17.5. The Council’s Landscape Character Assessment looks in more detail at these national-scale designations and divides the Borough’s countryside into 30 different landscape character areas. The assessment covers physical influences such as geology and topography, vegetation and wildlife, as well as historical and cultural influences such as the field pattern and settlement form. For each character area, management guidelines have been drawn up, based on a condition and sensitivity analysis. Development proposals will be expected to have regard to these. When assessing the impact of proposals upon the landscape, consideration also needs to be given to the fact that the character of some areas includes its relative tranquillity or quietness.

17.6. In addition to the natural landscape, the Borough also has extensive areas of surviving high quality historic landscapes. The county-wide Historic Landscape Character Assessment zones the land according to its historic character and the likelihood that a particular area will contain historic landscape features. The variety of historic landscape types within the Borough is extremely high, with three of particular rarity:

1. Coaxial field systems (particularly around Gaddesden Row).
2. Iron age mining and settlements (beneath the woodlands at Ashridge)
3. Deserted Medieval landscapes (Boarscroft Vale).

17.7. Some areas, such as the National Trust’s Ashridge Estate are exceptionally well-preserved. Others, such as the vale of Aylesbury and Chiltern dip-slop areas, although altered, still contain many elements of surviving past landscapes of prehistoric Roman, medieval and post-medieval date. Ashridge, Tring Park, Markyatecell Park and the Jellicoe water gardens in Hemel Hempstead town centre are all listed on the Register of Historic Parks and Gardens. There are also

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**Policy CS24: The Chilterns Area of Outstanding Natural Beauty**

The special qualities of the Chilterns Area of Outstanding Natural Beauty will be conserved. The scarp slope will be protected from development that would have a negative impact upon its skyline.

Development will have regard to the policies and actions set out in the Chilterns Conservation Board’s Management Plan and support the principles set out within the Chilterns Buildings Design Guide and associated technical notes.
unregistered parks and gardens which are considered to be of significant local interest.

17.8. The Hertfordshire Historic Environment Record provides up-to-date information on all of the county’s historic buildings, archaeological remains and historic sites, together with surveys, reports and aerial photographs to help identify both their physical scale and relative importance.

17.9. The approach to conserving the area’s built historic heritage is set out in more detail in Section 18.

Policy CS25: Landscape Character

All development will help conserve and enhance Dacorum’s natural and historic landscape.

Proposals will be assessed for their impact on landscape features to ensure that they conserve or improve the prevailing landscape quality, character and sensitivity and take full account of the Dacorum Landscape Character Assessment, Historic Landscape Characterisation and advice contained within the Hertfordshire Historic Environment Record.

Green Infrastructure

17.10. ‘Green Infrastructure’ is the term used to describe a network of protected sites, nature reserves, green spaces, waterways and green linkages that surrounds and threads through the built environment. It provides a setting for the towns and villages, connecting them to the wider countryside, and contributes to the overall character of the area, helping give Dacorum its strong sense of place and high quality environment.

17.11. Green Infrastructure brings with it a range of environmental, social and economic benefits; acting as natural ‘air conditioning,’ assisting with pollution control and flood management, improving the health and well-being of residents by providing space for leisure activities, reinforcing the character and identity of places, helping support renewable energy production, as well as having a positive impact upon social interaction and property prices. It is particularly important on the urban fringe, where it helps to soften the transition between urban and rural landscapes.
17.12. As a ‘life support system’ for both people and the wider environment it is vital that the quality and integrity of the Borough’s Green Infrastructure network is maintained and improved at all spatial scales, from sustainably designed buildings and gardens, to wildlife corridors, to open land within settlements and to the wider pattern of habitats and open space that feature throughout the countryside.

17.13. Dacorum’s Green Infrastructure Network (Map 3) brings together a number of separate studies and strategies\(^2\) and provides a conceptual tool for identifying key landscape features, sites and areas of high biodiversity; ensuring these environmental assets are protected and enhanced; and creating opportunities to extend and link them together. This is reinforced at the local level through the individual Place Strategies (Sections 20-27), which identify wildlife corridors and areas of open space that are of particular local importance for each of the Borough’s towns and large villages.

\(^2\) The Urban Nature Conservation Study, the Hertfordshire Biodiversity Action Plan, the Green Space Strategy, Appropriate Assessment and Open Space Study.
Map 3

Dacorum's Green Infrastructure Network

Key
- Borough Boundary
- Important Open Space
- Key Corridors
- Grand Union Canal
- Areas of Biodiversity Opportunity
- Key Biodiversity Areas:
  1. River Chess Valley (wetland)
  2. Ashridge/Berkhamsted Common/ Aldbery Nowers (woodland)
  3. Tring Park/ High Scrubs (grassland)
  4. Tring Reservoirs (wetland)
  5. Upper Gade Valley (mosaic)

Scale 1:110,000
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Dacorum Borough Council, Licence No. 100018935 2010
17.14. This Green Infrastructure Network will be informed by a more detailed Borough-level Green Infrastructure Strategy and associated Action Plan. This work will help ensure that green infrastructure and Habitats Regulations Assessment issues are appropriately incorporated into site requirements and inform the accompanying infrastructure delivery plan.

**Biodiversity and Geological Conservation**

17.15. There are a number of different layers of designation designed to protect biodiversity and geology (see Figure 15).

**Figure 15: Biodiversity and Geology Designations**

- Chiltern Beechwoods Special Area of Conservation (SAC)
- Sites of Special Scientific Interest (SSSIs)
- Regionally Important Geological and Geomorphological Sites (RIGGS)
- County Wildlife Sites
- Local Nature Reserves

17.16. The Habitat Survey for Dacorum\(^3\) identified over 200 Wildlife Sites, some of which overlap with other designations. This list is updated annually by the Hertfordshire Wildlife Sites Partnership, whenever new sites are identified or existing sites lose their nature conservation value. There are two Regionally Important Geological and Geomorphological (RIGGs) sites within the Borough: pingos on Boxmoor and puddingstone boulders at Castle Hill, Berkhamsted.

17.17. Not all areas of importance to biodiversity are protected by formal designations. Features such as the Grand Union Canal, river valleys, chalk streams, areas of ancient semi-natural woodland, nature reserves, important trees and hedges and other green spaces within towns and villages are collectively very significant and

\(^{3}\) Hertfordshire habitats Survey and Reports, 1994-1998, Herts and Middlesex Wildlife Trust and the Hertfordshire Biological Records Centre.
need protection. Opportunities will be taken to create new greenspace, designate new Local Nature Reserves (LNRS) to meet the local accessibility standards set by Natural England and support countryside management initiatives.

17.18. The increasing fragmentation of habitats will be addressed. Many areas have become isolated ‘islands,’ increasingly vulnerable to extreme weather conditions, disease and climate change. Habitat fragmentation is greatest in the southern and eastern parts of the Borough.

17.19. Key Biodiversity Areas\textsuperscript{4} are identified on Map 3. They contain particularly high concentrations of either woodland, wetland, grassland or a broader mosaic of habitats and have the greatest potential for joining fragments of habitats and creating, restoring and managing large areas of quality habitat.

