a network of multifunctional green and blue infrastructure that:
- avoids harm to existing trees, green infrastructure, precious habitat and species;
 - strengthens the biodiversity assets of the District;
 - addresses the impacts of development on landscape character and geodiversity;
 - responds to the key assets of the Epping Forest and Lee Valley Regional Park; and
 - provides for open spaces for people and other species to thrive.

Habitat Protection and Improving Biodiversity

- 4.3 The District is rich in biodiversity resources at an international, national and local scale of importance. In particular, ancient woodland, veteran trees and water habitats such as water meadows and rivers are prevalent in the District. These include a Special Area of Conservation designated for its habitat features and a Special Protection Area designated for its support of important bird species (both of which are European sites), national Sites of Special Scientific Interest, Local Nature Reserves and Local Wildlife Sites. National and international

legislation requires that these are protected to differing degrees. National policy requires the Council to take a positive approach to achieving net gains in biodiversity thus improving the quality and extent of land assets that are of biodiversity value whilst the NERC Act 2006 places a duty on the Council to have regard to the purpose of conserving biodiversity. The biodiversity designations in the District are contained on the policies map but this does not include protected species and habitat that may be located outside of these areas.

- 4.4 The types of designated ecological assets in the District are as follows and their definitions are contained within Appendix 1.
- 4.5 International:
- Special Areas of Conservation (SAC);
 - Special Protection Areas (SPA); and
 - Ramsar Sites.
- 4.6 National:
- Sites of Special Scientific Interest; and
 - National Nature Reserves.
- 4.7 Local:
- Local Nature Reserves; and
 - Local Wildlife Sites.
- 4.8 The Council values the high degree of biodiversity in the District and takes its responsibilities seriously in regard to its protection. The fragmentation of habitats is particularly damaging to realising the aim of achieving net gains in biodiversity and linking habitats is important in this respect. In part due to its proximity to London, the pressure from infill development in the metropolitan area of London and into Essex makes protection of biodiversity assets within the District all the more important. Some fragile ecosystems in the District suffer both from visitor pressure and air pollution from traffic. The impact of climate change on biodiversity is a key consideration and means that species need space to move as conditions alter.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Key Evidence

- Habitats Regulation Assessment (AECOM, 2017);
- Essex Biodiversity Action plan 2010-2020 , Essex Wildlife Trust 2011; and
- Local Wildlife Sites (LoWS) Review EECOS for EFDC 2010.

Approach

- 4.9 Given that development must seek to achieve net gains in biodiversity, the strategy and policies of the plan seek to emphasise that development must be coupled with the active protection of existing and creation of new habitat. This includes physically linking habitat sites where appropriate and protecting sites that are functionally linked to others - for example where there are pockets of habitat supporting a species such as stands of trees used by woodland birds. It includes measures such as protecting species, sites, hedgerows and protected trees and the restoration and enhancement of the wide variety of habitat in the District. It includes measures to improve and protect rivers and their banks, ponds and wetland such as de-culverting and providing buffer zones around features
- 4.10 In order to comply with national and international legislation and policy it is necessary to recognise that under certain circumstances, the harm caused by a development to biodiversity can and should be mitigated against and/or compensated for, and as a last resort offset. Measures include the provision of new habitats, relocation of species and development details to encourage or discourage species movement, for example the retention of waterways as dark corridors to support bats feeding, the introduction of toad crossings or cat-proof fencing.
- 4.11 In order to understand the impact of development proposals on protected species and habitats, and potentially valuable habitat for protected species it may be necessary to require detailed ecological survey information and an impact assessment to enable the Council to judge the proposal and how effective measures to mitigate or compensate any harm

might be. This will depend on the level of existing data available. The starting point for when a Preliminary Ecological Assessment is required is set out in Epping Forest District Council's Local List of Validation Requirements.

- 4.12 In respect of hedgerows an assessment against the criteria of the Hedgerow Regulations 1997 will be required and where deemed to be 'Important' under the Hedgerow Regulations, development proposals must demonstrate how adverse impacts will be avoided, and where mitigation is required, this must be on site.
- 4.13 The use of biodiversity accounting in the assessment of development proposals is advocated by the Council. A valuable Government Biodiversity metric is used in the Biodiversity Impact Assessment Calculator (BIAC). This Government biodiversity metric quantifiably demonstrates whether a net gain in ecological units has been achieved in regard to a proposed development and how compensatory measures on and off site can ensure a net gain. It can be applied to all habitats and can therefore assist in meeting the requirements to achieve net gains in biodiversity. The Council recommends the use of this tool to provide information regarding development proposals whilst recognising that the use of the tool does not override the protection afforded by law to many sites and species in the District.
- 4.14 The Council will take a precautionary approach where insufficient information is provided regarding the ecological status of the site, management and mitigation measures. Mitigation and compensation must conform to the requirements of relevant legislation and Government Standing Advice.
- 4.15 The design and layout of development should enable net gains to the biodiversity of the District.

Policy DM 1 Habitat Protection and Improving Biodiversity

- A. All development should seek to deliver net biodiversity gain in addition to protecting existing habitat and species. Development proposals should seek to integrate biodiversity through their design and layout, including, where appropriate,

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

through the provision of connections between physical and functional networks.

- B. Development proposals must protect and enhance natural habitats, areas and corridors for biodiversity and should not negatively impact upon areas of international or national designation. The creation of new corridors for biodiversity will be supported in appropriate locations. The provision of buffers to protect sensitive habitats including those of wetlands and ponds will be required where necessary.
- C. Development proposals which are likely to have a negative impact on a locally designated site (Local Wildlife Site and Local Nature Reserve) will only be permitted where the benefits of the proposed development clearly outweigh the value of the ecological feature adversely affected and there are no appropriate alternatives.
- D. In exceptional circumstances where the negative impacts of development on natural habitat and biodiversity are unavoidable, the negative impacts must be proportionately addressed in accordance with the hierarchy of:
 - (i) mitigation;
 - (ii) compensation in the form of habitat; and finally
 - (iii) offsetting within the locality.
- E. The details of any necessary enhancing, mitigating or compensatory measures should accompany the planning application as appropriate. When appropriate, conditions will be put in place to require that monitoring is undertaken (by a suitably qualified ecological professional), and to make sure that any mitigation, compensation and offsetting is effective.
- F. The loss, deterioration or fragmentation of irreplaceable habitats, such as veteran trees and ancient woodland, will not be permitted by the Council, unless the need for, and benefits of, the development in that location can be demonstrated to clearly outweigh the loss.
- G. Where there are grounds to believe that a Protected Species, Priority Species, Priority Habitat or other valuable habitat may be affected by proposed development, applicants must provide a full survey and site assessment to establish the extent of potential impact. This evidence should inform appropriately designed plans and mitigation measures.
- H. Ecological impacts of a proposed development

will be quantified by using the Biodiversity Impact Assessment Calculator (BIAC) where appropriate. Development proposals must demonstrate a net gain in ecological units.

- I. Ecological information must be supplied in accordance with BS 42020 2013 for all relevant planning applications.

Epping Forest SAC and the Lee Valley SPA

- 4.16 The Epping Forest and Lee Valley form significant areas of land in the District that are valuable for many reasons. They are the two sites that contain land subject to international protection for its biodiversity value. The Epping Forest contains a Special Area of Conservation (SAC) identified primarily for its habitat value in respect of beech trees and wet and dry heaths. The Lee Valley Regional Park contains a Special Protection Area (SPA) and is a Ramsar Convention on Wetlands Site both of which designations relate to its importance as a bird habitat. Known as 'European Sites' they are afforded protection in that detailed assessments (Habitats Regulation Assessments) are required of any development plans and proposals likely to give rise to that have a likely significant impact effect on the integrity of the sites. These sites form a critical part of the biodiversity assets and green and blue infrastructure of the District.
- 4.17 The Council has a duty as the 'competent authority' under the Habitats Regulations to protect the Epping Forest SAC and the Lee Valley SPA/Ramsar sites from the effects of development. This can be achieved using many measures but an important approach is one of mitigation through, for example, access management strategies, habitat management, provision of new Natural Green Space and sustainable transport choices.

Key Evidence

- Habitats Regulation Assessment (AECOM, 2017);
- Open Space Strategy (4 Global 2017);

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

- Epping Forest - the next 10 years (City of London Corporation, 2015);
- Lee Valley Park Development Framework (Lee Valley Regional Park Authority, 2011); and
- Memorandum of Understanding 'Managing the impacts of growth within the West Essex/East Hertfordshire HMA on Epping Forest Special Area of Conservation' (2017).

Approach

- 4.18 The Epping Forest (the Forest) and the Lea Valley are critical assets within the District for their contributions to biodiversity and recreation. The Forest in particular experiences considerable pressure on its habitats from visitors from both within and outside of the District and road traffic pollution as well as air pollution from London. The Forest is owned and managed by the City of London Corporation and is adjoined by buffer lands purchased by the Corporation to protect its boundaries from encroachment by urban development. These buffers can also act to relieve recreational pressure on the Forest. The potential impact of development on the Forest can arise from development some distance from the Forest itself, particularly in terms of the impact of air pollution from traffic generated on its sensitive ecosystems and from additional recreational pressures.
- 4.19 The Council takes its responsibilities seriously with regard to the protection of these sites and will ensure that Habitats Regulation Assessments of development proposals likely to affect these sites are undertaken. This responsibility also applies to European sites that are outside the boundary of the District but may be affected by development within the District.
- 4.20 The Habitats Regulations Assessment concluded that, as a result of the management regimes in place, there would be no likely significant effect on the Lee Valley SPA/Ramsar sites from recreational pressures arising from new development. Furthermore, air quality modelling demonstrated that changes in atmospheric pollution would not lead to a likely significant effect on these sites either alone or

in combination with other projects and plans. The Forest is currently assessed as being of 'unfavourable status'. Concerns exist in relation to both increasing recreational use and air-borne pollutants, including from traffic. This latter point relates to an underlying traffic/air quality issue as a result of existing substantial baseline traffic flows. Standard impact assessment methodologies show that the Local Plans being developed within the West Essex/East Hertfordshire Housing Market Area would not result in an adverse effect due to an expected improvement in air quality through the introduction of new technologies, and contributions to any retardation of that improvement is extremely small. However, addressing the underlying issue is a matter of good stewardship.

- 4.21 In recognition of this stewardship role the West Essex/East Hertfordshire Housing Market Area authorities have signed a Memorandum of Understanding (March 2017) with the City of London Corporation and Natural England. Paragraph 2.4 of the MoU sets out that its purpose is to ensure that the parties named, work in partnership to fulfil the following requirements:
- To collect and analyse data and evidence related to the impacts of proposed development and growth under the Local Plans to provide sufficient and robust evidence on which to base a strategy for the protection of Epping Forest SAC.
 - To commit to prepare a joint strategy, based on relevant available data and evidence and to an agreed timetable; and
 - The joint strategy will address both the requirement to avoid, or effectively mitigate, adverse impacts on the integrity of the SAC from Local Plan-led development, (where required, and more broadly deliver the requirement to prevent deterioration of the SAC features and aid in their improvement/restoration).
- 4.22 The MoU parties are now actively working together through an oversight Board and working groups to fulfil these requirements.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

4.23 In addition to the above the Council, through this Local Plan, recognises the need to provide confidence that new development does not result in any likely significant effects on the Forest and the Lee Valley SPA/Ramsar sites. Policy T 1 (Sustainable Transport Choices) and Policy DM 22 (Air Quality) provide the mechanisms by which the Council will seek to address the underlying issue of traffic/air quality issues in relation to the Forest, and provide for monitoring. In addition Policy DM 2 provides the mechanisms for managing future recreational pressures on the Forest in particular. The Council's approach is to facilitate the development of a green infrastructure network. Through improved links to other green spaces, and to the quality of those green spaces and links, the human pressure on these assets is intended to be more widely spread, with the aim of being less harmful to biodiversity.

