

NW Bicester

An application for the exemplar phase of the
NW Bicester Eco Development proposals submitted by
P3Eco (Bicester) Limited and the A2Dominion Group

Design and Access Statement

FARRELLS



17th Dec 2010 Revision B

P3Eco Ltd



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1 INTRODUCTION

1.1 Executive Summary

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1.1 Executive Summary



An holistic vision for Bicester

This Design and Access Statement (DAS) is submitted in support of a planning application to develop land to the north west of Bicester to provide for residential mixed used development as the exemplar phase of the wider proposal to develop land at NW Bicester as an Eco Development pursuant to the Supplement to PPS1 and the emerging Core Strategy of Cherwell District Council.

The proposed development, as defined in the planning application is as follows:

“Development of Exemplar phase of NW Bicester Eco Development to secure full planning permission for 393 residential units and an energy centre (up to 400 square metres), means of access, car parking, landscape, amenity space and service infrastructure and outline permission for a nursery of up to 350 square metres (use class D1), a community centre of up to 350 square metres (sui generis), 3 retail units of up to 770 square metres (including but not exclusively a convenience store, a post office and a pharmacy (use class A1)), an Eco-Business Centre of up to 1,800 square metres (use class B1), office accommodation of up to 1,100 square metres (use class B1), an Eco-Pub of up to 190 square metres (use class A4), and a primary school site measuring up to 1.34 hectares with access and layout to be determined”.

The application is supported by a number of technical assessment and related documents as set out in the Scope of Application Document (Doc 1) and this DAS needs to be read in conjunction with those documents. The Planning Statement sets out the planning context and policy rationale for the scheme. In addition, the Economic Strategy sets out the proposals and strategy for achieving a range of commercial opportunities as part of the exemplar phase. Likewise, Hunt Dobson Stringer has considered the social and economic characteristics of the existing community and the likely effects of the proposed development in terms of population and provision of social and community facilities.

This DAS sets out the analysis and description of the site, the evolution and evaluation of the site and key drivers of the design process, and the design response.

This document sets out an appraisal of Bicester and The Site. It outlines the context within which the scheme has developed and the development of the emerging Masterplan principles. The design teams' responses to the brief are included under the headings 'The Design Response', 'Landscaping', 'Energy Waste and Water', 'Commercial and Employment', 'Transport and Access', 'Secured by Design Principles' and 'Access Statement'.

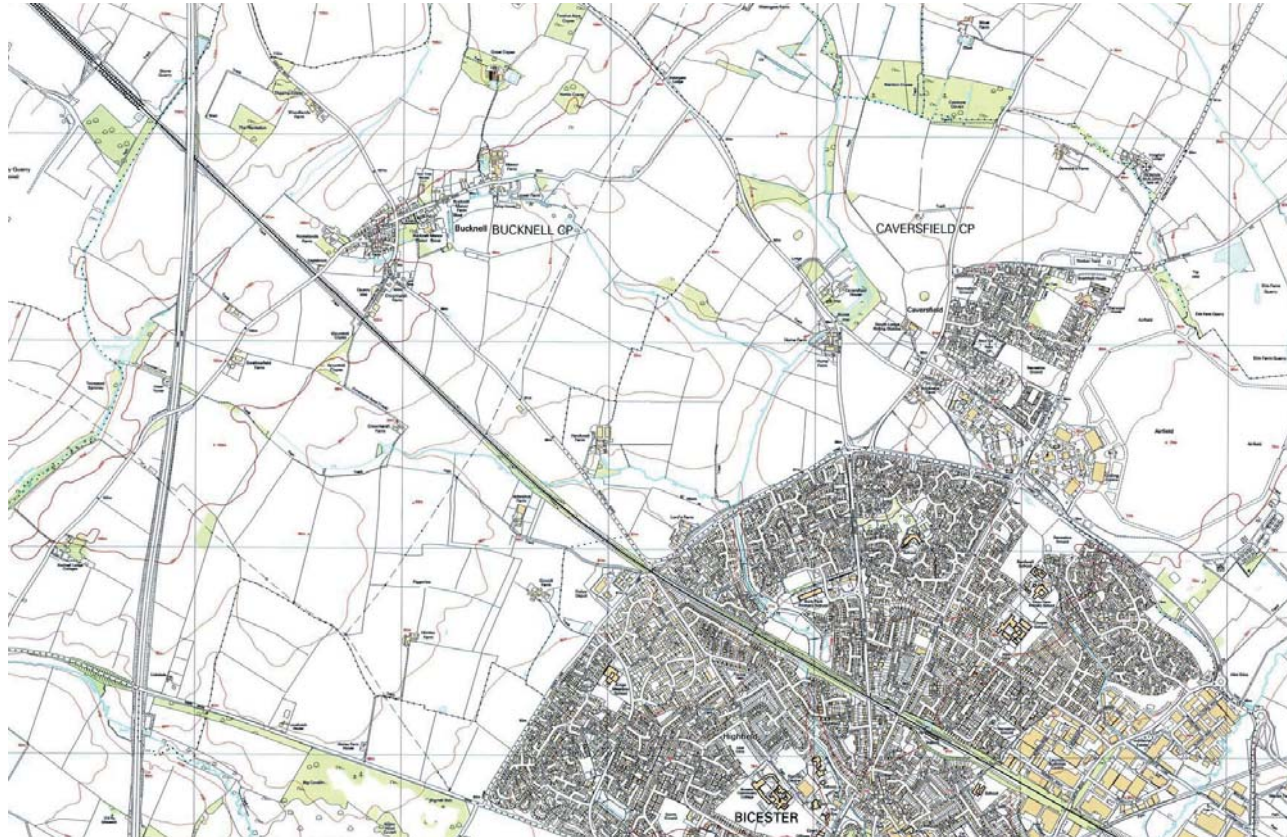
In June 2009 Farrells and P3Eco (Bicester) Limited launched their 'Vision for the future of Bicester', which promoted the idea that an eco development at Bicester should contribute to the regeneration of the town as part of a holistic plan to transform Bicester into a more sustainable community.