17.20. The Carbon Offset Fund (Policy CS30) will help provide additional tree and woodland planting, to extend and supplement existing green corridors and to reinforce existing landscape belts. The biodiversity value of new landscaping and open space will be increased through careful design and the use of appropriate native species.

\begin{quote}
\textbf{Policy CS26: Green Infrastructure}

Development will be expected to:

\begin{itemize}
  \item[a)] protect, extend and enhance the Green Infrastructure Network both within and outside settlements and at all spatial scales;
  \item[b)] support the long-term management, enhancement and restoration of wildlife habitats and strengthen biodiversity corridors; and
  \item[c)] meet any specific requirements set out within the Green Infrastructure SPD and associated Action Plan;
\end{itemize}

Open spaces will be managed in accordance with the Council’s Green Space Strategy.

National and local Biodiversity Action Plans will be supported through the conservation and management of important species and habitats, by protecting designated sites and by maximising opportunities to link these to the wider Green Infrastructure Network.
\end{quote}

\textsuperscript{4} Defined by the Herts and Middlesex Wildlife Trust and included within the Hertfordshire Biodiversity Action Plan.
Monitoring:

<table>
<thead>
<tr>
<th>Indicator(s)</th>
<th>Target(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in areas of local biodiversity importance</td>
<td>-</td>
</tr>
<tr>
<td>Quality of designated Wildlife Sites</td>
<td>Increase the proportion of local sites where positive conservation</td>
</tr>
<tr>
<td></td>
<td>management has been, or is being, implemented, from **% to **%.</td>
</tr>
<tr>
<td>Parks and Open Spaces managed to Green Flag standard</td>
<td>Increase in the proportion of total eligible space from 4.5% to **%.</td>
</tr>
<tr>
<td>Development within the Chilterns Area of Outstanding Natural Beauty.</td>
<td>-</td>
</tr>
</tbody>
</table>

17.21. The Hertfordshire Biodiversity Action Plan also sets targets for biodiversity within the County and the Chilterns Conservation Board’s Management Plan includes biodiversity targets that specifically relate to land within the Chilterns Area of Outstanding Natural Beauty. The Council supports the monitoring of these targets and will promote the sharing of monitoring information.

Delivery will be achieved by:

- Requirements for development sites identified within the Site Allocations DPD.
- Detailed policies within the Development Management DPD and supplementary planning documents.
- The use of the Landscape Character Assessments (including historic characterisation) to help decision makers recognise, conserve and enhance local landscape distinctiveness.
- Protection of open land within towns and large villages.
- The implementation of the Green Infrastructure and Green Space Strategies and national and Biodiversity Action Plan objectives.
- Supporting delivery of the Management Plan for the Chilterns Area of Outstanding Natural Beauty and associated guidance; and
- Working in partnership with national and local conservation organisations such as the Chilterns Conservation Board, Herts and Middlesex Wildlife Trust, Hertfordshire Environmental Records Centre and the Hertfordshire Countryside Management Service.
18. **Conserving the Historic Environment**

18.1. The Borough’s historic environment is diverse and includes 25 Conservation Areas that cover the Old Town of Hemel Hempstead, historic market towns, villages and hamlets. These are made up of local and national designations, undesignated heritage assets and areas of potential archaeological interest. Designations include Listed Buildings, Scheduled Ancient Monuments, Scheduled Archaeological Sites and Registered Parks and Gardens. Undesignated heritage assets include locally listed buildings, historic buildings and historic townscape. In addition, there are areas of potential unrecorded archaeological interest that are monitored by the Hertfordshire Historic Environment Record.

18.2. Historic features add tradition, continuity and character to a place, as well as being an asset for the economy, the environment and the wider community. Protection of the historic environment is expected as it is an important driver for economic development through the promotion of tourism and the higher land values associated with design excellence. The historic environment also provides an opportunity for community learning and enjoyment and to reuse buildings, such as the heritage of the paper making industry in Apsley.

18.3. The quality of the historic environment is sensitive to change from development and people and even the climate. Changes in economic and social conditions, as well as technological developments, can also mean that the original purpose for which the building was designed is outdated and adaptation may be needed. Increasing economic pressures have also resulted in higher numbers of buildings becoming ‘redundant’. This is often the case with agricultural and industrial buildings, places of worship and public houses, with a trend towards seeking higher value alternative uses such as housing. Climate change has resulted in more incidents of high winds and heavy rainfall which can have a detrimental impact on the fabric of buildings. Renewable energy installations can also affect the appearance of a building and its setting.

18.4. There is an additional danger that once common building types may become quite rare, through the conversion of a building to an alternative use and the loss of original character. This applies to both nationally designated and undesignated historic assets. There is also a greater threat that the historic environment may suffer harm through the demolition of undesignated historic buildings, which are then replaced with new characterless buildings and public realm.

18.5. The Council needs to re-evaluate its historic assets. This is a continual process and includes a programme of Conservation Area Appraisals. Appraisals will analyse the character and appearance of each Conservation Area and identify any negative
features or issues that could be addressed through development. Boundaries of Conservation Areas will be reviewed.

Policy CS27: Quality of the Historic Environment

The integrity and setting of designated and undesignated heritage assets will be protected, conserved and enhanced.

All development will adhere to this principle and as appropriate will:

(a) mitigate or rectify the negative features or issues identified in Conservation Area Appraisals; and
(b) ensure that potential, unrecorded archaeological sites or artefacts are surveyed and retained.

A supplementary planning document will provide further guidance on conservation areas and design.

Monitoring:

<table>
<thead>
<tr>
<th>Indicator(s)</th>
<th>Target(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of listed buildings (new and lost)</td>
<td></td>
</tr>
<tr>
<td>No. of buildings on the local list (new and Lost)</td>
<td></td>
</tr>
<tr>
<td>% of conservation areas with up-to-date appraisals</td>
<td></td>
</tr>
<tr>
<td>No. of buildings on the at risk register (new and lost)</td>
<td></td>
</tr>
</tbody>
</table>

Delivery will be achieved by:

- Reviewing and maintaining inventories of historic assets;
- Providing further policy guidance in the Development Management DPD and SPDs; and
- Following the ‘3 Step Approach to Successful Design’.
- Conservation Area Appraisals
19. Using Resources Efficiently

19.1. In providing for new homes, jobs and infrastructure, local planning policies can help shape and design places with lower carbon emissions and renewable energy technologies, which are ‘future-proofed’ from the effects of climate change. ‘Future proofing’ development includes: minimising the use of natural resources; reducing water run-off from hard surfaces and managing flood risk areas; generating less waste from development; and managing pollution. The benefits of reducing carbon emissions, and mitigating against and adapting the built environment for climate change include:

- reduced heating and electricity bills due to better insulation and efficient appliances;
- less reliance on fossil fuels;
- support for the local economy by increased use of locally sourced sustainable materials;
- ‘greening’ the built environment by biodiversity enhancements;
- reduced ‘heat stress’ in urban environments; and
- an improved quality of life and feeling of well-being.

19.2. Key legislative and statutory directives aim to reduce CO₂ emissions globally by at least 50% by 2050. In the UK, this is being driven by the Climate Change Act (2008), which has committed the Government to reducing CO₂ emissions by 26% by 2020, and an 80% reduction in all greenhouse gas emissions by 2050 (both from a 1990 baseline).

