

North West Bicester Supplementary Planning Document

INTERIM DRAFT

May 2015

Foreword

North West Bicester will be a neighbourhood unlike any other in Bicester - a development that demonstrates the highest levels of sustainability. Residents who move to North West Bicester will be making a lifestyle choice to live in efficient modern homes built to the highest environmental standards with excellent access to the town centre, public transport and adjoining countryside.

The site offers a unique opportunity to bring about a sustainable large scale development as part of the extension of the existing town with a comprehensive mixed use scheme designed and constructed to the highest environmental standards, bringing a mix of homes, offices, shops and easily accessible open space.

The development at NW Bicester will make a significant contribution to meeting the District's need for more homes and jobs as set out in the Local Plan, including the delivery of affordable housing.

A series of new places will be created, adding to the quality of and integrating with the existing town. The layout is based on the landscape framework of existing field boundaries defined by hedgerows. The proposals will take at least 20 years to complete and will help trigger the transition to a low carbon community across the town. They present an exciting opportunity to build a new form of sustainable community within Cherwell District and to extend the benefits of this community to the existing town of Bicester.

Councillor Michael Gibbard
Lead Member for Planning

Contents

1. Introduction.....	3
2. Site Context.....	9
3. Vision and Objectives.....	16
4. Development Principles.....	18
5. Design and Character Areas.....	52
6. Delivery.....	55

List of figures

Fig. 1 Supplementary Planning Document timetable.....	5
Fig. 2 Supplementary Planning Document structure chart.....	6
Fig. 3 Bicester context plan clp proposals map.....	8
Fig. 4 Site location plan.....	9
Fig. 5 Historical map of Bicester 1885.....	10
Fig. 6 Landscape character area.....	11
Fig. 7 Homes South of Lords Lane.....	12
Fig. 8 Topography.....	13
Fig. 9 Flood risk.....	13
Fig. 10 Walking accessibility from Bicester town station.....	14
Fig. 11 Site analysis plan	15
Fig. 12 Eco Bicester Vision	16
Fig. 13 North West Bicester Spatial Framework: Land use	17
Fig. 14 North West Bicester Spatial Framework: Landscape	41

Appendix

Appendix I: Hedgerow buffer and Masterplan	58
Appendix II: Summary of consultation responses.....	63
Appendix III: Cultural Wellbeing Strategy.....	71
Appendix IV: Landuse.....	73
Appendix V: Connections.....	74
Appendix VI: Landuse with principle connections.....	75

1.0 Introduction

- 1.1 This Supplementary Planning Document (SPD) expands upon Policy Bicester 1 of the Cherwell Local Plan. A copy of Policy Bicester 1 is set out in full in Appendix I. The SPD provides further detail to the policy and a means of implementing the strategic allocation at North West Bicester (NW Bicester). It will be formally adopted upon adoption of the Local Plan.
- 1.2 In summary, when fully delivered, North West Bicester will provide:
- Up to 6,000 "true" zero carbon homes;
 - Employment opportunities providing at least 4,600 new jobs;
 - Up to four primary schools and a secondary school;
 - Forty per cent green space, half of which will be public open space;
 - Pedestrian and cycle routes;
 - New links under the railway line and to the existing town;
 - Local centres to serve the new and existing communities and
 - Integration with existing communities

Background

- 1.3 In 2009, the site at NW Bicester was identified as having potential as an eco-town location in the Eco-towns Planning Policy Statement. It has subsequently been included in the Council's development Strategy as Policy Bicester 1 of the emerging Cherwell Local Plan. Cherwell District Council (CDC) has worked with Oxfordshire County Council (OCC), Bicester Town Council and external partners including the private sector, Government departments and agencies to develop the proposals for large-scale development. In April 2014, the Government published its "Locally-led Garden City Prospectus" (Department of Communities and Local Government). In December 2014 the Government awarded Bicester Garden Town status.
- 1.4 This work has primarily focussed on creating an attractive development delivering the standards in the Eco-towns PPS but has also included wider objectives in delivering a town-wide approach to sustainable development and the transition to a low carbon community. Planning permission for the first phase known as "The Exemplar" was approved in July 2012 and construction commenced in April 2014 (planning application reference: 10/01780/HYBRID). This phase will provide 393 homes, green space, local centre and primary school. In March 2014, a masterplan and supporting vision documents was submitted to CDC by developers A2Dominion setting out the spatial land uses for up to 6,000 homes on approximately 400 hectares of land at North West Bicester. The masterplan submission was supported by the following strategies, plans and documents:
- Access and Travel Strategy
 - Community involvement and governance strategy
 - Energy strategy
 - Flood risk assessment
 - Economic strategy and supporting economic baseline report
 - Green infrastructure and landscape strategy
 - Residential strategy
 - Statement of community involvement

Strategic environmental report

Social and community facilities and services strategy

Transport strategy

Water strategy

Vision and objectives document

Masterplan framework plan, green infrastructure plan and movement and access framework

- 1.5 A second application was approved in March 2014 subject to completion of a Section 106 agreement (application reference 14/01384/OUT). The proposals comprise 2,600 homes, employment land, retail, social and community facilities including a new primary school and expansion of the exemplar phase school. A third application relating to the land south of the railway line provides for 900 new homes, together with land for a secondary and primary school, local services and facilities (planning application reference: 14/01641/OUT). A fourth application (reference: 14/01968/OUT) was submitted in November 2014 for the realignment of the A4095 North West Bicester strategic link road and is currently being considered by CDC. Further land within the masterplan area to attain the 6,000 homes identified is in the control of other developers and promoters. An outline planning application (reference 14/01675/OUT) for employment uses on land at the junction of Middleton Stoney Road and Howes Lane was submitted by Albion Land in October 2014. This application seeks permission for up to 53,000 sq. metres of general industrial and storage and distribution uses within Use Class B2 and B8 respectively with ancillary office and light industrial uses with Use Class B1. An outline application (reference 14/02121/OUT) was submitted In December 2014 for up to 1,700 dwellings, a retirement village, social and community facilities, an energy centre, primary school and supporting infrastructure and is currently being considered by CDC.

Purpose of the SPD

- 1.9 This SPD sets out the minimum standards to be achieved by the proposed development. Developers will be encouraged to exceed these standards where possible and will be expected to apply new higher standards that arise during the life of the document and reflect up to date best practice and design principles.
- 1.10 The key elements of the SPD are:
- a spatial framework plan which should inform further masterplanning of the site;
 - development and design principles aimed at delivering a high quality scheme;
 - requirements for addressing sustainable design;
 - requirements relating to the scheme's delivery and implementation; and
 - requirements which should be met at the detailed planning application stage and beyond to ensure adequate and consistent approaches to quality and delivery.
- 1.11 The SPD will be used as a material consideration in determining planning applications on the NW Bicester site. In addition, it will aid the submission of successful planning applications and infrastructure delivery. The Council will progress the SPD as informal Council policy to be adopted once the Cherwell Local Plan is adopted. The timetable for preparing the SPD is summarised in Figure 1.

- 1.12 It should be read in conjunction with the National Planning Guidance including the National Planning Policy Framework, the Eco-towns Planning Policy Statement (PPS), the development plan comprising the adopted Cherwell Local Plan which continues to be the starting point for decision making and other guidance relating to large-scale sustainable development. It is expected that design codes will be developed as part of the planning process.

Fig. 1 Supplementary Planning Document timetable

Fig. 2 Supplementary Planning Document structure chart

Strategic Environmental Assessment and Sustainability Appraisal

- 1.13 A sustainability appraisal has been produced during the preparation of the Cherwell Local Plan. The Local Plan has been subject to an integrated Sustainability Appraisal (SA) and Strategic Environmental Appraisal (SEA) process in line with the requirements of European and national law. The law requires that at some point in the drafting of the Local Plan an assessment of its environmental effects is carried out and an SA report is written and consulted on.
- 1.14 The SA report sets out the results of the SA process, outlines why alternatives were selected, reports on the assessment of the Local Plan and outlines a programme for monitoring the environmental and sustainability effects of the plan. The full SA report, including the assessment of the NW Bicester site, is available from the following web site www.cherwell.gov.uk

Planning Policy, National Planning Policy and guidance

National Planning Policy Framework (NPPF) March 2012

- 1.15 The National Planning Policy Framework (NPPF) sets out the Government's planning policies. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans. The NPPF must be taken into account in the preparation of such plans and is a material consideration in planning decisions.
- 1.16 At the heart of the NPPF is a presumption in favour of sustainable development which should be seen as a golden thread running through both plan-making and decision-making. The advice in the NPPF has been taken into account in the drafting of this SPD.

Planning Policy Statement: eco-towns a supplement to Planning Policy Statement 1 (July 2009)

- 1.17 The Planning Policy Statement (PPS) set out Government's objectives for sustainable development in the form of large-scale development providing more homes while responding to the impact of climate change. It was cancelled in March 2014 following the introduction of the NPPF although the policies for North West Bicester remain until an up to date Local Plan is in place. It set out a wide range of standards for the delivery of zero carbon development, homes, transport, jobs, local services and other components of an eco-town. A list of the Eco towns principles that are consistent with the emerging Local Plan policies is contained in the Appendices.

Local Planning Policy

Cherwell Local Plan, 2011-2031

- 1.18 The Cherwell Local Plan (CLP) 2011-2031 sets out district-wide strategic objectives and policies. Proposed Modifications to the Cherwell Local Plan 2011-2031 were submitted to the secretary of State in October 2014 following the suspension of the Local Plan Examination in June 2014. The Proposed Modifications take account of the Oxfordshire Strategic Housing Market Assessment 2014 (SHMA).
- 1.19 The CLP includes policies and proposals maps showing the strategic development sites. Figure 3 shows the Local Plan policies map for Bicester including Bicester (Bicester 1).
- 1.20 Policy Bicester 1 sets out the Council's strategic policy and development standards for the eco town development at NW Bicester. The Local Plan includes other relevant policies, for example those on sustainable development (PSD1, ESD1-13), open space and local standards (BSC10 and BSC11) and infrastructure (INF1). The SPD should be read in conjunction with the emerging Local Plan policies.
- 1.21 The Local Plan sets out the housing trajectory for 2011 and 2031 including the projected delivery of new homes at North West Bicester. The delivery of the development will go beyond the plan period and is expected to take up to 30 years to complete.
- 1.22 The SPD must be consistent with the policies of the Local Plan and will align with the timescale for adoption as set out in Appendix 1 of the Cherwell Local Development Scheme (October 2014).
- 1.23 The examination into the Cherwell Local Plan concluded on 23rd December 2014 and the Inspector's Report is expected in late May 2015. The Local Development Scheme sets out the timescale for the preparation of the North West Bicester SPD.

As the text is not a Submission document the Submission Local Plan (January 2014) and the Proposed Modifications (August and October 2014) should be relied on as the primary sources.

Oxfordshire Local Transport Plan 2011-2030 (LTP3)

- 1.24 The Local Transport Plan was approved in 2012. It focusses on attracting and supporting economic growth and investment, delivering transport infrastructure, tackling congestion and improving health.

Oxfordshire Local Transport Plan 4 (LTP4)

- 1.25 Since LTP3 was adopted in 2011, much has changed, especially the way in which transport improvements can be funded. To ensure that the county's transport systems are fit to support population and economic growth, in 2014/15 Oxfordshire County Council (OCC) will be developing a new Local Transport Plan.
- 1.26 OCC is reviewing its transport vision, goals and objectives, to ensure that they support the Local Enterprise Partnership's Strategic Economic Plan as well as District Council Local Plans and other council strategies. The SPD should be read in conjunction with the Cherwell Local Plan 2011-2031 and other Government policy documents relating to large-scale development, sustainability and design, in particular:
- The National Planning Policy Framework (NPPF), (Department of Communities and Local Government – DCLG);

- National Planning Practice Guidance, (DCLG)
- By Design: Urban Design in the Planning System - Towards Better Practice, (Department of Environment, Transport and Regions - DETR and Commission for Architecture and the Built Environment - CABE);
- The Urban Design Compendium (editions 1 & 2) (Homes and Communities Agency);
- Places Streets and Movement: Better Places to Live by Design (CABE);
- Manual for Streets (2007) Department for Transport - DfT
- Manual for Streets 2 (2010) Chartered Institution of Highways & Transportation; and
- Car parking: What works where (Design for Homes, English Partnerships).
- Eco-towns worksheets – advice to promoters and planners (Town and Country Planning Association, DCLG)
- Sustrans Design Manual, Sustrans (November 2014).
- What makes an eco-town? BioRegional and CABE

1.27 These documents collectively promote a consensus view of good design principles. The SPD should also be read in conjunction with the North West Bicester masterplan submitted to CDC in March and May 2014 which have informed the preparation of the SPD.

Fig. 3 Bicester context plan CLP proposals map

2.0 Site context

2.1 This section provides a summary of the site location, local context, features and opportunities.

Site location

2.2 The site is located on land north of Howes Lane and Lords Lane (A4095) in Bicester. Figure 4 shows the location of the site.

It is approximately 1.5km from the town centre. The villages of Bucknell and Caversfield are located to the north and east of the site respectively. To the south east of the site, the area is predominantly residential and characterised by modern housing estates. The land to the south west is being developed as the South West Bicester Local Plan allocation marketed as “Kingsmere”.

The site is located between three radial routes out of Bicester to the north west which provide links to Banbury, Bucknell and Middleton Stoney. Banbury Road (B4100) provides access to the M40 motorway via junction 10 and the A43. An access to the first phase of the eco-town development is being constructed from the Banbury Road. Middleton Stoney Road is a fast rural road linking Bicester and Middleton Stoney. Bignell Park, a historic parkland landscape, lies to the south west of Middleton Stoney Road. The Bucknell Road lies to the north of the railway line and divides the site.

Fig. 4 Site location plan

Fig. 5 Historical map of Bicester 1885

Site boundary

2.5 The boundary is defined on the CLP Bicester 1 map which is reproduced in Appendix x.

Site area

2.6 The site area is 390 hectares as defined by CLP Policy Bicester 1.

Site history

2.7 Understanding the history of the site can help inform an understanding of some of the current site key site features. The Oxfordshire Historic Landscape Assessment forms an important component of the evidence base for the masterplan. Until the late 18th century the land was likely to have been open fields. Historic maps show that the field patterns and boundaries have changed little since the mid 1800's. Fig. 5 shows a map of the site in 1885

showing the field boundaries within the site have achieved their present day layout. By 1885, Home Farm, Lords Farm, Himley Farm, Aldershot Farm, Gowell Farm and Hawkwell Farm are all shown on the map of the area and by 1910 the railway line is completed. By the 1950s Lovelynch House is shown on local maps.

2.8 The Police Headquarters and Avonbury Business Park were developed in the 1990s and the A4095 realigned. By 1999 two small strips of plantation were added. Land at Middleton Stoney Road and Howes Lane was identified in the Cherwell Non-Statutory Local Plan 2011 as suitable for playing fields but never used for such use.

- 2.9 Land north of Howes Lane and Lords Lane was considered as part of the Cherwell Local Plan Options for Growth consultation in 2008 and was subsequently extended to accommodate an eco-town proposal as part of the Government's programme. Following the announcement of NW Bicester as a potential eco-town location in 2009 a planning application for a first phase was submitted in November 2010.

Fig. 6 Landscape character area

Site features

- 2.10 The predominant land use is agriculture with fields either bounded by post and wire fences or by hedges with some large trees, woodland and plantation. The agricultural land is classified as good to moderate value (primarily Grade 3) under the Agricultural Land Classification.
- 2.11 The site is relatively flat rising gradually to the North West. The London to Birmingham railway line runs through the site from south east to North West on an embankment before entering a cutting.
- 2.12 Bucknell Road also passes through the site to the north of the railway line and leads to the village of Bucknell approximately 300 metres from the site search area boundary.
- 2.13 Six farms, each with its own character, are located on the site, three north of the railway (Home, Lords and Hawkwell), and three south of it (Himley Farm, Aldershot Farm, and Gowell Farm).

Landscape character

- 2.14 The North West Bicester Masterplan Green Infrastructure and Landscape Report , March 2014 sets out the landscape character sets out an assessment of the landscape character and context. It cross refers to Volume 1 of the North West Bicester Strategic Environmental Report (SER) considers the landscape and visual implications of the proposed development in Section 5. A copy of these documents is available online at: www.cherwell.gov.uk.

There are no major landscape constraints present on the site and no landscape designations within the area. North West Bicester is within National Character Areas 107 , the "Cotwolds".

- 2.15 The Oxfordshire Wildlife and Landscape Study defines the site as being within the Wooded Estates landscape type. The Cherwell District Landscape Assessment (CDLA) 1995 identifies the site as within the Oxfordshire Estate Farmlands character area.
- 2.16 As part of the local landscape impact assessment process for the NW Bicester development project, a landscape character assessment has been prepared based on the principles set out in "Landscape Character Assessment Guidance for England and Scotland".

Landscape framework

- 2.17 The existing landscape provides the framework for the masterplanning of the site. It is typical of rural agricultural land in this area of Oxfordshire and is characterised by a mix of pasture and arable fields. Existing field boundaries form a strong framework of hedgerows. The Masterplan green infrastructure and landscape strategy provides further Information.

Ecology

- 2.18 Section 6 of the SER (Volume 1) refers to ecology. A copy is available on the CDC website. Existing hedgerows and woodland, together with the streams crossing the site, are important habitats which form the basis of wildlife corridors in the NW Bicester masterplan. These features and habitats, together with ponds, farmland and grassland provide many benefits to foraging and commuting bats, butterflies, common species of reptile, protected species such as great crested newts and badgers and many important breeding farmland and woodland birds.

Development edges

- 2.19 Howes Lane and Lords Lane form the urban edge to the site and the interface with the existing town.

Fig. 7 Homes South of Lords Lane

- 2.20 Middleton Stoney Road forms the western edge and the interface with Bignell Park, a historic parkland in private ownership. Banbury Road forms the eastern edge to the proposed development with Caversfield House and the Church of St Lawrence beyond. The northern edge of the site area is rural and cuts through existing field boundaries. This edge requires sensitive treatment in order to lessen the impact on the surrounding countryside.

Archaeology and heritage

- 2.21 An archaeological assessment concluded that the site is located within an area that has remained undeveloped since the 19th Century and possibly before. The site has known potential for remains dating from the prehistoric period with records of a prehistoric ring ditch located approximately 350 metres to the north of Himley Farm, a possible curvilinear enclosure to the north west of Hawkwell Farm and other evidence of prehistoric activity suggesting a general potential for remains from this period to be present. The Oxfordshire Historic Environment Record provides a useful resource and reference to guide further development of the masterplan. The site is located in an area of archaeological interest identified by a desk based assessment, aerial photographic survey and a trenched evaluation. These are summarised in Chapter 10 of the Strategic Environmental Report.
- 2.22 The archaeological evaluation recorded a number of archaeological features across the site including a Neolithic pit, a Bronze Age "Burnt Mound" as well as Iron Age and Roman settlement evidence. The archaeological features recorded during the evaluation are not considered to be of such significance to require physical preservation but will require further Investigation ahead of any development. There will be a need for a further scheme of investigation.
- 2.23 Three Grade II listed buildings are located within the site (Home Farm farmhouse and Himley Farm Barns). The farmhouse at Hawkwell Farm is a traditional building but not listed. In the surrounding area, St Lawrence's Church in the grounds of Caversfield House is an important local landmark building (Grade 2* listed). Its setting is important in the local landscape. Section 10 of the SER Volume 1 provides further detail.

Visual context

- 2.24 The flat topography means that extensive views may be had into and out of the site. Views into the site from all directions are curtailed by the railway line embankment meaning that the site as a whole can only be viewed from the embankment itself. A number of large trees and farm buildings are also visible on various parts of the site.

- 2.25 Views out from the site include those to existing dwellings and other buildings in Bucknell to the north, and to trees lining the B4100 to the east with Caversfield Church visible beyond these. To the east of the site, existing dwellings on the eastern side of Howes Lane/Lords Lane are visible. To the south a line of trees and parkland along the B4030 is visible which screens views from Bignell Park.
- 2.26 The immediate surrounding area shows a strong contrast between town and country. To the east of the site the outer limits of Bicester built in the late twentieth century, end abruptly at the A4095. To the west is open countryside, containing the village of Bucknell. To the south is the B4030 and beyond it the Bignell Park historic parkland and privately owned estate.