The NW Bicester development is now one of four Eco Towns identified in the PPS1 supplement which has been allocated funding support from central government. The development seeks to fully integrate with the existing town and create a settlement planned and built to the highest standards of sustainability. P3Eco has been encouraged to bring forward a first settlement of a few hundred homes to make the first steps on the journey to developing the Eco Town.

Farrells, together with a team of leading consultants, listed below, were commissioned jointly by P3Eco and A2 Dominion Group to develop the masterplan for the Eco Town development (known as NW Bicester) and designs for the first phase of the proposed North West Bicester Eco Town.

This Design and Access Statement documents the supporting illustrative NW Bicester proposals, the outline designs for the non-residential buildings and the detailed designs for the housing and infrastructure of the first phase. In addition it contains extracts from other supporting technical documents, including the Environmental Impact Assessment, forming part of the planning application.

1.2 Development Team



Client:	P3Eco (Bicester) Limited A2Dominion Group
Masterplanner:	Farrells
Master Landscape Architect:	Patel Taylor
Architect:	Farrells
Residential Architects:	Higgs Young Architects Panter Hudspith Architects
Landscape Architect:	Hyder
Planning Consultant:	Barton Willmore
Transport Consultant:	Hyder
Townscape Consultant:	Hyder
Engineering Consultant:	Hyder
Sustainability Advisor:	Bioregional
Population/Community Facilities Consultant:	Hunt Dobson Stringer
Employment Consultant:	SQW
Consultation Consultant:	PMC

Bicester's North Western extent and outlying villages

2 NW BICESTER CONTEXT APPRAISAL

- 2.1 NW Bicester Site History
- 2.2 NW Bicester Site Development History
- 2.3 NW Bicester Site Today

2.1 NW Bicester Site History



1830



Bicester, 1898



Historic Sheep Street



Sheep Street today



1950
The Causeway and the Church



2009



Bicester Sheep Fair, Sheep Street, 1908

Roman settlement mid 1st to 5th Century

A north-south Roman route, known as the Stratton (Audley) Road, from Dorchester to Towcester, passed through the area which later became the town of Bicester. Akeman Street, an east-west Roman road from Cirencester to St. Albans lies 2 miles (3.2 km) south. The ruins of the Roman settlement of Alchester lie 2 miles (3 km) southwest of the town.

Crossroad town – 6th Century onwards

The West Saxons established a settlement in the 6th Century at the crossing of a series of ancient routes on each side of the Bure stream. The name Bicester, which has been in use since the mid 17th Century, derives from earlier forms including Berncestre, Burencestre, Burcester, Biciter and Bissiter. The Domesday Book survey of 1086 recorded Berencestra, with two manors of Bicester and Wretchwick. The town became established as twin settlements on opposite banks of the River Bure, a tributary of the Ray, Cherwell and ultimately the Thames.

Market town – middle ages to 19th Century

Bicester developed as a trading centre, with a market and fair established by the mid 13th Century with two further manors, Bury End and Nuns Place, later known as Market End to the west and King's End to the east of the River Bure.

The two townships of King's End and Market End evolved distinct spatial characteristics. Inns, shops and high-status houses clustered around the triangular market place as commercial activity was increasingly concentrated in Market End. King's End had a lower population and less commerce on the East side of the Bure. The manorial lords, the Cokers, lived in the manor house since 1584. The house had been rebuilt in the early 18th Century remodelled in the 1780s. The park was enlarged surrounded by a wall after 1753

Garrison town 17th to 20th Century

The town has a long-standing connection with the military. During the Civil War (1642–49) Bicester was used as the headquarters of parliamentary forces. During the First World War an airfield was established north of the town for the Royal Flying Corps. This became a Royal Air Force station, but is now Bicester Airfield, the home of Windrushers Gliding Club. The British Army's largest ordnance depot - the Central Ordnance Depot of the Royal Logistic Corps- was located just outside the town.

Connected town - 1850 to present day

The Buckinghamshire Railway company completed the railway between Bletchley and Oxford in 1851, with a station in Bicester now called Bicester Town. In 1910 the Great Western Railway completed a new fast route between London and Birmingham, and opened a large station on Buckingham Road to serve Bicester now called Bicester North. Chiltern Railways trains runs between London Marylebone and Birmingham Snow Hill call at Bicester North.

2.2 Masterplan Site Development History

Bicester also has local bus services to Oxford and Banbury, and is served by long-distance route X5 between Oxford and Cambridge. Bicester's proximity to junction 9 of the M40 motorway provides good road links to London, Birmingham and Banbury. It also has good road links to Oxford, Kidlington, Brackley, Buckingham, Aylesbury and Witney.

The historic town centre, particularly Sheep Street and Market Square, have a wide range of local and national shops together with cafés, pubs and restaurants. Sheep Street is now pedestrianised with car parks nearby. Weekly markets take place on Fridays in the town centre along with farmers' markets and an occasional French market.

South of Bicester is Bicester Village Shopping Centre. Bicester has a population of 30,000 with two secondary schools: Bicester Community College (BCC) and the Cooper School. There are a number of primary schools including Langford Village Primary, Glory Farm Primary, Southwold, Brookside Primary School, St Edburg's, Five Acres, Longfields and Bure Park Primary.

NW Bicester Site Context Development History

During the 1700s the common fields were enclosed as privately owned farms:

- Market End farms – 1758
- Bucknell farms – 1780
- Caversfield – 1780
- Bicester King's End farms – 1793

Caversfield Parish (previously a detached part of Buckinghamshire) became part of Oxfordshire in the 1830s and 1840s. Hawkwell and Crowmarsh Farms were bought from the Bucknell Manor estate in 1918.