19.3. The national policy context is set out in Planning Policy Statement (PPS) 1, and its Supplement on Planning and Climate Change, and in PPS 22: Renewable Energy (2004). A replacement PPS for PPS1 Supplement and PPS22 is expected in 2010. Apart from the national mandatory standards being set through the Code for Sustainable Homes, there will also be similar mandatory standards for all other building types. Further changes are also expected to update the evolving national policy context including considerable changes to the 2006 Building Regulations.

19.4. On a regional level, the Regional Spatial Strategy encourages new development to be located and designed to optimise its carbon performance and encourages the supply of decentralised, renewable and low carbon energy sources. The Regional Spatial Strategy also sets a target to generate 10% of the region’s energy from

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5 ‘future-proofed’ – protecting for the future

6 ‘heat stress’ - an increase in air temperature from the absorption and retention of heat by hard and dark surfaces in urban environments
renewable sources by 2010 and 17% by 2020 (excluding offshore wind). To help cut water consumption from 150 litres per person per day, the Regional Spatial Strategy has set targets for a 25% reduction in new development and 8% in existing development on 2006 rates.

19.5. In support of national and regional guidance and targets, the Hertfordshire Climate Change Partnership (HCCP) was set up to bring together the County’s key organisations. HCCP has also been made responsible for the delivery of the Hertfordshire Local Area Agreement committed to a 9.1% cut in CO₂ emissions (from a 2005 baseline) by 2011.

19.6. The Council signed the Nottingham Declaration on Climate Change in 2007, and tackling climate change is a key priority of the Dacorum Sustainable Community Strategy. Improving the environmental performance of new development is a priority in the Council’s Corporate Plan. The Council will also be preparing climate change adaptation strategies, in line with demonstrating performance in relation to a number of climate change National Indicators.

19.7. The current energy performance of the Borough has demonstrated that there is a need to make improvements to domestic energy consumption, the existing housing stock, new development, and renewable and decentralised energy for the built environment.

19.8. The Borough currently shows very good performance on the reduction of domestic energy consumption. Over the 10 years from 1996, consumption has fallen by more than 20%, in line with targets. This has been achieved mainly through relatively cheap insulation and efficiency measures but it is estimated that more expensive measures will be needed from around 2015 onwards in order to maintain momentum. The Borough has below South East region average annual per head domestic energy consumption - gas consumption is 10% lower and electricity 13% lower (Low and Zero Carbon Study 2010). Consumption is also below most other regional averages in the country.

19.9. Even though nearly 30% of carbon emissions arise from energy use in our homes, there are very few examples of private development in the Borough that can be built to reduce these emissions through higher energy efficient standards above 2006 Building Regulations Part L, such as the Code for Sustainable Homes or BREEAM⁷.

19.10. There are also no significant examples of renewable energy generation in the Borough, apart from a few small-scale wind turbines generating only a small amount

⁷ BREEAM - www.breeam.org/
of electricity, at local secondary schools in Hemel Hempstead and Cupid Green Council Depot.

**Renewable Energy**

19.11. A ‘Low and Zero Carbon Study’\(^8\) has been undertaken at a county-wide level and includes maps of existing CO\(_2\) emissions, and higher levels of electricity and heat demands in the Borough. The maps demonstrate that areas of high energy demand and related CO\(_2\) emissions from existing buildings are concentrated in the higher density areas of major settlements.

19.12. The Energy Opportunities Plan (Map 4) in the study, demonstrates the opportunities and constraints for decentralised energy. The Energy Opportunities Plan expresses the importance of delivering strategic District Heating Opportunity Areas in the Borough. There are also opportunities to harness wind power. However these have been identified in the Green Belt and therefore justification under Policy CS4 will be required to enable these to be taken forward.

19.13. Given the Borough’s rural and urban character, and prospects for urban regeneration in Hemel Hempstead, District Heating Opportunity Areas and Combined Heat and Power (CHP) will be pursued in high density areas targeted for regeneration. There are also opportunities for these systems to be powered by local biomass\(^9\) and appropriate waste that is not being recycled for other purposes. Micro-generation technologies, particularly solar water heating, photovoltaics and heat pumps will also help reduce carbon emissions.

19.14. Due to opportunities for high density development in some areas of the Borough, combined with constraints elsewhere, there is justification for carbon reduction targets that exceed the mandatory stepped changes associated with Part L of Building Regulations. An appraisal of the costs compliance is set out in Appendix 3.

19.15. The stepped change away from Part L of Building Regulations (the Code for Sustainable Homes/ non-residential equivalent) will be directed towards District Heating Opportunity Areas. These areas include the town centre, East Hemel Hempstead and large-scale greenfield development. Major new development (10 dwellings and above/1000sqm of non-residential and above) in these areas will be expected to deliver networks of district heating to help the borough meet renewable energy targets and to improve energy efficiency (see Table 11). The proposed Green

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\(^8\) Low and Zero Carbon Study, 2010 – a technical document supporting the Core Strategy

\(^9\) Biomass – waste timber, crops, plants and sustainably sourced trees used to fuel wood burners, district heating systems and CHP
Energy Centre in Maylands Business Park will help fulfil these ambitions along with educating the community on best practise. Smaller developments in or close to District Heating Opportunity Areas should consider delivering suitable technologies to facilitate connection to district heating networks in the future.

**Map 4: Energy Opportunities Plan**

**to follow**

19.16. More detailed guidance about District Heating Opportunity Areas and Wind Opportunity Areas will be delivered through a Supplementary Planning Document.

**Table 11: Additional CO₂ Reductions**

<table>
<thead>
<tr>
<th></th>
<th>10 dwellings or more in District Heating Opportunity Areas</th>
<th>Non-residential development of 1000sqm or more in District Heating Opportunity Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 2010*</td>
<td>A minimum of Code Level 4</td>
<td>A minimum of 44% reduction** in the dwelling or Building emission rate compared to the target emission rate defined by Building Regulations</td>
</tr>
<tr>
<td>From 2013*</td>
<td>A minimum of Code Level 5</td>
<td>100% reduction</td>
</tr>
<tr>
<td>From 2016* for residential and from 2019* for non-residential</td>
<td>Code Level 6 / Zero Carbon***</td>
<td>Zero Carbon***</td>
</tr>
</tbody>
</table>

**Notes:**
* This requirement will not come into effect until successive updates to Part L of the Building Regulations become mandatory.
** This is a reduction in the Building Emission Rate compared to the Target Emission Rate defined by the Building Regulations i.e. a 44% reduction is the equivalent to Code Level 4 energy efficiencies.
Sustainable design and construction

19.17. Sustainable building design and construction is an essential part of the Council’s response to the challenges of climate change, natural resource depletion, habitat loss, and wider environmental and social issues.

19.18. The way in which buildings are designed, constructed, operated and decommissioned has significant impacts on the built and natural environment, and requires major resource inputs such as energy, water and materials. Designing and constructing buildings that help to minimise these key resources and construction waste from decommissioning buildings, can not only reduce the Borough’s carbon footprint, but also costs for developers and occupiers. Therefore developers should be considering the refurbishment of existing buildings before considering demolition. Developers should also provide adequate sewerage facilities for new development and ensure that there is sufficient capacity at the relevant wastewater treatment works (refer to guidance under the section Delivery and Infrastructure).