Fig. 8 Topography

Fig. 9 Flood risk

Fig. 10 Walking accessibility from Bicester town station

Topography and hydrology

- 2.27 The topography of the site slopes gently upwards from south-east to north-west with elevations ranging from around 97mAOD to 80mAOD.
- 2.28 The main watercourses on site drain to the River Bure which leaves the site via a culvert under the A4095 flowing towards the town centre. Within the masterplan boundary there are several water features including the Bure and its tributaries, field drains, ponds and springs. One of these streams passes below the railway line. In addition, five water wells and three groundwater abstraction sites have been identified within the site area and a minor aquifer with intermediate groundwater vulnerability is present beneath the site. Section 7 of the SER (Volume 1) refers to flood risk and hydrology.

Site constraints and opportunities

- 2.29 The site provides a unique opportunity for large-scale development in Bicester. It is in multiple ownerships and will require a comprehensive approach to land assembly and phasing of development. Existing landscape features such as the hedgerows and watercourse corridors provide the structure to the masterplan and will be retained. In terms of the capacity for residential development, the Bicester Landscape assessment states that consideration should be given to the landscape and visual separation between the site and satellite villages including Bucknell. It states that employment uses would be best located adjacent to the railway line according to the assessment.
- 2.30 The railway line divides the site into two distinct areas which will have to be connected.
- 2.31 The junction of the Howes Lane, Lords Lane and Bucknell Road will need to be reconfigured to improve A4095 strategic route along Howes Lane and Lords to accommodate the forecast growth in traffic arising from the proposed developments in the town.
- 2.32 The site's aspect provides the potential for large-scale renewable energy generation from roof-mounted solar photovoltaic panels with the option to use sustainable heat from the Ardley energy from recovery plant.

- 2.33 The site's proximity to the existing town centre and employment opportunities should also strengthen the local economy and integrate the development with the existing community.

- 2.34 The town centre is accessible on foot within 20 minutes from most areas in the town. Bicester is very accessible by bike with most places within 10 minutes of the town centre. Bicester Town and Bicester North Railway stations are also accessible by bike.

Fig. 11 Site analysis plan

3.0 Vision and objectives

- 3.1 The vision for NW Bicester has been guided to a large extent by the Eco-towns Planning Policy Statement (PPS) and taken forward in the emerging Cherwell Local Plan and the Bicester Masterplan Consultation Draft.
- 3.2 The Cherwell Local Plan sets out the vision for Bicester in 2031 and the strategy for delivering the vision. It includes bringing about a pioneering eco-development which will establish a new sustainable community, integrated with, and for the benefit of, the whole of Bicester.
- 3.3 The vision reflects the Eco Bicester One Shared Vision which sets out to create a place where people choose to live, work and spend their leisure time in sustainable ways.
- 3.4 The Eco Bicester One Shared Vision (Fig12) sets out the aims and ambitions for the whole town which the Bicester Masterplan develops and extends. The proposals for North West Bicester will act as the catalyst for the transition to a more sustainable community ensuring that households and Individuals are able to reduce their carbon footprint to a low level and achieve a more sustainable way of living.

Fig. 12 Eco Bicester Vision

- 3.5 In this SPD, the vision for North West Bicester is for a high quality development, well integrated with the existing town, which provides homes, jobs and local services in an attractive landscape setting, increases biodiversity and addresses the impact of climate change. It is based on the principles of sustainable zero carbon development designed to meet the effects of future climate change including extreme weather events and reduced energy and water use.
- 3.6 The SPD will ensure that the vision for the site will be delivered successfully. It includes the major components that make up an eco-development meeting the challenges that such development poses as set out in the emerging CLP.
- 3.7 The SPD has taken key elements from the North West Bicester masterplan and vision documents submitted by developers, A2Dominion in 2014. The masterplan will be incorporated into the Final SPD as a framework masterplan. Figure 13 shows the interim masterplan framework which is indicative the masterplan framework is confirmed. A full list of the vision documents supporting the masterplan is contained in appendix I. The masterplan was prepared in collaboration with officers of the Eco Bicester Project team comprising representatives from Cherwell District Council, Bicester Town Council and Oxfordshire County Council together government bodies including the Environment Agency, Natural England, Highways Agency and Homes and Communities Agency. Local organisations such as the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT), Bicester Vision and the Chamber of Commerce were also involved as stakeholders informing the masterplan workstreams.
- 3.8 The framework masterplan illustrates the key components of the development strategy for the site. It includes the landscape framework that underpins the masterplanning providing connectivity and structure to the site.

- 3.9 The eco-development will utilise the site's natural features and opportunities to provide a place that encourages a more sustainable way of living in homes that are well designed, energy efficient, accessible to jobs and local facilities within easy reach of the town centre and countryside. In doing so it will meet, and wherever possible exceed, the eco-town standards and policies of the CLP, creating an exemplar of truly sustainable development.
- 3.10 Infrastructure requirements will be future-proofed so that the development can adapt to changes in the future. Renewable energy generation from on-site sources will be the key to delivering zero carbon emissions from energy used in buildings on the site. The provision of utilities' infrastructure should be coordinated and support the overarching objective for zero carbon development.

Fig. 13 North West Bicester Spatial Framework: Land use

4.0 Development principles

- 4.1 This section sets out the key development principles for the site. It considers the Eco-town standards set out in the PPS, the principles set out in CLP Policy Bicester 1, the North West Bicester Masterplan and spatial framework plan.
- 4.2 It explores the eco-town principles further and breaks them down into component parts each of which is used to inform the principles that will be used to guide developers, landowners and applicants when preparing development proposals.
- 4.3 As such it provides an understanding of how the spatial framework and masterplanning principles should be incorporated into the preparation of planning applications.
- 4.4 Applicants are expected to consider the principles and parameters set out in this section, expecting them to be met in the preparation of planning applications (in outline and detail) and Design and Access Statements. The principles should be applied to the development as a whole, as well as individual sites.
- 4.5 In delivering the vision for North West Bicester, applicants are required to respond directly to these principles in Design and Access Statements and demonstrate how they have been taken into account.

Development Principle 1 – Developing the spatial framework.

Relevant eco towns policy ET20 Masterplanning

Masterplanning underpins the Eco town standards and the PPS (ET20) states,

“All eco-town planning applications should include an overall masterplan and supporting documentation to demonstrate how the eco-town standards will be achieved.”

Relevant CLP Policy Bicester 1

Policy Bicester 1 states *“Planning permission will only be granted for development at North West Bicester in accordance with a comprehensive masterplan for the whole area to be approved by the Council as part of a North West Bicester Supplementary Planning Document”*.

REQUIREMENT - Masterplanning

- 4.6 Cherwell District Council is committed to ensuring comprehensive development through the masterplanning of the site comprising land in multiple ownerships. In order to ensure a comprehensive development, all planning applications will be required to be in accordance with the framework masterplan for the site. The masterplan below is to be used as the interim masterplan framework and is indicative until the final masterplan framework is confirmed

[MOVE NW BICESTER MASTERPLAN- MASTERPLAN FRAMEWORK FROM BIMP6 01 REVA FROM APPENDIX I]

IMPLEMENTATION

- 4.7 The masterplan shows:

- the site boundary;
- Proposed land uses;
- existing woodlands and hedgerows, watercourses and ponds;
- proposed woodlands and hedgerow buffers;
- water corridor buffer zones;
- a nature reserve and country park;
- a burial ground
- site access points from the highway network; indicative primary and secondary routes (roads and street layout); and
- the proposed realignment of Howes Lane.

4.8 It is supported by surveys and technical information.

4.9 The masterplan indicates the key development components of the masterplan. It will be used to guide the preparation of development proposals and deliver key components of the masterplan..

4.10 The BREEAM Communities assessment methodology will be used to assess the sustainability of the proposals. CEEQUAL assessment methodology will also be used to deliver improved project specification, design and construction of civil engineering works.

4.11 CABE Design Review will be encouraged of all schemes to ensure high quality design. Design Review has been used in masterplanning the site (most recently in May 2014) and Phase 1 exemplar proposals and will be continued throughout the development.

Development Requirement 1 - Developing the masterplan.

The masterplan should achieve BREEAM Communities “Excellent”. For more information go to www.breeam.org. In order to ensure comprehensive development through planning applications should be consistent with the masterplan and mindful of the masterplan as set out below.

Planning applications will be:

- determined in accordance with the masterplan adopted as part of the SPD;
- supported by a masterplan to show the “fit” with the overarching masterplan;
- required to demonstrate the principles and vision set out in the site wide masterplan, and the SPD;
- required to progress design work (see design principles in section 5) in the preparation of detailed proposals. For example, details to the level of the block and the street should be provided to explore issues related to building typologies and solar orientation.

Meet the requirements as set out in the Local Validation Checklist and advice on making an application (for more information go to: www.cherwell.gov.uk/planning)

Development Principle 2 – "True" zero carbon development

Relevant PPS Eco-town standard - ET7

The definition of zero carbon in eco-towns is that over a year the net carbon dioxide emissions from all energy use within buildings on the eco-town development as a whole are zero or below. It excludes embodied carbon and emissions from transport but includes all buildings – not just houses but also commercial and public sector buildings.

CLP Policy Bicester 1

Development Description: A new zero carbon (as defined in the Eco-towns Supplement to PPS1) mixed use development including 6,000 homes will be developed on land identified at North West Bicester.

Utilities – Utilities and infrastructure which allow for zero carbon on the site and the consideration of sourcing waste heat from the Ardley Energy recovery facility. The approach shall be set out in an Energy Strategy Zero Carbon (see PPS definition) water neutral development is sought. Development proposals will demonstrate how these requirements will be met. Off site improvements to the utilities may be required.

REQUIREMENT

- 4.12 The concept of zero carbon development is set out clearly in the Eco-towns PPS and has been embedded into Council strategies and policy ever since. CLP Policy Bicester 1 requires the provision of infrastructure to allow for zero carbon development on the site. The 2008 Climate Change Act established the world's first legally binding climate change target with the aim to reduce the UK's greenhouse gas emissions by at least 80% (from the 1990 baseline) by 2050. Reduction in the use of fossil fuels will not only contribute to reaching this target but also help protect against fuel price rises.

IMPLEMENTATION

- 4.13 Work to date indicates a mixture of low carbon district heating and photovoltaic (PV) energy would achieve zero carbon. The site's orientation and aspect creates the opportunity for roof mounted solar panels to generate renewable energy and will go a significant way to achieving the zero carbon targets.
- 4.14 The approach to energy and carbon dioxide reduction is set out in the masterplan energy strategy and summarised below:
- Provide a large scale solar array on all roofs;
 - energy efficient buildings and
 - a network of energy centres providing gas and biomass combined heat and power (CHP) which will require a district heating network.

Zero carbon energy

- 4.15 Renewable energy generation from on-site sources will be the key to delivering zero carbon emissions from energy used in buildings. PV panels currently appear to provide the most viable solution as set out in the energy strategy supporting the masterplan.
- 4.16 Orientation and design of buildings will be expected to take account of the potential to install solar panels.

- 4.17 The Council will encourage:
- roof mounted arrays to avoid use of large tracts of land for a single purpose.
 - exploration of technologies that will assist building occupiers in maximising the use of any renewable energy generated on the site.
- 4.18 Design of the proposed development should enable solar power generation by supporting:
- Orientation - For pitched roofs, all roofs should have at least one pitch facing within 45 degrees of due south. Mono-pitch or flat roofs should be used to increase PV provision. A mix of orientations ranging from +45 degrees to -45 degrees of south will reduce the peak export and contribute to meeting peak demands.
 - Avoiding overshadowing/overshadowing - Buildings should avoid or at least minimise shading to roofs. Shading of south facing roofs by trees or other buildings should be avoided.
 - Built form, density and massing that optimises the potential for solar gain to generate energy.
- 4.19 Solar masterplanning software use at early design stages (e.g. using sketchup design software www.sketchup.com) to check for best use of solar resources on a site.

Energy Centres – Combined Heat and Power

- 4.20 Low carbon energy centres, providing combined heat and power to the development are proposed within the site boundary as part of the masterplan energy strategy. Energy centres are shown on the Draft Master Plan and have been located to maximise the potential for combined heat and power while also allowing the potential for the site to fit a future heat network for Bicester. The design and siting of energy centres should allow for the space requirements including the need for biomass deliveries and ensure that there is no nuisance to adjoining uses.

Local Heat Network

- 4.21 The feasibility of a local heat network for Bicester as a whole is being investigated by CDC and BioRegional funded by the Department for Energy and Climate Change (DECC) Heat Network Delivery Unit (HNDU). The importance of a heat network should be recognised and opportunities included in proposals for the eco-town. The aspiration is for waste heat from the energy recovery facility at Ardley to connect to proposed developments, if feasible.

Smartgrids

- 4.22 The use of smartgrids and low carbon energy storage solutions provide an opportunity to manage demand and supply of renewable and zero carbon energy technologies. Such solutions should be explored further in the energy strategies to support planning applications and masterplanning delivery.

Development Requirements 2 - Zero carbon development

Development at NW Bicester must achieve zero carbon emissions as defined in the PPS and this SPD.

Each full and outline application will need to be supported by an energy strategy and comply with the definition of zero carbon development as described in the Eco-towns PPS.

The energy strategy should identify how the proposed development will achieve the zero carbon targets and set out the phasing.

Use of heat and low carbon energy from the energy recovery facility at Ardley should be explored in the energy strategy. Smartgrid and storage technology should be also be investigated.

Applicants will be encouraged to maximise the fabric energy efficiency of buildings.

Provision of utilities' infrastructure should be coordinated and support the overarching objective of zero carbon development.

Where an approach is proposed that does not include a heat network it will have to be demonstrated that it is a robust long term solution and that connection to any heat network should be explored.

Development Principle 3 - Climate Change Adaptation

Relevant Eco town standard -
ET8 Climate Change Adaptation

Development proposals should create sustainable communities resilient to and appropriate for climate change. They should be planned to minimise future vulnerability in a changing climate. Developments should be designed to take account of the climate they are likely to experience, using, for example, the most recent climate change scenarios available from the UK Climate Change Impacts Programme

Relevant CLP Policy ESD1 Mitigating and adapting to climate change.

Policy Bicester 1 Key site and place shaping principles

All new buildings designed to incorporate best practice on tackling overheating, taking account of the latest UKCP climate predictions.

REQUIREMENT

- 4.23 The Eco-towns PPS requires development to be designed to take account of future climate scenarios. The 2009 UK Climate Projections (UKCP09) set out the key projections of climate change across the UK over the 21st century. Projected changes by the 2080s based on a 50% probability level include increases in summer mean temperatures of 3.9 degrees in southern England and 23% decrease in summer precipitation.
- 4.24 Policy ESD1 of the CLP and supporting text provides more detail on the anticipated effect of climate change in the District.
- 4.25 A Local Climate Impacts Profile (LCIP) has been undertaken as part of the Local Plan preparation to better understand the impact of extreme weather in Cherwell. The LCIP reviewed extreme weather events over the period 2003 to 2008. If heatwaves were to recur on the scale of 2003 it would have a significant impact on health, biodiversity and infrastructure (including damage to buildings by tree and drought related subsidence, roads, drainage systems and business closures).
- 4.26 There is increasing recognition that reducing carbon emissions is important in reducing and adapting to the impacts of climate change.
- 4.27 It is anticipated that overheating in buildings will be an issue in future climate change scenarios requiring an innovative approach in the design of new buildings. At present there is no rigorous definition of what constitutes overheating in dwellings. However there is documented evidence that temperatures being reached in some existing dwellings are harmful to occupant health and well-being.

- 4.28 The factors that contribute to overheating in dwellings include:
- urbanisation,
 - occupant behaviour and interventions,
 - orientation,
 - aspect,
 - glazing,
 - internal gains,
 - thermal mass,
 - changes in building design (including the drive for energy efficiency, leading to highly insulated and airtight dwellings),
 - pollution,
 - noise and
 - security.

IMPLEMENTATION

- 4.29 The PPS and CLP both make reference to climate change adaptation and mitigation measures. They set out clear requirements to be met by proposals for development in planning applications. The draft masterplan sets out the framework for implementing the climate change measures required to deliver the eco-town objectives. A comprehensive approach to climate change adaptation will be required with every planning application.
- 4.30 Research with Oxford Brookes University has modelled the climate Bicester is likely to experience. It shows the biggest risks are overheating and water stress. The worst case scenarios for overheating in homes occur in terraces or detached properties with both east and west facing glazing. These homes get morning and evening sunshine when the sun is lower in the sky whereas south facing glazing can be shaded easily from midday summer sun.
- 4.31 Green space and green infrastructure will contribute to an urban cooling effect and Sustainable Urban Drainage Systems (SUDS) will be designed to respond to future extreme weather events including water neutrality measures as set out in a Water Cycle Study and SUDS as part of a Water Cycle Strategy. Buildings will be designed to be warm in winter and cool in summer employing sustainable construction techniques and passive management systems wherever possible to avoid the use of air conditioning plant and machinery.
- 4.32 The principles of sustainable development should contribute to the character of the area by influencing form of development for example, to maximise passive energy gain, support PhotoVoltaics, wind power and grey water.

Development Requirements 3 -Climate Change Adaptation

Planning applications will be required to:

- incorporate best practice on tackling overheating
- incorporate best practice on tackling the impacts of climate change on the built and natural environment including:
 - Urban cooling through Green Infrastructure (for example, the use of green space and the incorporation of green streets);

- Orientation and passive design principles;
- include water neutrality measures as set out in a Water Cycle Study
- meet Minimum Fabric Energy Efficiency Standards (FEES)
- achieve Code for Sustainable Homes Level 5 (CSH5).

Planning applications should include designs and layouts that run east-west to avoid worst case overheating. Layouts and designs that run north-south should pay extra attention to risk of overheating.

Planning applications should:

- provide evidence to show consideration of climate change adaptation.
- demonstrate how risks will be reduced through win-win situations (BREEAM Communities SE10) - such as:
 - Reducing more than one impact of climate change (for example reduce effect of urban heat island whilst also reducing flood risk);
 - Reducing the contribution of the development to climate change (e.g. reducing the need for electric cooling and therefore reducing carbon emissions)
 - Providing additional sustainability, economic or wellbeing benefits (e.g. rainwater harvesting using drainage techniques that increase biodiversity or improve water quality)
- Design and Access Statements should address the issue of climate change adaptation. Detailed designs will be required to demonstrate they are resilient to the impacts of climate change with reference to the work carried out by Oxford Brookes University (OBU), Hyder and BioRegional.
- Design for Future Climate Change – Adapting Buildings Programme – NW Bicester Eco development by Hyder Consulting Limited.

Development Principle 4 - Homes

Relevant eco-towns PPS standard ET 9 – Homes

Relevant CLP Policy ESD3 – Sustainable Construction Policy Bicester 1

Housing

Number of homes – Up to 6,000 (3,293 to be delivered within the plan period)

Affordable Housing – 30% Layout to achieve Building for Life 12 and Lifetime Homes standards

Homes to be constructed to be capable of achieving a minimum of Level 5 of the Code for Sustainable Homes on completion of each phase of development including being equipped to meet the water consumption requirement of Code Level 5

The provision of extra care housing

Have real time energy monitoring systems, real time public transport information and Superfast Broadband access, including next generation broadband where possible. Consideration should also be given to digital access to support assisted living and smart energy management systems.

Neighbourhood water recycling should be implemented as a means to achieve Code for Sustainable Homes Level 5 water consumption requirements, rather than house by house scale water recycling which may be expensive.

REQUIREMENT

- 4.33 As part of the zero carbon performance, new homes will need to meet high standards of fabric energy efficiency, (see section on zero carbon). The proposed development includes up to 6,000 new homes of which at least 30 per cent will be affordable.
- 4.34 Homes will be designed to high environmental and space standards using sustainable methods of construction to maximise energy efficiency, reduce carbon emissions and achieve zero carbon development targets across the site.
- 4.35 Homes are a fundamental element of the walkable neighbourhoods principle and delivery of the masterplan will need to ensure that local facilities, services including schools and jobs are easily accessible on foot and bicycle.
- 4.36 The density of residential development will reflect its location within the site with higher density residential development along public transport corridors and adjacent to local centres.
- 4.37 The development will provide a range of house types and sizes to meet local needs and create a sustainable community.
- 4.38 As well as providing attractive places for people to live, the new homes will also be adaptable and provide flexibility for residents to work from home. This will allow the need to travel to be reduced leading to a reduction in carbon emissions from transport and require local services and facilities to support homeworkers.