Roman / Medieval



Modern



Evolution

2.2 Masterplan Site Development History



Bicester Current Development

1. Sainsbury's Town Centre Development. Sainsbury's £70 million re-development of the town centre, originally planned to start in 2008, had been delayed by the onset of the credit crunch, but is now going ahead.
2. Kingsmere – 1585 houses and associated facilities at SW Bicester
3. Business Park – 12 office buildings and a hotel not yet commenced
4. Evergreen 3 – Improvements to Bicester Town Station and a new London-Oxford rail route

2.3 Masterplan Site Today

NW Bicester Site Context Today

This is broadly described as having a rolling landform, with underlying limestone geology, characterised by a distinctive pattern of woodlands and mixed farmland - much of which is associated with 18th Century parkland. Most recently, the Oxfordshire Wildlife and Landscape Study (2004), places the site within 'Wooded Estatelands' Landscape Character Type, with the following key characteristics (Ref 1-4):

- *Rolling topography with localised steep slopes*
- *Large blocks of ancient woodland and mixed plantations of variable sizes*
- *Large parklands and mansion houses*
- *A regularly shaped field pattern dominated by arable fields*
- *Small villages with strong vernacular character*

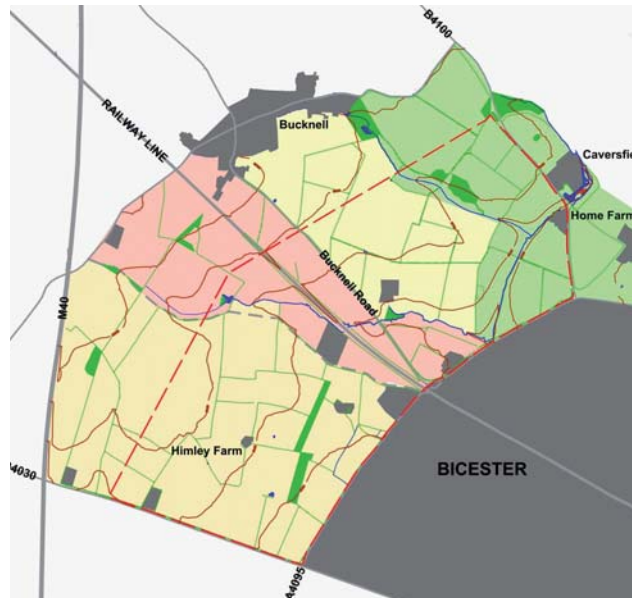
Geology, landform and drainage: The geology in the area around Bicester and further south is dominated by Oxford Clay. Landform is gently rolling, with the streams of local springs flowing through small valleys.

Landcover: Mixed farmland is the dominant landcover, with arable farming forming the principal use and pasture generally on the steeper slopes. This is a well-wooded landscape with blocks of woodland and corridors of trees bordering valley streams. Fields are generally enclosed by hedgerows, with established ash and oak hedgerow trees also contributing to the wooded character of the landscape.

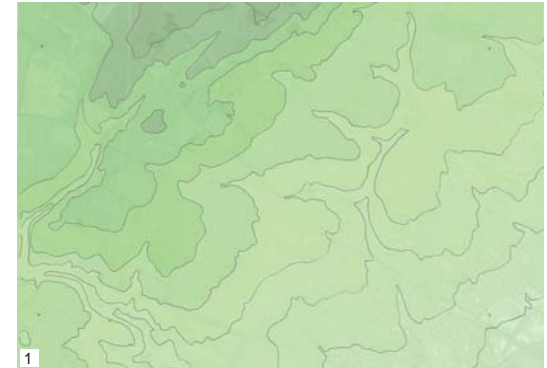
Settlement and communications: Settlement is characterised by scattered farmsteads generally with strong vernacular character, reinforced by features such as stone walls and stone buildings with stone or clay tiled roofs. The surrounding agricultural land is generally characterised by a geometric pattern of medium to large fields. Bucknell Road, a minor country lane, links Bicester with the village of Bucknell, to the north, and the A4095, B4030 and B4100 provide the wider transport/communications network at Bicester's northern edge. A bridleway runs through the centre of the site, connecting Bicester with open countryside to the north. Overhead power lines and a railway line, mostly on embankment, also traverse the area.

Local vernacular and building materials

The earliest surviving buildings of the town are mainly grey oolitic limestone, from the Priory Quarry at Kirtlington, five miles (8 km) west on Akeman Street, some ginger lias (ironstone) comes from the area around Banbury and white and bluish grey cornbrash limestone was



quarried in Crockwell and at Caversfield two miles (3 km) to the north. Timber framed structures used timber from the Bernwood Forest on the western slopes of the Chilterns five miles (8 km) east. Infilling of frames was of stud and lath with lime render and limewash. Others were of brick or local rubble stonework. The river valleys to the south and east of the town were the source of clay for widespread local production of brick and tile local roofing materials included longstraw thatch, heavy limestone roofs made with Stonesfield slate and local red clay plain tiles. 19th Century bulk transport by canal and railway infrastructure allowed imports of blue slate from North Wales.



- 1 Existing Topography
- 2 Water courses
- 3 Settlement pattern today

2.3 Masterplan Site Today



Banbury Road



Bure Park - Pedestrian / Cycle Access



Goswell Farm



Howes Lane - Residential Area



Bicester Town Centre



Cowell Farm



Himley Farm



Lords Lane



Bucknell Road



St Lawrence Church



Home Farm



Railway embankment

3 FIRST PHASE CONTEXT APPRAISAL

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3.1 Site Development History



The NW Bicester site includes a number of agricultural land ownerships. During the course of 2009 P3Eco began discussions with landowners to understand the options for acquisition and to put in place preliminary agreements for the delivery of land for the development.