4.24 In pursuit of protecting the vulnerable habitat of Epping Forest the Council seeks to provide alternative spaces and corridors that can relieve the recreational pressure on the Forest. It recognises that additional development in the District is likely to give rise to further visitor pressure on the Forest that needs to be mitigated. This can be achieved by increasing public access to land that is not in the Forest, and altering the character of existing open spaces and the links between open spaces. These linkages are intended to improve access for walkers, dog walkers, cyclists and horse riders, as well as provide space, including additional space for wildlife and plant species.

4.25 However, it is recognised that some housing sites will not be of a sufficient scale to make provision for a meaningful proportion of natural green space. Where those sites are within the 'sphere of influence' of the Forest (as determined by an up-to-date Visitor Survey, the most recent of which was undertaken in October/November 2017) the Council will seek contributions to support the development and implementation of an access management strategy by the City of London Corporation.

4.26 The suitability of natural green space and corridors will be dependent on a range of factors including location and the potential of the land to increase recreational opportunities and biodiversity value

Policy DM 2 Epping Forest SAC and the Lee Valley SPA

- A. The Council will expect all relevant development proposals to assist in the conservation and enhancement of the biodiversity, character, appearance and landscape setting of the Epping Forest Special Area of Conservation (SAC) and the Lee Valley Special Protection Area (SPA).
- B. New residential development likely to have a significant effect, either alone or in combination with other development in these areas, will be required to demonstrate that adequate measures are put in place to avoid or mitigate any potential adverse effects.
- C. All outline or detailed planning applications for new homes within the settlements of Loughton, Epping, Waltham Abbey, North Weald Bassett, Theydon Bois, Coopersale, Thornwood, Buckhurst Hill, Chigwell and Chigwell Row will be required to make a financial contribution to access management and monitoring of visitors to the Epping Forest SAC, in accordance with Visitor Survey Information which demonstrates this is needed.
- D. To mitigate against potential or identified adverse effects of additional development in the District, in particular from strategic developments, on the Epping Forest SAC, and Lee Valley SPA the Council will ensure the provision of a meaningful proportion of Natural Green Space or access to Natural Green Space. This could involve:
 - (i) providing new green spaces; or
 - (ii) improving access to green space; or
 - (iii) improving the naturalness of existing green spaces; or
 - (iv) improving connectivity between green spaces where this would not contribute to a material increase in recreational pressure on designated sites.
- E. Planning applications on sites within 400m of the Epping Forest SAC will be required to submit a site level Habitats Regulations Assessment setting out how any urbanisation effects (including from fly

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

tipping, the introduction of non-native plant species and incidental arson) will be mitigated against.

Landscape Character, Ancient Landscapes and Geodiversity

4.27 The predominant land use, by area, of the District is agriculture and the countryside provides the setting of its hamlets, villages and towns in addition to providing part of the setting for London. The mosaic patchwork of countryside, ancient woodland, hedgerows and trees (including many veteran trees) is a distinctive characteristic of the landscape, as are the river valleys. Therefore the matter of landscape character forms an important consideration in planning for the District's future development, and the Council seeks to maintain a careful balance between managing change to the landscape character and providing much needed new development. In this regard the manner in which the edges of settlements, and ridges, are treated in development is particularly important, as is, the protection of, and where feasible, the enhancement of long distance views.

Key Evidence

- Epping Forest District Council Landscape Character Assessment (Chris Blandford Associates, 2010);
- Epping Forest District Council Settlement Edge Landscape Sensitivity Study (Chris Blandford Associates, 2010); and
- Epping Forest District Historic Characterisation Study (Essex County Council, 2015).

Approach

4.28 The District sits on a plateau, immediately north of the basin in which Greater London is largely contained. The plateau is cut by the 2 main river systems, the Lea/Stort and the Roding. Soils have been influenced by glaciation and erosion, but are generally London clay, with boulder clay and gravels. The District contains some geological features of interest and particular factors shaping the current landscape include

the relatively low rainfall, London clay geological formations, together with the effects of past glaciation on the topography, creating the gently sloping landform, with its wooded ridges, crowned by the forests of Epping and Hainault.

- 4.29 The gently undulating landscapes of south west Essex are a significant contribution to landscape character in the District. The topography of the District gives rise to some long distance views, both to countryside and London. Given its location, climate and topography the main factor shaping the District's landscape character outside the urban areas is the presence or absence of trees, as influenced by farming practice. These ridges and valleys; ancient landscapes; the hedgerow and woodland patchwork; urban open spaces giving character to some settlements; veteran and protected trees including avenues and lanes; and roadside trees form the particular characteristics of the setting for development in the District.
- 4.30 Pressures on the landscape from development mirror those outlined under Policy DM 1. Whilst the long term impacts of climate change on the landscape, particularly trees, is uncertain - some species will suffer and others benefit. The need to ensure the preservation of existing trees and provide space for the next generation of large trees is critical to the future landscape as well as providing for shade in a changing climate, and the species they support.
- 4.31 The future development pattern of the District must recognise its setting, and respond to the particular landscape characteristics which vary in their sensitivity to change. Individual developments should be designed in a manner that minimises their impact on the landscape through careful design, materials and landscaping and pay attention to long distance views. In addition, each individual development should actively seek to contribute to the immediate and wider landscape (as appropriate) by considerate and careful landscaping of proposals. This includes the provision of permeable areas of planting for the purposes of reducing flood risk. The landscape sensitivity studies and Historic Environment Characterisation Study, undertaken on behalf of the Council, provide key evidence in this respect

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

against which to measure the impact of proposed development and its design. The Policy applies equally to sites within built up areas and those on the edge of settlements.

Policy DM 3 Landscape Character, Ancient Landscapes and Geodiversity

A. Development proposals will be permitted where applicants are able to demonstrate that the proposal will not, directly, indirectly or cumulatively, cause significant harm to landscape character, the nature and physical appearance of ancient landscapes, or geological sites of importance.

Proposals should:

- (i) be sensitive to their setting in the landscape, and its local distinctiveness and characteristics;
- (ii) use techniques to minimise impact on, or enhance the appearance of, the landscape by:
 - taking into account existing landscape features from the outset;
 - careful landscaping of the site;
 - ensuring the sensitive use of design, layout, materials and external finishes; and
 - having regard to protecting, and where possible, enhancing long views to distant landmarks and landscapes of interest.

Green Belt and Development

4.32 Over 92% of the District is designated as Metropolitan Green Belt. Green Belt policy relates to the function and purposes of the Green Belt and not the intrinsic value of the land to which it relates such as its relative value for agriculture or biodiversity. Policy SP 5 Green Belt and District Open Land provides the strategic approach regarding the Green Belt within the District. The impact of development on the purposes of the Green Belt can be significant and therefore must be carefully controlled.

Key Evidence

- Green Belt Review (LUC, 2016)

Approach

4.33 National policy on Green Belt is clear as to the purposes of Green Belt against which

applications for development are weighed. The weighing exercise is undertaken to establish the suitability of the proposals in respect of any harm that may occur to the purposes of the Green Belt. Policy DM 4 identifies that whilst a great deal of development in the Green Belt is not considered appropriate there are certain circumstances under which some development is permissible.

4.34 Within the context of national planning policy the Council does not consider that it would be in compliance with national policy to define specific rules for development in the Green Belt beyond those contained in Policy DM 4. In respect of extensions to existing buildings and replacement of existing buildings it is therefore not intended to define “disproportionate” or “materially larger” since they would depend on the characteristics of the site locality, and existing buildings themselves in relation to the specific proposals. For the purposes of Policy DM 4, “limited infilling” means the development of a small gap in an otherwise continuous built-up frontage, or the small-scale redevelopment of existing properties within such a frontage. It also includes infilling of small gaps within built development. Limited infilling should be appropriate to the scale of the locality and not have an adverse impact on the character of the countryside or the local environment.

4.35 Similarly it is not intended to specify very special circumstances as this will need to be clearly demonstrated by the applicant based on site specific considerations. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

DM 4 Green Belt

- A. The purposes of the Green Belt are to:
- (i) Check the unrestricted sprawl of large built up areas;
 - (ii) Prevent neighbouring towns from merging into one another;
 - (iii) Safeguard the countryside from encroachment;
 - (iv) Preserve the setting and special character of

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

historic towns; and

- (v) Assist urban regeneration by encouraging the recycling of derelict and other urban land.

- B. Within the Green Belt planning permission will not be granted for inappropriate development, except in very special circumstances, in accordance with national policy.
- C. The construction of new buildings is inappropriate development in the Green Belt. Exceptions to this are:
 - (i) Buildings for the purposes of agriculture and forestry;
 - (ii) Provision of appropriate facilities for outdoor sport, outdoor recreation and for cemeteries, as long as any development preserves the openness of the Green Belt and does not conflict with the purposes of including land within it;
 - (iii) The extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;
 - (iv) The replacement of a building, provided the building is of the same use and not materially larger than the one it replaces;
 - (v) Limited infilling in smaller settlements and limited affordable housing related to smaller settlements, in accordance with Policy H 3; and
 - (vi) Limited infilling or the partial or complete redevelopment of previously developed land, which would not have a greater impact on the openness of the Green Belt and the purpose of including land within it than the existing development.
- D. Certain other forms of development may also be appropriate in the Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in the Green Belt. These are:
 - (i) Mineral extraction;
 - (ii) Engineering operations;
 - (iii) Local transport infrastructure that can demonstrate a requirement for a Green Belt location;
 - (iv) The re-use of buildings provided that the buildings are of a permanent and substantial construction; and

- (v) Development brought forward under a Community Right to Build Order.

Green and Blue Infrastructure: Design of Development

- 4.36 A strategy for the natural environment and green and blue infrastructure is a key plank of the overall development strategy of this Local Plan. Green and blue infrastructure performs many roles including adapting to and mitigating against the impacts of climate change - for example: in providing shade during higher temperatures; space for species migration; reducing greenhouse gas emissions; and providing flood mitigation. In addition invasive non-native species of plants can cause damage to habitats and features and the management of these is an important aspect of protecting the current and future assets.
- 4.37 Policy SP 7 sets the context for green and blue infrastructure requirements of development in the District. The detailed requirements relating to that policy are contained in Policy DM 5 and supporting text which provide further guidance with respect to specific development proposals.

Key Evidence

- Landscape Character Assessment (Chris Blandford Associates, 2010);
- Settlement Edge Landscape Sensitivity Study (Chris Blandford Associates, 2010);
- Infrastructure Delivery Plan (Arup, 2017);
- Open Space Strategy (4 Global 2017);
- Epping Forest Historic Environment Characterisation Study (Essex County Council 2015); and
- 50 favourite trees (EFDC website).

Approach

- 4.38 The Council sees green and blue infrastructure as a critical part of the future of the District. The Local Plan seeks to effectively protect, link (where appropriate) and enhance: wildlife sites, including Local Wildlife Sites; Priority Species and Habitats; veteran trees; ancient woodland; hedgerows and field boundaries; unmetalled lanes; ancient paths and walks; green lanes and

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

bridleways; watercourses; ponds; wetlands; protected trees; meadow lands; playing fields; Epping Forest buffer lands; farmland (for food production); access to and biodiversity value of agricultural land; allotments; cemeteries; parks; urban green space; and ecological corridors, including those between the Lea Valley and Epping Forest.