IMPLEMENTATION

- 4.39 The Draft masterplan identifies the areas of residential development within the site and sets out to create sustainable neighbourhoods.
- 4.40 Housing areas are in accessible locations in terms of local services and jobs.
- 4.41 Masterplanning and detailed layouts should ensure homes are located within 800 metres along the shortest walking route of primary schools.
- 4.42 Homes should be set in a strong landscape framework.
- 4.43 Proposals should develop the work carried out by OBU, Hyder, BioRegional and A2D on designing homes for future climate change.
- 4.44 The concept of “homezones” has been established by the exemplar first phase community streets. The concept should be carried through into subsequent phases of development. Implementation of the concept through masterplanning should create safe, accessible neighbourhood streets and facilitate the creation of a successful community.

4.45 Home designs will encourage more sustainable ways of living for example through:

- Space for recycling facilities and composting facilities,
- gardens and food production
- gardens for biodiversity (for example, fruit trees, wildflower meadows and log piles)
- easily accessible cycle storage areas
- **connectivity of** rainwater harvesting systems to residential gardens and adjacent green street features,
- greywater use,
- passive heating and cooling and
- **provision for electric vehicle charging points**
- smart home design that uses technology to manage appliances and energy use.

DEVELOPMENT REQUIREMENTS 4 - Homes

Proposals will include details of 30% affordable housing of a type and tenure to meet local housing needs. Assistance in identifying needs will be provided by the Council's Strategic Housing Officer.

Proposals for new residential development will be expected to incorporate sustainable design and construction technology to achieve zero carbon development through a combination of fabric energy efficiency, carbon compliance and local renewable energy generation.

Design principles will be set out and include the use of local materials, flexibility in house design and size including the potential for additions to the building to adapt to changing circumstances.

Design and Access Statements should respond to the eco-town principles and set out how homes will contribute to meet design criteria for the development.

In summary, all homes should:

- achieve Building for Life 12 (www.designcouncil.org.uk)
- use energy efficient materials as part of the building fabric and innovative approaches to sustainable construction
- optimise the site's potential for solar energy gain and passive house techniques for ventilation and cooling
- address the issue of overheating and respond to the orientation of the site
- meet a minimum of Level 5 of the Code for Sustainable homes
- meet lifetime homes minimum space standards (www.lifetimehomes.org.uk)
- provide flexible space to facilitate homeworking and be "smart" - incorporating real time energy monitoring systems, technology that provides up to date real time community information including travel, superfast broadband (speeds in excess of 100 MBps) to facilitate use of homes as offices and small businesses
- Daylighting parameters for all residential properties should achieve both Average Daylight Factor (ADF) credits under Hea 1 of CSH as follows:
 - "Kitchens must achieve a minimum Average Daylight Factor of at least 2%
 - All living rooms, dining rooms and studies (including any room designated as a home office under Ene 9 – Home Office) must achieve a minimum Average Daylight Factor of at least 1.5%"
- provide gardens for food production and biodiversity

Development Principle 4(a) - Homes – Homeworking

Homeworking will play an important role in creating employment opportunities on the site. It will be encouraged and facilitated by the design of the new homes and superfast broadband provision.

REQUIREMENT

4.46 The ability of homes to provide flexible space for residents to work from home is a requirement of the phase 1 exemplar development. This will reduce the need to travel allowing residents who work elsewhere to spend time doing their job at home. It will also provide the opportunity to facilitate the provision of small businesses, sole traders and local businesses to use their homes for work and employment. Within homes there should be space provided to allow use as an office or small scale ancillary business use.

IMPLEMENTATION

4.47 The masterplan economic strategy is expected to deliver homeworking targets for the site. The strategy will require further detailed work in terms of developing the proposals for homeworking to ensure the creation of the jobs indicated on the site.

DEVELOPMENT REQUIREMENT 4(a) - Homes – Homeworking

Detailed planning applications and Design and Access Statement should set out how the design of new homes will provide for homeworking. They should also refer to the economic strategy for employment opportunities provided by homeworking and the contribution to reducing unsustainable commuter trips set out in accompanying Transport Assessments and Travel Plans.

Development Principle 5 – Employment

Relevant Eco-towns standard ET10 Employment

It is important to ensure that eco-towns are genuine mixed-use communities and that unsustainable commuter trips are kept to a minimum. An economic strategy should be produced to accompany planning applications for eco-towns that demonstrate how access to work will be achieved. The strategy should also set out facilities to support job creation and as a minimum there should be access to one employment opportunity per new dwelling that is easily reached by walking, cycling and /or public transport

Relevant CLP Policy Bicester 1

Employment

Land Area – a minimum of 10 ha, comprising business premises focused at Howes Lane and Middleton Stoney Road, employment space in the local centre hubs and as part of mixed used development.

Jobs created – At least 3,000 jobs (approx. 1000 jobs on B use class land on the site) within the plan period.

Use classes – B1, with limited B2 and B8 uses

It is anticipated that the business park at the South East corner of the allocation will generate between 700 and 1000 jobs in use classes B1, B2 and B8 early in the Plan period. A Carbon Management Plan shall be produced to support all applications for employment developments.

An economic strategy including an action plan to be produced to support the planning applications for eco-town proposals demonstrating how access to work will be achieved and to deliver a minimum of one employment opportunity per new dwelling that is easily reached by walking, cycling and/or public transport

Mixed use local centre hubs to include employment (B1(a), A1, A2, A3, A4, A5, C1, D1 and D2) New non-residential buildings will be BREEAM Very Good with the capability of achieving BREEAM Excellent.

The CLP is also accompanied by an evidence-base which should be referred to in preparing proposals for employment uses on the NW Bicester site

REQUIREMENT

- 4.48 A fundamental requirement of the eco-towns PPS is to ensure that development provides job opportunities and facilities to support the delivery of new communities. The vision for employment is to deliver a mixed use development and ensure that unsustainable commuter trips are kept to a minimum. It requires the preparation of an economic strategy based on baseline information and evidence to identify target sectors for economic growth and linkages with other economies in the area.
- 4.49 Other employment opportunities and facilities should be provided on the eco development and in links to the wider economy. These include service jobs, growth of the low carbon environmental goods and services sector (including energy, management, retail, community development role) and greener business such as the commercial uses in the local centres that choose sustainability practices. The end result should be to provide at least as many jobs as new dwellings on the site (within walking or cycling distance) or accessible by public transport within Bicester.
- 4.50 It is recognised that the proposed development will create demand for local services and facilities in the local area which will provide opportunities for some of the future residents of NW Bicester. However, the challenge will be to provide the estimated 4,600 jobs identified in the masterplan economic strategy.
- 4.51 Larger scale commercial development within the proposed business park comprising general industrial uses (within Classes B1 (b) &(c) and B2 of the Uses Classes Order) and storage and distribution (within Class B8 of the Use Classes Order) with office use (Class B1a) is proposed by the CLP.

IMPLEMENTATION

- 4.52 The masterplan and spatial framework plan identify land for employment uses to facilitate the creation of on-site jobs. In addition, the masterplan economic strategy sets out the scale, type and location of jobs related to NW Bicester and an action plan. Employment opportunities should be provided on-site and meet the skills of local residents.
- 4.53 Employment uses include a proposed business park on land at Middleton Stoney Road and Howes Lane. Larger scale commercial development in this area was identified in the masterplan economic strategy to provide employment space for target sectors including the high value logistics, manufacturing (including performance engineering) and low carbon companies. The buildings will be in a high quality landscape setting with high quality offices providing research and development facilities. Other business and financial services will be located in the town centre.
- 4.54 It is estimated in the North West Bicester masterplan economic strategy that over 2,000 jobs could be provided in the business park with the Local Plan policy anticipating the business park generating

between 700 and 1,000 jobs early in the plan period. The development is expected to come forward in the early phases and its location reflects the accessibility of the site to the strategic highway network.

- 4.55 An estimated 1,000 jobs will be provided in the local centres comprising offices, retail/leisure, health facilities, community halls and community facilities possibly nurseries, care and extra care homes and a hotel. The local centres should also support the growth of the low carbon environmental goods and services sector and encourage sustainable lifestyles through commercial uses such as bike shops and organic cafes.
- 4.56 The existing Avonbury Business Park could be extended to create commercial use and frontage along the realigned Howes Lane.
- 4.57 Land between the realigned Bucknell Road and Lords Lane adjacent to the local centre is identified for commercial uses.
- 4.58 The existing farmsteads are identified in the masterplan for mixed use development including some commercial uses. Proposals for mixed use development at the existing farmsteads should retain and respect the listed barns at Himley Farm and the listed farmhouse at Home Farm. Landscape proposals including open spaces should be used to retain the setting of the listed buildings on the site. The spatial framework identifies mixed use employment to the north east of Lords Farm and at Hawkwell Farm. The economic strategy does not include an indicative number of jobs created in this area.
- 4.59 Other employment opportunities will be created through the provision of facilities for homeworking in the design of new homes. Homeworking will play an important role in creating employment opportunities on the site and will be encouraged, facilitated by the design of the new homes (Please refer to Development Principle 4(a)).

DEVELOPMENT REQUIREMENTS 5 - Employment

Employment proposals will be required to address:

- Accessibility to homes and sustainable transport
- Mixed use development
- Relationship to neighbouring uses and
- The vitality of local centres

Planning applications should be:

- supported by an economic strategy
- be consistent with the masterplan Economic Strategy;
- demonstrate access to at least one new opportunity per new home on-site and within Bicester;
- present an up to date summary of economic baseline information;
- set out the local economic context and economic links (with a specific focus on jobs and employment land);
- pursue target sectors of the high value logistics, manufacturing (including performance engineering) and low carbon companies

- refer to the Cherwell Local Plan evidence base;
- include an action plan to deliver jobs and homeworking, skills and training objectives;
- support local apprenticeship and training initiatives.

Development Principle 6 – Transport, Movement and Access Relevant eco-towns standard ET11

Relevant CLP Policy SLE1,

Policy Bicester 1

- 4.60 The Eco Bicester One Shared Vision encourages *“walking and cycling as the first choice of travel within the town to improve health, reduce carbon emissions, and improve the quality of the environment”*. A Draft Sustainable Transport Strategy for Bicester has been prepared setting out the transport ambition and vision for sustainable transport in the town. It will inform the preparation of transport policies and proposals for the existing town and new development proposals.
- 4.61 The Government has set out its ambition for cycling, for example in announcements made by the Prime Minister and the Cycling Delivery Plan published for consultation in November 2014. The development at Bicester should reflect this ambition. The PPS sets targets for trips originating from NW Bicester and aims to tackle the carbon impact of transport from day one through the provision of transport choice messages, infrastructure and services. A key transport objective is to make it easy to get around on foot and/or cycle.
- 4.62 Travel and mobility are part of our everyday lives. The PPS states *“Travel in eco-towns should support people’s desire for mobility whilst achieving the goal of low carbon living.”* Proposals for NW Bicester should support this. Cycling and walking will be encouraged and supported to be the first choice of transport in new development and the wider town of Bicester. Improved linkages to the town’s stations must be provided and further linkages to Bicester town station should be investigated to provide improved connectivity to a wider range of destinations.
- 4.63 The principles in this SPD set out to demonstrate and achieve the benefits that flow from good design and assign a higher priority to pedestrians and cyclists, setting out an approach to residential streets that recognises their role in creating places that work for all members of the community.
- 4.64 Development should have a robust urban structure, with a network of well-designed, connected spaces and routes that prioritise the movement of pedestrians, cyclists and public transport. It is critical that these spaces form well connected places which draw the existing and new communities together. Streets will form a major element of the public realm which will “stitch” the site together.
- 4.65 Principles of “walkable neighbourhoods” and “filtered permeability” have been applied in the masterplanning to determine the mix of uses and connections to predominantly daily facilities within the new community. These principles should continue to be used in the preparation of planning applications. The spatial framework plan in Appendix V shows the key connections within the site and surrounding area.

REQUIREMENT

- 4.66 Development proposals must show an understanding of existing routes and provide a considered

response that enhances existing access and connections and seeks to improve/ remove barriers to movement on and off-site.

- 4.67 It is essential that the accessibility of the overall development internally and externally is designed to a high standard with attractive, direct and overlooked routes. Such routes will be expected to be designed to an adoptable standard.
- 4.68 It is crucial proposed developments integrate fully with existing developments and communities in Bicester by making new connections, while improving existing ones.
- 4.69 Rights of Way should be recognised as important links to the countryside, enhanced and reinforced through the implementation of the masterplan supported by individual planning applications.

IMPLEMENTATION

- 4.70 The Draft masterplan sets out a framework for movement and access within the site. It includes a street hierarchy and indicative layout of primary streets. This requires further work to ensure the street design and layout is legible.
- 4.71 The primary road layout within the site provides access to the strategic road network. The detailed layout should be designed to keep vehicle speeds low and discourage unnecessary journeys by private motor car.
- 4.72 The Draft masterplan seeks to employ principles of filtered permeability and walkable neighbourhoods. These principles should be developed further in detailed planning proposals
- 4.73 Masterplanning has provided the opportunity to address the aspect of existing properties along Howes Lane and the potential for the new development to enhance the existing properties through good urban design and integration with the proposed development. The spatial framework plan is based on the following movement hierarchy:
- A strong green space structure providing a network of footpaths and cycleways;
 - Provision of a strategic route through the site, to realign Howe's Lane, cross the railway line and allow integration and connectivity between the new and existing community;
 - Primary access roads into the site link employment, schools and community facilities;
 - Controlled access roads through residential areas provide a route for public transport and maximise the public transport catchment;
 - Minor roads and home zones/community streets to serve residential areas.
 - Indicative strategic accesses and primary streets are shown on the spatial framework plan.

Development Requirement 6 Transport, Movement and Access

Key considerations for movement to be addressed in planning applications are as follows:

- Reducing car dependency;
- Prioritising walking and cycling;
- Generating activity and connectivity;
- highway and transport improvements including Howes Lane and Bucknell Road

- Bus priority and links and infrastructure including RTI

At the outline planning applications stage it will be necessary to set out the indicative layout of lower hierarchy streets as part of a future design code. The secondary road network will provide other routes through the site. Below this level, further work in preparing planning applications is required to show how the routes will connect and illustrate the permeability of the site.

There is scope for planning applications to reconsider key elements and provide further detail to explain how the movement principles will be realised in spatial and public realm terms.

Planning applications and proposals should:

- demonstrate how MfS 1 and 2 have been incorporated into the design of roads and streets
- demonstrate how sustrans design manual guidance has been incorporated
- address and ensure connectivity along the major routes.
- include a Movement Strategy and designs to promote sustainable transport ensuring that all residential areas enjoy easy access to open space and are connected by a range of modes of transport to schools, community facilities and leisure/employment opportunities.
- demonstrate that homes are within 5 minutes' walk (approximately 400 metres) of frequent public transport and 10 minutes' (approximately 800 metres) of neighbourhood services;

Development Principle 6(a) – Sustainable Transport - Modal Share and Containment.

The PPS at paragraph ET11.2 states “planning applications should include travel plans which demonstrate how the town’s design will enable at least 50 per cent of trips originating in eco-towns to be made by non-car means, with the potential for this to increase to at least 60 per cent over time.”

Policy SLE4 of the emerging CLP states “the Council will support the implementation of the proposals in the Movement Strategies and the Local Transport Plan to deliver key connections, to support modal shift and to support more sustainable locations for employment and housing growth.”

- 4.74 Baseline information on mode share of trips is available from the Bicester Household Travel Diary Data (2007, 2010). The results of the Travel Behaviour Survey carried out by OCC in late 2010 showed 69 per cent of total trips in Bicester were made by car and 31 per cent by non-car modes.
- 4.75 Mode share varies by distance with many of the shortest journeys in Bicester already made by non-car modes (78 per cent) whereas longer journey (more than 3km) are mostly by car (86 percent including car passengers)
- 4.76 Containment refers to the number of trips generated by a development and the travel patterns within that development. A high rate of containment indicates a land use and transport conditions that enable residents to travel without the need for complex external journeys.

REQUIREMENT

- 4.77 Attractive routes and connections through the development should make the cycling and walking objective achievable. In order to achieve the amount of trips by walking and cycling, proposals in planning applications should be developed with strong connections to on and off-site destinations.

- 4.78 Walking routes should be designed to integrate with the existing public rights of way network. Opportunities for walking and cycling should be developed and enhanced through a network of sustainable, attractive and direct routes linking green spaces.
- 4.79 Primary routes for vehicles should allow access to the development but not dominate the layout or design of the scheme. This should be a place where people provide the vitality and vibrancy and walking and cycling become the first choice of travel.
- 4.80 The transport system should be planned to ensure that all homes and key services have access to non-car modes of transport.
- 4.81 Car sharing and car clubs should be an important element in supporting reduced car ownership and use.
- 4.82 Streets and spaces should not be dominated by parking and innovative layouts and management should be used where appropriate.
- 4.83 Parking requirements will need to be sensitively addressed.

IMPLEMENTATION

- 4.84 Masterplanning has sought to achieve an increased level of containment of trips within the development and in Bicester. Residential areas in the draft masterplan have been located so that they are within walking distance of schools and local facilities and accessible to the bus route through the site. Detailed proposals and further masterplanning should be designed in a way that supports children walking and cycling safely and easily to schools from homes.
- 4.85 Walking distances to schools should be measured by the shortest route along which a child may walk reasonably safely. For children under 11 there should be a maximum walking distance of 800 metres from homes to the nearest school.
- 4.86 The target level of containment is for at least 35 per cent of trips to be within NW Bicester and 60 per cent to be within Bicester as a whole, that is, 40 per cent or less travelling outside of Bicester. This compares to an estimated 25 per cent at present within neighbourhoods and 56 per cent within Bicester as a whole. It aims at some increase in containment, recognising the complexities and limited influence over people's choices about where they live, work, shop and send their children to school.
- 4.87 Masterplanning has sought to incorporate the following sustainable transport principles:
- Comprehensive direct networks for walking, cycling and public transport;
 - Limited or less convenient private vehicle access for homes and services;
 - good accessibility by sustainable modes to key services such as schools and local centres;
 - **provision of bus infrastructure**
 - A compact layout – with medium densities, a mix of uses and a range of facilities within 10 minutes walking distance (around 800 metres);
 - Community Streets (Home zones) – residential areas where streets design encourages drivers to travel at very low speeds;
 - Shared space streets and squares – these are intended to reduce the dominance of motor vehicles

and to improve the conditions for walkers, cyclists and pedestrians;

- 4.88 The draft masterplan seeks to facilitate the overall modal share by non-car modes set out in the PPS eco-town standards. This varies by the length of trip. The aim is to achieve an overall modal share of not more than 50 per cent by car. The targets suggest an overall increase in walking trips from 22 per cent at present to 30 per cent for NW Bicester; increasing cycling trips from 4 per cent to 10 per cent and bus trips from 5 to 10 per cent. Walking, cycling and bus trips also include journeys to the railway stations as part of longer journeys by public transport.
- 4.89 The spatial planning framework in Appendix IV shows the accessibility of key destinations and connections between the areas of the site.

Development Requirement 6(a) – Sustainable Transport - Modal Share and Containment.

Masterplanning should include land use mixes that maximise the containment of trips within the NW Bicester development and limit the need for vehicular travel.

Planning applications should:

- include Travel Plans which demonstrate how the design will enable at least 50% of trips originating in the development to be made by non-car means with the potential to increase to 60% by 2020.
- Set out how they will deliver:
- High containment of trips within the town;
- enhanced bus services from NW Bicester into and around Bicester;
- Additional bus priority measures;
- street plans to discourage car movement;
- Travel awareness plans (individualised travel plans etc.);
- Real time travel information including access to train and train services;
- High quality walking and cycling links to and from the town and waymarking
- cycle storage within new homes.
- Be supported by a Walking and Cycling Strategy and
- Transport Assessments and addressing the guidance in this SPD.

Planning applications should also demonstrate:

- options for ensuring key connections around the town do not become congested as a result of the development, for example, by extending some aspects of the travel plan beyond the immediate boundaries of the NW Bicester site
- significantly more ambitious targets for modal share than the 50 per cent and for the use of sustainable transport.
- demonstrate how the principles of filtered permeability have been employed in designing the layout of schemes.

Development Principle 6(b) – Electric and low emission vehicles

REQUIREMENT

- 4.90 To reduce carbon emissions from transport as part of a sustainable transport system, electric and low emission vehicles will be encouraged. Proposals should include ultra-low carbon vehicle options including electric vehicles, car share schemes and low emission public transport. The implications on energy demand should be considered. Proposals should not add so many additional private vehicles to the local road network that they cause congestion.

Development Requirement 6(b) – Electric and low emission vehicles

Proposals should make provision for electric and low emission vehicles through infrastructure provision and support in Travel Plans.