During early 2010 P3Eco instructed Farrells to begin to consider designs for the first phase of the development. Due to the nature of the emerging discussions with the landholders and the increasing level of information spread through the NW Bicester consultation process, P3Eco were presented with a number of options for the location of the exemplar scheme.

Initial studies included the use of land owned by the Malins and the Phipps, before settling on a proposal solely on the land owned by the Phipps family. This approach was informed by the timescales in place and the nature of the arrangement.

Once this decision had been made an assessment was undertaken to appraise which 21 hectares would facilitate the first phase and deliver the aspirations for NW Bicester.

The Phipps land does not have frontage onto Lord's and Howe's Lanes and therefore making connections to and from Bicester would prove more challenging. However, the selection of land would be driven by this desire to forge links with the existing town. Four regular shaped and flat fields that facilitated uncomplicated development sat to the north of the available land, however it was decided that this extent would lead to an isolated development that failed to connect with Bicester and therefore failed to deliver the principles of the Eco town. Instead, the most southerly of the fields available would be chosen in addition to two of the northerly fields, creating a red-line boundary that circled the Phipps' Home Farm. This boundary was further modified by Phipps wishes to retain a green setting to the western side of their property to retain medium length views.

Masterplan extent showing exemplar red-line boundary



Red-line boundary studies

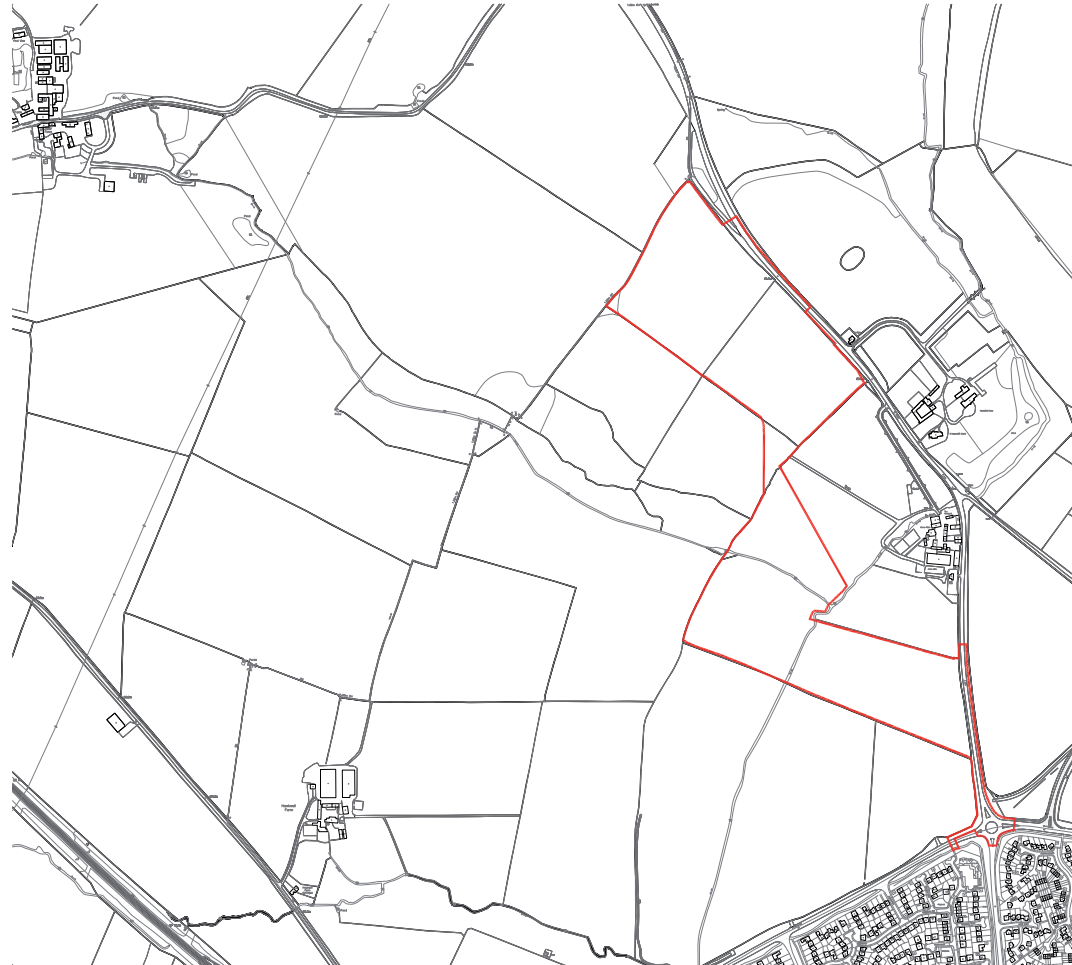
3.2 Site Today

The first phase site comprises approximately 21 hectares of farm land lying to the west of Banbury Road (B4100), north of Bicester Town and its ring road extent.

The site is located at the eastern edge of the wider masterplan proposals for NW Bicester, to the north east of the railway viaduct and Bucknell Road that transect the masterplan proposals. To the north and east are the satellite villages of Bucknell and Caversfield respectively.

The red-line boundary locally frames the lands of Home Farm and has views to Caversfield House and the Anglo-Saxon St Laurence's Church.

The unusual 'bow-tie' shape of the red-line line boundary contains an interesting topography and sits within the defined landscape character of Caversfield Valleys and Ridges. The land is predominantly laid to pasture, is not publicly accessible and contains no built forms.