19.19. The layout of development will be required to make the most effective use of land depending on the site’s slope, existing and desired pedestrian and highway accesses, and environmental and brownfield constraints, such as floodplains, rivers, mature trees and contaminated land issues. The orientation and shading of buildings will need to maximise the energy efficiency of the buildings where possible. This will avoid the need for additional energy consumption for heating or cooling purposes. Decentralised energy technologies used to heat and provide electricity to the development will need to be suitable for the site layout, design principles and any observed constraints.

19.20. Sustainable design and construction also provides an opportunity to retain and enhance biodiversity. Apart from improving quality of life and property value, enhanced biodiversity also delivers ecological benefits. While all living plant matter absorbs CO₂, trees process more due to their large size and extensive root structure (Forestry Commission¹⁰). One hectare of woodland can absorb emissions equivalent of 100 family cars (with high emissions). Trees can also remove sulphur dioxide from the atmosphere, attenuate noise pollution, provide natural air conditioning and shade, and moderate the rate of water run-off through rainfall attenuation, which reduces the risk of flooding. Therefore, new development will be expected to retain and replace existing trees, and help to plant more trees to expand the tree canopy in the Borough.

¹⁰ Forestry Commission – www.forestry.gov.uk
19.21. Developers will be expected to complete a Sustainability Statement and carbon compliance check online for their proposal. Payments will also be required into a Carbon Offset Fund when the appropriate carbon reductions have not been delivered on-site. The fund will be used to support initiatives that help reduce carbon emissions in the existing building stock and fix or absorb carbon (for example by planting trees). Tree planting and other ‘greening’ initiatives will help to enhance biodiversity, improve quality of life and wellbeing and reduce ‘heat stress’ in the urban environment.

19.22. Payments may also be made to the Carbon Offset Fund as part of the allowable solutions to deliver zero carbon development (in-line with Building Regulation changes to Part L), although the following allowable solutions must be considered first:

- carbon reductions on-site, through energy efficiency, low carbon and zero carbon technologies or on-site generation;
- connection to a district heating network;
- reduction of unregulated emissions through energy efficient appliances etc.;
- exporting low carbon or renewable heat from the development site to other developments; and
- investing in low and zero carbon community heat infrastructure.

19.23. A Supplementary Planning Document will be required to support the implementation of the Carbon Offset Fund and give further consideration to the allowable solutions required.

19.24. Further advice and practical sustainable development solutions are proposed in Hertfordshire’s Building Futures Design Guide\(^{11}\) for use by developers, planners and the general public. The guide is an evolving website with practical case studies and guidance for new development.

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**Policy CS28: Renewable Energy**

Capacity to generate XX GWh per year of renewable electricity and at least XX GWh per year of renewable heat will be provided. New development will be expected to contribute to renewable energy targets, taking account of the Energy Opportunities Plan and using the appropriate design and technology.

Specific opportunities will be identified for decentralised energy in the Borough.

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\(^{11}\) Building Futures Design Guide - [www.hertslink.org/buildingfutures](http://www.hertslink.org/buildingfutures)
Policy CS29: Sustainable Design and Construction

New development will comply with the following principles:

- Use building materials and timber from verified sustainable sources;
- Minimise water consumption during construction; and
- Recycle and reduce construction waste which may otherwise go to landfill.
- Provide an adequate means of water supply, surface water and foul drainage;
- Plan to limit residential indoor water consumption to 105 litres per person per day until national statutory guidance supersedes this advice;
- Comply with CO₂ reductions as per Table 11;
- Incorporate at least one new tree per dwelling/per 100sqm (for non-residential developments) on-site and replace any trees lost through development;
- Minimise hard surfaces around the curtilage of buildings and in new street design;
- Incorporate permeable and lighter coloured surfaces within urban areas; and
- Provide on-site recycling facilities for waste.

Buildings will also be designed to have a long life and adaptable internal layout.

Applicants will need to explain how:

a) they have considered the whole life cycle of the building and how the materials could be recycled at the end of the building’s life;

b) their design meets ‘Lifetime Homes’ standards; and

c) their design has been ‘future proofed’ to enable retrofitting to meet tighter energy efficiency standards and connection to decentralised community heating systems.

The principles in this policy may be relaxed if the scheme would be unviable or there is not a technically feasible approach. Where new development cannot meet on-site energy or tree canopy requirements, the applicant will be expected to make an appropriate financial contribution towards the Carbon Offset Fund.
Policy CS30: Carbon Offset Fund

The Carbon Offset Fund will be used to fund:

(a) energy efficiency improvements in the Borough’s existing housing stock; and
(b) new tree planting.

Monitoring:

<table>
<thead>
<tr>
<th>Indicator(s)</th>
<th>Target(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of new homes built to standards identified in Table 11</td>
<td>-</td>
</tr>
<tr>
<td>Level of carbon savings from new developments in terms of tonnage of CO2</td>
<td>-</td>
</tr>
<tr>
<td>Number of homes built with ‘lifetime home’ standards</td>
<td>-</td>
</tr>
<tr>
<td>Provision of new trees</td>
<td>-</td>
</tr>
<tr>
<td>Proportion of new dwellings built water saving techniques on-site</td>
<td>-</td>
</tr>
<tr>
<td>Percentage of household waste recycled</td>
<td>-</td>
</tr>
<tr>
<td>NI186 - reductions of carbon emissions per capita by activity (domestic,</td>
<td>9.1 % cuts in per capita emissions to realise county targets, by 2011.</td>
</tr>
<tr>
<td>commercial, transport)</td>
<td>Higher targets tbc.</td>
</tr>
<tr>
<td>NI 188 – adapting to climate change</td>
<td>Reach Level 4 by 2011. Higher targets tbc.</td>
</tr>
<tr>
<td>Types of renewable energy used to generate heat and electricity</td>
<td>Local Target – XX GWh of renewable electricity by 2031</td>
</tr>
<tr>
<td>K/GWh of renewable electricity produced</td>
<td>Draft Regional Target ENG2 – by 2015, 16% of electricity consumed in the</td>
</tr>
<tr>
<td></td>
<td>region should be generated from renewable sources; by 2020 electricity</td>
</tr>
<tr>
<td></td>
<td>generated from renewable sources in the region should have risen to at</td>
</tr>
<tr>
<td></td>
<td>least 20%.</td>
</tr>
<tr>
<td>K/GWh of renewable heat produced</td>
<td>Local Target - XX GWh of renewable heat by 2031</td>
</tr>
<tr>
<td></td>
<td>Draft Regional Target ENG1 – by</td>
</tr>
</tbody>
</table>
2020, 12% of our heat should be generated from renewable sources.

| Tonnage of CO2 savings from measures designed to improve the existing building stock |
| Number of net trees planted through new development and delivered through the Carbon Offset Fund |

**Delivery will be achieved by:**

- Using a carbon compliance tool or something similar and the use of a Sustainability Statement at the planning application stage.
- Identifying key sites for decentralised renewable energy in the Site Allocation DPD.
- Using a Development Management Policy or SPD, which will set out a framework for the management of payments into the Carbon Offset Fund.
- Herts Municipal Waste Spatial Strategy which support the delivery of recycled domestic waste.
- Compliance with Building Regulations.
- Delivering funding generated through the Carbon Offset Fund.
- Joint working with Council’s Energy Conservation team and the Home Energy Conservation Association (HECA).