Development Principle 6 (c) – Proposed highways infrastructure - Strategic link road and proposed highway realignments

PPS Reference – Paragraph ET 11.3

The PPS states at the above reference that “where an eco-town is close to an existing higher order settlement, planning applications should also demonstrate options for ensuring that key connections around the eco-town do not become congested as a result of the development.”

Howes Lane/Lords Lane

- 4.91 Howes Lane is characterised by dense planting, fencing and rear elevations. This results in limited opportunities to link with the eco-town site with the exception of a single greenway.
- 4.92 Lords Lane presents a more positive aspect to the proposed development in terms of the orientation of new development (housing facing outwards towards the road from Bure Park). The Bure Stream and local nature reserve forms an important green link into the town from the site.

REQUIREMENT - Bucknell Road realignment

- 4.93 The masterplanning of the site provides an opportunity to improve Bucknell Road and address issues of road safety and local access to Bucknell village. The road currently has the character of a rural lane with tall hedges on either side and vehicles travelling fast (the national speed limit is 60 mph).
- 4.94 Changes to the character and function of Bucknell Road are also required to allow connectivity between the proposed uses in the southern part of the masterplan areas. It will also have the benefit of discouraging through traffic from using the Bucknell Road to gain access to the M40 at Junction 10 and access other roads north of Bicester. It aims to discourage vehicular movement (“rat-running”) through the villages.
- 4.95 Bucknell Road should provide a strong connection through the site and not be a barrier to movement. The existing highway arrangements along the Bucknell Road should be improved to allow a rapid bus-only link direct into the eco town site via Bucknell Road with associated walking and cycling infrastructure along it.

REQUIREMENT - Howes Lane realignment

- 4.96 The requirement to upgrade the existing Howes Lane and Lords Lane corridor has long been a priority scheme in the local authorities’ infrastructure delivery plans and programmes. It includes a scheme to

improve the Bucknell Road Howes Lane and Lords Lane junction. Similarly the crossing of the railway line was seen as a potential constraint in masterplanning the site; particularly its impact on connectivity between the land uses on either side of the railway embankment.

- 4.97 A number of options have been considered for the strategic road network in this area and are set out in the various planning documents and evidence in the form of transport studies/modelling to support the CLP.
- 4.98 The proposals for improvement of Howes Lane should integrate the existing and new development. To provide this, the existing road is moved further from the existing properties to a new alignment. Development should provide an appropriate interface with Howes Lane by sensitively responding to the scale, massing and height of existing development.

IMPLEMENTATION - Bucknell Road

- 4.99 To reduce the attractiveness of the existing Bucknell Road route for through traffic, other road users, including vehicular traffic travelling along Bucknell Road to and from the town centre, will be diverted to along the route of the existing Lords Lane. The proposed realigned route will enter the masterplan site approximately 100 metres east of the existing Lords Farm. It will then cross the extended boulevard.
- 4.100 Access to Bucknell from the south and town centre will use the primary street through the northern part of the site before rejoining Bucknell Road on its current alignment. Bucknell Road will be truncated from the north just before crossing the stream continuing as a walking and cycle route towards the southern boundary of the site and the Bucknell Road beyond to the town centre.
- 4.101 The spatial framework plan shows a downgraded and diverted Bucknell Road providing a sustainable transport route through the masterplan area and into town.

IMPLEMENTATION - Howes Lane

- 4.102 The Draft masterplan and spatial framework plan shows the A4095 diverted through the site to provide a strategic route for the town and create an urban boulevard for the new development. This road will have the character of a bustling street and be a place of pedestrian activity and the focal point the new community. The speed of vehicles will be reduced to allow movement between the existing and new development. The creation of tree lined boulevard will be an attractive feature of the development.
- 4.103 The Howes Lane/ Bucknell Road/ Lords Lane junction arrangement will be replaced by an underpass under the railway line to ease the movement of traffic along the east-west route. Commercial uses will be concentrated in this area providing activity as the main street through the development. The Boulevard will be the primary access into the development connecting the initial phases of housing, community facilities and business park. The carriageway width should be restricted to ensure it does not present a barrier to crossing and movement. The character of the Boulevard should be developed further based on the character areas set out in this document.
- 4.104 The proposed strategic link will be designed as a tree lined street or boulevard. It provides the opportunity to enter the site by a series of “gateways” providing a sense of arrival into the eco-town development at the edges of the masterplan boundary.

- 4.105 This area should accommodate not only the highway but also trees, green space, segregated footways and cycleways with building fronting the new road. It should result in a vibrant area at all times of day for the community as well as people passing through.
- 4.106 The secondary school could provide activity and a focal point for the development in the southern area of the site. It could be flanked by mixed uses development comprising commercial uses, residential and new green infrastructure.
- 4.107 Vehicles should move through this area along the attractive street, perhaps stopping to use the local facilities or to allow school children or shoppers to cross. Crossing points should allow permeability for pedestrians and cyclists to conveniently access facilities on and off site.
- 4.108 The vision is to maintain the strategic route to accommodate the predicted volumes of traffic while providing an environment that is safe and attractive to pedestrians, cyclists and any person that is using the services and facilities proposed.
- 4.109 The new route will be a highly accessible street in the new development with excellent links to the rest of the development and town. It will provide commercial opportunities, creating a viable and sustainable mix of uses serving local needs. In this location, and along the public transport corridors, higher density development will be encouraged.

Development Requirements 6(c) – Proposed highways infrastructure - Strategic link road and proposed highway realignments

- Highway requirements should not lead to a route which will in itself form a new barrier - albeit relocated within the site boundaries.
- Good permeability, frontage and crossing points combined by a reduced speed limit should deliver the vision for an urban boulevard.
- In terms of the design of this new section of road, the local highway authority recognises the continued strategic importance, nature and level and types of traffic carried on a daily basis by Howes Lane as part of the Bicester perimeter road network. OCC has provided an indicative Howes Lane carriageway dimension requirement of 7.3 metres. It has also indicated a requirement for off road footways and cycleways, verges (with trees) and two swales and a speed limit of 30 mph.
- Joint cycleway/footways should be at least four metres wide and segregated routes to provide attractive routes for pedestrian and cyclists.
- Applicants will need to work with OCC and CDC to find an acceptable design solution appropriate to the uses along the route. The existing Howes Lane will be the subject of a Stopping Up Order to allow potential alternative uses ranging from open space to foot/cycle ways.

Development Principle 6(d) – Public transport

REQUIREMENT

- 4.110 The vision is to create a rapid and regular bus service from the site to key destinations in and around the town in order to be attractive to residents. The public transport service needs to be fast reliable, affordable and direct.

4.111 The Draft masterplan proposes a bus network through the site designed to transport passengers directly and efficiently to their destination and give the bus priority over other road vehicles. Bucknell Road is the preferred route for a bus link to the town centre and this will require some infrastructure to support the increased use by buses from the NW Bicester site. The bus route will use the primary street network for the most part.

IMPLEMENTATION

4.112 The Draft masterplan includes three bus-only links (central, western and eastern). The delivery of bus-only links requires further investigation, for example, from the Bucknell Road to the north side of the development and from the new link to the west side of the development needs further consideration to ensure it can be delivered to achieve the goal of providing an efficient bus service.

4.113 NW Bicester should be an exemplar in the design and operation of its transport systems. The challenge this presents is significant and means that “business as usual” is not an option. Street and place design should give pedestrians and cyclists priority with limited and managed car access.

4.114 An indicative bus route has been submitted with the Draft masterplan. It includes bus only routes and bus priority measures. The final public transport solution must be attractive to all future residents and provide a viable and efficient alternative to car travel.

Development Requirement 6(d) – Public transport

The location of the internal bus stops should be within 400 metres (walking distance) of homes and located in the site’s local centres where possible. Bus stops should be designed to provide Real Time Information infrastructure, shelters and cycle parking.

Development Principle 7 - Healthy lifestyles

ET12.1 states “The built and natural environments are an important component in improving the health and well-being of people. Well designed development and good urban planning can also contribute to promoting healthier and more active living and reduce health inequalities. Development proposals should be designed and planned to support healthy and sustainable environments and enable residents to make healthy choices easily.”

CLP Policy BSC 8 – Securing Health and Well Being

CLP Policy Bicester1 – Key site specific design and place shaping principles

REQUIREMENT

4.115 Development proposals should focus on social factors such as benefits of personal health and well-being as part of environmental and economic sustainability. Healthy lifestyles are a key component of the development principles and proposals will need to address this issue Often these factors are interwoven.

4.116 For example, sustainable transport options such as cycling and walking reduce environmental impact but also bring benefits for personal health and well-being; walkable communities encourage social connection; car clubs are a new service industry that create sustainable jobs and reduce transport impacts.

4.117 It is vital that the eco-towns work well as places. This means in social and economic terms as well as environmental. Healthy lifestyles are a key component of the development principles and proposals will need to address

- 4.118 Healthy lifestyles will also have the benefit of reducing demand on local health facilities and increased economic productivity with less absence from work due to health issues. Locally grown food can reduce carbon emissions from transport and storage and involves some physical activity in its production.
- 4.119 Residents should be encouraged and supported in growing their own fruit and vegetables and the green spaces used to provide sources of food including fruit trees. Replacing car journeys with walking and cycling trips can have many benefits in terms of health from reducing air pollution, encouraging exercise through active travel and increased interaction with friends and neighbours.
- 4.120 Allotments and play areas have similar functions for health and community cohesion. Some further benefits of healthy lifestyles are set out below:
- Exercise – just 30 minutes of gardening can burn around 150 calories
 - Home grown produce – If managed properly an allotment can produce enough food to supplement a family's weekly shop, with fresh fruit and vegetables over the year. This could be quite a substantial cost saving
 - Healthy lifestyles – spending as little as 15 minutes a day in the summer sunshine can build up vitamin D levels – this can help the body ward off some illnesses and raise serotonin levels, making plot holders happier and healthier
 - Reducing Obesity levels – reducing cholesterol – through healthier foods, cooking workshops, eating together and discussing food choices
 - Reducing stress levels
 - Access to fresh air
 - Mental illness – promoting interaction with the environment helps to build confidence and skill levels. The integration of allotments with communities means they have a great potential for occupational therapy and as mechanisms of social inclusion
 - Spending time with like-minded people – allotments are places to socialise and for the camaraderie.
 - Allotments are now used by people of all ages, genders and ethnic backgrounds – this aids community cohesion and helps to limit isolation.
 - Allotments are seen as an opportunity to learn from experienced gardeners as well as share knowledge with newcomers.
 - Allotments can be seen as a social leveller – individuals are valued independently of their social – economic status – it is valued upon gardening skills and knowledge
 - Being a plot holder provides a sense of being part of a community
 - The National Allotment Society provides further information on allotments (<http://www.nsalg.org.uk/allotment-info/benefits-of-allotment-gardening/>)

IMPLEMENTATION

- 4.121 The masterplanning of the site and in particular design of the neighbourhoods will be key to the delivery of the healthy lifestyles principle

Development Requirements 7 - Healthy lifestyles

The health and well-being benefits from the development principles set out in this SPD should be considered in the masterplanning and design of proposals.

Proposals should provide facilities which contribute to the well-being, enjoyment and health of people.

Planning applications should set out how the design of development will deliver healthy neighbourhoods and promote healthy lifestyles through active travel (walking and cycling) and sustainability.

The green spaces within the development should also provide the opportunity for healthy lifestyles including attractive areas for sport and recreation as well as local food production.

Development Principle 8 - Local services

Relevant eco-towns standard ET13 Planning applications should include a good level of provision of services within the NW Bicester eco-town site that is proportionate to the size of the development. This should include leisure, health and social care, education, retail, arts and culture

CLP Policy Bicester 1

Infrastructure Needs Education – Sufficient secondary, primary and nursery school provision on site to meet projected needs. It is expected that four 2 Forms of Entry primary schools and one secondary school will be required. There should be a maximum walking distance of 800 metres from homes to the nearest primary school.

Health – to provide for a 7 GP surgeries to the south of the site and a dental surgery.

Community facilities – to include facilities for leisure, health, social care, education, retail, arts, culture, library services, indoor and outdoor sport, play and voluntary services. The local centre hubs shall provide for a mix of uses that will include retail, employment, community and residential provision. Education, health care, community and indoor sports facilities will be encouraged to locate in local centres and opportunities for co location will be welcomed. Provision will be proportionate to the size of the community they serve. Each neighbourhood of approximately 1000 houses to include provision for community meeting space suitable for a range of community activities including provision for older people and young people. A site of 0.5 ha for a place of worship to be reserved for future use.

REQUIREMENT

4.122

They are important in providing attractive places where people will want to meet and spend time providing a destination for local residents to visit with a strong community focus. Small scale retail serving the daily needs of local residents will be supported as part of the mix use local centres which should also include employment opportunities and commercial use of first floors.

IMPLEMENTATION

4.123 Local centres are proposed as part of the mixed use development including small retail units, offices, community facilities including a nursery, primary school, and public house. The energy centres and other infrastructure and facilities on the site will generate and support jobs within the site. It is important employment areas are easily accessible and well connected to other uses. The location of complementary uses such as cafes, bars and hotels should be convenient to employment facilities on the site to create a vibrant local economy as set out in the economic strategies.

4.124 The success of the commercial uses will be influenced by the mix of uses and quality of the built and natural environment in the masterplan and spatial framework plan. By locating commercial uses in close proximity to community and educational facilities it is envisaged the masterplan will promote viability and support local services. Community facilities and social infrastructure including schools will

be provided in locations accessible to the new communities and sports and recreational facilities located in close proximity.

- 4.125 The distribution of community halls will be spread across the site and perform a different function to help build the new community. Schools shall provide high quality educational facilities with a strong community and sustainability emphasis to embrace the whole community, with facilities for the benefit of whole community. It is important that the mix of uses does not undermine the role of the town centre.

Development Requirements 8 - Local services

The Council will seek to ensure facilities are provided to meet the needs of local residents. Planning applications should include a good level of provision of services within the NW Bicester eco-town site that is proportionate to the size of the development. This should include leisure, health and social care, education, retail, arts and culture while recognising that the existing town centre will continue to perform an important role as the service centre for the town and surrounding area including major large scale retail and community services such as the new library.

Local services should be located in accessible locations within walking distances (defined in this SPD) to homes and employment.

Following on from the “walkable neighbourhoods” principle the schools should be easily accessible on foot and other non-car sustainable modes. They should be set in an attractive landscape and where parents need to access the school by car should be carefully considered in order to avoid congestion and conflict with pedestrians and cyclists.

To encourage sustainable travel initiatives, schools should be accessible from at least two sides of the site see “typical example” from the educational requirement document. The local education authority’s preference is for three vehicular entrances located strategically around the perimeter. Noise generation around schools should be minimal. School dropping off/picking up points should be agreed with OCC and CDC. Oxfordshire County Council’s detailed design principles for primary and secondary school sites are contained in Appendix XX.

Development Principle 9 - Green infrastructure and landscape

Relevant PPS eco-towns standards ET 14 and ET15

CLP Policy Bicester 1

Burial Ground – to provide a site of a minimum of 4 ha for a burial ground which does not pose risks to water quality (this may contribute to the Green Infrastructure requirements) Green infrastructure – 40% of the total gross site area will comprise green space of which at least half will be publicly accessible and consist of a network of well managed, high quality green/open spaces which links to the open countryside. This should include sports pitches, parks and recreation areas, play spaces, allotments, the required burial ground (possibly a woodland cemetery) and SUDS. Planning applications shall include a range of types of green infrastructure including green space and meet the requirements of Policy BSC11.

REQUIREMENT

- 4.126 Green space and green infrastructure will be a distinguishing feature of the site making it an attractive place to live. It provides the landscape setting to the development and a range of opportunities for formal sports, play and informal recreation and the creation of a distinctive development. The eco-town presents an opportunity to create a distinctive and imaginative landscape and green infrastructure

(SUDS, pedestrian routes, recreation space, habitat and bio fuel) focussed around existing watercourses and the stream corridors. These features are important and will influence the design of the development.

- 4.127 Proposals at NW Bicester should create new urban places connected by green space and green corridors utilising the existing landscape framework. A network of interconnected green cycle and walking routes should be created with a combination of direct links between green areas and key destinations allowing residents and local people to explore the wider landscape. The design and layout should provide short direct sustainable connections to the town centre, countryside and key destinations. The proposed developments should support cultural activity through the provision of high quality public open space.
- 4.128 The impact of development on the site should be minimised to avoid disturbance of existing natural features such as trees and hedges and retaining the links to the landscape and countryside beyond the masterplanning boundaries. Planting of trees should be used to reinforce existing trees and hedges and integrate development with the landscape. The interface with Bignell Park for example needs to be handled with sensitivity as does the relationship to the settlements of Bucknell and Caversfield including important views of buildings such as St Lawrence's church in Caversfield. The setting of listed buildings within the site should be considered carefully when preparing planning applications. Landscape proposals including open spaces should be used to retain the setting of listed buildings on the site.
- 4.129 Open space should be fronted to secure attractiveness. Green infrastructure should enhance and complement the structure of the urban form and the hierarchy between the two elements needs to be understood in order to understand how these areas might be developed in subsequent applications.

IMPLEMENTATION

- 4.130 The majority of green space in the Draft Masterplan is focussed on natural corridors and integrated with the existing hedgerows. The green space to the south of the railway line provides general amenity, sports and a nature reserve. To the north of the railway line the green space provides general amenity, a country park, water treatment facility, burial ground and community farm.
- 4.131 Other areas of green space provide the landscape framework for the master plan and opportunities to deliver green infrastructure. The Draft masterplan proposes a green infrastructure framework retaining existing landscape features such as trees, hedgerows and woodland.
- 4.132 The space should be multi-functional, for example, accessible for play and recreation, walking or cycling safely, and support wildlife, urban cooling and flood management. Particular attention should be given to land to allow the production of food from community, allotment and/or commercial gardens. Proposed landscape schemes and Green Infrastructure design should be used to provide external cooling and reduce heat islands.
- 4.133 The bridleway leading from the eastern end of Howes Lane past Aldershot Farm is an important link between the town and countryside and is identified as a green corridor in the masterplanning. (see appendix I)

Development requirements 9 - Green infrastructure and landscape

Planning applications should demonstrate a range of types of green space, for example wetland areas and public space.

Development must meet the requirements of BSCII.

Green spaces should be multi-functional, for example accessible for play and recreation, local food production (important due to the high carbon footprint of food), walking or cycling safely and support wildlife, urban cooling and flood management, providing the policy principle is not compromised.

The expectation is for frontages to be designed onto the green spaces with design consideration towards natural surveillance and ensuring landscaping schemes are not compromised. The existing Howes Lane has the potential to be integrated into the green infrastructure and landscape setting of the masterplan.

All planning applications should demonstrate the provision of forty per cent green space and a range of types of green space. Particular attention should be given to land to allow the production of food from community, allotment and/or commercial gardens.

Proposed landscape schemes and Green Infrastructure design should be used to provide external cooling and reduce heat islands.

Green roofs should be used to assist with neighbourhood cooling but will not be included in the requirement for 40% green space.

Development should have a clear system of safe, accessible and attractive open and green spaces that respond to and enhance natural features across the site, and integrate with the existing settlement.

Play areas should be located where they are accessible to children and overlooked.

There should be areas where biodiversity is the principal outcome, such as the nature reserve, parts of the country park, and wildlife corridors and buffers. In addition, opportunities to maximise biodiversity in other green spaces should be taken.

All development should be consistent with the Green Infrastructure and Landscape Strategy May 2014.

Fig. 14 North West Bicester Spatial Framework: Landscape

Development Principle 9 (a) –Tree planting

To reflect the Biodiversity Strategy, native trees and shrubs should be planted on the site particularly within woodland, the country park, the nature reserve, and ecological buffers and corridors but also as a proportion of other plantings

REQUIREMENT

- 4.131 Sufficient space should be allocated for tree planting in the planning applications to integrate with the streetscene and adjacent street furniture/ highways infrastructure/ buildings. Emphasis should be placed upon the planting of larger tree species (oak, plane, lime, hornbeam etc.) within the streetscene to ensure greater benefits are returned to the environment and community. Quote: *"Big trees provide big benefits, small trees provide small benefits"*

IMPLEMENTATION

- 4.132 Good communications and better understanding of all above/below ground requirements within the street scene at the earliest stage by the design team should ensure the appropriate integration of all street scene features including trees, SUD's, swales, rainwater harvesting, service routes (above & below) and CCTV.
- 4.133 Ensuring planting is in the correct locations and allow for the integration of the trees into a water sensitive urban design avoids conflicts with adjacent features and services as the trees mature. It also allows for the trees to function efficiently and to their maximum capability within the street scene whilst contributing to installed environmental, ecological and engineered features.