The site today



View of the southern field looking north east

3.3 Site Analysis

The site can be considered as comprising of three areas; the southern field, the watercourse zone and the northern fields. The former fronts the Banbury Road as it leads northwards from the town centre and is mostly flat before falling approximately 5m into a valley defined by a tree-lined watercourse that is dry for the majority of the year. The field has a sense of enclosure due to the established hedgerows to all sides albeit for breaks for field access and farm activities.

The central zone contains the most interesting variation in topography falling in two directions to the watercourses travelling north/south and east/west before rising up to meet the two fields to the north. The watercourse that transects this area has low level reeds in contrast to the wooded character of the watercourse leading to Home Farm. Hedgerows are prevalent to the south and western boundaries whilst the diagonal boundaries are an invention of the red-line exercise and there are no landscape features that respond to these. Views of Home Farm and the gable of St Laurence's Church emerging from woodland are visible in this section.

The middle zone is also rich in ecology with the main badger sett adjacent to the east/west watercourse and an annex sett adjacent to the north/south brook as well as a bat roost in this location. Further information regarding the site's ecology can be found in Arup's Ecological report included in the Environmental Impact Assessment.

The diagonal linking point with the northern fields allows for the connection of the upper two fields to the middle section and is crossed by an existing access from the farm to the two central fields which will continue to be used for pasture for the livestock.



Panoramic of Southern Field



Photograph of wooded watercourse



Photograph of watercourse bed



Site Topography

3.3

Site Analysis



Panoramic of middle zone



Location of badger sett

The upper two fields have their longest frontage onto the B4100 as the road turns north west on its way to meet the A43. The fields are orthogonal in their arrangement contained with a perpendicular framework of hedgerows, which flare as they meet the carriageway edge. The fields are featureless being relatively flat, however to their northern most corner the hedgerows merge with woodland, masking a road lay-by before extending further north. The top two fields are accessed by means of a track from Home Farm and also a small entrance adjacent to the central hedgerow.

The setting of St Laurence's Church and Home Farm is a key consideration in the development of the upper fields, a setting that in a large part is defined by undeveloped agricultural land with associated rural qualities. The softening of the edges of any new development would be needed to provide a proper buffer to these features.



Panoramic of the northern field (west)