**Sustainable resource management**

19.25. Development must be carried out in a sustainable way to protect natural resources for use by future generations, and to adapt against and mitigate impacts of climate change. Natural resources including high quality agricultural land, mineral reserves\(^\text{12}\) and water supplies will be safeguarded and all new development will be expected to:

- minimise waste on-site;
- maximise recycling measures;
- consider opportunities for biomass production for renewable energy generation;
- avoid pollutants into the wider environment;
- remEDIATE contaminated land;

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\(^{12}\) Mineral reserves – refers to clay reserves at Bovingdon Brickworks, and sand and gravel belt around Kings Langley.
• protect and enhance natural features of importance, including wildlife and landscapes; and
• consider the overall carbon footprint of materials used and use locally produced materials and sustainably sourced materials, wherever possible.

**Water management**

19.26. The East of England is the driest region in the country receiving only two thirds of the average UK annual rainfall. The effects of climate change and housing growth in the region will result in water becoming a more precious commodity, and therefore water will need to be used more sparingly.

19.27. Protection of water resources also assists in the retention of often fragile ecosystems, susceptible to the availability and flow of water. Frequent, extreme weather events are also a consequence of climate change. Heavy, frequent rainfall and long dry spells impacts on river levels and flows, creating pressure on underground drainage systems and affecting the level of rainfall left to recharge groundwater sources.

19.28. The Strategic Flood Risk Assessment agreed with the Environment Agency has informed the selection of the strategic development sites and broad locations for development. The sequential approach advocated by Planning Policy Statement 25 has also informed the selection of sites. The majority of the proposed development will be accommodated outside flood zone areas and any new development within flood zones will be expected to develop appropriate mitigation measures to reduce the cause and risk of flooding. This is to avoid an adverse impact on the quality of the groundwater source or a risk to its ability to maintain a public water supply.

19.29. A ‘Water Cycle Study Scoping Report’\(^{13}\), has been jointly completed with Three Rivers District Council, St. Albans City & District Council, Welwyn Hatfield Borough Council and Watford Borough Council. The stakeholders involved in the process included the Environment Agency, Thames Water Utilities and Veolia Water Central amongst others. The study examined the condition of the existing distribution network and Waste Water Treatment Works and whether it would be able to cope with additional development growth.

19.30. The workshop associated with this work examined the need to:

- restore river flows
- support the Grand Union Canal system (and its reservoirs)
- restore natural habitats along the chalk streams and in Boarscroft Vale

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\(^{13}\) Water Cycle Study Scoping Report, 2010 - a technical document supporting the Core Strategy
• support biodiversity
• retain water in the catchment area
• recharge the aquifer
• limit the effect of variable rainfall and reduce the risk of flooding
• provide sufficient capacity for foul water drainage
• increase the efficiency of water use, in part through sustainable design and construction
• provide sufficient water for people and to support agriculture

19.31. The study concluded that work would need to be progressed to the next stage (the Water Cycle Study Outline Report) to establish:

1) if Maple Lodge or Blackbirds Waste Water Treatment Works would need to increase the Dry Weather Flow consent and introduce new physio-chemical standards; and
2) how extensive the upgrades need to be to the sewerage networks throughout Hemel Hempstead and Kings Langley.

19.32. The cost and disruption for both of these upgrades is expected to be significant and they will both take a considerable length of time to plan and deliver.

Pollution and waste management

19.33. The planning system plays a key role in the location and standard of development. Together with other consent regimes and processes, it can limit the impact of (and prevent) polluting emissions – i.e. noise, light, fumes, chemicals, noxious substances and waste in general. Standards set nationally should continue to be achieved. When standards become more stringent, efforts must be made to enhance the quality of the air, water and/or soils.

19.34. In Dacorum special consideration also needs to be given to:

• the quality of the groundwater supplying the chalk aquifer;
• the habitat and biodiversity of chalk streams;
• the maintenance of higher quality agricultural areas;
• limiting the effects of noise and air pollution along major routes (i.e. road, rail and aircraft from Luton Airport);
• retaining tranquil parts of the Chilterns Area of Outstanding Natural Beauty and Boarscroft Vale; and
• the risks associated with Buncefield Oil Terminal.

19.35. The planning system has a role to play in the disposal of household, commercial and construction waste. To help reduce potentially polluting environments and avoid
unnecessary waste going to landfill sites developers will be expected to avoid potentially polluting developments, the creation of additional waste, and the location of new development near existing sources of pollution. This will prevent negative impacts on health and the quality of life of people, as well as impacts on natural habitats and wildlife.

19.36. Hertfordshire County Council’s Waste Core Strategy, Waste Site Allocations and Waste Development Policies documents form part of the Minerals and Waste Development Framework for Hertfordshire. The Development Plan Documents on waste set out the County Council’s overall vision and strategic objectives for waste planning and the broad locations for strategic waste facilities. The Framework will be used as a basis for future waste planning, and will be used in the determination of planning applications across Hertfordshire.

Policy CS31: Water Management

Water will be retained in the natural environment as far as possible. Measures to restore natural flows in the river systems and the water environment will be supported. Supply to the Grand Union Canal will be maintained.

Development will be required to:

(a) avoid Flood Zones 2 and 3: Flood Risk Assessments, must accompany planning applications for development in these areas, explaining how the sequential approach to development has been taken into account and outlining appropriate mitigation measures;
(b) minimise water runoff through provision of Sustainable Urban Drainage Systems, and measures such as minimising hard surfaces, rain water storage and recycling;
(c) secure opportunities to reduce the cause and impact of flooding, such as using green infrastructure for flood storage;
(d) secure opportunities to conserve and enhance biodiversity, such as through the provision of green roofs; and
(e) avoid damage to Groundwater Protection Zones.
Policy CS32: Pollution Control

Development will be required to help:
- a) maintain air quality standards and support improvements in identified Air Quality Management Areas;
- c) maintain soil quality standards and remediate contaminated land in line with Environment Agency, Defra and Natural England guidance; and

Any development proposals that are likely to lead to an increase in pollution (into the air, soil or any water body) by virtue of the emissions of fumes, particles, effluent, radiation, smell, heat, light, noise or noxious substances will not be permitted.

Monitoring:

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<th>Indicator(s)</th>
<th>Target(s)</th>
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<tbody>
<tr>
<td>Percentage of new dwellings built on floodplains and/or contrary to Environment Agency advice</td>
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<tr>
<td>Groundwater quality checks carried out by the Environment Agency</td>
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<tr>
<td>Sustainability Statement/statement</td>
<td></td>
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<tr>
<td>Change in extent and air quality of AQMAs</td>
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</table>

Delivery will be achieved by:
- Using a Sustainability Statement to demonstrate how their proposals meet best practice standards;
- Development Management processes and Development Management Development Plan Document;
- The East Hemel Hempstead Area Action Plan which will help to restrict certain types of development around Buncefield Oil depot.
- Help and guidance on water management from external agencies and water authorities, such as the Environment Agency, Thames Water and Veolia Water UK.
• Help and guidance of Countryside Management Services and other similar organisations.
• Air quality monitoring undertaken across the borough.
• The monitoring and standards set by external agencies.
20. Place Strategies

20.1. A series of Place Strategies have been developed for each of the Borough’s towns and large villages, together with the wider countryside. The role of these strategies is to take forward the settlement hierarchy (Table 1) and broad policies and highlight particular characteristics and future requirements of each place. These requirements range from the provision of particular pieces of infrastructure, to the protection or enhancement of key attributes that give the place its unique identity.