Development Requirements 9 (a) - Tree planting

Planning applications should allocate appropriate space for the root and crown development of trees.

Where planning applications include proposals for tree planting in or adjacent to hard surface areas the provision of engineered planting pits should be installed with either structured cells, raft system or structured soil. Engineered planting pits in hard surface areas are to be integrated within rainwater harvesting systems in order to assist with stormwater management, reduce maintenance costs and improve water efficiency.

Tree pits must be of the size and specification to support and allow for the individual tree to reach and maintain its mature, natural form and characteristics without the associated and predictable conflicts with urban features and residents.

The design and installation of all hard surface tree pits should be in accordance with BS8545:2014 'Trees from nursery to independence in the Landscape', 'Trees in Hard Landscapes - A guide for Delivery' - Tree Design & Action Group.

Planting pits within hard surface areas must be fit for purpose and capable of providing an aerated, uncompacted medium capable of containing an appropriate volume of soil which can support the tree through maturity. The planting pits must have appropriate engineering solutions installed to ensure that the maturing roots do not present any foreseeable level of risk to property and adjacent hard surfaces. Each hard-surface planting pit specification to be designed to suit the individual tree and its situation.

Tree planting should be considered in masterplanning the site with discussions with the relevant officers from the earliest stage in the design phase.

To improve the integration and practical installation of trees within hard surface areas, developers should adopt a standard practice whereby all engineering drawings include and identify the location and dimensions of all planting pits within the street scene.

Development Principle 9 (b) – Development edges

REQUIREMENT

- 4.134 Development edges made up of soft landscape proposals and sensitively designed built form have the potential to conserve and enhance the current setting of historic features. Development edges should respond well to the existing tree and woodland cover. Development should be accommodated without resulting in disruption to the local landscape pattern.

IMPLEMENTATION

4.135 The strong landscape structure and general sense of enclosure across the landscape are such that with careful consideration for retention and enhancement of local features they could provide the framework for green infrastructure.

Development Requirements 9 (b) – Development edges

Development on the edge of the site is likely to be more informal and rural in character and this will be reflected in the nature of the green spaces to be provided whereas the formal open space and sports pitches will have a different character. The western edge should be defined by woodland areas and support the existing landscape character of the area.

Development Principle 9 (c) – Hedgerows and Stream corridors

REQUIREMENT

- 4.136 Retaining and reinforcing the existing hedgerows, trees and woodland on the site is a key development principle. The field boundaries and hedgerows divide the site into parcels. The hedges are to be largely retained in the masterplan proposals and provide both a constraint and opportunity for development proposals. They are an important feature in the local landscape and form the basis of the site's green infrastructure.
- 4.137 The alignment of some hedgerows also provides linkages / connections within the site and between the existing town and surrounding countryside for people and wildlife. A block of broadleaved semi-natural woodland west of Home Farm will be retained within a buffer zone of semi-natural habitat linked to the green space along the water courses. Key strategic hedges are identified on the spatial planning framework.
- 4.138 The Bure and its tributaries are important local watercourses. The stream corridors and field boundaries provide further structure and detail to the masterplan having multi-functional roles in the provision of green space, habitat, biodiversity gain, sustainable drainage, recreation and health, movement and access. They are intrinsic to the site as a whole.

In order to strengthen and enhance the value of the landscape, natural buffer zones will be created. (see Appendix I) Within these buffers a network of paths and cycleways will provide links between the various areas of the site providing safe and attractive routes to schools, shops and places of work as well as a link to the town and country beyond the natural site boundaries.

IMPLEMENTATION

- 4.139 The Draft Masterplan and Spatial Framework use the existing field boundaries and hedgerows to give the masterplan structure. Hedgerows define the site layout recognising their landscape importance and contribution to biodiversity and habitat. They provide natural corridors throughout the site for wildlife but also for residents as part of the comprehensive cycling and walking network. The landscape strategy that supports the Draft Masterplan includes the following key landscape elements:
- Green loops as part of a linear park
 - Retained and reinforced hedgerows with a 20 metre buffer
 - Riparian zones along the stream corridors
 - Woodland copses

- Green “fingers” integrating green infrastructure into the development

The hedgerows would be managed in accordance with a LMHP to ensure that they provide habitat suitable for the fauna that were recorded on the site prior to development, in particular, nesting birds (non-farmland specialists), mammals and invertebrates, including the hair streak butterfly and other notable invertebrates. They would also provide wildlife corridors.

Development Requirement 9 (C) – Hedgerows and Stream corridors

Planning applications need to explain green infrastructure in relation to the way that it fits with the housing and commercial developments as these are critical to the success of the scheme. For instance, simple considerations such as whether development fronts onto landscape will make a huge difference in the way the area is perceived and functions.

Hedgerow loss should be minimised and mitigated for and existing hedges retained as part of the landscape framework and breaches of the hedges minimised in designing the layout of development- Retained hedgerows identified on the Draft masterplan and spatial framework will be enriched by semi-natural vegetation in buffer zones, a minimum of 10 metres either side of the hedgerow in accordance with the Green Infrastructure and Landscape Strategy.

The establishment of a minimum 60 metre corridor to the watercourses (30 metres each side of the centre line) shall be provided to create a strong landscape feature in the scheme and secure the opportunity for biodiversity gain from the development. The corridors will also have other purposes and capacity for other functions. For example, they will provide the interface with development and may, recreational routes and play and as such long term management proposals will be required as part of any planning application.

Dark Buffers

Connectivity between habitats and ecosystems must be planned and protected. The resilience of the ecosystems in and around NW Bicester depends on maintaining connectivity for the full range of wildlife and plants. All planning applications should provide plans showing how wildlife corridors of all sorts will be maintained within the site and also connect with neighbouring sites in accordance with the NW Bicester masterplan and biodiversity strategy. A plan showing protected dark corridors across the site must be included.

A 20 metre buffer along either side of designated hedgerows recognised for their ecological value will be provided to create a “dark corridor” for nocturnal species such as bats. The hedgerow buffers should be provided in accordance with the Green Infrastructure and Landscape Strategy. The lighting scheme for the development will avoid disturbance to these dark areas.

Development Principle 9 (d) - Sports pitches

PPS ET14

CLP Policy Bicester 1

Infrastructure needs

GI- 40% of the total gross site area will comprise green space. This should include sports pitches.

BSC10 Open Space, Outdoor Sport and Recreation Provision

REQUIREMENT

- 4.140 The Council will encourage partnership working to ensure that sufficient quantity and quality of, and convenient access to open space, sport and recreation provision is secured through ensuring that proposals for new development contribute to open space, outdoor sport and recreation provision commensurate to the need generated by the proposals.

IMPLEMENTATION

4.141 The Spatial Framework includes sports pitches and secondary school playing fields in a central position on the land to the south of the railway, and in proximity of each other where it may be possible to create a sports hub. Also a site for outdoor sport has been identified in a central position on the land to the north of the railway annotated on the Draft Masterplan as a “Sports Pitch”.

Development Requirements 9(d) - Sports pitches

The layout, design and type of provision requires further consideration to ensure that it provides a sustainable solution in the longer term. The suitable phasing of sports pitches will be secured through Section 106 Agreements and/or conditions as appropriate.

Any new facilities should be built in accordance with Sport England’s design guidance notes, copies of which can be found at: <http://www.sportengland.org/facilities-planning/tools-guidance/design-and-cost-guidance/>

Development Principle 9 (e) – Biodiversity

Relevant PPS eco-towns standard ET16

Relevant Cherwell Local Plan Policies:

Bicester 1 - Key site specific design and place making principles

Preservation and enhancement of habitats and species on site, particularly protected species and habitats and creation and management of new habitats to achieve an overall net gain in biodiversity including the creation of a local nature reserve and linkages with existing BAP habitats.

Sensitive management of open space provision to secure recreation and health benefits alongside biodiversity gains

A landscape and Habitats Management Plan to be provided to manage habitats on site and to ensure this is integral to wider landscape management.

ESD10 - Protection and enhancement of biodiversity and the natural environment.

REQUIREMENT

4.142 The PPS requires eco-towns to demonstrate a net gain in local biodiversity and a strategy for conserving and enhancing local biodiversity for planning applications.

4.143 The CLP Policy ESD10 requires preservation and enhancement of habitats and species on site.

4.144 Green space is critical to ensuring a net gain in biodiversity. The aim is to ensure greater Biodiversity across the site once the development is complete. Bat activity and badger corridors have also been incorporated into the masterplan landscape framework.

IMPLEMENTATION

4.145 The Draft Masterplan proposals shall retain the most valuable habitats and ecological features on the site including protecting the majority of hedgerows and watercourses.

Development Requirement 9 (e) – Biodiversity

Biodiversity mitigation and enhancement shall be incorporated into development proposals to provide a net biodiversity gain. As such it is not possible to mitigate for the Impact of farmland birds on the site, off site

mitigation measures should be provided and all applications within the masterplan area should contribute to the provision of off site mitigation.

Proposals must demonstrate inclusion of biodiversity gains within the built environment for example through planting, bird, bat and insect boxes and the inclusion of green roofs

A biodiversity strategy which is part of an approved biodiversity strategy for the whole masterplan area, shall accompany all planning applications. It should include an accepted numerical metric to show that a net gain in biodiversity will be achieved.

All new development within the North West Bicester site must be in line with the North West Bicester masterplan green infrastructure and landscape strategy, May 2014 which forms part of the masterplan SPD.

A Biodiversity Strategy which builds on a biodiversity strategy for the masterplan shall accompany all planning applications.

A detailed Landscape and Habitats Management Plan including a comprehensive ecological monitoring programme will be required for all reserved matters and full planning applications.

Development Principle 10 - Water

Relevant Eco-town standard ET17

Paragraphs ET17.1 to ET 17.5 set out the standards for water in the PPS. Annex B of the PSS also refers to Water neutrality as set out below:

“Water neutrality is the concept where the total water used after a new development is no more than the total water used before the new development.

This requires meeting the new demand through improving the efficiency of uses of the existing water resources.

Water neutrality needs to be assessed within a defined area, normally the water company’s water resource zone.

Water neutrality is a demanding level of ambition which is only likely to be achieved through a combination of measures.

A key component is to make the new development water efficient, through using the most efficient water products and where appropriate looking at water use options. Relevant Local Plan Policy Bicester 1

Utilities – Utilities and infrastructure which allow for water neutrality on the site. The approach shall be set out in a Water Cycle Study. The Water Cycle Study shall cover water efficiency and demand management, water quality and how it will be protected and improved, WFD compliance, surface water management to avoid increasing flood risk and water services infrastructure improvement requirements and their delivery, having regard to the Environment Agency’s guidance on Water Cycle Studies. Zero Carbon (see PPS definition) water neutral development is sought. Development proposals will demonstrate how these requirements will be met. Off site improvements to the utilities may be required.

REQUIREMENT

4.146 The PPS requires development proposals to be ambitious in terms of water efficiency across the whole development and demonstrate efficient use and recycling of water to minimise additional water demand from new housing and new non-domestic buildings. In order to meet zero carbon targets for the development (equating to Level 6 of the CSH) proposals will be required to meet a water efficiency target of 80 litres per person per day. The Water Cycle Strategy (WCS) sets out details of how this may be achieved as the design standard for all new development. The development should not make it more difficult for the water company to achieve its demand management strategy and ensure a supply demand surplus is maintained.

4.147 As Bicester is in an area of serious water stress, with Thames Water (the statutory water undertaker for the area) predicting supply demand deficits, proposals should aspire to water neutrality as achieving development without increasing overall water use across a wider area. Policy Bicester 1 sets out the infrastructure needs for North West Bicester and requires utilities and infrastructure which allow for zero carbon (see Development Principle 2) and water neutrality on the site.

IMPLEMENTATION

4.148 The Draft Masterplan is supported by a WCS confirming the proposed development shall incorporate a water efficiency design standard to limit average per capita consumption (PCC) to 105 litres per person per day (l/p/d) in all new homes. For residential properties, at least 25 l/p/d of potable water demand must be replaced with non-potable water to allow the target of 80 l/p/d to be achieved. Options for providing a non-potable supply to the dwellings on the NW Bicester development include:

- Rainwater harvesting (RWH) at a property level
- RWH at a wider neighbourhood level
- Greywater recycling (GWR) at a property/neighbourhood level and
- Local reclamation of treated wastewater.

4.149 In terms of on-site sewerage network capacity it is suggested in the WCS that gravity sewers are employed to collect the majority of the waste water to avoid the need for a multitude of on-site sewage pumping stations. The design standard shall also require that water recycling technologies are used locally to supplement domestic supplies. It sets out options for the proposed development. It explores the proposed new potable demand from the development and the alternative methods to reduce the demand on the existing Thames Water Utilities network. In this way it seeks to move the development towards water neutrality to avoid the above mentioned supply demand deficits.

4.150 Reducing potable water demand also allows more water to be retained in the environment, which can have benefits for biodiversity, amenity and both the flow (additional dilution) and physiochemical elements of the Water Framework Directive (WFD). Water efficiency measures in residential and non-residential buildings are explored in the WCS and will need to be developed further in the implementation of the masterplan. They include variable flush toilet devices, reduced flow showers and taps and metering retrofits. Local reclamation of surface water will be required to increase water neutrality further. It is unlikely that local groundwater or surface water abstractions would be suitable substitutes to the utility company network.

Development Requirement 10 - Water

Planning applications should be accompanied by a water cycle strategy (WCS) that provides a plan for the necessary water services infrastructure improvements. The WCS should be prepared and developed in partnership with interested parties, including the local planning authority, the Environmental Agency (EA) and the relevant water and sewerage companies through a water cycle study. The strategy should:

- (a) assess the impact the proposed development will have on the water demand within the framework of the water company's water resource management plans and set out the proposed measures which will limit additional water demand from both new housing and new non-domestic buildings and show how the scheme can address the aim of water neutrality
- (b) demonstrate that the development will not result in any deterioration in the status of any surface waters or ground-waters affected by it
- (c) set out proposed measures for improving water quality and avoiding surface water flooding from surface water, groundwater or local water courses.

(d) demonstrate that adequate sewerage Infrastructure capacity exists on and/or off the site to serve the development that would not lead to problems for existing users

Development proposals shall:

- Incorporate measures in the water cycle strategy for improving water quality and managing surface water, ground water and local watercourses to prevent surface water flooding from those sources and
- Incorporate SUDS designed to maximise the opportunities for biodiversity..

Development Principle 11 - Flood risk management

Relevant eco-towns standard ET18

The location, layout and construction of eco-towns should reduce and avoid flood risk wherever practicable. Eco-towns should not increase the risk of flooding elsewhere and should use opportunities to address and reduce existing flooding problems.

REQUIREMENT

4.151 To minimise the impact of new development on flood risk the NPPF requires that the surface water drainage arrangements for any development site are such that volumes and peak flow rates leaving the site post-development are no greater than those under existing conditions. As the NW Bicester site is predominantly greenfield in its predevelopment state, the drainage strategy should be based on the principle of attenuating any additional post development runoff to equivalent greenfield rates.

IMPLEMENTATION

4.152 The aim is to provide a site-wide sustainable urban drainage system (SUDS) as part of the approach to flood risk management and climate change adaptation. In terms of design, the SUDS should not be treated simply as a drainage feature, but integrated into the wider landscape and ecology strategy. SUDS are a fundamental component of the proposed green infrastructure.

4.153 Development proposals should demonstrate how sustainable urban drainage systems (SUDs) and other appropriate measures will be used to manage surface water, groundwater and local watercourses to prevent surface water flooding.

4.154 Natural drainage systems and runoff rates no higher than greenfield rates will be required to reduce the risk of flooding and maintain groundwater levels.

4.155 Maintenance of the surface water features on the site is critically important to maintain their long term functionality. Without maintenance in perpetuity, drainage features will not be able to provide the required surface water attenuation and restrict surface water runoff to the Greenfield runoff rate. This will increase the risk of flooding on and offsite.

Development Requirement 11 - Flood risk management

Planning applications should demonstrate that the proposed development will not increase flood risk on and off the site.

They should demonstrate that the peak discharge rate for all events up to and including the 1 in 100 chance in any year critical storm event, including an appropriate allowance for climate change will not exceed

that of existing site.

As the development includes proposed residential development with an assumed lifetime of 100 years, the surface water drainage strategy should include a 30 per cent allowance for climate change in accordance with guidance in the NPPF.

Planning applications must demonstrate in a surface water drainage strategy that the proposed development will not increase the risk of flooding from surface water on or off site

In preparing planning applications, the following guidance should be referred to:

“Preliminary rainfall runoff management for developments”, DEFRA, Environment Agency providing guidance on the preparation of surface water strategies;

NPPF National Planning Guidance on Climate Change allowances

“C635 Designing for exceedance in urban drainage – Good Practice”, CIRIA”

“Sustainable Drainage Systems – design manual for England and Wales CIRIA C522

SUDS manual, CIRIA C697

Development Principle¹² – Waste

Relevant PPS eco-towns standard ET19

ET19 states:

Planning applications should include a sustainable waste and resources plan covering both domestic and non-domestic waste which:

- (a) sets targets for residual waste levels and landfill diversion
- (b) Establishes how all development will be designed so as to facilitate the achievement of the targets
- (c) Provides evidence that consideration has been given to the use of locally generated waste as a fuel source for CHP generation and
- (d) Sets out how developers will ensure that no construction, demolition and excavation waste will be sent to landfill.

CLP Policy Bicester 1

Waste Infrastructure – The provision of facilities to reduce waste to include at least 1 bring site per 1000 population positioned in accessible locations. Provision for sustainable management of waste both during construction and in occupation shall be provided. A waste strategy with targets above national standards and which facilitates waste reduction shall accompany planning applications.

REQUIREMENT

4.156 Waste can cause harm to the environment through its treatment and disposal. The Waste Management Plan for England was published by the Department for Environment, Fisheries and Rural Affairs (DEFRA) in 2013 and sets out the Government’s waste policies. The Government’s aim is to reduce the amount of waste produced across the economy whilst promoting economic growth and prosperity.

4.157 In terms of recycling, the EU target is for 50% of waste to be recycled by 2020. Landfill or incineration without energy recovery should be the last resort. In 2012/13 22.6 million tonnes of household waste was generated in England but has been falling on average by 2% per year since 2007. More recently there has been a growth in waste in Oxfordshire which could be up to 2% in 2015.

- 4.158 Under ET19.1 of the PPS, planning applications should include a sustainable waste and resources plan (SWRP) covering domestic and commercial waste and setting targets for residual waste, recycling and landfill diversion. A site waste management plan (SWMP) for NW Bicester supports the masterplanning of the site. The implementation of such plans remains best practice despite the Site Waste Management Plans Regulations 2008 being repealed in December 2013.
- 4.159 Between 2007 and 2014 the Oxfordshire Waste Partnership's (OWP) increased recycling and composting rates from 33% to 60% in Oxfordshire. In April 2014 OWP was replaced by an informal partnership, "Recycle for Oxfordshire" working to continuously improve waste management services for residents.
- 4.160 OWP agreed the Oxfordshire Joint Municipal Waste Management Strategy (OJMWMS) in 2007 which was reviewed and updated in 2013. It sets out plans for dealing with municipal waste up to 2030.
- 4.161 The main themes of the strategy are:
Reduce and reuse - provide advice, services and information to help householders, businesses and the community reduce and reuse materials and avoid waste. Also to set a good example by reducing its own waste. Recycling and composting - as a minimum, Oxfordshire will achieve a combined recycling and composting rate of at least:
- 65% of household waste by 2020,
 - 70% of household waste by 2025,
- 4.162 The OJMWMS Policy 3 aims to help households and individuals reduce and manage their waste in order to ensure zero waste growth or better of municipal waste per person per annum. Applicants should be aware of this is developing their Sustainable Waste and Resources Plans and consider how they could help achieve the waste target reduction. Bicester already has a good basis for this that could be built on in the existing sustainability and reuse centre at Bicester Green. To meet the PPS requirements development proposals should achieve at least 70% reuse and recycling

IMPLEMENTATION

- 4.163 Cherwell District Council has produced guidance on bin storage in residential developments.
- 4.164 The Government's review of Housing Standards includes changes to guidance on external waste storage to ensure it is properly considered in new housing development.

Development Requirement 12 - Waste

Planning applications should include a Sustainable Waste and Resources Plan (SWRP)

The SWRP should demonstrate that targets for residual waste levels and landfill diversion can be met

Proposals should incorporate the CDC Design Advice on waste management in establishing how the development will be designed to facilitate the achievement of the targets set in the SWRP

The SWRP should also achieve zero waste to landfill from construction, demolition and excavation.