- 4.39 The expectation is that new development will consist of high quality design that carefully incorporates and links multifunctional spaces (for example for wildlife, recreation, and sustainable drainage). The landscaping of development is expected to be a key element of mitigation against the effects of climate change and the management of flood risk.
- 4.40 The development pattern for a significant amount of new development during the Plan period will be on the edges of settlements on greenfield land that was previously protected from development by Green Belt policy. There is therefore a particular emphasis needed to ensure that existing green and blue infrastructure assets are respected and used to best effect in new development. In addition, the connection between existing and new development, accessible space and habitats should not be broken, and new spaces and links created within developments that perform effective functions for recreation and other purposes. It should be clear that the design of development has carefully incorporated the context of green and blue infrastructure and provides access to the countryside, water features and urban green spaces as appropriate.
- 4.41 Most development in the District should be capable of providing for some landscape features suitable to the site and it is critical that native species are used in planting schemes as well as ensuring, where applicable, that biosecurity measures for non-native invasive species are included in schemes.
- 4.42 Trees are of particular importance in the District and are a key element of the green infrastructure strategy. The Council particularly seeks to increase the tree cover in the District, and aim where possible to allow for space for the next generation of large trees. Therefore in

providing new trees the Council expects applicants to include a suitable proportion of larger slower growing and longer living trees in order to avoid only shorter life, fast growing species being planted during the Plan period.

- 4.43 The Council's Local List of Validation Requirements sets out 'thresholds' and types of planning application where information that should be submitted. This includes Preliminary Ecological Assessment, Hedgerow Surveys, Arboricultural Implication Assessments and Method Statements.

Policy DM 5 Green and Blue Infrastructure

- A. Development proposals must demonstrate that they have been designed to:
- (i) retain and where possible enhance existing green infrastructure, including trees, hedgerows, woods and meadows, green lanes, wetlands, ponds and watercourses;
 - (ii) use native species where appropriate and take account of the need for biosecurity including control of non-native invasive species, and ensure all planting stock is supplied free of pests or disease, and uses non-invasive species;
 - (iii) incorporate appropriate provision of new green assets or space;
 - (iv) enhance connectivity and integration by providing pedestrian/cycle access to existing and proposed Green Infrastructure networks and established routes, including footpaths, cycleways and bridleways/Public Rights of Way; and
 - (v) enhance the public realm through the provision and/or retention of trees and/or designated and undesignated open spaces within built up areas.
- B. Development proposals must be accompanied by sufficient evidence to demonstrate that:
- (i) the retention and protection of trees (including veteran trees), landscape features or habitats will be successfully implemented in accordance with relevant guidance and best practice;
 - (ii) the provision of new trees, new landscape and water features or habitat creation/improvement will be implemented in accordance with relevant guidance and

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

best practice; and

(iii) as a whole the proposals for Green and Blue Infrastructure are appropriate and adequate, taking into account the nature and scale of the development, its setting, context and intended use.

C. In the Garden Town Communities, a full concept plan of proposed green and blue infrastructure that incorporates existing features on the site and its links to the wider landscape and townscape will be required for submission with the application. Further requirements may be outlined within Strategic Masterplans in accordance with policies SP 3 and DM 9.

Designated and Undesignated Open Spaces

4.44 Open space provision is critical to the physical and mental health of our communities, as well as important to our experience of the character of settlements and the landscape in the District. The population growth expected over the Plan period will add to demand for space for all forms of recreation. Provision needs to be suitable for all, and especially older users; those with limited mobility; those on low incomes and children. In particular the Council wishes to provide communities with opportunities to improve their lifestyle and maintain their health.

4.45 Such open space in the District varies in character, quality and usage from children's playgrounds, through sports pitches to natural space that can be used for a variety of recreational purposes. New development in the District should provide the amount and type of open space appropriate to its size or contribute to improvements of existing spaces as appropriate to the circumstances. Where development may, in exceptional circumstances, involve the use of open space for buildings this must be carefully controlled.

Key Evidence

- Open Space Strategy (4 Global, 2017); and
- Infrastructure Delivery Plan (Arup, 2017).

Approach

4.46 National planning policy defines open space as all open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity. These spaces can be opportunities for sports and recreation, to play, walk close to home, meet for social gatherings, and can present opportunities to view local wildlife. The quality of the spaces in the District varies but they need to be conserved as appropriate, enhanced and where possible connected, in line with the strategy for green infrastructure.

4.47 Providing new publicly accessible open space in new development is a critical part of maintaining healthy places to live and providing the contrast between built areas and outdoor spaces that meet our social and psychological needs. The Council will take into account the individual characteristics of sites when assessing what level of open space provision is appropriate.

4.48 Local evidence in the form of Epping Forest District Council Open Space Strategy 2017, explains the quantity and type of open spaces in the District, access to them and their quality. The types of spaces included in the study are:

- Amenity Greenspace;
- Public Parks and Gardens;
- Provision for Children and Young People;
- Natural, and Semi Natural Greenspace;
- Allotments; and
- Cemeteries and Churchyards.

4.49 The study indicates a variation in the provision of different forms of open space across the District as measured against national standards. In some cases a deficit in the amount of one type of open space might offset surplus in another for some users - for example, whilst there is a deficit in the amount of land given over to parks and gardens there is a large surplus of natural and semi natural space due to the presence of the Epping Forest and Lee Valley Regional Park. However, the Council

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

recognises that the different forms of open space are likely to meet the needs of differing sections of the community and locally accessible space, close to home, is important. Of significant concern is the deficit in the amount of, and access to, play facilities for children and young people.

- 4.50 The way in which an open space is managed has a significant impact on how much it is used, and its value for recreation, health and biodiversity. Many of our existing open spaces are managed by Parish and Town Councils and the District Council seeks to provide guidance in this respect based on the evidence contained in the Epping Forest District Council Open Space Strategy.
- 4.51 The Council seeks to protect and improve the quantity of certain open spaces in line with the evidence base regarding needs. However, in exceptional circumstances development of part of an open space may be considered appropriate. In such circumstances this would be set alongside improvements in quality to the remaining space, or to existing open space in the locality, and should be clearly set out in any justification for proposals.
- 4.52 Communities are able to seek to designate, and thus protect, Local Green Space which is especially meaningful to a community, local in character and not extensive in size.
- 4.53 The Infrastructure Delivery Plan contains the priorities and measures intended to improve upon the quantity, quality and access to the range of open spaces in the plan. The Council will use the national standards for different types of spaces as a start point for negotiation on development proposals. These act as a guide to development requirements, and the expenditure of any financial contributions aimed at quality improvements to open space.
- 4.54 The standards for quality of spaces are included in the Infrastructure Delivery Plan.

Policy DM 6 Designated and Undesignated Open Spaces

- A. Where appropriate development proposals will be required to provide open space, or links to open space in accordance with the guidance contained within the Infrastructure Delivery Plan and Open Space Strategy. Nationally adopted space standards will be used as a starting point for provision.
- B. Development on open spaces will only be permitted if it does not result in a net loss of usable public open space or reasonable access to alternative open space within a settlement. Existing open space should not be built upon unless:
- (i) an assessment has been undertaken showing the land to be surplus to requirements; or
 - (ii) development would not have a detrimental impact upon the accessibility to open space; or
 - (iii) the loss would be replaced by equivalent or better provision in terms of quantity or quality in a suitable location; or
 - (iv) the development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss.
- C. In circumstances where partial loss of the space is considered justified, the predominantly open nature of the remainder of the site should be maintained and enhanced together with the visual amenity and its function as appropriate for active play and recreation.

Historic Environment

- 4.55 The historic environment is a critical part of the District's character and the policies in this section set out the Council's approach to its conservation and enhancement.

Heritage Assets

- 4.56 Epping Forest District benefits from a rich and varied historic environment some of which is afforded national protection by law, and other locally protected through planning policy. The heritage assets span thousands of years from the Early Iron Age to the 20th Century.
- 4.57 The relationship is well recognised between the historic environment and landscape which

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

retains historic and ancient features in many places, and provides the setting of towns and villages. The Council seeks to positively conserve and enhance this through the Local Plan by having clear respect for the District's heritage assets.

Key Evidence

- Epping Forest District Council Heritage Asset Review (DPP, 2012);
- Epping Forest District Historic Characterisation Study (Essex County Council 2015);
- Epping Forest District Council Parish Lists of Buildings of Local Architectural or Historic Interest (EFDC website); and
- Epping Forest District Council Conservation Area Character Appraisals Programme (EFDC Website).

Approach

- 4.58 The Council is required to take a positive approach to the conservation and enjoyment of the historic environment of the District. This includes taking into account the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation. It is also important that the concept of conservation is not devalued through, for example, the designation of conservation areas that lack special interest. National planning policy sets out that, as heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. For example, substantial harm to designated heritage assets should be exceptional, or in the case of those which are of the highest significance, highly exceptional, unless it can be demonstrated that substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss
- 4.59 The types of historic asset to which this Policy applies are 'designated' assets: i.e. Listed Buildings, Registered Parks and Gardens, Scheduled Monuments and Conservation Areas; and 'non designated' assets such as locally listed buildings and structures (such as monuments

and memorials) and non-designated archaeological remains (although, depending upon their significance, the latter should be treated as though they are designated under national planning policy). The Council will undertake periodic reviews of its designated and non-designated heritage assets and introduce additional levels of protection, such as through the use of Article 4 Directions and areas of Special Advertisement Control, where justified.

- 4.60 A heritage statement is required for any application that may affect heritage assets (both designated and non-designated). The statement should:
- include a description of the significance of any heritage asset affected, including the contribution made by its setting;
 - provide an evaluation of the impact the development may have on this significance; and
 - demonstrate how the significance of the heritage asset has informed the design of the proposed development.
- 4.61 Further information (and links to guidance) is set out in the Council's Local List of Validation Requirements. Outline planning applications will not be accepted for development proposals within conservation areas. In addition, where the principle of demolition has been established, consent to demolish will be given only when acceptable plans for development have been agreed and a legal contract for the redevelopment of the site has been entered into and full detailed recording of the building including plans and photographs may be required depending upon its merit. Where there is any harm or loss to significance the applicant will be required to record and disseminate detailed information about the asset gained from desk based and on site investigations and provide this to the Council, the Essex Historic Environment Record and Historic England.
- 4.62 Applications for proposals in respect of heritage assets will be expected to demonstrate that they have paid good attention to matters, where relevant, including detailing, streetscape,

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

roofscape, landscape, scale, height, density, massing, layout, elevation, design, plot and site frontage sizes, materials and external finishes. In addition the Council will encourage proposals which seek their conservation, regeneration, maintenance, repair or enhancement, of Listed Buildings, and which improve access for people with disabilities who visit or work there. In such cases it must be fully justified and demonstrated that any harm to their significance is necessary to achieve substantial public benefits.

4.63 Where proposals affect heritage assets of archaeological interest, preference will be given to preservation and management in situ. However, where loss of the asset is justified in accordance with national policy, the Council will require:

- an archaeological evaluation demonstrating that the remains have been properly assessed and the implications of development understood, and any impacts of development minimised through design; and
- where in situ preservation proves impossible that a full investigation, recording and an appropriate level of publication by a competent archaeological organisation has been undertaken prior to the commencement of development.

4.64 As set out in national planning policy, in certain exceptional circumstances, development may be allowed to take place that would not normally be granted permission if it provides significant improvements to a heritage asset which could not otherwise be obtained, and which secures its long term future or use for the public benefit. This is known as 'enabling development'. In such cases, the Council will expect the applicant to obtain relevant specialist advice, including from Historic England, and to provide the Council with unequivocal evidence (including financial details) as to how the proposal will secure the future conservation of a heritage asset, and why the development is necessary.

Policy DM 7 Heritage Assets

Historic Environment

- A. The historic environment will be conserved and enhanced in a manner appropriate to its significance. Development proposals should seek to conserve and enhance the character, appearance and function of heritage assets and their settings, and respect the significance of the historic environment.
- B. Heritage assets are an irreplaceable resource and works which would cause harm to the significance of a heritage asset (whether designated or non-designated) or its setting, will not be permitted without a clear justification to show that the public benefits of the proposal considerably outweigh any harm to the significance or special interest of the heritage asset in question.