20.2. Of particular importance to informing these strategies were a series of place workshops. These brought together local residents and representatives from a range of public, private and voluntary organisations to help identify local issues and develop ‘Place Visions.’

Local Objectives

20.3. The spatial strategies include local objectives specific to each place that set out what will be delivered over the next 20+ years. There are also very important common objectives across the Borough that are expected to be secured. These are common to all places:

- Secure more affordable housing and a balanced mix of housing types.
- Accommodate growth which promotes sustainable patterns of development.
- Provide a variety of employment opportunities in balance with housing development.
- Support the policies and guidance on ‘Securing quality design’ and the ‘Historic environment’.
- Support the local design principles set out within the supplementary guidance on Urban Design.
- Safeguard existing leisure assets such as open space, outdoor leisure space, rivers and the Grand Union Canal and create stronger green links throughout the Borough.
- Maintain and enhance the character, built heritage, natural environment and leisure assets of each settlement and the wider countryside.
- Safeguard the retention of local centres, particularly in villages.
- Support the retention of existing services, facilities and jobs.
- Improve access for pedestrians, motorists and cyclists and the condition of the highways.
- Ensure new housing is balanced by school capacity and matched by additional community facilities/infrastructure.
- Reduce peak-time traffic congestion and dependence on car use.

Strategic sites

20.4. Strategic allocations are identified in the spatial strategies; one for Land at Durrants Lane / Shootersway, (Egerton Rothesay School) Berkhamsted, and one for Hicks
Road, Markyate. The spatial strategies give a broad outline of the planning principles of the development and how these development requirements will be met. These will be underpinned by detailed masterplans that set out in more detail the nature and timing of the proposal, the mix, distribution and scale of uses, and the requirement for new infrastructure.

20.5. A number of strategic housing locations have also been identified. Their broad locations are identified, together with key planning principles. Detailed requirements for these sites will be established through the Site Allocations DPD.

20.6. These strategic allocations and locations will contribute towards the level of growth and development needs of the Borough to 2031. They will also help deliver the Borough and settlement visions.

**Vision Diagrams**

20.7. Vision and Design Diagrams have been produced for each of the places to illustrate the spatial strategies. The diagrams for Hemel Hempstead been sub-divided to separate the built and natural environment, with a separate detailed diagram covering the town centre. These diagrams can be found at the end of each spatial strategy.
21. **Spatial Strategy for Hemel Hempstead**

**Context**

21.1. Hemel Hempstead is a Mark One New Town designed by Geoffrey Jellicoe in the 1940’s with development starting in the 1950s. It is the largest town in the Borough and has a population of just over 82,000. The town is quite compact and is surrounded by Green Belt. The most distinctive landscape features include the Grand Union Canal, and the Gade and Bulbourne Valleys with rivers that converge at Two Waters, south of the town centre. The topography of the town and the design of the neighbourhoods draws the countryside in, allowing views of open space, woodland and parkland from residential areas to the west, east and the south of the town centre.

21.2. Hemel Hempstead has excellent links to London and the Midlands, via the M1 and M25 motorways and the main railway line stations in Boxmoor and Apsley. Other than the town centre, the focus for employment is the Maylands Business Park, which is the largest business park in the East of England to the east, and Apsley and Two Waters to the south. A wide range of shops, services and facilities are provided by local centres. The main leisure and sports facilities comprise Leisure World, Hemel Hempstead Sports Centre, Esporta and The Snow Centre.

21.3. Accessibility to the town centre remains one of its assets. However, there is a need to maintain and improve pedestrian routes between adjoining residential areas, car parks and bus stopping points. The linearity of the town centre remains a barrier to integration of the various zones. The Old Town at the northern end, and the Plough Zone to the south, are currently the focus of the evening economy.

21.4. Key regeneration projects are a main priority for the Council. As an original New Town, many buildings and the public realm in the town centre are now tired and some areas require significant regeneration. Regeneration projects are also required in the east of Hemel Hempstead at Maylands Business Park to aid economic recovery since the Buncefield explosion.

21.5. The following are the key regeneration projects:

1. **Town centre** – this includes the regeneration and refurbishment of the town centre. The ambitions for the area are explained in the vision for the town centre.

2. **Maylands** - to rejuvenate the Maylands Business Area to deliver a first choice employment location with some residential development, leisure space and a Green Energy Centre. The ambitions for East Hemel Hempstead are explained in the vision.

3. **Neighbourhood Centres** – to regenerate, reinvigorate and green the neighbourhood local centres.
4. **Green spaces** - the main priorities are to improve the networks of open spaces, and create a new urban park largely in the green gateway area to the south of Hemel Hempstead.

5. **Growth of Hemel Hempstead** – to respond to the need to provide significant numbers of new homes, jobs and associated facilities.

**The Visions**

**Vision for Hemel Hempstead town**

Hemel Hempstead will embrace new development and aim to promote pride of place, taking forward the 1947 Hemel Hempstead New Town Development Corporation motto ‘Greater, Richer, More Beautiful’ into the 21st Century. Its long-term strategy as a Key Centre for Development and Change will be to deliver a minimum of 6,500 new dwellings (between 2006 and 2031). The town will provide a better quality of life and prosperity for its residents and business community. This will be achieved by delivering a greater range of suitable high quality, low carbon housing and meeting the needs of the community, whilst regenerating the town centre and growing Maylands Business Park through the East Hemel Hempstead Area Action Plan.

As part of meeting community needs, new schools will be built, as well as new leisure facilities including a sports facility for young people and an urban park. A performing arts venue will serve the town and additional leisure activities will be encouraged in the town centre and at Jarman Park, along with new business opportunities. A new cemetery will also be necessary to accommodate the town and the wider area’s needs. There will also be improved public transport links between Maylands Business Park, the town centre and the main railway station in Hemel Hempstead, and a new covered bus station in the town centre. More employment opportunities will be available through the expansion of Maylands Business Park. New homes will be expected to incorporate energy efficiencies and key developments in high density areas will take advantage of district heating or combined heat and power.

**Vision for Hemel Hempstead town centre**

The town centre will be a vibrant place where people will want to shop, work, live, learn, and visit during the day, evening and night. This will be achieved through economic regeneration and new housing to maximise footfall, whilst ensuring a distinctive identity is based upon its New Town history. Through regeneration, new development will deliver a legible and attractive physical environment that makes maximum use of its pedestrian connections and environmental and built assets. The key priorities will be to provide better public realm connections to the Old Town from the rest of the town centre, and strengthen green links along the River Gade and to Gadebridge Park, the new Urban Park, Paradise Fields and the Nickey Line. New facilities and services will include a new hospital, school, college, performing arts venue, multi-cultural facility and an office hub for small offices. The public
realm and building fascias along the Marlowes will also be significantly improved and the pedestrianised area extended, following relocation of the bus station. Public art and culture will be promoted.