Development Principle 13 – Community and governance

Relevant eco-towns standard ET22

A long term approach is necessary to ensure the new development retains its integrity and is able to manage change in a planned way.

Planning applications should be accompanied by long term governance structures for the development to ensure that:

- (a) Appropriate governance structures are in place to ensure that standards are met and maintained;
- (b) there is continued community involvement and engagement to develop social capital;
- (c) Sustainability metrics including those on zero carbon, water, transport and waste are agreed and monitored;
- (d) Future development continues to meet eco-town standards, and
- (e) Community assets are maintained.
- (f) Seek to achieve a seamless approach across the site in terms of community led activities and facilities.

CLP Policy

Policy Bicester 1

Requires the masterplan and planning applications to include:

The submission of proposals to support the setting up and operation of a financially viable Local Management Organisation by the new community to allow locally based long term ownership and management of facilities in perpetuity.

REQUIREMENT

4.165 NW Bicester provides an opportunity to consider innovative and new approaches to community governance. The creation of a balanced and mixed community is a fundamental requirement of eco-towns and sustainable development.

IMPLEMENTATION

4.166 To promote integration with the existing community planning applications should include:

- Provision of a range of house types and tenures, potentially linked to incentives to local first time buyers and older households;
- Sensitive allocation and management policies for affordable housing which enable extended families and friendship networks (co-housing) to move together and help create a more diversified tenure mix;
- Provision of a range of community and leisure facilities which cater not just for NW Bicester but also give people from the existing community reasons to go there;
- Revenue support for provision of appropriate staffing and early staffing of community facilities;
- Good public transport links between NW Bicester and the wider town. Delivering a high quality scheme is only part of creating a successful place. Suitable management of the different elements of the masterplan will be required to ensure facilities are maintained over the long term and to help to build social cohesion.

Development Requirement 13 - Community and governance

Planning applications should show how they support the work to establish a Local Management Organisation (LMO) as the long term governance structure and seek to achieve a seamless approach across the site in terms of community led activities and facilities.

Development Principle 14 - cultural wellbeing

A Cultural Wellbeing Strategy has been prepared in draft. It focusses on making NW Bicester a culturally vibrant place through a high quality design and community engagement. This does not preclude the provision of public art, providing it is integral to achieving high quality design across the site. Planning applications will be required to demonstrate how proposals to support cultural wellbeing will be incorporated into detailed development plans. A copy of the strategy is included in appendix III.

REQUIREMENT

4.167 The National Planning Policy Framework (NPPF) recognises that cultural wellbeing is part of achieving sustainable development and includes cultural wellbeing within the twelve core planning principles which underpin both plan-making and decision-taking. The NPPF states that the planning system should:

- ‘take account of and support local strategies to improve...cultural wellbeing for all...’

IMPLEMENTATION

4.168 The Planning Practice Guidance (PPG) complements the NPPF and provides advice on how to deliver its policies. The PPG states that:

- ‘Public art and sculpture can play an important role in making interesting and exciting places that people enjoy using.’

The implementation of community facilities is linked to the policy objective of creating a culturally vibrant place, combining both artworks and appropriate community facilities which may include theatre/cultural uses. these community facilities would fit, harmoniously, with the objectives for mixed use development set out earlier in this document. The link between objectives and implementation is therefore reinforced and serves to further deliver the NPPF Core Principles on cultural well-being.

Development Requirement 14 - cultural wellbeing

Cultural wellbeing activities should complement and support the vision and aims of the NW Bicester Eco Town development by:

- Exploring the use of sustainable materials – using recycled materials or locally sourced materials to reduce the carbon footprint and inventive ways to offset other resources used;
- Celebrating nature and the natural environment, by reflecting on natural and environmental issues;
- interpreting nature, creating artworks to inform people and raise awareness about nature and its processes, and/or about environmental issues through participatory art projects;
- Encouraging environmentally sustainable behaviour – artwork as bins to encourage recycling, using sustainable routes through the development – artwork to encourage cycle and walking routes – and help with way finding and directing the flow of people through public areas;
- Encouraging local residents and visitors to think about and become environmentally aware in their everyday living;
- Create an identity for the development (as the first Eco Town in the UK), to both the residents and outside world;
- To use the creation of artworks and provision of community and cultural facilities to assist in the creation of a distinctive, safe, vibrant, cohesive and socially sustainable community.

5.0 Design and character areas

- 5.1 This section relates to the specific design and place shaping principles in the CLP including streets, green infrastructure, and public realm. These principles are seen as the basis of further work in the preparation and submission of planning applications on the site. They are therefore the starting point for planning applications and should be used in developing proposals in accordance with the spatial framework. The spatial framework sets out the land uses across the site and demonstrating the design principles to be used in guiding subsequent planning applications.
- 5.2 The following design principles should guide the preparation of proposals on the site:
- Sustainability – a key driver in the design of the eco-town and a fundamental principle in achieving a zero carbon development - the layout of the site and individual buildings should reduce the use of resources and carbon dioxide emissions;
 - Character – somewhere with a sense of place and that responds positively to the area as a whole;
 - Integration – within the site but also with the surrounding town and countryside;
 - Legibility – a place which is easy to understand and navigate;
 - Filtered Permeability – achieving a form of layout which makes for efficient movement for pedestrians, cyclists and public transport provision while accommodating vehicles, and ensuring good connections with its surroundings;
 - Townscape – utilising building height, scale and massing, and design detail and
 - Landscape and green infrastructure including green space– a place which responds to its landscape setting incorporates buildings in a quality landscape setting.

Design principles

- 5.3 The following design principles should be incorporated into proposals submitted as planning applications:

Continuity and enclosure

- Buildings should relate to a common building line that defines the street and public spaces and establishes a clear hierarchy of streets and spaces.
- Development should provide active frontages to all public spaces.
- Private spaces should be clearly defined and enclosed at the rear of buildings.
- Streets and spaces including green infrastructure should be well-designed and demonstrate the use of high quality materials. They should be appropriately detailed with street furniture, lighting, trees and public art. Such details should be comprehensively designed into the public realm to give the proposals an identity and enhance the sense of place.

Legibility

Development form should establish a street and/or space hierarchy that is focussed on important routes, landmarks and landscape features so as to enhance existing views and vistas, and create new ones to help people find their way around.

The design, location and function of buildings, along with the use of materials and landscape treatment, should reinforce the identity and character of routes and spaces they serve.

The gateways to the site and the local centres should be designed to create a sense of arrival within the development and improve legibility.

Adaptability

Development and buildings should:

- ensure flexibility and adaptability of buildings including provision for homeworking;
- achieve the principles set out by Lifetime homes and Lifetime neighbourhoods;
- allow buildings to change use, or serve a different function and
- be brought forward with a mind to “future proofing” emerging sustainable technologies and infrastructure

All buildings should be fitted with Automatic Water Suppression Systems.

Diversity

Development should:

- provide a mix of compatible uses;
- create vibrant local centres and communities;
- allow people to live work and play in the same area;
- establish a visual variety through a townscape-led approach
- respond to the key conditions and character cues across the site.

Climate change adaptation

Development should:

- be designed in response to the latest predictions of future climate change with reference to UKCIP and the NW Bicester specific climate predictions prepared by Oxford Brookes University; and
- show consideration of topography, water environment and water use, street layout, landscape, building mass and choice of materials to help avoid heat islands, modify summer peak temperatures and reduce energy load on buildings

Architectural responses across the development should:

- demonstrate consideration of passive solar gain, risks of overheating thermal mass, albedo (materials) etc. whilst still engaging with the street and enhancing the public realm.

Building Heights

- 5.4 Generally the development proposals will be suburban in scale reflecting the location of the site and the Bicester context with two-storey buildings with pitch roofs up to a height of 12 metres. In the local centres and along the strategic route through the site taller buildings with up to four storeys (heights up to 20 metres) will be considered in the context of the masterplan to increase density and meet the requirements of occupiers in these locations.
- 5.5 The height of the proposed business park in south western part of the site should recognise the prominence of the location on the edge of the site and should relate to the residential neighbourhood to the south of Howes Lane.
- 5.6 Planning applications will need to consider heights and how these vary across different site conditions.

Character and setting

- 5.7 Proposed development should be sensitive to the existing landscape and townscape character whilst creating a unique image for the eco-town. Development proposals should demonstrate a morphology and urban form that responds to the site's topography, ecology, natural features and landscape character as well as responding to local patterns of development.

Design and layout

- 5.8 Development should be outward facing, with attractive edges and perimeter blocks; and take advantage of passive overlooking

Building design and Street Scene

- 5.9 Buildings should be designed to enliven the street scene through the creation of street frontages and entrances.
- 5.10 Ground floor windows fronting onto the street should be employed to provide activity, at regular intervals.

Development Principle - Commercial development – design

- 5.11 Non-residential buildings should be designed to be BREEAM very good with the capability of meeting BREEAM Excellent on occupation of 50% of development.
- 5.12 Further parameters including scale and massing, building heights and frontages, maximum floorspace areas will be required to define the nature of commercial development and how it is integrated within the masterplan.
- 5.13 The form and nature of commercial development in the proposed business park should create a gateway with landmark buildings along Howes Lane as a prominent location within the development.
- 5.14 The BREEAM Technical Manual SD5073 - 4.0: 2011 for new construction - non-domestic buildings, 2011 sets out Building Design Daylighting parameters for all non-residential buildings to achieve BREEAM HEA 1 - Visual Comfort which states:
- All fluorescent and CFL lamps to be fitted with high frequency ballasts
 - Relevant building area meets good practice

Character areas

- 5.15 The natural features of the site combined with the proposed pattern and density of development suggest the site can be broken into distinct zones or character areas: proposed neighbourhoods north of the railway line bisected by watercourses; neighbourhoods bisected by the green network; the employment areas; higher density uses and other town-wide facilities such as a hotel or community facilities.
- 5.16 Within these character areas there are a number of more localised character types as follows:
- strategic road (the Boulevard);
 - strong landscape edge;

- green space frontage overlooking development set within the green space network;
 - education and employment zone – secondary school, business and general industrial located within strong landscape structure;
 - informal residential layout responding to alignment of watercourse and other landscape elements;
 - semi-formal residential development based on more formal layout of sports pitches/playing fields, parkland, civic squares and amenity public space.
- 5.17 Character Areas set out in more detail the key components of the neighbourhoods that have been identified and provide an indication of the likely activity that each area will provide. For example, all buildings should be accessed from the street to maximise on-street activity.
- 5.18 The setting of St Lawrence's Church, Himley Farm Barns and Home Farm are key considerations for any development in this area. This setting is currently defined by underdeveloped agricultural land with associated rural qualities, in turn allowing views from these areas to the Church tower such that built development without adequate buffers would be incongruous.

6.0 Delivery

- 6.1 This section sets out the key requirements relating to the scheme's delivery and the requirements which should be met at the detailed planning application stage and beyond. The aim is to ensure a comprehensive scheme and consistent approaches to quality and delivery.
- 6.2 The masterplan will be delivered through the preparation, submission and implementation of planning applications. The approach to developer contributions, infrastructure requirements, monitoring and review mechanisms and transition should follow the guidance in this section.
- 6.3 The following components should be taken into account in delivering the vision and when preparing proposals to deliver the masterplan through the submission of planning applications:
- Achievement of zero carbon as defined in the PPS and eco town standards;
 - the transport, access and movement framework; infrastructure requirements, provision and delivery including highways, education and community facilities;
 - Resource efficiency and low carbon solutions for example energy and water;
 - Sustainable and healthy lifestyles – to reduce the carbon footprint of development by ensuring that households and individuals in the eco-town are able to reduce their carbon footprint to a low level and achieve a more sustainable way of living (Ref PPS p2); Employment opportunities and facilities to support job creation providing a mix of uses and access to job opportunities; The landscape framework provided by the site's existing natural features to provide and enhance green space including multi-use Green Infrastructure; A high quality design and layout as part of a comprehensive masterplan setting out the distribution of land uses within an attractive landscape setting and a long term approach to community and governance through the establishment of a Local Management Organisation.

Infrastructure provision

- 6.4 The Infrastructure Delivery Plan in the Cherwell Local Plan identifies infrastructure required to deliver the eco-town proposals. Infrastructure (transport, energy, water, waste and communications but also community infrastructure in education and health) requirements essential to meet the needs of residents include:
- School provision
 - District Energy Network
 - Green infrastructure as part of the forty per cent green space
 - Local services and facilities
 - Community facilities
 - Railway crossing(s)
 - Strategic highway improvements
 - Sustainable transport provision

Outline planning stage

- 6.5 Outline planning applications represent the first stage in the delivery of the masterplan. Outline planning applications can be made with some or all matters reserved for future determination. Guidance on the local requirements for outline planning applications is set out on the Council's website www.cherwell.gov.uk

Outline Planning Applications

Outline planning applications represent the first stage in the delivery of the Masterplan. Outline planning applications should be prepared in accordance with the Principles and Requirements set out in this Supplementary Planning Document (prepared in accordance with the PPS1 Supplement Eco-towns July 2009 and North West Bicester Masterplan documents as set out in Principle / Requirement 1 Developing the Spatial Framework.

Outline planning applications can be made with some or all reserved matters reserved for future determination. Guidance on the local requirements for planning applications is set out on the Council's website www.cherwell.gov.uk

Each outline planning application must include:

Outline Application Forms, landownership certificates and agricultural holding certificate;

Planning application drawings (for approval and in support);

Description of development and parameters document;

Design and Access Statement;

Landscape Strategy;

Environmental Statement or for subsequent applications a statement identifying where impacts have been previously assessed;

Sustainability Framework;

Transport Assessment;

Framework Travel Plan;

Energy Strategy;

Water Cycle Strategy;

Utilities assessment;

Planning statement;

Draft Heads of Terms;

Statement of Community Involvement;

Affordable housing statement;

Economic Strategy;

Aboricultural report

Cultural Strategy;

Monitoring Plan

Indicative masterplan in accordance with the NW Bicester masterplan;

Information to assess site specific matters.

Pre-application Consultation

During the preparation of outline planning applications, applicants should partake in pre-application consultation with statutory consultees, including Cherwell District Council and Oxfordshire County Council. In addition, genuine public consultation should take place. This should include planning for real exercises and best practice from community engagement techniques.

Transition

- 6.6 Eco town standard ET21 sets out the transition process for eco-towns. It requires planning applications to support this by setting out, “*the detailed timetable of delivery of neighbourhoods, employment and community facilities and services – such as public transport, schools, health and social care services, community centres, public spaces, parks and green spaces including biodiversity*”. It goes on to set out other requirements for planning applications.

Consultation and engagement

- 6.7 Planning applications should include a Statement of Community Involvement to show the genuine engagement of the public in preparing the proposals. This should include planning for real exercises and best practice from community engagement techniques. Previously stakeholder workshops have taken place and these should be developed as the basis of future consultation exercises.

Planning Performance Agreements

- 6.8 Planning Performance Agreements will be sought. In order to facilitate effective processing of applications the Council will encourage pre-application engagement and the agreement of a Planning Performance Agreement with agreed timescales.
- 6.9 Planning applications will be required to include the following:
- Environmental statement or for subsequent applications a statement identifying where impacts have previously been assessed
 - Description of development, parameter plans and environmental statement
 - Supporting information including an illustrative masterplan, Design and Access Statement
 - A strategy demonstrating how the proposals will meet the requirement for Zero Carbon buildings across the development
 - Draft Heads of Terms setting out the developer contributions (See section on infrastructure delivery)
 - Economic Strategy
 - Transport Assessment
 - Design and Access Statement
 - Parameter plans for illustrative purposes only
 - Cultural Strategy
 - Landscape Strategy
 - Biodiversity Strategy
 - Green Infrastructure framework plan
 - An indicative masterplan in accordance with the Draft masterplan and SPD spatial framework
 - Information to address site specific requirements

Reserved Matters applications

- 6.10 Reserved Matters applications should set out in detail the proposed development in the context of the wider masterplan in order to ensure a comprehensive development and compatibility with adjacent uses. Reserved matters should include the phasing and sequencing of development as set out in the Draft masterplan. Reserved Matters

Reserved Matters applications should set out in detail the proposed development in the context of the wider masterplan. Reserve matters may include:

1. Layout
2. Scale
3. Appearance
4. Access and
5. Landscaping

Design and Access Statements and Design Codes Should be used to deliver the development principles.

Planning Obligations and Developer Contributions

- 6.11 CLP Policy INF1 is the basis for providing new infrastructure and facilities through new development. It is intended to reduce the time taken to negotiate individual planning obligations associated with development proposals.
- 6.12 It is anticipated that the developer contributions through legal agreements will include:
- Provision of affordable housing
 - Contributions to educational facilities
 - Community facilities
 - Sports facilities
 - Management and maintenance of open space
 - A burial ground
 - Governance
 - Sustainable lifestyles requirements
 - Local employment, training and skills
 - Sustainable transport measures including the provision of bus services, off site highway schemes, pedestrian and cycle routes and
 - Provision of SUDs

This list is not exhaustive and early discussion of requirements is encouraged.

Draft Heads of Terms

- 6.13 Cherwell District Council continues to prepare evidence base for developer contributions. Applicants should agree the requirements of any section 106 and conditions with the local planning authority and County Council. The requirements of the planning obligations include the provision and/or contributions for the following:
- Community facilities (Libraries - Bicester Library and Library Link in the proposed large community Hall)
 - Changing places toilet; Education - adult learning; social care - day care/resource centre for older persons;
 - Health facilities - GPs surgery, neighbourhood police
 - Fire station
 - Early intervention centres
 - Community Halls – including management and maintenance
 - Community Development workers and fund
 - Thames Valley Police - Neighbourhood policing and community safety Skill and training
 - Visitor facilities/ environmental education centre
 - Places of worship
 - Primary schools, Secondary school, Special Education Needs, Extended school, Early years
 - Sports Pitches and associated buffers
 - Sports centre
 - Amenity space (parks, gardens, natural/semi natural green space, allotments, LAPs, LEAPS and NEAPs
 - Burial ground

- Biodiversity offset contribution
- Museum Resource Centre contribution
- Public art through cultural enrichment
- Waste collection
- Local Management Organisation
- Affordable Housing
- Sustainable transport
- Bus service
- Monitoring and Review

6.14 Planning submissions should set out a strategy and programme for monitoring and reviewing the proposals once implemented. This will ensure that the eco-town principles and standards are measured and the performance of the development can be managed effectively to provide feedback and potential improvements to later phases of the scheme. A monitoring plan should be prepared to support the planning applications.

Delivery – schools

6.15 Development proposals will require: School site boundary plans with outline of surrounding roads and housing; topographical surveys across the school site and adjacent development; acoustic survey (existing and anticipated) across the development area should be provided to the local education authority

Developer contributions

6.16 Developers will be expected to work collaboratively to deliver the infrastructure. Planning proposals should provide opportunities for the community to engage and participate in their environment, using temporary artist led interventions to assist in achieving high quality design and also as a catalyst for community growth.

Appendix I

Schedule of documents supporting the NW Bicester SPD:

Masterplan Vision and Objectives

Masterplan Framework (Drawing No. BIMP6 01revA)

Green infrastructure and landscape strategy

Economic Strategy and Baseline

Energy Strategy

Water Cycle Study

Flood Risk Assessment

Residential Strategy

Surface Water Drainage Strategy

Statement of community involvement

Strategic Environmental Report

Social and Community Infrastructure Strategy

Community involvement and governance

porting habitat with natural play

supporting habitat with natural play

4.6m wide foot and cycleway

Retained Hedgerows (hedgerow buffers and dark corridor hedgerow buffers)

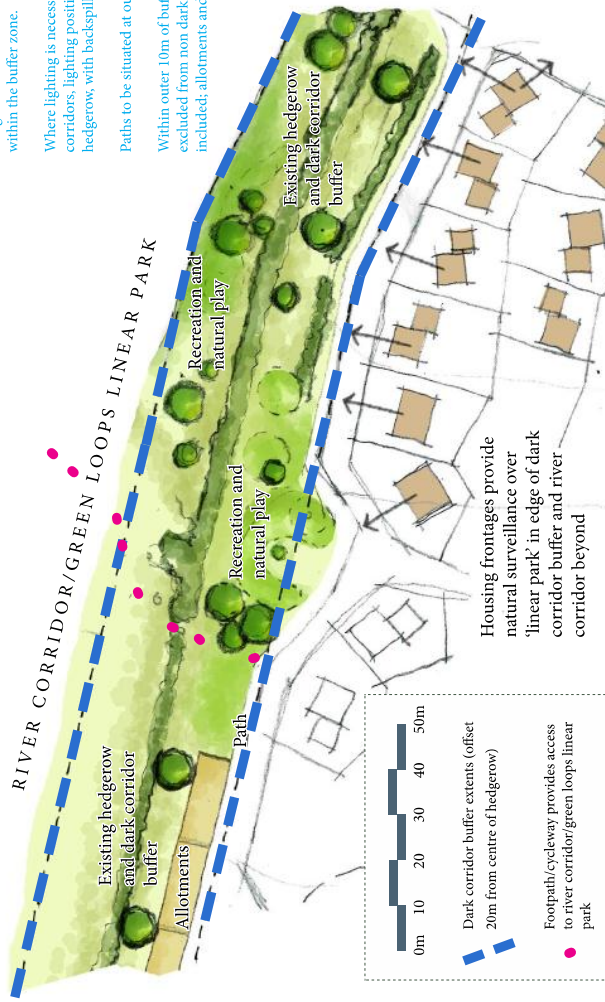
Dark Corridor Buffer
(20m buffer each side of hedgerow)

Hedgerows within dark corridors have **no lighting** within the buffer zone.