Local Heritage Assets

- C. Development proposals that affect local heritage assets detailed on the Local List will be expected to demonstrate how they retain the significance, appearance, character and setting of the local heritage asset.
- D. There is a general presumption in favour of retaining local listed heritage assets and where this is not possible, recording of the heritage asset should be undertaken and submitted alongside development proposals.

Heritage at Risk

4.65 A significant part of the enhancement of heritage assets is their care and maintenance which is the responsibility of the owner of the asset. Many owners of heritage assets in the District take pride in the assets and are responsible owners. However, the Council's Heritage Asset Review identified a concentration of buildings at risk in four particular conservation areas namely Abridge, Royal Gunpowder Mills, Roydon and Waltham Abbey, together with some locally listed buildings at risk. These are not the only heritage assets at risk in the District as a result of neglect or inappropriate development. Policy is required to encourage some owners of heritage assets to maintain them and respect them for future generations to enjoy.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Key Evidence

- Epping Forest District Council Heritage Asset Review (DPP, 2012)

Approach

- 4.66 A positive approach to the protection and enhancement of heritage assets requires that they are maintained to a high standard. This is the responsibility of the owner. The simple fact of a heritage asset being in a poor condition is not a reason for allowing redevelopment or development that could cause harm to the significance of the asset. Owners are encouraged to maintain heritage assets to a high standard in order to preserve their significance.
- 4.67 The Council seeks to support owners to secure the future of the heritage assets currently at risk, and at risk in the future, in a way that respects the significance of the heritage asset and enhances that significance.

Policy DM 8 Heritage at Risk

- A. The Council will expect property owners/partners to work proactively with the authority in bringing forward proposals for the conservation and enhancement of Heritage Assets at Risk or under threat within the District to secure their future and seek a viable use consistent with their heritage value and significance.

Design

- 4.68 The following policies relate to the design of proposed development in the District. National planning policy encourages the securing of good design and its importance is increasingly recognised by the development industry. In the past there has been a tendency to view design solely as a visual concern – in these policies the Council is seeking to consider the social and environmental elements of design, such as the potential of a high quality public realm to contribute to public health, quality of life and the sustainability agenda.
- 4.69 National policy expects that the Council includes design policy that sets out the quality of development expected for the area and

recognises the local context both in terms of the locality, and the immediate site and its surrounds.

Approach

- 4.70 High quality design should ensure that new development is visually attractive, responsive to local character, helps to promote healthy communities and creates buildings which are durable, adaptable, and function well within the surrounding area to create a safe and accessible environment. Good design should enable and encourage people to live healthy lifestyles, reduce the risk of crime, create accessible environments which are inclusive for all sectors of society, and increase opportunities for social interaction. Secured by Design provides guidance on how to include security into a development.
- 4.71 The Council is keen to ensure that the next generation of development in the District is of a quality deserving of its location and meets the needs of occupiers and users in an effective and sustainable manner. The environmental impact of development is of significant concern and ensuring sustainable construction is a clear aim of this Local Plan. A clear contribution to the townscape and landscape of the District is sought through high quality design. The design of development which impacts on the historic assets of the District is particularly important and the Council seeks to pay particular attention to them.
- 4.72 The Council seeks development that follows the principles of sustainable construction and encourages developers to deliver schemes that meet the performance set by appropriate standards e.g. Passive House and BREEAM UK New Construction 2014. Development should give rise to minimal environmental impact with respect to its energy use, water use, waste and transport as well as providing for green infrastructure and healthy environments for users.
- 4.73 The quality of amenity for the occupiers of buildings and users of open spaces is increasingly the subject of concern, particularly in settlements where densities are higher. In order to assess development proposals, the

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Council will have regard to the BRE guidelines produced in 2011 (BRE209) which although not mandatory are heavily relied upon as they advise on the approach and evaluation of impact in daylight and sunlight matters. An assessment should accompany proposals where the proposed development has the potential to negatively impact existing levels of daylight or sunlight on adjoining properties or within the development site itself.

- 4.74 New developments should be designed to protect the privacy of both new and existing occupiers. Separation distances, the provision of screening between elevations as well as the angle of orientation will be assessed as part of any planning application.

Strategic Development

- 4.75 Development proposals will be required to accord with the place-shaping principles set out within Policy SP 3, and it will be necessary to demonstrate compliance with these principles through the production of Strategic Masterplans, Design Codes and Concept Frameworks where indicated. Chapters 2 and 5 provide further details.

Policy DM 9 High Quality Design

- A. All new development must achieve a high specification of design and contribute to the distinctive character and amenity of the local area. The Council will require all development proposals to be design-led and:
- (i) relate positively to their context;
 - (ii) make a positive contribution to a place;
 - (iii) where appropriate, incorporate sustainable design and construction principles that consider adaptation and mitigation approaches to address climate change;
 - (iv) are planned, where appropriate, to minimise vulnerability to climate change impacts and which will not exacerbate vulnerability in other areas; and
 - (v) incorporate design measures to reduce social exclusion, the risk of crime, and the fear of crime.

Strategic Sites

- B. The Council will require Strategic Masterplans to

be prepared and developed for the Garden Town Communities set out in SP 5 and other relevant allocated sites as set out in Chapter 5. Strategic Masterplans will be produced by the applicant, in partnership with the Council, and the local community, and be capable of being adopted by the Council as Supplementary Planning Documents. Design Codes will be required to be produced and agreed with the Council to support the implementation of the Strategic Masterplans. All relevant applications will be required to conform with the agreed Strategic Masterplans and Design Codes.

- C. The Council will require the use of the established Quality Review Panel for larger or contentious sites at appropriate stages, to be agreed with the Council, to inform detailed design proposals for major developments.

Design Standards

- D. Development proposals must relate positively to their locality, having regard to:
- (i) building heights;
 - (ii) the form, scale and massing prevailing around the site;
 - (iii) the framework of routes and spaces connecting locally and more widely;
 - (iv) the rhythm of any neighbouring or local regular plot and building widths and, where appropriate, following existing building lines;
 - (v) the need to provide active frontages to the public realm; and
 - (vi) distinctive local architectural styles, detailing and materials.

Landscaping

- E. Development proposals must demonstrate how the landscaping and planting has been integrated into the development as a whole. The Council will expect development proposals to respond to:
- (i) levels, slopes and fall in the ground;
 - (ii) trees on and close to the site;
 - (iii) natural boundary features;
 - (iv) the biodiversity of the site and its surroundings; and
 - (v) the need to maximise the use of permeable surfaces.

Public Realm

- F. Where appropriate development proposals must contribute positively to the public realm and to

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

public spaces to which it is physically or functionally connected.

Connectivity and Permeability

- G. Where appropriate, development proposals must maximise connectivity within, and through, the development and to the surrounding areas including the provision of high quality and safe pedestrian and cycle routes.

Privacy and Amenity

- H. Development proposals must take account of the privacy and amenity of the development's users and neighbours. The Council will expect proposals to:
- (i) provide adequate sunlight, daylight and open aspects to all parts of the development and adjacent buildings and land (including any private amenity) space;
 - (ii) avoid overlooking and loss of privacy detrimental to the living conditions of neighbouring residents and the residents of the proposed development;
 - (iii) not result in an over-bearing or overly enclosed form of development which materially impacts on either the outlook of occupiers of neighbouring properties or the residents of the proposed development; and
 - (iv) address issues of vibration, noise, fumes, odour, light pollution, air quality and microclimatic conditions likely to arise from any use or activities as a result of the development or from neighbouring uses or activities.
- I. All development proposals must demonstrate that they are in general conformity with the design principles set out in other relevant Local Development Documents, Design Guides, Neighbourhood Plans or Village Design Statements (VDSs) adopted or endorsed by the Council.

Housing Design and Quality

- 4.76 The majority of the development coming forward over the Plan period will be residential in nature. A core principle of planning is to always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings. National policy expects a high quality of design that meets the needs of the diversity of people i.e. is 'inclusive'. It notes that design policies should concentrate on guiding the overall scale, density, massing, height, landscape, layout materials and access of new development in relation to neighbouring buildings and the local area. The consideration of design goes beyond appearance, and should address the connections between people and places, creating safe and accessible environments.

Approach

- 4.77 The Council seeks to ensure that it is not possible to identify the tenure of a residential development from its external appearance since there can be significant differences in the appearance and quality of materials used between owner occupied and rented housing. This approach is very important to creating inclusive and attractive residential environments.
- 4.78 The design of the development impacts significantly on living conditions for occupiers and in particular the size and design of internal and external space are important. An analysis of recent applications for development highlights that there is pressure in the District for accommodation to be approved that does not meet the national space standards. There is therefore a need to ensure that all development meets at least the minimum space standards. The Council expects that opportunities are taken to improve the external environment of residential developments where existing quality is poor and to provide suitable public open space with developments, as appropriate, refer to DM 6.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Policy DM 10 Housing Design and Quality

- A. All new housing development is required to meet or exceed the minimum internal space standards set out in National Prescribed Space Standards and open space standards.
- B. Ground floor family housing must provide access to private garden/amenity space, and family housing on upper floors should have access to a balcony and/or terrace, subject to acceptable amenity, privacy and design considerations, or to shared communal amenity space and children's play space.
- C. Where appropriate development proposals should seek to include enhanced provision of green infrastructure, including the quantity and

quality of landscaped areas, tree provision and the provision of additional open space as required by Policy DM 5 and DM 6.

- D. Mixed tenure residential development proposals must be designed to be 'tenure blind' to ensure homes across tenures are indistinguishable from one another in terms of quality of design, space standards and building materials.

Residential Extensions

- E. Extensions or alterations to residential buildings will be required to respect and/or complement the form, setting, period, detailing of the original buildings. Matching or complementary materials should be used.

Figure 4.1 Current National Prescribed Space Standards (March 2015)

Number of bedrooms (b)	Number of bed spaces (persons)	1 storey dwellings (sq.m)	2 storey dwellings (sq.m)	3 storey dwellings (sq.m)	Built-in storage (sq.m)
1b	1p	39 (37)*			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

*Footnote: Where a 1 bedroom (1 person bed space) has a shower room instead of a bathroom, the floor area may be reduced from 39m² to 37m² as shown bracketed

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Waste Recycling Facilities on New Development

4.79 National policy requires that attention is paid to minimising waste as part of sustainable development and policies should make provision for the infrastructure for waste management.

Approach

4.80 The Council is committed to reducing waste and the Local Plan will seek to encourage the reuse, recycling and composting of waste material as a priority over disposal. Provision for the disposal of waste including separation for recycling is integral to the convenience afforded to occupiers and users, as well as having the potential to create poor design details if considered as an afterthought. The Council expects these facilities to be integrated into design so that they operate effectively and do not look out of place.

4.81 The management of waste in flatted properties poses particular challenges which need to be factored into the design of a building at a very early stage. Where flatted development includes basement parking provision, the Council expects the options for basement servicing of waste management and collection to have been investigated. This avoids compromising the quality and provision of amenity space, forecourts or active ground floor frontages.

Policy DM 11 Waste Recycling Facilities in New Development

- A. All development which generates waste will be required to make on-site provision for general waste, the separation of recyclable materials and organic material for composting. The on-site provision must:
- (i) ensure adequate dedicated internal and external storage space to manage the volume of waste arising from the site;
 - (ii) provide accessible and safe access to on-site storage facilities, both for occupiers and collection operatives including vehicles; and

(iii) be located and screened to avoid nuisance and adverse impact on visual and other amenity to occupiers and neighbouring uses; and for mixed use development, suitably separate household and commercial waste.