**Vision for East Hemel Hempstead (Maylands Business Park)**

East Hemel Hempstead will be the home to a vibrant, dynamic and premier business-led community. It will be a first choice investment location capitalising on and strengthening its role as a regional economic hub.

The area will be the focus for high quality, energy efficient development permeated by open space. It will entice visitors by providing a better environment and more leisure facilities. It will be easily accessible by a range of transport modes. Passenger will improve connections to key destinations not only around the town but to those in other urban centres. Those living and working in the area will enjoy a high quality of life as a result.

**Local Objectives**

Hemel Hempstead will aim to:
- Deliver 6,500 new homes (including the town centre and East Hemel Hempstead);
- Develop the public transport interchange between the town centre, the railway station and Maylands;
- Accommodate wastewater treatment and sewerage infrastructure; and
- Improve and ‘green’ some of the local centres as part of the local centre regeneration programme.

Different parts of the town will help deliver chunks of the 6,500 housing target together with other objectives local to the town, the town centre and East Hemel Hempstead. These are as follows:

- **Hemel Hempstead town** (excluding the town centre and East Hemel Hempstead) will aim to deliver:
  a) up to 5,800 homes;
  b) 6 primary schools, each with 2 forms of entry;
  c) a new Urban Park;
  d) a sports facility; and
  e) a new cemetery.
The town centre only, will aim to deliver:
   a) around 1,800 homes;
   b) a new General Hospital;
   c) 1 primary school with 2 forms of entry;
   d) a bus interchange;
   e) a new college;
   f) a supermarket;
   g) a performing arts venue;
   h) a cultural facility;
   i) new civic facilities; and
   j) optimised pedestrian activity.

East Hemel Hempstead only, will aim to deliver:
   a) around 1,000 homes;
   b) new open space within the Heart of Maylands;
   c) a town stadium/leisure complex (subject to funding); and
   d) 1 primary school with 2 forms of entry.
Delivering the Vision: Hemel Hempstead Town

21.6. After taking into account potential levels of development in other settlements Hemel Hempstead will have the scope to deliver around 6,500 homes over the period 2006–2031, with around 800 of these homes from Green Belt releases. This level of housing growth will be sufficient to accommodate the natural population and household growth. However, a higher amount of housing has been identified to enable the Council to secure the right mix and tenure of homes, and to address the affordable housing shortage in the borough. This will also allow the Council to deliver homes in the right places, nearby to existing physical and social infrastructure to minimise the need for additional facilities and services for new homes and residents, such as wastewater treatment and sewerage infrastructure\(^1\) and schools.

21.7. New development will aim to enhance the pride and image of the town through high quality regeneration and development, and through the provision of new open space, outdoor leisure space, public realm improvements and co-ordinated public transport interchanges. New development will also accommodate renewable energy generation and energy efficiency technologies to reduce carbon emissions. However, the greatest opportunities for zero and low carbon technologies are associated with high density developments, which will be delivered in the town centre and to the east of the town.

Delivering the Vision: Hemel Hempstead Town Centre

21.8. The key role of new development in the town centre will be to facilitate regeneration and maximise pedestrian activity during the day, early evening and night. A variety of employment, shopping and leisure uses will be delivered to suit the income levels of local residents. Multiple retailers will be attracted to strengthen the economy and there may also be an opportunity for an additional department store\(^2\).

21.9. To help drive regeneration in different parts of the town centre character zones have been identified (in Figure 16). Each zone accommodates similar uses or built/natural landscape.

\(^1\) Local Water Authorities (Thames Water Utilities Ltd and Veolia Water Central) manage the collection of wastewater mainly at Maple Lodge Wastewater Treatment works and the supply of potable water. New housing growth infrastructure in Dacorum will not be taken into consideration by the Local Water Authorities until post 2015.

\(^2\) These are the fundamental design and retail principles associated with towns that have similar characteristics. The paper ‘After the Goldrush’ written by Hewdon Consulting calls these ‘Clone Towns’ and gives guidance on how to make a Clone Town successful.
Developers must consider the relationship of the proposed development with its character zone and opportunities available.

**The Old Town** - is based around the High Street, Queensway and the northern tip of the Marlowes. The main businesses include professional services, quality specialist shops and a strong evening economy with a variety of pubs, restaurants and cafes. The quality of the built environment in this zone is recognised for special architectural or historic importance and the notable landmark of St Mary’s Church. This zone offers opportunities to improve north/south pedestrian links and refurbishment of the building fascias along the northern tip of the Marlowes.

**The Gade Zone** - includes the north western section of the town centre from Queensway to Coombe Street. Notable features include the River Gade and the Marlowes Methodist Church. This zone holds significant regeneration opportunities for educational, civic, residential and multi-cultural uses, along with opportunities for decentralised heating systems or CHP.

**Original Marlowes Zone** - contains part of the north eastern section of the Marlowes. Its notable feature is its listed villas. It includes services for the town centre such as a large doctor’s surgery and food stores Asda and Iceland. This zone holds some redevelopment opportunities for residential and part of the pedestrian gateway location for an office hub, as well as opportunities for more sympathetic architecture and improvements to the building fascias of the listed buildings.

**Jellicoe Water Gardens** - encompasses the whole of the listed Water Gardens area designed by Jellicoe, running from Coombe Street to Moor End Road. This zone has the opportunity to restore the Water Gardens, deliver a new centralised covered bus station and include improvements to the pedestrian environment along Waterhouse Street.
Delivering the Vision: East Hemel Hempstead

21.10. East Hemel Hempstead will focus on regenerating the employment area and becoming the economic beacon for the town. It will have an attractive environment that will draw in new employers, organisations and head offices. The East Hemel Hempstead Area Action Plan (AAP) will provide further details about the Maylands regeneration projects and expand upon the need to deliver more high quality housing, facilities and services to support the business area. The Maylands Masterplan, the Maylands Gateway Development Brief and the Heart of Maylands Development Brief already provide some background guidance on the aims and aspirations for the area.

Urban Design

21.11. Figure 17 and 18 illustrate the town’s key urban design characteristics, which reinforce Borough-wide policies. Policy CS33 provides further design guidance to guide development in the town centre, with the aim of maximising regeneration and

The Hospital Zone - includes the hospital site, Paradise employment area, the offices, hotel and surgery opposite. Notable features include Paradise Fields, which is mostly to be retained as open space. The hospital site holds significant regeneration opportunities for residential, education and health uses, and two suitable locations for an office hub, along with opportunities for new open space, improved pedestrian/cycle links, and decentralised heating systems or CHP.

The Marlowes Shopping Zone - is consolidated around the Marlowes Shopping Centre, the pedestrian area and ramped area, and the stretch north on the other side of the Marlowes to Coombe Street. It is part of the prime retail pitch of the town centre and is in need of major regeneration and refurbishment. This zone holds significant regeneration opportunities with the potential to restore the Market Square and create additional leisure uses and active frontages along the ramped area (at ground level) and Waterhouse Street. Part of the pedestrian gateway around the Market Square is also suitable location for part of an office hub. There are also opportunities to create a new covered public meeting space along the pedestrianised area, make improvements to building fascias, de-clutter the pedestrian environment, revamp the children play area and deliver decentralised heating systems or CHP.