Home Farm



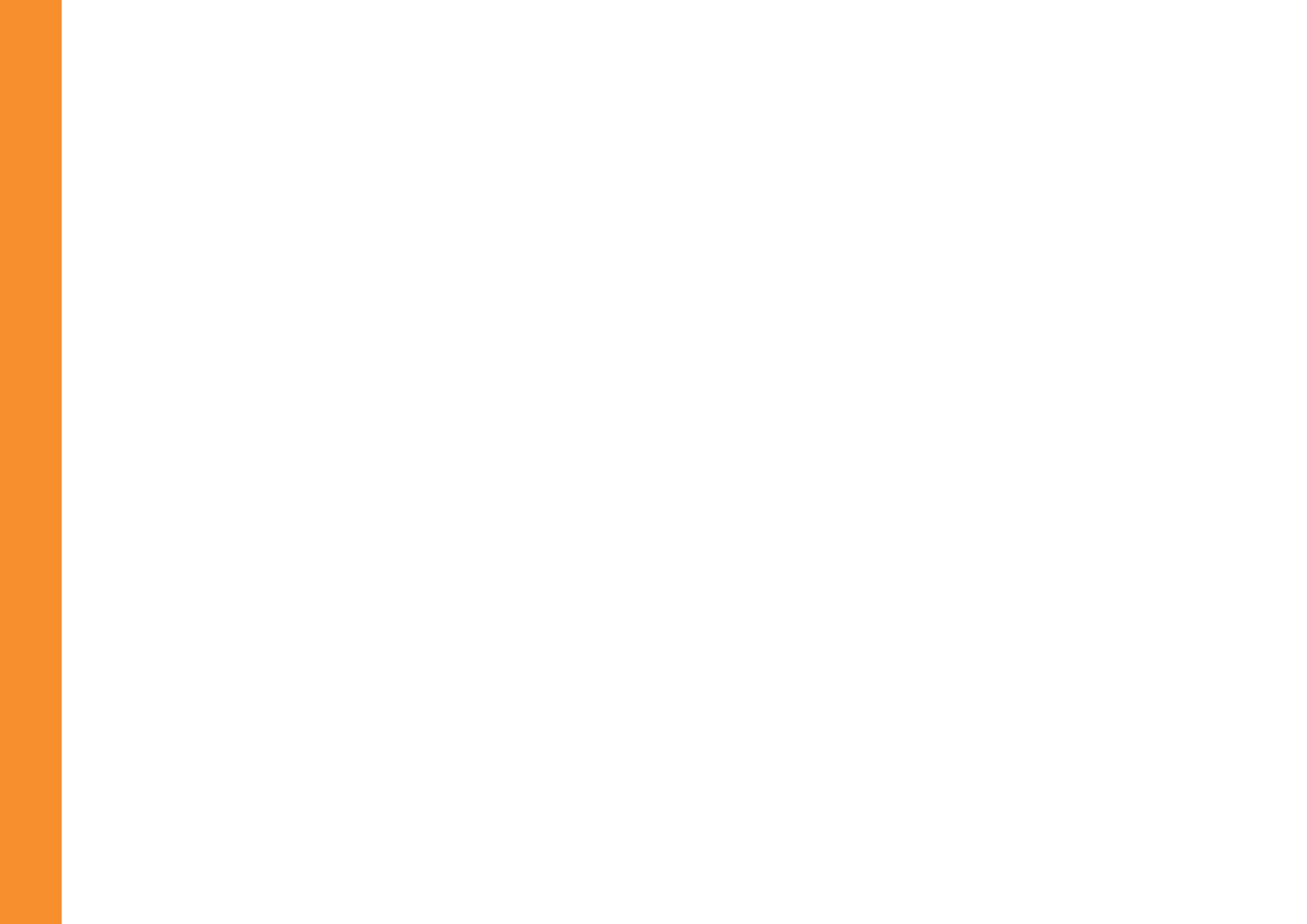
Home Farm



St. Lawrence's Church

4 MASTERPLAN URBAN DESIGN PRINCIPLES

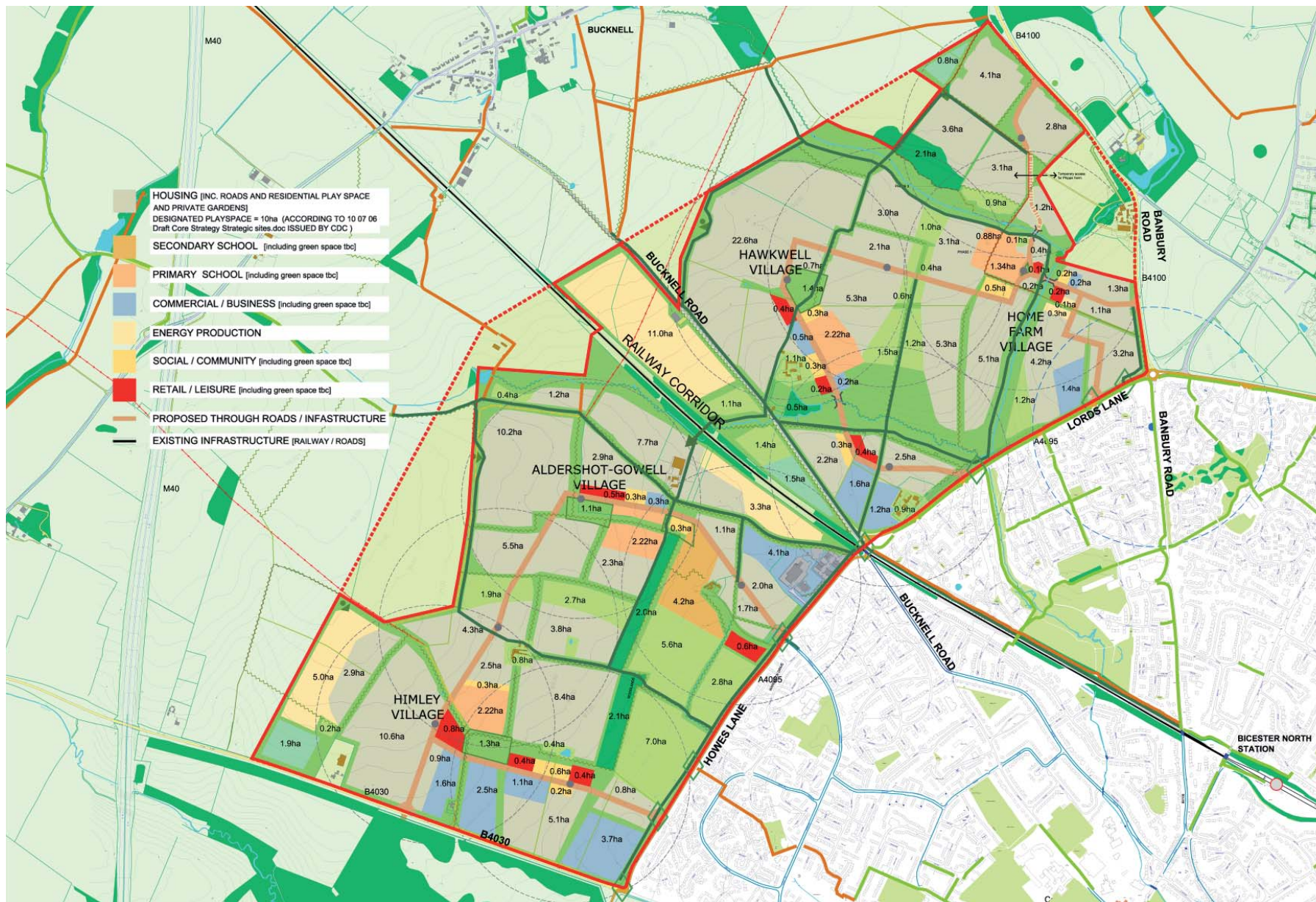
4.1 Design Concepts



4.1 Design Concepts



NW Bicester Masterplan



NW Bicester Masterplan Land-Use drawing

4.1 Design Concepts

The NW Bicester eco development masterplan objectives are to:

- Extend the town with 5000 zero carbon homes
- Enable the countryside to infiltrate the development with green open spaces linked into Bicester town
- Encourage the integration of new and existing communities with shared services and infrastructure
- Work with the laws of nature to create landscape as the primary infrastructure
- Link communities with the sites history creating local centres around existing farmsteads
- Create renewable energy production harnessed locally
- Retain existing businesses
- Create new employment with emphasis on innovation, training and eco business opportunities
- Disperse employment and community facilities across new local centres
- Provide integrated transport links throughout the site and into the existing town centre and rail stations
- Ensure that all parts of the site are within 400m walking distance of a regular bus route
- Humanise the ring road by creating crossing and frontage designed to the scale of people not cars
- community and service facilities to be distributed within close walking distances of all housing

The Masterplan creates green infrastructure with the objectives:

- 40% of development site area will be provided as green infrastructure
- Provide a series of linked open spaces between the 4 hub / villages
- Create green linkages with the wider countryside and communities
- Connectivity for cyclists and pedestrians creating strong links to the existing town and surroundings
- Existing, topography, water courses and habitats will provide a strong framework for the green infrastructure
- Existing hedgerows are to be retained and integrated with the green space in the development creating habitats and amenity space