B. Proposals for new flatted residential development will be required to make provision for:

- (i) Adequate temporary storage space within each flat, allowing for separate storage of recyclable materials; and
- (ii) Adequate communal storage for waste, including separate storage for recyclables pending its collection.

Subterranean, Basement Development and Lightwells

4.82 Development of basements and subterranean rooms below gardens, particularly in established residential areas, has become an increasingly popular way of gaining additional space in homes. Like many other authorities in areas experiencing high property values, Epping Forest District has experienced an increase in the number of applications for basement development in recent years.

Approach

4.83 It is important that basement development is carried out in a way that does not harm the amenity of neighbours, compromise the structural stability of adjoining properties, increase flood risk or damage the character of the area or natural environments in line with national planning policy.

4.84 The Council will also seek to control the overall size of basement development to protect the character and amenity of the area, the quality of gardens and vegetation and to minimise the impacts of construction on neighbouring properties. A basement that is no deeper than one full storey below ground level is often the most appropriate way to extend a building below ground. Criterion Bi) below states that basements should not comprise more than 1 storey. The Council considers a single storey for a basement to be approximately 3 to 4 metres in height.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

- 4.85 Some development falls within the scope of permitted development. However, where control can be exercised the Council will seek to manage adverse impacts. Where appropriate, applicants will need to submit specific information as part of the planning application to demonstrate that these impacts can be addressed. The information should be contained in a Basement Impact Assessment to be submitted as part of the planning application.
- 4.86 The introduction of lightwells where they are not an established and positive feature of the streetscape can harm the character or appearance of an area. Where external visible elements are allowed they need to be located and sensitively designed to avoid light pollution to neighbours and harm to the existing character and appearance of the building, streetscape and gardens in the vicinity.

Policy DM 12 Subterranean, Basement Development and Lightwells

- A. Subterranean developments, basements, or extensions to existing basements, will only be permitted where it can be demonstrated that the proposal:
- (i) will not adversely affect the structural stability of the host building, neighbouring buildings and other infrastructure, including the adjoining highway, having regard to local geological conditions;
 - (ii) does not increase flood risk to the property and adjacent properties from any source;
 - (iii) avoids harm to the appearance or setting of the property or the established character of the surrounding area;
 - (iv) will not adversely impact the amenity of adjoining properties by reason of noise or increased levels of internal or external activity; and
 - (v) will not adversely impact the local natural and historic environment;
- B. The siting, location, scale and design of basements must have minimal impact on, and be subordinate to, the host building and property. Basement development should:
- (i) not comprise of more than one storey; and
 - (ii) not exceed 50% of each area of garden within

- the curtilage of the property;
- C. And during the construction phase:
 - (i) will not cause harm to pedestrian, cycle, vehicular and road safety, adversely affect bus or other transport operations, significantly increase traffic congestion, nor place unreasonable inconvenience on the day to day life of those living, working or visiting nearby;
 - (ii) will minimise construction impacts such as noise, vibration and dust for the duration of the works; and
 - (iii) ensure compliance with the Construction Management Statement submitted (see Policy DM 21)
- D. The Council will not permit subterranean developments or basements which include habitable rooms or other sensitive uses in areas prone to flooding and where there is no satisfactory means of escape from flooding.
- E. In determining applications for light wells, the Council will protect:
 - (i) the architectural character of the building; and
 - (ii) the character and appearance of the surrounding area.
- F. In determining proposals for basements and other underground development the Council will require an assessment of the scheme's impact on drainage, flooding, groundwater conditions and structural stability in the form of a Basement Impact Assessment and where appropriate a Basement Construction Management Statement.
- G. Within the Green Belt basement developments may be considered acceptable provided they do not have a greater impact on the openness of the Green Belt, either themselves or cumulatively with other developments.

Advertisements

- 4.87 Poorly sited or badly designed advertisements and signs, including projecting signs, and illumination, particularly flashing illumination can have a detrimental effect on the character and appearance of areas and may raise issues of public safety. National policy recognises this and makes provision for the control of advertisements.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Approach

- 4.88 The term ‘advertisement’ covers a very wide range of advertisements and signs. Some advertisements are not regulated by the Council and others benefit from “deemed consent”, which means permission is not needed; this will depend on the size, position and illumination of the advert. Other advertisements will always need consent. For more information refer to the Control of Advertisements Regulations.
- 4.89 When deciding applications for advertisements the Council can have regard to considerations of amenity and public safety, as well as the Control of Advertisements Regulations. Policy DM 13 sets the criteria by which amenity and public safety will be assessed in Epping Forest District in relation to advertisements. The design, colour, materials and positioning of all advertisements and signs should respect the character and style of the existing building and be appropriate within the street scene.
- 4.90 Historic buildings and structures can be particularly sensitive to the change in amenity caused by some advertisements that include illumination. The Heritage Asset Review found that some areas would benefit from Special Advertisement Control. Therefore the Council seeks to carefully control adverts affecting heritage assets including conservation areas, individual historic buildings and buildings that are locally listed. Internally illuminated box fascia signs will be resisted. Externally illuminated fascia signs will normally be preferred.
- 4.91 Estate agents’ boards have deemed consent rights for their display and thus do not need approval from the Council to be displayed for a limited time period. The urban parts of the District and the frequency of sales and lettings can lead to a proliferation of estate agents boards, which are not always removed within the required timescale. This results in a build-up of boards, both legal and illegal, detracting from building façades and causing an untidy and cluttered street scene. In such situations the Council will seek the removal of deemed consent rights from the Secretary of State for this type of advertising.

Policy DM 13 Advertisements

- A. Where advertisement consent is required, such consent will be permitted if the proposal respects the interests of public safety and amenity, and meets the following criteria:
- (i) the design, materials and location of the advertisement respects the scale and character of the building on which it is displayed and the surrounding area;
 - (ii) the proposals would not result in a cluttered street scene, excessive signage, or proliferation of signs advertising a single site or enterprise;
 - (iii) any illumination will be considered in relation to impact on visual amenity, potential light pollution, road safety and functional need;
 - (iv) Internally illuminated signs will not be permitted where harm is caused to heritage assets including listed buildings and conservation areas; and
 - (v) illuminated signs will not be permitted in residential areas.

Shopfronts and On Street Dining

- 4.92 There is a need for a policy to ensure that proposals for new shopfronts are of a high quality and relate well to the scale and character of the original building and surrounding area. Attractive shopfronts make a positive contribution to local distinctiveness and enhance the vitality of the shopping frontage as well as the wider town centre.

Key Evidence

- Town Centres Review (Arup, 2016).

Approach

- 4.93 The Council considers that the distinctive character of shopping areas should be maintained by retaining or designing high quality shopfronts that refer to the architecture of the host building, neighbouring units and general scale and rhythm of the shop front widths in the area. New shopfronts should contribute positively towards a cohesive streetscape and attractiveness of the shopping parade. Materials, detailing, craftsmanship and

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

finishes are equally important in achieving high quality shopfront design especially as they are viewed close up.

- 4.94 Shopfronts with poor quality materials, internally illuminated box fascias and intrusive signage add to visual clutter and detract from the appearance of the streetscape. Projecting shutter boxes have a negative impact on shopfronts, while solid shutters generally create a bleak, unattractive and hostile environment in the evenings. Their significant detrimental impact in this regard also inhibits passive surveillance and encourages graffiti. Therefore in most cases permission is unlikely to be granted for the installation of any form of roller shuttering on the outside of a building. If a shutter box is unavoidable, it should normally be located internally behind the shop window.
- 4.95 On street dining facilities can add to the vibrancy of town centres. However these should not disrupt normal pedestrian movement or other high street activities. Where possible, such facilities should integrate with the public realm of the surrounding area. The Council may consider limiting the hours of use through the use of planning conditions. Where such facilities fall within the Public Highway a licence will need to be obtained from the local highway authority.

Policy DM 14 Shopfronts and On Street Dining

Shopfronts

- A. The Council requires shopfronts, including their signs, security shutters and canopies, to be designed to a high standard and contribute to a safe and attractive environment. In particular:
- (i) The Council will seek the retention of traditional shopfronts contributing to the visual, architectural or historic quality of the local townscape;
 - (ii) Replacement shopfronts should relate to the host building and conserve original materials and features as far as possible;
 - (iii) The alteration or replacement of an existing shopfront or the development of a new shopfront must allow for easy access by all members of the community; and

- (iv) Security shutters must be open mesh and, wherever possible, be located internally.

On Street Dining

- B. Proposals for on-street/forecourt dining must demonstrate the suitability of the proposed location having regard to the proximity of residential development and should:
- (i) be integral and functionally related to the business; and
 - (ii) provide sufficient space to not obstruct the pavement space and not create a permanent enclosure.

Environmental Policies

- 4.96 The final set of development management policies address a wide range of matters relating to the wider site environment pertaining to individual developments. It includes additional requirements to those contained in the design policy section of the Plan. Many of the measures address the use of natural resources and mitigate against the impacts of climate change as well as assisting places to adapt-to the changing climate.

Managing and Reducing Flood Risk

- 4.97 Parts of the District currently experience flooding from a range of sources and climate change is projected to increase the risk of flooding and number of flooding incidents over the plan period. It is critical to manage flood risk in order to minimise harm to people and property. Key factors in reducing the risk of flood damage include identifying flood risk from all sources including Critical Drainage Areas which are particularly susceptible to surface water flooding. Delivering flood mitigation schemes and improving drainage infrastructure then alleviate the risk. The location and design of buildings and their settings are key factors in reducing the risk of flood damage.

Key Evidence

- Level 1 Strategic Flood Risk Assessment Update (URS, 2015);
- Essex Local Flood Risk Management Strategy (Essex County Council, 2013);

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

- Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan (URS, 2015); and
- Epping Forest District Council's Flood Risk Assessment Zones (URS, 2015).

Approach

- 4.98 Locations within the District have experienced flooding that has caused damage to property. Avoiding development in areas at risk of all types of flooding is the most effective way to minimise flood risk over the Plan period, coupled with careful provision of flood mitigation measures where water run-off from buildings and the land can be managed.
- 4.99 The Epping Forest District Council Strategic Flood Risk Assessment (SFRA) Level 1 Update 2015 contains a great deal of detail on the matter of flood risk. The forms of flooding experienced in the District are: 'fluvial' from rivers and other watercourses; 'pluvial' from rain i.e. surface water flooding resulting from rain; and 'groundwater' flooding which is the emergence of water from the ground away from river channels
- 4.100 The SFRA identified surface water run off as the greatest risk to the District with regard to flooding due to the underlying geology and the presence of water courses in the area. The corridors of the River Lea and River Roding, including their main tributaries Cobbins and Cripsey Brooks contain the majority of the flood risk zones in the District – i.e. areas at risk from flooding by rivers. In particular the rapid onset, flash flooding of the smaller watercourse system is an ongoing concern.
- 4.101 The approach of directing development to areas where the risk of flooding is lowest, taking account of climate change and the vulnerability of types of development to flooding, is known as 'sequential testing'. If necessary an 'exceptions test' is applied to the location of development to establish whether there is a way to locate and design the development within a flood risk area by exception and requires the proposed development to demonstrate: wider sustainability benefits to the community that outweigh the flood risk; and

that it will be safe for its lifetime without increasing flood risk elsewhere.