Where lighting is necessary in areas adjacent to dark corridors, lighting positioned facing **away** from hedgerow, with backspill limited.

Paths to be situated at outside edge of buffer.

Within outer 10m of buffer, activity/elements excluded from non dark hedgerow buffers may be included; allotments and formal play equipment.



Retained Hedgerows

Maximising the retention of existing hedgerows is an important aspect of the biodiversity net gain strategy. They are also a key characteristic of Bicester's landscape pattern, and can beneficially contribute to the compartmentalisation of the development plots.

By bringing the existing hedgerows into better management and supplementing the hedgerow habitat with adjacent complementary habitats the overall hedgerow corridors can be significantly enhanced. The supporting habitat, or 'buffer', should be a minimum of 10m either side of the hedgerow.

Some lengths of hedgerow will form part of the longer 'dark corridors' identified for commuting bats (see section 3 and Figure 4). Dark corridors should reserve a minimum of 20m either side of the hedgerow as 'buffer' to development. Both 10m and 20m 'buffer zone' examples are provided on sample area Figures 8 to 10.

The sample areas and design principles shown illustrate treatment at the interface of hedgerows and their associated 'buffer zones' with proposed housing. Hedgerows are kept within the public domain.

Biodiversity

The hedgerow buffers would support long-grass habitat to maintain and enhance the value of these features for invertebrates. Some buffers would be sown with a native plant mix that would be flower-rich in order to be visually appealing to the local residents. New habitats of value to the hedgerows fauna that would be created within the hedgerow buffers include wildflower-rich grassland, species-rich scrub, trees and tall grassland swales. Where it is proposed to provide a pedestrian/cycle route within the hedgerow buffer there would be at least 6m from the centre of the hedge to the edge of the leisure route. This would ensure that the biodiversity value of the hedgerows is maintained. Notwithstanding this the area potentially occupied by the cycle/pedestrian routes has been excluded from the net gain calculation using the Defra metric. Use of the metric has revealed that the green infrastructure associated with the Masterplan would deliver an increase in biodiversity and therefore a net gain in biodiversity.

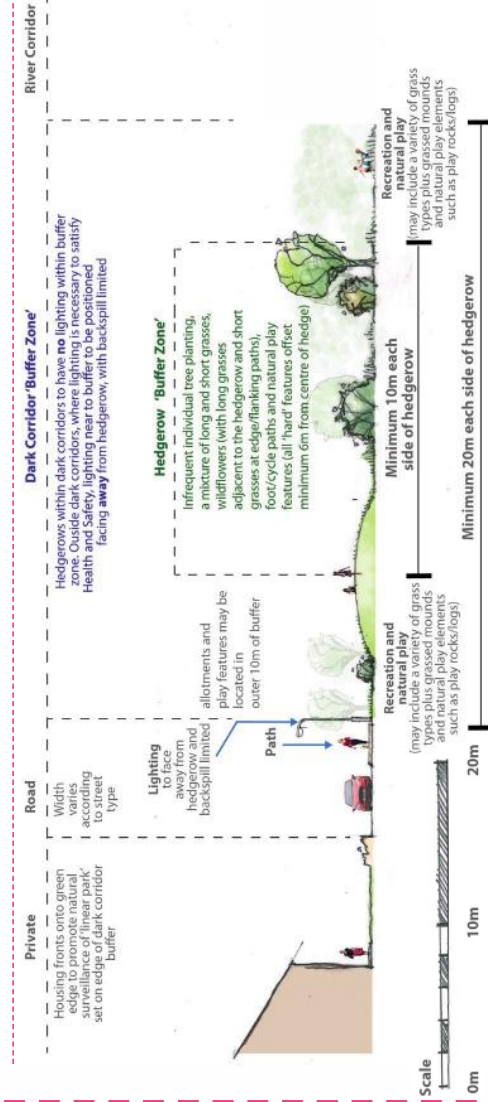
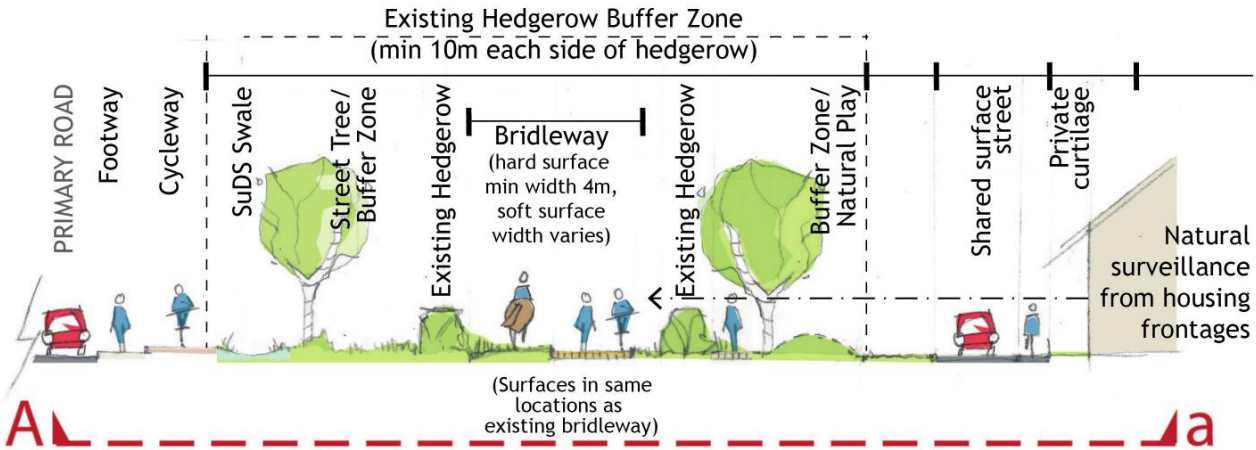
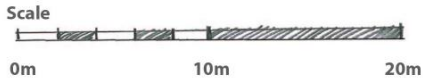
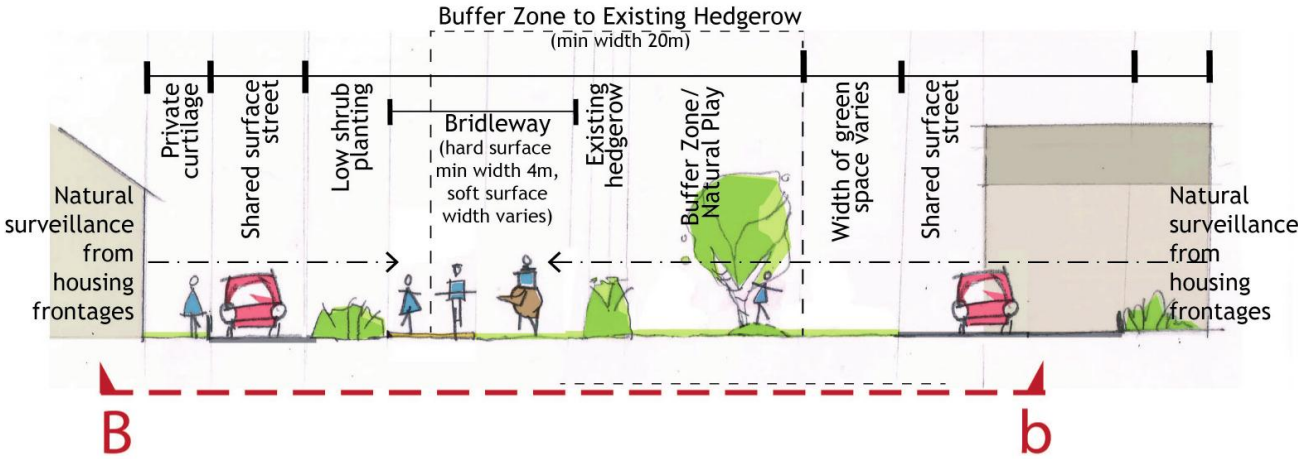
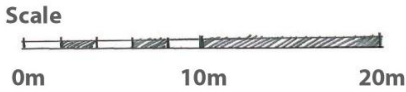
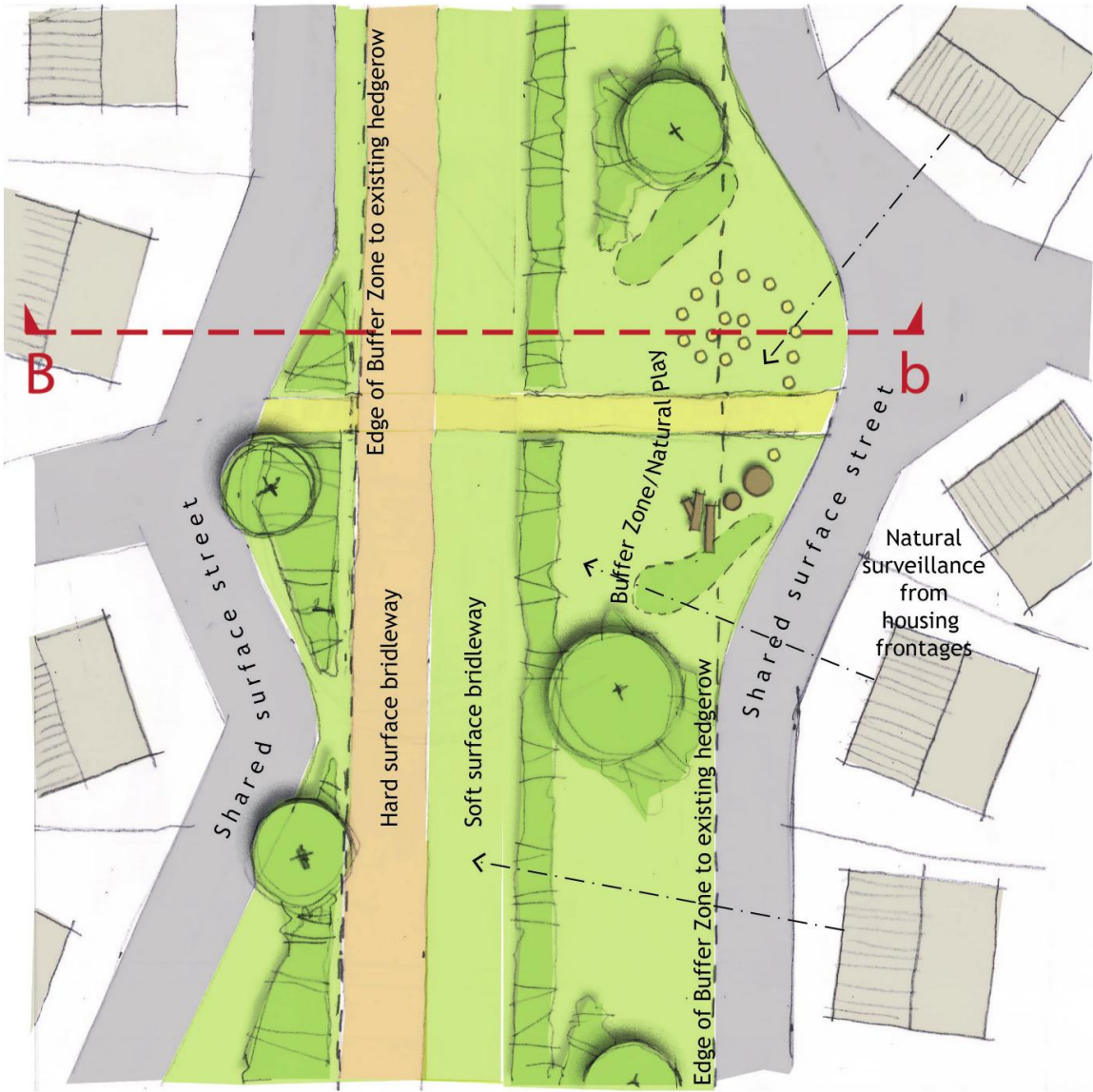


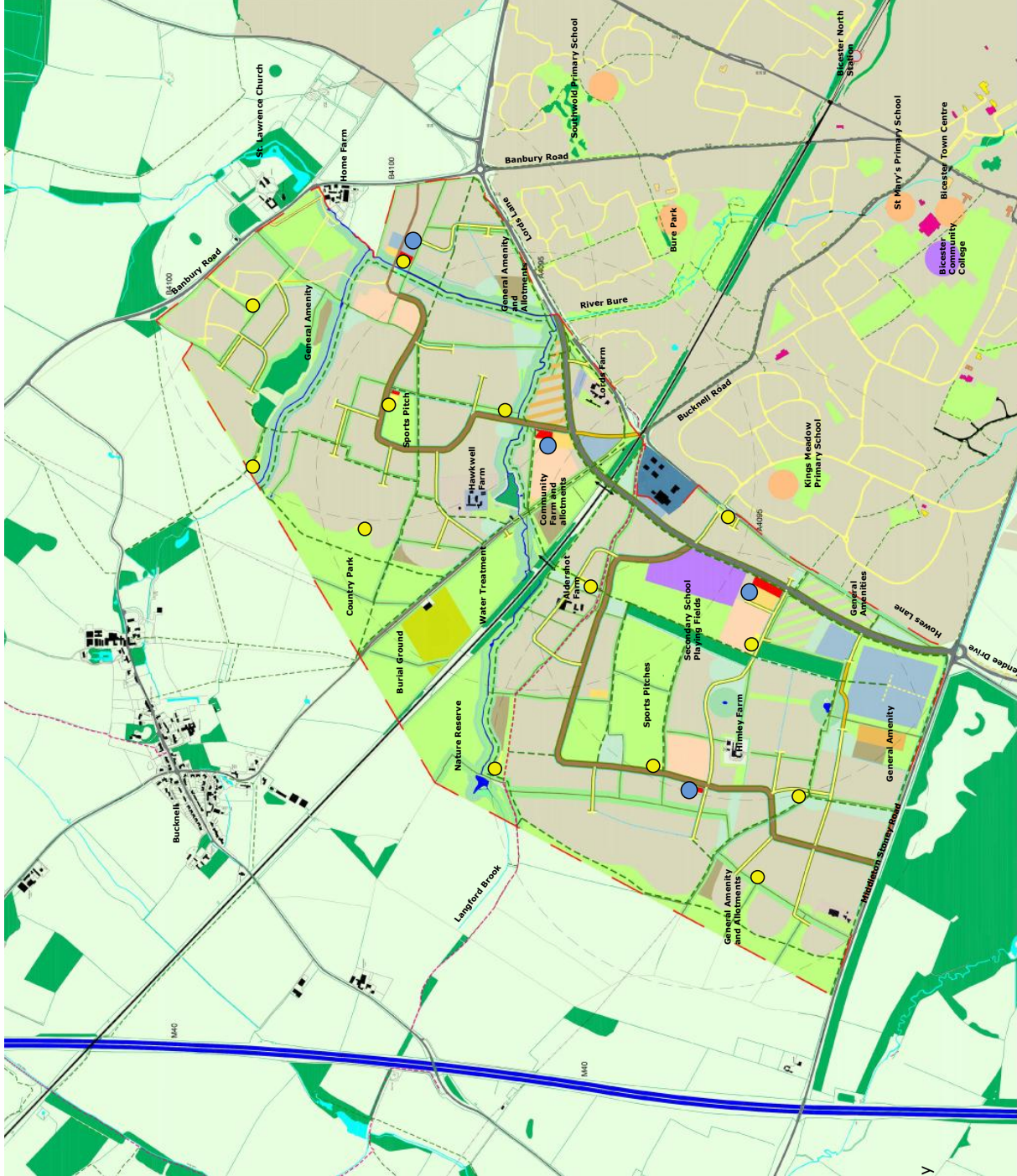
Figure 8 - 20m (dark corridor) hedgerow buffer design principles - sketch plan and section

Bridleway - Roadside with existing hedgerows



Bridleway - Residential with existing hedgerow





BIMP6 01 rev A
NW Bicester Masterplan - Masterplan Framework

FARRELLS

— Masterplan Site Area

Proposed NW Bicester Land Use

- Green Infrastructure
- Existing Woodlands and hedgerows
- Existing Water Corridor and Ponds
- Proposed Woodlands and Hedgerows Buffer
- Proposed Water Corridor Buffer Zone
- Housing
- Primary School
- Secondary School
- Secondary School Sports Pitches
- Existing Business (including green space tbc)
- Existing Farm Use (including green space tbc)
- Commercial/ Business
- Social/Community
- Retail
- Care Home/Hotel/Other
- Extra Care Housing (including green space tbc)
- Energy Centre
- Water Treatment
- Proposed Retention Basins and Attenuation Ponds
- Proposed Swales
- Existing Herbage
- Play
- Proposed groups of allotments

Proposed Connectivity

- Strategic Roads with segregated footpath/cycleway
- Primary Roads with segregated footpath/cycleway
- Secondary Roads including footpath/cycleway
- Off road footpath cycleways
- Crossing under railway
- Existing Bridle Path

Appendix North West Bicester Masterplan

Issues and Options Consultation

Questionnaire and comments for online consultation portal

18th June to 24th July 2014

Introduction

In completing the responses to the following questions, please try to think about the long term issues for Bicester and imagine how the town and proposed developments will look in 10, 20 or 30 years time. Try to imagine you are a resident of the town in the future. This should allow you to consider your responses and think about the town as a whole rather than just focussing on issues that affect you personally.

(PLEASE NOTE THE NUMBER OF RESPONSES IS SHOWN IN BRACKETS)

1. The Masterplan vision and objectives is to create an attractive eco-town that integrates with the existing town and provides local homes, jobs, schools, local facilities, recreational and natural space for biodiversity. The new buildings and place will be designed to meet the effects of future climate change including extreme weather events and reduce energy and water use.

Which of the following things is important to you? Please tick all that are relevant

- Providing more homes in Bicester (3)
- Providing jobs on the eco town site as part of a mixed use development (5)
- Reducing carbon footprint, carbon emissions and environmental impact in construction and use of the buildings (6)
- Providing local services and facilities such as schools and shops while supporting the existing town centre (0)
- Integrating the new development with the existing town (2)
- Improving the Howes Lane and Lords Lane local road network for walking and cycling links and public transport from the new development to key destinations in the town (0)
- Reducing pollution and emissions from transport (0)
- Attracting new residents to the town and building a new community for existing residents to enjoy through participation and development of a new community-led management organisation (0)
- More sustainable use of resources, for example water efficiency and waste reduction (3)
- Providing space for play, nature and biodiversity (5)
- Designing a place that encourages healthy lifestyles through for example, local food production, walking and cycling to school and work and other places within the town (4)

2. The Draft masterplan sets out a framework for the use of land across the site, including areas for the homes and extra care facilities for older people, employment areas, land set aside for faith related uses, shops, schools, open space and play areas, community meeting places, doctors surgery, sports facilities, roads and infrastructure.

Do you support the broad distribution of land uses across the site?

- Yes (8)
- No (4)

If “no” please explain why

Uses green fields rather than brown field sites

It's a building site on a massive scale with very few Eco credentials

Not enough new facilities and resources to compensate Bicester residents for disruption caused by the construction work.

It is important to integrate this with the rest of the wider community. It will create a potentially isolated community.

Banbury Road to town centre route has a cycle route but this leads to the main road/path close to the town centre.

3. The masterplan seeks development that minimises the use of energy and water and reduces carbon and waste. The proposals aim to provide zero carbon development whereby over a year the net carbon dioxide emissions from all energy use within the buildings on the eco town site as a whole are zero or below. The aim is also to reduce the cost of running the homes and minimise the impact on the environment.

Do you support this aim?

- Yes (10)
- No (2)

Please explain why

Building extra homes is not eco-friendly on green field sites.