- Further work is continuing to determine how various uses are distributed.
- Provide a net Increase in the biodiversity of the area
- Create allotments to grow food locally
- Provide a woodland cemetery: an essential requirement of Bicester Town

The masterplan a social infrastructure in four new villages centres with the objectives:

- 4 Hubs / village centres for services located within walking range of a 400m radius of residential areas
- A new crossing over/ under the rail for foot and cyclists
- The secondary school is to the south of the railway close to Howes Lane
- A 15 hectare area of green space is provided suitable for sports recreation space close to Howes lane
- The area of non residential uses is approx 12% of the development area.
- An area for energy production has been identified adjacent the railway which needs to be investigated further as part of the energy strategy.
- The character of the layout and public open space in the new villages is based on similar size and scale of villages in the surrounding Oxfordshire area
- all parts of the site are within 400m walking distance of a regular bus route
- The village centres have a mix of land uses and the masterplan has been revised to co-locate these as much as possible allowing flexibility for shared use of facilities and parking.
- Local centres are focused on village greens and market squares with primary schools, eco business centres, eco pubs, village stores, shops, nurseries and health centres
- Local centres based around existing farmstead
- Local centres vary in scale according to location
- Employment dispersed across all local centres

The NW Bicester eco development aims to be a catalyst for the wider regeneration of Bicester town

- Make the historic town centre into the 'heart' of the place
- Get local people to shop locally
- Develop a variety of related new activities
- Create a destination for the local communities
- Improve the quality of the public realm
- Make the most of Bicester's strategic position
- Create a sustainable transport plan for the town