- 4.102 Some uses are more vulnerable to flood risk than others e.g. caravans and basement dwellings are 'highly vulnerable' whilst marinas are 'water compatible'. National planning policy guidance explains these distinctions and suitable approaches.
- 4.103 National planning policy explains that for the exception test to be passed: within the site the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to prefer a different location; development is appropriately flood resistant and resilient, including safe access and escape routes where required, and that any residual risk can be safely managed, including by emergency planning; and it gives priority to sustainable drainage systems.
- 4.104 For areas of river flooding the SFRA notes that these are principally in flood risk zones 2 and 3, but can also contain areas of flood risk 1 where there are Critical Drainage Areas (as notified by the Environment Agency).
- 4.105 The EFDC Flood Risk Assessment Zones (FRAZ's) have been defined by EFDC as 'catchments of ordinary watercourses identified as key areas where surface water run off is contributing to Main Rivers or areas of known historic flooding'. Within FRAZ's particular attention should be applied to surface water management, with the aim of reducing the cumulative impact of development throughout the District.
- 4.106 A Surface Water Management Plan outlines the predicted risk and preferred surface water management strategy for areas under study. They identify local Critical Drainage Areas (CDAs) and site specific measures that could help reduce the risk of surface water flooding in these areas. The Council currently has in place one Surface Water Management Plan (SWMP) for Loughton, Buckhurst Hill and Theydon Bois. Further SWMPs may be produced for other areas.
- 4.107 Because flood risk can arise from development in a different location to the development itself, both existing and new development need to be considered in terms of associated flood risks.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

This means opportunities should be taken via measures in new development where it is possible to assist communities that are currently at risk of flooding.

- 4.108 In addition, there can be opportunities to reduce flood risk overall and reduce the causes and impacts of flooding, for instance through the layout and form of development including green infrastructure, by safeguarding land for flood risk management and designing off-site works required to protect and support development. It is important to ensure that there is no net loss of flood storage.
- 4.109 Policy DM 15 follows the sequential approach and current national policy - it applies to all operations that are defined as development in Section 55 of the Town and Country Planning Act 1990 hence includes engineering operations such as ground works, conversions of buildings and extensions to existing buildings. The Policy will be applied across the District, taking into account all sources of flooding.
- 4.110 Flood risk should be assessed at the site level as this enables an understanding of the risk of flooding on-site and the impact of flooding elsewhere.
- 4.111 The valuable information on Critical Drainage Areas and the EFDC Flood Risk Assessment Zones will be used to support decision making on planning applications. The Council seeks to improve drainage, hence reduce flood risk, within the Critical Drainage Areas and the FRAZs and ensure that site specific flood risks are properly assessed. It is also important to ensure that the cumulative impact of flood risk from development is reduced throughout the District.
- 4.112 The Council will use its standard conditions on approvals for development to secure the relevant information required for assessments – these vary in accordance to the size of the development for proposals in these areas.

Policy DM 15 Managing and Reducing Flood Risk

- A. The Council will require all development proposals to demonstrate that they avoid and reduce the risk of all forms of flooding to future occupants and do not increase the risk of flooding elsewhere;
- B. The Local Plan allocations are directed towards Flood Zone 1 or to areas with the lowest probability of flooding. Any proposals for new development (except water compatible uses) within Flood Zone 2 and 3a will be required to provide sufficient evidence for the Council to assess whether the requirements of the Sequential Test and Exception Test, have been satisfied.
- C. Proposals within Flood Zones 2 and 3a must be informed by a site specific Flood Risk Assessment (FRA) taking account of all potential sources of flooding and climate change allowances and should:
- (i) demonstrate the application of a sequential approach for the development of individual sites to ensure that the highest vulnerability of land uses are located in areas of the site that are at lowest risk of flooding;
 - (ii) preserve overland flood and flow routes and ensure there is no net loss of flood storage;
 - (iii) ensure that there is no adverse effect on the operational functions of any existing flood defence infrastructure;
 - (iv) provide adequate flood storage and compensation on site;
 - (v) where appropriate, set out the mitigation measures that will be incorporated on site to manage residual flood risk including finished floor levels to accord with Environment Agency's Standing Advice; and
 - (vi) naturalise water courses where opportunities arise, in line with Policy DM 17 (Watercourses and Flood Defences).
- D. All proposals for new development will be required to:
- (i) manage and reduce surface water run-off, in line with Policy DM 16 (Sustainable Drainage Systems);
 - (ii) manage water and waste water discharges, in line with Policy DM 18 (On-site Management of Waste Water and Water Supply);

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

(iii) ensure safe access and egress for future users of the development and an appropriate emergency evacuation plan where appropriate; and

(iv) include measures to assist existing communities at risk of flooding where feasible.

- E. All proposals for development within a Critical Drainage Area (CDA) or an EFDC Flood Risk Assessment Zone (FRAZ) will be required to provide a site specific flood risk assessment consisting of: an assessment of the risks involved, focussing predominantly on surface water and ordinary watercourses; details of any mitigation measures on-site where required (e.g. increased thresholds); and a drainage strategy incorporating the use of SuDS (Policy DM 16) to mitigate any impacts of site.
- F. With the exception of water compatible uses and essential infrastructure, subject to passing the Exception Test, development in areas designated in Epping Forest District's Strategic Flood Risk Assessment or as determined by specific Flood Risk Assessment as being within Flood Zone 3b will not be permitted.
- G. Proposals for developments within identified Critical Drainage Areas could, based on the outcome of the site specific flood risk assessment, be subject to a section 106 contribution or CIL funding for the delivery of appropriate flood alleviation schemes.

Sustainable Drainage Systems

4.113 Avoiding development in areas at risk of all types of flooding is the most effective way to minimise flood risk over the Plan period. This needs to be coupled with careful provision of flood mitigation measures where run off can be managed. National policy gives priority to sustainable drainage systems which manage run off.

Key Evidence

- Level 1 Strategic Flood Risk Assessment Update (URS, 2015);
- Essex Local Flood Risk Management Strategy (Essex County Council, 2013); and

- Loughton, Buckhurst Hill and Theydon Bois Surface Water Management Plan (URS, 2015).

Approach

- 4.114 The Strategic Flood Risk Assessment Level 1 Update 2015 (SFRA) identifies surface water run-off as the greatest risk to the District with regard to flooding. The Council currently has in place one Surface Water Management Plan for Loughton, Buckhurst Hill and Theydon Bois (2016).
- 4.115 Surface Water run-off is the excess water that flows off the land as a result of rainfall that is unable to filter through the soil. Surface water flooding occurs when high intensity or prolonged rainfall generates run-off which flows over the surface of the ground and ponds in low lying areas. It can be especially problematic when the ground is saturated or when the drainage network has insufficient capacity to cope with the additional flow. Climate change is projected to increase the frequency and intensity of heavy rainfall events, placing greater pressure on traditional drainage systems.
- 4.116 All development has the potential to increase the risk of surface water flooding. Sustainable Drainage Systems (SuDS) are an important tool in managing surface water flood risk. SuDS mimic natural drainage systems and retain water at or near a site when rain falls. They can also be of added benefit by enhancing biodiversity and amenity through design treatments and incorporate trees and other vegetation that also assist in mitigation against flooding. The Council seeks to manage surface water run off as close to the source as possible and will apply a hierarchy of drainage solutions as outlined in Policy DM 16, prioritising sustainable solutions. Proposals should seek to maximise the value of SuDS by making use of their features, such as trees, green space and clean water at the surface, to improve the value of landscapes and to strengthen the sense of place.
- 4.117 There are numerous types of SuDS including swales, ponds, green walls and brown, blue and green roofs. 'Green roofs' are a design feature that is planted whilst 'brown roofs' are

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

composed of soil allowed to colonise with plants naturally and 'blue roofs' are themselves water features. All of these design elements slow the rate of run-off of rainwater from land or buildings. In addition, paying attention to designing permeable surfaces in development assists with drainage (see also Policy DM 9).

4.118 Applicants will be expected to demonstrate that the SuDS will function effectively over the lifespan of the development, by ensuring adequate arrangements for their management and maintenance. Attention should be paid to the most up to date Technical Guidance from Government; British Water and the Environment Agency and Essex County Council.

Policy DM 16 Sustainable Drainage Systems

- A. All proposals for new development must seek to manage surface water as close to its source as possible in line with the following drainage hierarchy:
- (i) store rainwater for later use;
 - (ii) use infiltration techniques, such as porous surfaces in non-clay areas. Porous surfaces are suitable in areas of clay but must be adequately tanked with an outfall. Epping Forest District is predominantly clay so any infiltration proposals must be subject to and pass the relevant percolation tests;
 - (iii) attenuate rainwater in ponds or open water features for controlled release;
 - (iv) attenuate rainwater by storing in tanks or sealed water features for controlled release.
- B. Other methods must also reflect the stringent drainage hierarchy contained within the current CIRIA¹ SuDS Manual (2015), which provides further detailed guidance over and above Building Regulations:
- (i) controlled discharge of rainwater direct to a watercourse/surface water body;
 - (ii) controlled discharge rainwater to a surface water sewer/drain;
 - (iii) controlled discharge rainwater to the combined sewer.
- C. The Council will encourage the use of green,

brown and blue roofs.

- D. The Council will require Sustainable Drainage Systems (SuDS) to be sensitively incorporated into new development by way of site layout and design, having regard to the following requirements:
- (i) all major development proposals will be required to reduce surface water flows to the 1 in 1 greenfield run-off rate and provide storage for all events up to and including the 1 in 100 year critical storm event including an allowance for climate change, and include at least one source control SuDS measure resulting in a net improvement in water quantity and quality discharging to a sewer;
 - (ii) all brownfield development proposals should aim to achieve the 1 in 1 greenfield run-off rate and, at a minimum, achieve a 50 per cent reduction in existing site run-off rates for all events, including an allowance for climate change, SuDS measures resulting in a net improvement in water quantity and quality discharging to a sewer;
 - (iii) all 'minor' and 'other' development proposals should aim to achieve the 1 in 1 greenfield run off rate where possible, including an allowance for climate change, or a rate as otherwise agreed with the Council; and
 - (iv) for all development where the greenfield run-off rate cannot be achieved, justification must be provided to demonstrate that the run-off rate has been reduced as much as possible.
- E. Where Sustainable Drainage Systems are implemented they will be expected to:
- (i) meet the requirements set out in national standards, and meet the Council's standards if they exceed national guidance;
 - (ii) incorporate measures identified in Surface Water Management Plans;
 - (iii) be designed to maximise biodiversity and local amenity benefits and where appropriate, ensure that SuDS techniques provide for clean and safe water at the surface;
 - (iv) improve water quality; and
 - (v) full details of the means of achieving future management and maintenance of the SuDS scheme to ensure that it will function effectively over the lifespan of the development will be required, including

¹ Construction Industry Research and Information Association

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

responsibilities and funding.

- F. The Council will give consideration to adopting SuDS. Contributions in the form of commuted sums or CIL will be sought for maintenance if adopted by the Council.
- G. Where SuDS cannot be implemented due to site constraints (such as land contamination) robust justification must be provided along with proposed alternative approaches to surface water management.
- H. Where particular sites and the wider catchment have identified existing flood issues, the implementation of good practice on Natural Flood Management must be explored.

Protecting and Enhancing Watercourses and Flood Defences

4.119 National policy notes that opportunities offered by new development should be used to reduce the causes and impacts of flooding. Historical development has included changes to natural watercourses that do not necessarily assist in modern flood management or support building in resilience to climate change. In addition, new development must not reduce the quality of an adjacent water course and should provide enhancements wherever there is an opportunity.

Key Evidence

- Level 1 Strategic Flood Risk Assessment Update (URS, 2015); and
- Essex Local Flood Risk Management Strategy (Essex County Council, 2013).

Approach

4.120 In order to manage the risk of flooding to properties close to a watercourse, buffers of open land should be applied between the water course and new buildings.

4.121 The most effective way to reduce flood risk is to enable the watercourses to operate naturally, however in urban areas these have been redirected, and culverted over the years whilst areas of land that may have been used for water storage during flood have been developed. Such changes can now contribute to the risk of flooding. The Environment Agency advises that

in order to manage flood risk where there are opportunities to re-naturalise water courses, and provide land for flood storage, these should be taken. In addition such measures can be used to actively encourage the creation, restoration and enhancement of habitats. All development proposals should therefore account for these matters in design wherever possible.