The Plough Zone - is focussed around the Plough Roundabout. It is an important gateway to the Town Centre and has recently been enhanced by the Riverside retail and residential development with restaurants along River Gade riverside walk. The redevelopment of Kodak will include important residential, office and restaurant uses.
development opportunities. This design policy is guided by a wish to restore its New Town character and identity and create a contemporary and attractive environment. When considering the town centre it is important to recognise its role as a focal point for the town, providing a hub for commercial activity and public transport. The town centre is also a neighbourhood of Hemel Hempstead. This role will be reinforced through new housing development. Existing and new residents require access to a similar range of facilities as other neighbourhoods. The ‘Town Centre Masterplan’\(^3\) will provide further guidance and focus on areas of anticipated greatest change and activity.

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\(^3\)Town Centre Masterplan - currently programmed for adoption in March 2012; see the provisional programme of the Council’s Local Development Scheme at [http://www.dacorum.gov.uk/pdf/LDSTimetableNov08.pdf](http://www.dacorum.gov.uk/pdf/LDSTimetableNov08.pdf)
Policy CS33: Hemel Hempstead Town Centre Design Principles

New development will:

a) Contribute fully to the achievement of town centre use, movement and design principles; and

b) Meet relevant opportunities for zones within the town centre.

The town centre principles below will guide all future actions for:

1. use:
   (a) delivering a mix of uses in the regeneration areas to support the prime retail function;
   (b) securing an additional anchor store i.e. department store;
   (c) maintaining a public sector presence in the town centre;
   (d) creating a new office hub;
   (e) delivering new leisure and cultural facilities.
   (f) retaining and restoring existing important spaces and squares and creating new public meeting spaces;

2. movement:
   (b) securing an integrated public transport hub with appropriate traffic management; and
   (c) continuing the riverside walk from the Plough Zone through to the Gade Zone.

3. design:
   (a) emphasising the importance of pedestrian and movement gateways through bolder building design, height and landscaping;
   (b) providing active street frontages;
   (c) restoring existing mosaics and decorative panels and creating new pieces of art as part of the design process for new buildings;
   (d) using high quality materials and public art to complement the existing palette of materials and features;
   (e) unifying the zones through a co-ordinated design approach and an integrated movement and streetscape design;

Specific opportunities for each zone are identified in Figure 19: Town Centre Character Zones and Development Opportunities.

A Town Centre Master Plan will be prepared to elaborate this policy.
Monitoring:

<table>
<thead>
<tr>
<th>Indicator(s)</th>
<th>Target(s)</th>
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<tbody>
<tr>
<td>Achievement of key development</td>
<td>To be determined.</td>
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<td>milestones.</td>
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Delivery will be achieved by:
- Planning applications and appeals.
- Site Allocations DPD
- Development Management DPD
- Hemel Hempstead Town Centre Masterplan SPD
- Marlowes Shopping Zone Improvements Plan
- Partnership working

Strategic Allocations

** Consider the inclusion of parts of the town centre as strategic allocations, to be delivered through the Core Strategy**

Strategic Locations

<table>
<thead>
<tr>
<th>Location reference</th>
<th>**</th>
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<tbody>
<tr>
<td>Site location</td>
<td>Marchmont Farm</td>
</tr>
</tbody>
</table>
| Proposals          | Approximately 300 new homes
|                    | Extend Grovehill Park    |

Principles
- A mix of two storey and three storey housing including around 40% affordable homes.
- A contribution must be made towards educational and community facilities.
- The layout, design, density and landscaping must create a soft edge with the adjoining Green Belt boundary.
- Impact on the local road network mitigated through the promotion of sustainable travel options, including pedestrian links to the local centre.

Delivery
- The proposal will be delivered as an allocation in the Site Allocations DPD where detailed planning requirements will be established.

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<thead>
<tr>
<th>Location reference</th>
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<tr>
<td>Site location</td>
<td>Old Town</td>
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<tr>
<td>Proposals</td>
<td>Approximately 80 new homes</td>
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</tbody>
</table>
| Principles         | A mix of two storey and three storey housing including around 40% affordable homes.  
<p>|                    | A contribution must be made towards educational and community facilities. |</p>
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<thead>
<tr>
<th><strong>Location reference</strong></th>
<th><strong>Site location</strong></th>
<th>West Hemel Hempstead (North?)</th>
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<td><strong>Proposals</strong></td>
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<td>Nature Reserve</td>
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<td><strong>Principles</strong></td>
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<td>detailed planning requirements</td>
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<td>will be established.</td>
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Figure 19: Hemel Hempstead Town Centre Vision Diagram

KEY
- Key Landmarks
- Gadebridge Park
- Open Land
- Primary vehicular route
- Secondary vehicular route
- Paradise Fields
- Movement Gateway
- Pedestrian Gateway
- Listed Buildings
- River Gade
- Hemel Urban Park

Town Centre Zones
- Jellicoe Water Gardens
- Gade Zone
- Original Marlowes Zone
- Hemel Old Town
- Marlowes Shopping Zone
- Hospital Zone
- Plough Zone

Scale 1:8,000
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Context

21.1. Berkhamsted is an attractive valley town surrounded by the Chilterns Area of Outstanding Natural Beauty. It is the second largest settlement in the Borough with a population of just over 18,500. The town is linear in character with the A4251, West Coast mainline, River Bulbourne and the Grand Union Canal running along the valley floor. Historically, development has spread along and up the valley sides. The historic core is large, densely built-up and contains many high quality and listed properties. The settlement is served by a town centre that provides an important district and service centre role and supports a thriving evening economy. A variety of businesses can be found in the town centre and in the employment areas around Billet Lane. Northchurch lies at the western end of the settlement. It retains a strong village character centred on St Mary’s Church, and is served by a small local centre.

The Vision

Berkhamsted will be a sustainable and vibrant market town, where travel by non car use will be promoted. It will accommodate new housing to meet the needs of local people, particularly more affordable housing and family homes, while maintaining the strong valley and linear character of the settlement, and protecting key environmental assets such as the Grand Union Canal and the River Bulbourne. Open space will be protected and more space provided. There will be quality schools in both the public and private sectors. New development will respect and protect the built and natural heritage of the town, the canalside environment, and the character of neighbourhoods. The town centre will be an attractive commercial, cultural and social focal point of the settlement with a strong district shopping and service centre role. It will be maintained and enhanced together with the neighbourhood role of Northchurch local centre. Businesses will be attracted and supported. Employment areas around Billet Lane will provide local job opportunities and offer an attractive location for small to medium sized firms.

Local objectives

- Deliver 1,200 new homes between 2006 and 2031.
- Bring forward the strategic site at Durrants Lane /Shootersway (Egerton Rothesay School) to deliver new homes, improvements to the school and informal leisure space for the community.
- Deliver 2 new first schools.
- Resolve the future of the New Road/Springfield Road link.
- Support the British Film Institute to consolidate on their site.
- Maintain the current level of employment provision.