Not achievable

The masterplan seeks to reduce the amount of carbon to address the impacts of climate change

Do you see this as an important issue?

- Yes (10)
- No (3)

Please explain why

Use brownfield sites and more sustainable locations

History has shown that you won't beat nature, however much you try. You cannot plan something you have no knowledge about.

If this is an important issue why is it only being proposed for the NW Bicester development? If the council believed it to be an important issue then the same principles should also be applied to the Kingsmere development.

4. The energy strategy continues to investigate reducing energy consumption while introducing various technologies for supplying power and heat. The following technologies are proposed please indicate which technologies you would support:

- Solar power from roof installed solar panels and tiles (12)
- Heat and power from local energy centres generated from gas and biomass boilers (6)
- SMART grid technology, ways in which energy generated on site can be stored, balanced and used most efficiently, (8)
- Wind power (6)
- Waste heat from Ardley energy from waste plant (9)

4 (a) Do you support the aims of the energy strategy set out above?

- Yes (10)
- No (3)

If no please explain

Aims do not go far enough, either in scope or ambition. Technology used might be better but return to the grid (electricity) not adequately planned.

Not convinced wind power is cost-effective.

Partly support this as good to see a reduction in energy consumption. Does cost for installing solar panels and technologies provide cost saving on energy and over what period.

Do not support energy centres. Don't see how this will work. Don't like being tied into a set source for energy or a set supplier.

5. The aim is for one job to be created for every house built. This could be a job on the site or elsewhere in the town. It means job opportunities as part of the development in shops, schools, business areas, financial and professional services, offices, restaurants and cafes and home working. The Economic Strategy prepared for the developers has identified the following opportunities:

An Eco Business Centre as part of the first phase Local Centre

Business Park including large and small industrial units

Offices both within the Eco Business Centre, within the local centres and Business Park

Homeworking

Do you think the proposals being developed provide the right types of jobs to meet the employment requirements? For example, do you think the approach to providing jobs on the site is the right mix of businesses and jobs in the right place?

- Yes (5)
- No (8)

Please explain why

Rather see EXISTING land in Bicester used for jobs, such as the Launton and Telford Rd sites to integrate into old Bicester to get there. Attract diverse businesses isn't going to be easy. You can't magic jobs from nowhere.

No evidence that residents will want to work close to home just because it's there.

Bicester needs major investment in jobs. Think big and long term. Make Graven Hill and possibly Arncott into another Milton Park (Didcot). Bicester near to Oxford for engineering and hi tech industries to be created, not just distribution warehouses. Valour Bruce factory site in Launton Road remains vacant and in disrepair. Bicester deserves better than just becoming a dormitory town for Oxford & London.

Not enough support for manufacturing jobs

Proposals not outlined in full, e.g. where business centre and business park will be,

if the phone and data communications will be adequate to support home workers and home businesses.

No guarantee people will work locally, in these planned areas, or commute creating more traffic issues and pollution, or even driving to London or Oxford.

Too great an emphasis on home working in model. Need to attract businesses to the town. Very little industrial development land available - other than NW Bicester.

Told initially that a factory to build the houses would be one of the first units to be built and create a large number of jobs- why has this not been highlighted in plan? Has it been dropped?

Need campaign to interest local residents in new ways of working and new forms of employment (even though the Eco-Village will obviously attract new people to the area too).

Need to work with 'Bicester Vision', Chamber of Commerce and Parish Council to present the new employment opportunities to people in the town, as well as potential employers. .

Need connections with Bicester's secondary schools. Bicester kids stay local, but don't seek employment in new sectors

Not enough 'big' companies attracted to Bicester. A lot of people who live in Bicester travel to work, partly due to the town's location close to the M40 and also with good rail links to London and Birmingham.

Good idea to have more jobs locally for people who live in Bicester

Needs to be some bigger companies that come to the town (and not just low-income retail jobs).

Difficult to generate and keep suitable jobs for those living on site.

Cannot see development being any different from other estates. People will commute to their job

6. Construction of the development at NW Bicester will take over 20 years. Opportunities for training and apprenticeships are being considered for local people in construction during the development of the site.

Do you support the provision of training and apprenticeships in construction as part of the development?

- Yes (13)
- No (1)

If no...

Disruption to get this estate built is not worth it.

Excellent - we need so much more of this kind of investment in the UK, needs to be energetically sold to the local community

7. Locations have been identified for facilities like local shops, health facilities, community halls, schools, land set aside for faith related uses, sports facilities and extra care housing for older people. Consideration has been given to distance from the homes and passing trade for Local centres with a strong community focus, located close to the schools, sports pitches and bus routes. These will provide a mix of uses including offices. The increased population will also support improved facilities in the existing town including the new library, indoor sport, community hospital, social services, emergency services and cultural facilities.

Do you think the locations identified for the local facilities are in the right location?

- Yes (8)
- No (3)

Don't know (2)

Are there any facilities not currently provided that you think should be?

Cannot create a community, communities develop. Increased population will not support the facilities, they will stretch them

What are they and why do you think they are needed?

Who can say until it's built?

Howes Lane cannot become part of NWB planned urban development. It must remain the vital link in creating a ring road around north Bicester. Even more important with the East/West rail link level crossing closings on the southern bypass link. Perhaps The developers of NWB should pay to sort out the junction under the Bucknell Road railway bridge.

8. Work is progressing on a community-led local management organisation. It will potentially own and manage the public areas and community buildings. A local organisation would complement existing democratic structures and allow the new residents to directly make decisions on the management and maintenance of community facilities, as well as having an endowed asset base to generate income and reinvest. It could eventually have a Board to make decisions and be made up of newcomers, as well the

existing Bicester community, stakeholders. The main reasons for doing this are:

- To help create a sense of community and identity
- Anticipated constraints on public spending - the Council is keen to explore alternative solutions to how the upkeep of facilities and open space is funded.
- A long term approach to supporting the new community and its arrangements for managing facilities.

Do you think a local community- led management organisation will help to build the new community?

- Yes (10)
- No (2)

If you lived at NW Bicester would you want to get involved in the community-led management organisation?

- Yes (4)
- No (8)

Do you agree with this approach to community building?

- Yes (10)
- No (2)

Please explain why or provide any additional comments

Communities develop over time. Community led management organisations are a fob, a shame, lip service to democracy, an excuse to misdirect people, a front to hide away those controlling the puppet strings, full of self-interested parties be they councillors or those who cannot get there moment of power any other way. These organisations also butt against the wishes of local democracy all too often, just like you looking to put this estate in a green field area against the wishes of people locally.

But they will need to know what organisations already exist and get support from other similar groups, such as at Kingsmere, Bure Park & Langford Village.

My impression of these types of schemes is they will typically be led a few 'keen' people and not necessarily for the benefit of all.

9. The aim is to create a place where a wide range of homes and opportunities to meet housing demand can be provided. For example, new neighbourhoods will be developed to the highest standards of sustainability and provide opportunities for older people needing extra care and vulnerable groups. The design of the new homes needs to be flexible, for example through internal layouts that allow adaptation as lifestyles change and enable homeworking.

Which of the following do you think should be included in new homes?

- Flexible internal layout (7)
- Ability to extend the property in the future (4)
- Homes with a variety of inside and outside rooms, winter gardens, patios, atria, balconies, conservatories that blur the distinction between the internal and the external spaces; (4)
- 'Green' homes including gardens big enough for summer houses, offices, studios etc. with enough space not to trouble the neighbours; (8)
- Space for recycling provision; (7)
- High speed broadband to allow for home working, education, smart management systems etc. (10)
- Homes designed to be comfortable with good levels of day lighting and low energy costs. (10)
- Materials from renewable sources and locally produced (6)

Do you support the approach to the development of new homes on the site?

- Yes (10)
- No (3)

If no....

Bicester needs more affordable homes, and given the number of active retired, singles, couples without children etc. the Kingsmere estate is going to provide enough houses for the next 10 years or so, what is needed is smaller homes which could be well laid out flats to house those households which are one or two people. Homes do not have to be houses, Therefore if you were to be truly eco you would make the most of this chance and increase the population density to be housed. Presently you are planning to build on green fields, have a population in nice houses with gardens and home studios which will not be affordable for most. It is clear you are only interested in profit rather than community.

Whilst I have no issues with new houses being built in the area I still fail to understand the real benefit of the 'eco-town' development. This is a new development which I assume aims to be revolutionary where in fact all new developments should instead be evolutionary. There should be main elements such as cycling/bus routes, energy efficient schemes delivered for all new housing developments, not just a few. The approach also suggests the creation of a new community which will seem isolated from the rest of Bicester.

I believe this development was forced on Bicester by Cherwell DC and agreed by Government before much consultation with the residents of Bicester. The development is too large for the overall size of Bicester and doesn't seem to add anything significant to the infrastructure and roads needed to support the whole town.

10. As the town grows, traffic will also increase. Transport studies and strategies aim to positively address the impact of increased traffic. The proposed realignment of Howes Lane seeks to ensure integration of the new development with the rest of the town. It also addresses the railway line crossing. The aim is to create safe streets that encourage walking and cycling. The layout and design will seek to reduce the dominance of car parking. Walking, cycling and public transport should take precedence over trips by car. Electric and low emission vehicles are also likely to have a role to play.

Please indicate which of at the following measures you support to reduce the impact of cars:

- Realigning Howes Lane - a new road link replacing the Howes Lane/Lords Land/Bicknell Road existing roundabout (7)
- Walking and cycling routes provided throughout the development linking with existing routes (10)
- Electric cars and low emission vehicles (3)
- Traffic calming to reduce the impact of cars in existing residential areas (2)
- Restriction on through traffic in existing residential areas (0)
- Junction improvements to the existing local highway network to keep traffic flowing (10)
- Improved bus services (8)

Do you support measures to deliver sustainable transport and the approach that reduces need to travel?

- Yes (6)
- No (6)

Have we got the sustainable transport measures right?

Please provide any additional comments

Support measures to deliver sustainable transport etc. but not what SPD describes it as. "realigning" Howes Lane would be destroying the established by pass / ring road.

realignment looks to convenience customers and inconvenience industry and those who already live here. Putting profit before community.

No realigning of Howes Lane. Let NWB create its urban boulevard within the boundaries of its development.

Residents of north Bicester deserve free movement of traffic. Extra residents of NWB will create massive demand.

CDC cannot let NWB upset the traffic flow around north Bicester. What role has OCC in deciding on the road layout?

Lords Lane & Howes Lane are part of the Bicester Ring Road and should not be changed into a slower road system which will create more problems and pollution.

Need dual carriageways to enable smoother traffic flows. Agree that Bucknell Rd railway bridge junction needs action

Difficult to reduce impact of cars through any of SPD measures. Good to see improved cycle and bus routes that service the town.

Cycle routes are okay but need improvement near town centre - not considered during town redevelopment, or proposed planning for Bicester Village/Tesco.

Current bus services to Bure Park are useless. The S5 bus travels to most places in Bicester but not up the Banbury Road.

The 22/23 service runs around the town, due to the route taken it is actually quicker (and cheaper) to walk the Banbury Road.

S5 buses might travel closer to Bure Park if they take in the new development.

Totally against Howes Lane realignment and proposals for Shakespeare Drive and Bucknell Road.

Town needs a FAST ring road to divert traffic trying to avoid Bicester Village or make its way north without using the motorway at J9.

Not convinced it works

De-regulated bus market is not sympathetic to positive social initiatives. Support the cycle routes, but need improvements to the cycle network in Bicester.

Problem with people cycling inconsiderately on the pavement, some pavements are designated as shared territory between cyclists and cars - needs attention.

11. The new development will be part of Bicester. Opportunities have been identified for footpaths, cycle routes and open spaces to join the new development to the existing town such as extending the green link from Bure Park. Facilities have been located so they could be used by existing residents but would not compete with existing facilities in the town.

Do the proposals integrate well with the surroundings?

- Yes (8)
- No (2)

Have the right routes been identified?

- Yes (4)
- No (6)

Please provide additional comments

Leave Howes Lane alone. It is there for all, not to be "realigned" for your convenience!

Not sure what the green link from Bure Park is, but to avoid disruption to existing roads cycle/footpaths should be on bridges or under-passes.

What happened to the monorail?

Howes Lane should not be turned into a green lane or cycle track.

There should be a tram link from NW Bicester to Bicester North Station and

Tram link to Bicester Town Station/Town Centre, Bicester Village, a retail development from the new Tesco to Bicester Avenue, and the proposed Park & Ride. (Trams powered by electricity are superior to buses and cause less road traffic.) Regret that Chiltern Railways realigned filled original platform which could be used for a tram link.

The lack of existing links in the rest of Bicester is an issue. Please identify safe cycle routes directly from the new development into the town centre.

Should be discussions with Chiltern Railways re integration with town transport development for mutual benefits - e.g. Phase I linking Bicester North & Bicester Town Stations and Bicester Village.

Can you suggest ways of improving integration with the existing town? For example, do you think the proposals create good links to the town, are there any links missed from the plans?

- Yes (10)
- No (1)

If not, please provide details of how the masterplan could be improved.

12. The Draft masterplan proposes much of the area on the outer edge of the site for a country park, nature reserve and open space. Links to existing footpaths are shown.

Do you support this use of land at the edge of the site?

- Don't know (8)
- No (4)

If no.....

Either maximise use or leave it be.

40% seems too high when land is at a premium. The more land we take from agriculture the more intensive farming needs to become to ensure we can feed the population. This seems to be ignored by all concerned these days.

Not sure about country park/play area next to a burial ground. Lack of burial ground in Bicester excuse to get more burial ground space as part of the development. Find somewhere else for a burial ground.

Not sure about the sports pitches as already loads in town. What we need is an improved indoor sports facility, with badminton, tennis and squash courts especially.

13. 40% of the land is set aside as green space for sports pitches, a country park, play areas, allotments, burial ground, nature reserve and community farm. Existing hedges are to be retained to support biodiversity.

Is the open space in the right place and is it being used for the right mix of uses?

- Yes (5)
- No 4

If no...

Poor ideology and planning behind the thinking of the plan.

Wrong principles for wrong place at wrong time. Wait for the CDC local plans rather than steam rolling this through.

Not read the document, so can't comment.

I don't understand the question

Which uses do you think are most important to provide for?

- Sustainable urban drainage systems, for flood management and urban cooling (5)
- Habitat creation to support wildlife (4)
- Sports pitches (5)
- Play and recreation areas (5)
- Allotments (5)
- Walking and cycling routes (3)

14. Section 6 of the Vision documents sets out the key elements and proposals for the Draft masterplan largely based on existing landscape features. It is likely these will form the basis of the design section and character area analysis in the Draft Supplementary Planning Documents masterplan.

Do you think the components of the spatial framework plan are clearly identified and provide sufficient detail to understand the key design principles?

- Yes (7)
- No (4)

15. It is proposed to design the development as a series of neighbourhoods each with a distinct character. These character areas would vary to reflect their location on the site, for example by being developed to reflect the rural edge or natural areas or as urban areas where they are close to facilities.

Which of the following do you think is important to reflect in the character areas?

- The area of the site the neighbourhood is adjacent to, for example local facilities or green space (5)
- Landscape and natural features such as trees and hedgerows (5)
- Reflecting traditional buildings in the area (3)
- Use of sustainable materials (1)
- Design to minimise energy use and maximise renewable energy (3)
- Mix and type of houses (4)
- Non-residential uses (2)

Finally, if you would like to find out more about North West Bicester and the Eco Bicester projects, please provide your email address in the box below.

Appendix III

Draft NW Bicester Cultural Wellbeing Strategy

Planning Policy Context:

National Planning Policy

The National Planning Policy Framework (NPPF) recognises that cultural wellbeing is part of achieving sustainable development and includes cultural wellbeing within the twelve core planning principles which underpin both plan-making and decision-taking. The NPPF states that the planning system should:

- ‘take account of and support local strategies to improve...cultural wellbeing for all...’

The Planning Practice Guidance (PPG) complements the NPPF and provides advice on how to deliver its policies. The PPG states that:

- ‘Public art and sculpture can play an important role in making interesting and exciting places that people enjoy using.’

Local Planning Policy

The Cherwell Local Plan (Proposed Modifications version August 2014)

Policy Bicester 1 which provides the local planning policy context for the NW Bicester site sets out key site specific design and place shaping principles for the site. These include:

“The provision of public art to enhance the quality of the place, legibility and identity”.

In terms of the infrastructure needs of the site, the Policy requires community facilities including those for arts and culture.

The Approach:

Cherwell District Council (CDC) will require all reserved matters applications and full applications on the NW Bicester site to demonstrate how proposals to support cultural wellbeing will be incorporated into detailed development plans.

This Strategy sets out what applications should include by way of such proposals and how this will be secured by CDC through the planning process.

This Strategy’s focus is on making NW Bicester a culturally vibrant place through a marriage of high quality design with community engagement. This does not preclude the provision of public art, providing it is integral to achieving high quality design across the site.

As such cultural wellbeing initiatives should cover 2 main areas of activity and focus:

- 1) Activities that positively influence physical form and function to secure high quality design - i.e. projects that have a physical, permanent outcome integrated into form, function, style or content of a place, space or building. These could range from projects where an artist has participated in the design or masterplanning of buildings, townscapes, or landscapes, to the design and making of individual physical elements within them.
- 2) Activities that engage with the emerging community - i.e. potentially a programme of projects that could range from creative consultation to festivals, ephemeral structures, film, web, recording the oral history of the emerging new community or other virtual projects that promote a clear sense of identity to those within the settlement and external to it, to regular activities like community choirs etc.

Objectives:

Cultural well-being activities should complement and support the vision and aims of the NW Bicester Eco Town development by:

- Exploring the use of sustainable materials – using recycled materials or locally sourced materials to reduce the carbon footprint and inventive ways to offset other resources used;
- Celebrating nature and the natural environment, by reflecting on natural and environmental issues; interpreting nature, creating artworks to inform people and raise awareness about nature and its processes, and/or about environmental issues through participatory art projects;
- Encouraging environmentally friendly behaviour – artwork as bins to encourage recycling, using sustainable routes through the development – artwork to encourage cycle and walking routes – and help with way finding and directing the flow of people through public areas;
- Encouraging local residents and visitors to think about and become environmentally aware in their everyday living;
- Create an identity for the development (as the first Eco Town in the UK), to both the residents and outside world;
- To use the creation of artwork/s to assist in the creation of a distinctive, safe, vibrant, cohesive and socially sustainable community.

CDC is seeking developers to provide opportunities for the community to engage and participate in their environment, using temporary artist led interventions to assist in achieving high quality design and also as a catalyst for community growth.

Implementation:

CDC will seek to embed cultural wellbeing in the site's development in the following way:

- Broadly, each outline consent for the site will be accompanied by a S106 agreement which will contain clauses to require cultural wellbeing elements to be incorporated into areas of site infrastructure (e.g. landscape, schools etc) and for a public artist to be commissioned to manage how the public are engaged on this.
- Specifically, each S106 agreement will require an overarching Cultural Wellbeing Statement covering the area coterminous to that of the outline consent, to be submitted to and approved in writing by CDC prior to the submission of reserved matter applications. This Statement will contain detailed proposals to support the cultural enrichment of the site. Ideally Cultural Wellbeing Statements should include a mixture of projects where cultural elements are integrated into form and function of the site to achieve high quality, distinctive design and projects where the focus is on community engagement - of course some projects will include both elements.
- Each reserved matters consent will contain conditions or incorporate an agreement to secure the approach set out in the approved Cultural Wellbeing Statement, providing CDC is satisfied with what is being proposed.
- In respect of full applications on the site, Cherwell District Council will require all such submissions to be accompanied by a Cultural Wellbeing Statement, the outcomes from which will be secured by S106 agreement or condition as appropriate.

Each Cultural Wellbeing Statement should set out a clear route to how its proposals can be implemented throughout the site. CDC will expect each Cultural Wellbeing Statement to contain realistic and achievable proposals which can be funded as a necessary part of the site development costs. However in the case of particularly ambitious and / or innovative ideas being put forward, some funding could come from private sponsorship and some from public arts funding streams. CDC will be happy to support any necessary bids and help seek out funding sources where they consider proposals are particularly innovative.

Further advice:

For further advice on appropriate organisations that can help applicants in drawing up initiatives to include in their Cultural Wellbeing Statements, and for information on public artists who are experienced in community engagement on art projects, please contact Nicola Riley (Shared Interim Community Partnerships and Recreation Manager, Cherwell District Council) as follows:

Nicola.Riley@cherwell-dc.gov.uk

Direct Line: 01295 221724

Appendix IV