- 4.122 The canal system in the District is navigable and used for leisure purposes. There is no intent to interfere with the navigability of the canal system implied in this policy.
- 4.123 It is not possible in all circumstances to naturalise existing watercourses. Where it is not possible to re-naturalise water courses then development must pay particular attention to ensuring that the existing built defences such as walls and culverts serving the development are fit to last, and will be maintained throughout the lifetime of the development.
- 4.124 The Council will seek contributions to protection and enhancement of watercourses and flood defences through s106/ CIL where appropriate in addition to work required on site.

Policy DM 17 Protecting and Enhancing Watercourses and Flood Defences

- A. New development must be set back at a distance of at least 8 metres from a main river² and an ordinary watercourse³, or at an appropriate width as agreed by the Council and/or the Environment Agency, in order to provide a naturalised and undeveloped buffer zone, free of built development, other than for site access and other essential infrastructure connections. Buffer zones should be designed for the benefit of biodiversity and should be undisturbed by lighting. Planning applications must include a long term scheme to protect and enhance the conservation value of the watercourse and ensure access for flood defence maintenance, in line with the requirements of the Water Framework Directive and the Thames River Basin Management Plan.

² the main rivers and their associated tributaries are the River Lea, River Lee Navigation and Stort Navigation River Roding, Nazeing Brook, Cobbins Brook and Cripsey Brook

³ the ordinary watercourses are those that are not Main Rivers.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

- B. All major development will be required to, and minor development will be expected to
- (i) investigate and secure the implementation of environmental enhancements to open⁴ sections of the river or watercourse if appropriate; and
 - (ii) investigate and secure the implementation of measures to restore culverted sections of the river or watercourse, if appropriate.
- C. Where de-culverting or other river enhancements are shown to be unfeasible, the Council will seek a financial contribution to restore another section of the same watercourse.
- D. Proposals must not adversely affect the natural functioning of main rivers and ordinary watercourses, including through culverting.
- E. Where appropriate the Council will require planning applications to include a condition survey of existing watercourse infrastructure to demonstrate that it will adequately function for the lifetime of the development and, if necessary, the proposal must make provision for repairs or improvements.
- F. Development on or adjacent to a watercourse must not result in the deterioration of the water quality of that watercourse. Development must not impact on the stability of the banks of a watercourse or river.

On-site Management and Reuse of Waste Water and Water Supply

4.125 There is a clear need to ensure that surface water and foul water drainage and treatment occur effectively for the protection of human health and the wider environment. In order for development to function effectively it should not cause any pollution to water bodies or controlled waters including ground water. The pressure of existing water supplies is of concern to residents in some parts of the District. The bulk of a policy response to these matters is bounded by national policy and the respective responsibilities of water suppliers and regulators.

⁴ Open in this context means any length of watercourse that is not culverted.

Key Evidence

- Infrastructure Delivery Plan (Arup, 2017)

Approach

- 4.126 National policy sets out that Local Authorities should adopt proactive strategies in regard to climate change resilience and take full account of water supply and demand considerations. They should include Local Plan policies to deliver the provision of infrastructure including waste management, water supply and wastewater.
- 4.127 The EU Water Framework Directive established a framework for the protection and improvement of rivers and lakes, estuaries, coastal waters and groundwater. As set out development must not result in the deterioration of the water quality status of a waterbody and must not prevent the future attainment of 'Good Ecological Status', or 'Good Ecological Potential' if the watercourse is artificial or heavily modified.
- 4.128 In addition the chemical quality of the watercourse is important as it has the potential to affect the biological quality. The ecological potential or status of the water bodies in the District varies although most of these water bodies do not fall under the ambit of the Water Framework Directive. The Thames River Basin Management Plan is designed to implement the Directive. It seeks by 2027 at the latest that all relevant water bodies in the area should be of 'good ecological status'.
- 4.129 During the Plan period the Council seeks to take any measures that are within its powers to improve the quality of these water bodies and is in discussion with the Environment Agency and the statutory water undertaker (Thames Utilities Ltd) to establish how to influence these beyond dealing with any historical misconnection problems from properties. Sustainable drainage systems are considered to be able to contribute to improvements in water quality given their potential to 'filter' run off water. All new development must avoid any detriment to water quality.
- 4.130 The Environment Agency has identified Groundwater Source Protection Zones for 2,000 groundwater sources used for public drinking

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

water supply nationally. The zones show the potential for contaminant migration to the water source/resource from any activities that might cause pollution in the area. The closer the activity the greater the risk. The groundwater source catchments are divided into zones that relate to the travel time of water from any point below the water table to the source. The Lee Valley contains some areas of Groundwater Source Protection Zones in the Inner Zone 1 (50 day travel time) and Outer Zone 2 (400 day travel time) and Total Catchment Zone 3. The Environment Agency use the zones in conjunction with the Groundwater Protection Policy to set up pollution prevention measures in areas which are at higher risk and to monitor the activities of potential polluters nearby. Although not considered in national source protection zones, the Lee Valley within the District is especially sensitive to groundwater contamination, as a whole, due to the history of gravel extraction and landfilling. There are also significant numbers of private water supplies in the area which require protection.

4.131 The Council expects developers to work with the water companies to ensure that their proposals can be suitably serviced with water supply and make considerate use of water saving measures such as grey water systems and rain water harvesting (please see also Policy DM 9). In addition to ensure the suitable arrangements for foul water drainage and treatment from their developments and respect for the Groundwater Source Protection Zones and the environment in general.

4.132 This will also apply to operators of commercial developments to ensure that contaminated surface water is properly treated in order to protect drainage systems, watercourses and the environment in general. For example, from car/lorry washes and hardstanding.

4.133 In the majority of cases the Council does not have the power to refuse planning permission in relation to connections to the public sewer whilst the statutory undertakers' role is to provide connections to the public sewer and their ability to refuse to make connections is limited. Therefore, planning applications should be referred to the statutory undertaker for

assessment. The applicant will be expected to provide proof of the adequacy of the proposals in respect of water supply and foul drainage via correspondence from the statutory undertaker. The Council will use standard conditions to manage this aspect of the development.

Policy DM 18 On Site Management and Reuse of Waste Water and Water Supply

- A. The Council will expect planning applications to set out how they will ensure that there is adequate surface water, foul drainage and treatment capacity to serve their development and demonstrate that it does not impact on the adequacy of existing development in this regard. All proposals for new development will be required to:
 - (i) ensure the separation of surface and foul water systems; and
 - (ii) implement sustainable drainage systems, in line with Policy DM 16.
- B. Where the local public sewer network does not have adequate capacity to serve the existing and proposed development, proposals will be required to demonstrate that it provides for suitable alternative arrangements for storing, treating and discharging foul water. Should there be capacity issues resulting from development that can be addressed through upgrades of the sewerage network, developers will be required to demonstrate how these will be delivered in advance of the occupation of development.
- C. The Council will expect new development to connect to mains foul drainage, and will restrict the use of non-mains drainage for foul water disposal, particularly in Groundwater Source Protection Zones, in line with Environment Agency guidance. The location of and likely impact on the private water supplies within the District must also be taken into account. Where non-mains drainage is proposed for the disposal of foul water, a foul drainage assessment will be required to ensure the most sustainable drainage option will be implemented.
- D. All proposals for new development will be required to:
 - (i) ensure that there is adequate water supply infrastructure capacity both on and off-site to serve the development with wholesome

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

water of sufficient quantity, flow rate and pressure, without adversely impacting on existing users; and

- (ii) make provision for the installation and management of measures for the efficient use of mains water and where possible with direct connection to the mains public water supply. Please also refer to Policy DM 19.

Sustainable Water Use

4.134 It is important to manage the water resources that serve the District as it is in an area of serious stress on water resources which could culminate in potentially significant impacts on the water environment. Consequently the use of water efficiency measures in buildings is appropriate and justifiable.

Key Evidence

- Infrastructure Delivery Plan (Arup, 2017)

Approach

4.135 The District, served by Thames Water and Affinity Water for mains water potable water supplies and a number of private water companies, is classed as being in an area of 'serious water stress' (Environment Agency Water Stressed Areas Classification 2013). In such areas it is recommended that there is implementation of water efficiency standards in order to manage demand on the water environment.

4.136 The average UK consumption of water is 150 litres per person per day (in the home). As set out in government guidance the Council has the option to set additional technical requirements in the Local Plan on exceeding the minimum standard (125 litres per person per day) required by Building Regulations in respect of water efficiency. The tighter Building Regulations optional requirement expected by the Council is 110 litres per person per day (roughly 30% less than average consumption).

4.137 Given the significant pressure on the water supply in the District, conditions will be required on planning permissions to ensure the standard is met. There are many routes to achieving the standard such as the use of grey water systems

and rainwater harvesting together with water efficient fittings and appliances.

4.138 With respect to non-residential development the Council considers it reasonable to require a similar percentage reduction in water consumption as that for residential uses recognising that some commercial uses need more water for operational processes.

4.139 The Code for Sustainable Homes provides a useful benchmark to assist in water efficiency measures and the BREEAM 2014 for New Construction is the relevant standard for non-domestic new build property. Whilst the Council recognises that it cannot impose the BREEAM standard the policy below sets out the Council expectation of a reduction in water usage in non-residential buildings commensurate with that achieved by the optional requirement for residential development.

4.140 Water efficiency of non-residential buildings can be demonstrated with reference to the BREEAM manual metrics.

Policy DM 19 Sustainable Water Use

- A. Development will need to demonstrate that:
 - (i) Water saving measures and equipment is incorporated in all new development
 - (ii) New homes (including replacement dwellings) meet a water efficiency standard of 110 litres or less per person per day; and
 - (iii) New non-residential development of 1,000 sq.m gross floor area or more aims to achieve at least a 30% improvement over baseline building consumption
- B. The above applies unless it can be clearly demonstrated that it would not be feasible on technical or viability grounds.
- C. Where new national standards exceed those set out above, the national standards will take precedence.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

Low Carbon and Renewable Energy

4.141 National policy provides that local authorities should adopt proactive strategies with regard to climate change resilience and have a positive strategy to promote energy from low carbon and renewable energy. It notes that local authorities should recognise the responsibility of all communities to contribute to energy generation from renewable or low carbon sources.

Key Evidence

- Epping Forest District Council Carbon Reduction and Renewable Energy Assessment (Atkins, 2013)

Approach

4.142 National planning policy notes that local authorities should include Local Plan policies to deliver the provision of energy infrastructure including heat. Low carbon and renewable energy measures take a variety of forms including commercial 'farms' that whilst intrusive generate energy on a large scale, individual installations for individual properties (micro generation) and schemes that include a number of properties (district heating schemes). Some householder installations are permitted development not requiring planning permission.

4.143 The Council wishes to encourage new development that designs from the outset an environment of zero or low carbon energy use rather than retrofits installations to standard traditional designs. The retrofitting of renewable energy installations on existing development is considered acceptable in principle.

4.144 The Council recognises the need for energy generation to support development and seeks the generation of low carbon and renewable energy. The Council also recognises the findings of the Carbon Reduction and Renewable Energy Assessment in its conclusions that the potential in the District for large scale renewable energy production is hampered by the policy designation of the Green Belt. National Policy does not rule such development out but notes

that elements of many renewable energy projects will comprise inappropriate development. In such cases the demonstration of very special circumstances would be required for proposals to proceed (NPPF paragraph 91). In any case careful consideration of the impact of proposals on the openness of the Green Belt is needed. More positively, the Assessment concluded that small scale renewable energy schemes of all kinds can be accommodated in the District and incorporation in the design of development on larger sites is feasible and viable as would be installations on individual buildings.

4.145 Decentralised heating is supported by national policy as a form of renewable or low carbon decentralised energy supply, and a means of meeting requirements of the Climate Change Act on carbon emission reduction. Decentralised or community energy schemes can be connected into larger District wide schemes.

4.146 A key characteristic of district heating schemes are that an 'anchor' high demand energy user is needed to support the viability of the scheme. The Councils Carbon Reduction and Renewable Energy Assessment 2013 found the potential for combined heat and power (CHP) networks in the glasshouse industry to be significant in terms of carbon savings – if powered by traditional energy sources this is heavily reliant upon the fuel markets and there are viability concerns. However, if it is practical to provide through renewable energy sources then there is potential.

4.147 It is possible that future redevelopment or extension of industrial areas may give rise to the suitable conditions for district heating schemes, or purely support site wide communal energy systems that may be connected to district heating networks at a later date. A small number of gas fired combined heat and power plants exist in the District.

4.148 Large scale residential development is a clear candidate for the use of communal energy schemes that may later be connected to wider district networks.

4.149 The proposed Policy seeks to support appropriate low carbon and renewable

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

technologies including district heating networks as part of a package of measures to assist in delivering more energy efficient development. All major development should incorporate site wide communal energy systems that serve all energy demands from within the development and should have the ability to connect to district heating networks where possible.

Policy DM 20 Low Carbon and Renewable Energy

- A. The incorporation of low carbon and renewable energy measures in new and existing development will be encouraged with regard to both standalone installations and micro renewables integrated into development.
- B. Low carbon and renewable energy technologies will be permitted provided that:
 - (i) they do not have any adverse impact on the integrity of any European sites, wildlife sites, protected species or habitats or the openness of the Green Belt;
 - (ii) a positive assessment is provided demonstrating how any impacts on the environment and heritage assets, including cumulative landscape, noise, visual, air quality and emissions, and traffic generation impacts can be avoided or mitigated through careful consideration of location, scale and design; and
 - (iii) the benefits of the proposal are clear with regard to the amount of heat or electricity generated and consequential reduction in greenhouse gases, and the local individual or community benefit.
- C. The use of combined heat and power (CHP), and/or combined cooling, heat and power (CCHP) and district heating will be encouraged in new developments.
- D. Strategic Masterplans will be required to demonstrate how the potential to incorporate infrastructure for district heating can be provided, and will be expected to connect to any existing suitable systems (including systems that will be in place at the time of construction), unless it is demonstrated that this would render development unviable or that alternative technologies are available that provide the same or similar benefits and opportunities.

- E. Where a district heating scheme is proposed the Council will expect the scheme to demonstrate that the proposed heating and cooling systems (CHP/CCHP) have been selected considering the heat hierarchy in line with the following order of preference:
 - (i) connection with existing CHP/CCHP distribution networks;
 - (ii) site wide CHP/CCHP fuelled by renewable energy sources;
 - (iii) communal CHP/CCHP fuelled by renewable energy sources; and
 - (iv) gas fired CHP/CCHP.

Local Environmental Impacts, Pollution and Land Contamination

4.150 National policy supports the planning system to prevent both new and existing development from contributing to environmental damage and putting people and the environment at risk, or subjecting them to the adverse effects from unacceptable levels of soil, air, water, light or noise pollution or land instability. These factors impact significantly on living conditions and include the potential disruption from the demolition and redevelopment of buildings. National planning policy also notes that planning should remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land where appropriate.

Key Evidence

- EFDC Contaminated Land Strategy (EFDC, 2000).

Approach

4.151 The aim in plan making should be to minimise pollution and other adverse effects on the local and natural environment and subsequently humans and other species. The prevention of unacceptable risks from pollution and land instability should be accounted for in consideration of the location of development and the impact on health and the environment taken into account. Some engineering operations and ground works can cause pollution such as the movement of significant amounts of soil, or fill with inert waste to re-

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

contour land. Therefore all types of development fall within this policy.

- 4.152 National policy notes that where a site is affected by contamination or land instability it is the responsibility of the developer or landowner to ensure that a safe development is secured. However, planning policy and decision making is required to ensure that any site is suitable for its use taking account of ground conditions and land stability including from former activities and pollution from former uses. Such assurance can be taken from site investigation information prepared by a competent person. National planning policy defines the competent person to prepare site investigation information as being “a person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation.”
- 4.153 Contamination of land in the District largely arises from previous industrial activity, waste disposal, accidental spillages and transportation. Many processes are now controlled under legislation but historically this was not the case and hence we are left with a legacy of contaminated land and surface/ground waters that potentially may need to be addressed. (Refer EFDC Contaminated Land Strategy 2000).
- 4.154 The construction process, whether accompanied by demolition or other ground preparation, can cause a significant degree of noise, dust and vibration within the locality. Some types of development such as basement development are particularly extreme examples of such disruption. The Council seeks to minimise these impacts and the use of Construction Management Statements, agreed with the Council, include matters such as hours of operation on site. In addition, the reuse of materials on site reduces waste, as well as the amount of materials removed from site and contributes to an overall reduction in the use of materials reducing the carbon footprint of development.
- 4.155 The following Policy seeks to ensure that these factors are effectively considered and managed in assessing the suitability of development,

acquiring evidence to support decisions made on planning applications, and requiring management statements setting out the process and rules for the reduction of nuisance in the demolition and construction process.

Policy DM 21 Local Environmental Impacts, Pollution and Land Contamination

- A. The Council will require that the residual local environmental impacts of all development proposals after mitigation do not lead to unacceptable impacts on the health, safety, wellbeing and amenity of existing and new users or occupiers of the development site, or the surrounding land. These potential impacts can include, but are not limited to, air and water (surface and groundwater) pollution, dust, noise, vibration, light pollution, odours, and fumes as well as land contamination.
- B. The Council will:
- (i) resist development that leads to unacceptable local environmental impacts, including, but not limited to, air pollution, noise and vibration, light pollution, odours, dust and land and water contamination;
 - (ii) require that activities likely to generate pollution are located away from sensitive uses and receptors where possible, practical and economically feasible;
 - (iii) require development proposals to mitigate and reduce to a minimum any adverse local environmental impacts and activities that may have wider cumulative effects;
 - (iv) where there are unacceptable risks of contamination or land instability, require these to be properly and fully addressed through remediation. If remediation measures are not suitable then planning permission will be refused; and
 - (v) where necessary, apply planning conditions to reduce local environmental impacts on adjacent land uses to acceptable levels.

Land Contamination

- C. The Council will expect the remediation of contaminated land through development. Potential contamination risks will need to be properly considered and adequately mitigated before development proceeds. To deliver this the Council will require development proposals on

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

contaminated land:

- (i) to be informed by a desktop study and preliminary risk assessment, including an assessment of the site's history, potential contamination sources, pathways and receptors;
- (ii) where necessary to undertake a site investigation and detailed risk assessment in line with current best practice guidance, including where appropriate physical investigations, chemical testing and assessments of ground gas risks and risks to groundwater;
- (iii) where necessary to provide a remediation strategy that sets out how any identified risks from the assessments above are going to be addressed. If remediation measures are not suitable then planning permission will be refused;
- (iv) where necessary to provide a long term maintenance and monitoring regime for the mitigation of any ongoing risk and identify the person/s responsible for the regime;
- (v) where necessary to provide a validation report once remediation has taken place, including evidence that demonstrates that risks from contamination have been controlled effectively; and
- (vi) to ensure that all above assessments and investigations are carried out by a competent person.

Construction and Demolition

- D. The Council will seek to manage and limit environmental disturbances during construction and demolition as well as during excavations and construction of subterranean developments. To deliver this the Council requires the submission of Construction Management Statements for the following types of developments:
- (i) all major developments;
 - (ii) any basement developments;
 - (iii) developments of sites in confined locations or near sensitive receptors; and
 - (iv) if substantial demolition/excavation works are proposed.
- E. In addition the Council supports the use of sustainable design and construction techniques, including where appropriate the local or on-site

sourcing of building materials enabling reuse and recycling on site.

Air Quality

- 4.156 The 2008 Ambient Air Quality Directive sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO²). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems.
- 4.157 The Department for Environment, Food and Rural Affairs carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with European Union Air Quality Limit Values. It is important that the potential impact of new development on air quality is taken into account in planning where the national assessment indicates that relevant limits have been exceeded or are near the limit.
- 4.158 The local air quality management (LAQM) regime requires every district to regularly review and assess air quality in their area. These reviews identify whether national objectives have been, or will be, achieved at relevant locations, by an applicable date.
- 4.159 If national objectives are not met, or at risk of not being met, the local authority concerned must declare an air quality management area and prepare an air quality action plan. This identifies measures that will be introduced in pursuit of the objectives and can have implications for planning. Air quality can also affect biodiversity and may therefore impact on our international obligations under the Habitats Directive.
- 4.160 As set out in the supporting text to Policy DM 2 the health of the Epping Forest SAC is sensitive to, amongst other things, air-borne pollutants, including those generated as a result of traffic. In addition the Council was required to declare an Air Quality Management Area (AQMA) in the area of Bell Common, Epping in 2010. This is still being monitored as nitrogen dioxide levels

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.

are still elevated and the Council is required to reduce them by 2020.

Key Evidence

- Habitats Regulations Assessment (AECOM, 2017); and
- Memorandum of Understanding on managing the impacts of growth within the West Essex/East Hertfordshire Housing Market Area on Epping Forest Special Area of Conservation (2017).

The Approach

4.161 Local Plans can affect air quality in a number of ways, including through what development is proposed and where, and the encouragement given to sustainable transport. Therefore in plan making, it is important to take into account air quality management areas and other areas where there could be specific requirements or limitations on new development because of air quality.

4.162 The approach to the location of development in the Local Plan has included the consideration of the sustainability of sites in respect to accessibility, or potential accessibility to facilities, services and jobs, by means other than the car. The reduction in levels of car use can have a significant positive effect on the air quality in an area, as can the provision of infrastructure which supports the use of new technologies, such as electric vehicles. This approach is taken forward through Policy SP 2 (Spatial Distribution) and Policy T 1 (Sustainable Transport Choices). As set out within the Memorandum of Understanding the Council is working with the City of London Corporation, Natural England and other Housing Market Area authorities to address both the requirement to avoid, or effectively mitigate, adverse impacts on the integrity of the SAC from Local Plan-led development and the requirement to prevent deterioration of the SAC features.

4.163 In addition to the above policies it is important that the effects from development, both individually and cumulatively, are assessed where they have a potential effect on the health of people and biodiversity within the District, and that appropriate mitigation and monitoring

measures are secured. As traffic is a major contributing factor to effects of humans and habitats, all new development which requires the submission of a Transport Assessment or Transport Statement (as set out in the Council's Local Validation Checklist) will be required to submit an assessment of air quality impacts which may arise as a result of the development. This is in addition to other developments which will require the submission of such assessment where the proposal has the potential to impact on air quality.

DM 22 Air Quality

- A. The Council will seek to ensure that the District is protected from the impacts of air pollution. Potential air pollution risks will need to be properly considered and adequate mitigation included in the design of new development to ensure neither future, nor existing residents, workers, visitors, or environmental receptors including the Epping Forest SAC are adversely impacted as a result of the development.
- B. Mitigation measures required will be determined by the scale of development, its location, the potential to cause air pollution, and the presence of sensitive receptors in the locality.
- C. Larger proposals or those that have potential to produce air pollution, will be required to undertake an air quality assessment that identifies the potential impact of the development, together with, where appropriate, contributions towards air quality monitoring. Assessments shall identify mitigation that will address any deterioration in air quality as a result of the development, having taken into account other permitted developments, and these measures shall be incorporated into the development proposals. This will include an assessment of emissions (including from traffic generation) and calculation of the cost of the development to the environment. All assessments for air quality shall be undertaken by competent persons.

The Local Plan should be read as a whole. Proposals will be judged against all relevant policies.