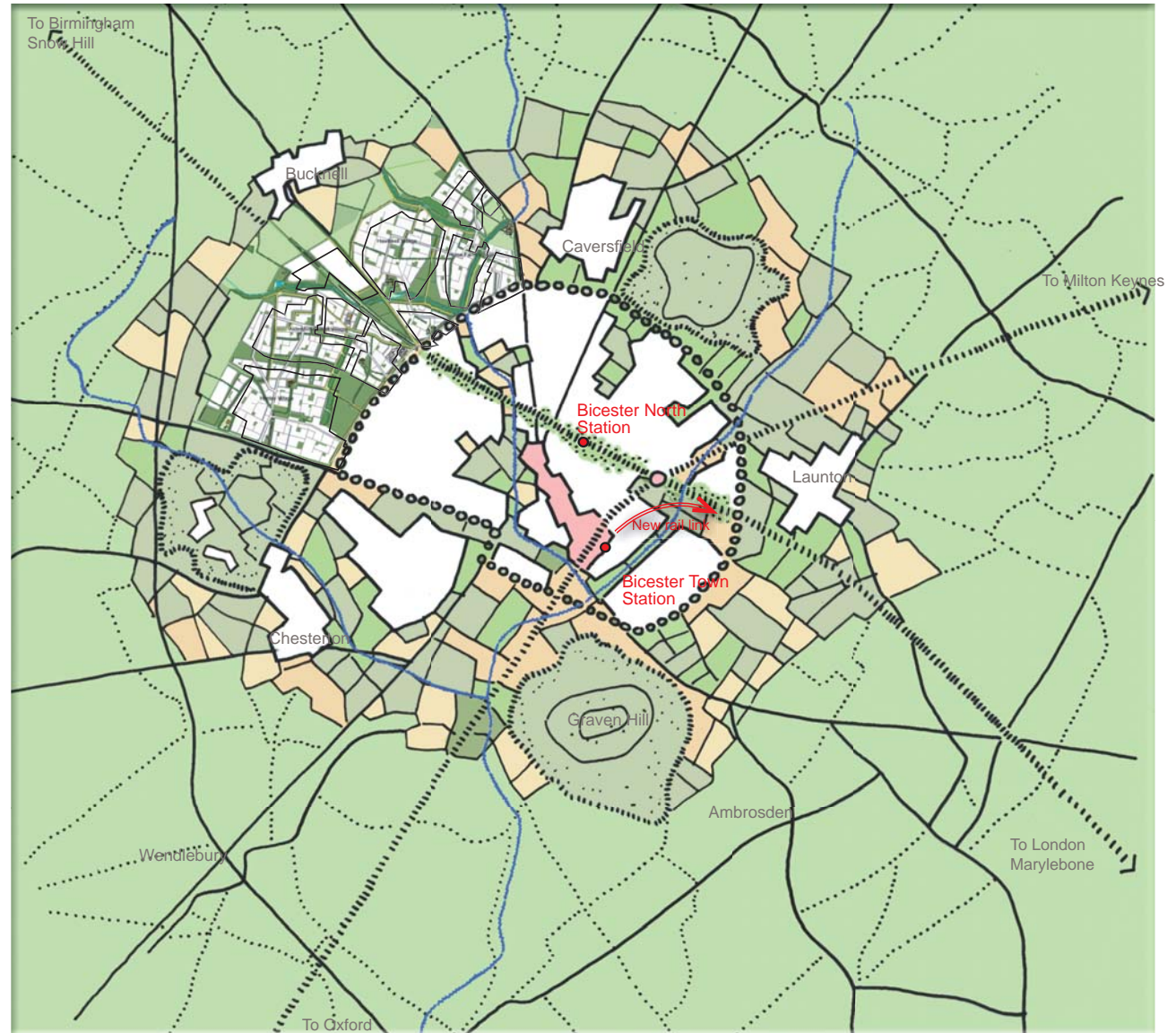
4.1 Design Concepts

Building on Existing Transport Infrastructure

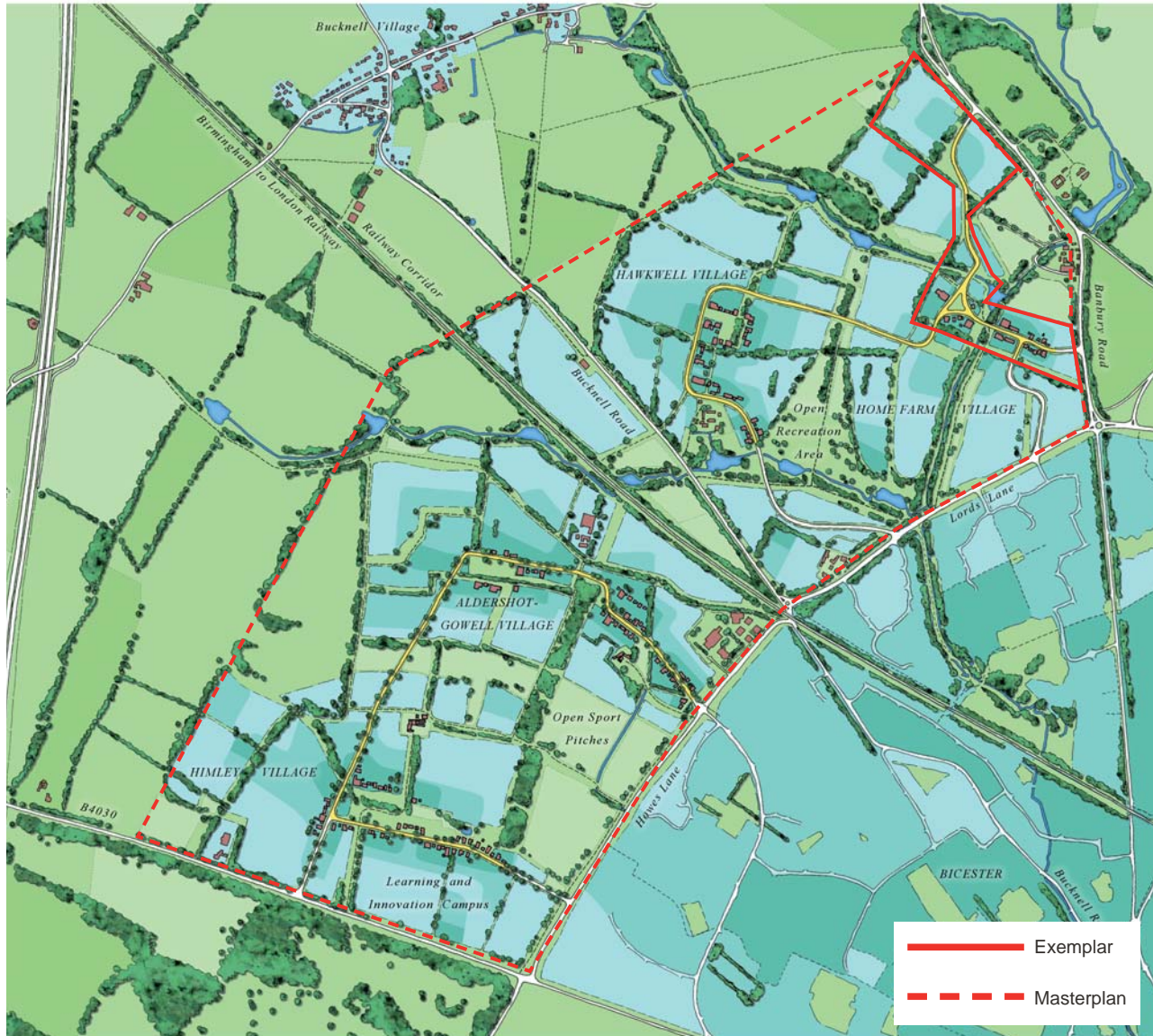
- The Ring Road is humanised with new crossings, frontages, cycleways and road access to the development from Howes Lane, Lords Lane, Middleton Stoney Road and Banbury Road.
- A new crossing over/under rail creates a network of routes for pedestrians and cyclists.
- New shared use off-road foot and cycle paths will make Bicester the best place on two wheels.
- Existing tracks and footpaths become new connectors to surroundings.
- Build on existing bus and public transport infrastructure reducing the reliance on the private car.

Growing the social infrastructure

- A new eco-development extending the town with 5000 zero carbon homes grown around existing farmsteads.
- A new secondary school located to maximise catchment area and with proximity to sport pitches and sport and fitness centre.
- A learning and innovation campus linked to Oxford and Cherwell Valley College located with good accessibility to Bicester town station.
- Several Possible locations are provided for woodland cemeteries.
- Renewable energy production is harnessed locally from biomass and or PV solar array.
- Existing businesses retained and new employment created and dispersed across all local centres.



4.1 Design Concepts



“Working with the laws of nature” - landscape as the primary infrastructure

- Existing hedgerow, stream, pond and woodland habitats conserved, enhanced and integrated into green infrastructure and the new development.
- 40% of the development will be green infrastructure increasing the biodiversity of the area.
- Allotments will make locally grown food accessible to local communities and educate children and young people about their local environment.
- Landscape amenity space, will provide open recreation area to ensure that everyone has access to the natural environment.

Four new villages become the focus for the social and cultural infrastructure

- Existing farm buildings are retained and become the heart around which the new village community centres are grown.
- Local centres are focused on village greens and market squares with primary schools, eco business centres, eco pubs, village stores, shops, nurseries and health centres.
- Community and shopping facilities located close to housing will make local centres into the destination for the local communities.
- The character of the layout and public open space in the new villages is based on similar size and scale of villages in the surrounding Oxfordshire area.

5 DESIGN RESPONSE

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The Vision for Bicester seeks to develop the town to become an important economic centre in its own right within the Central Oxfordshire sub-region and on the Oxford-Cambridge arc. Furthermore, the vision indicates that North West Bicester will contribute greatly to improving Bicester's profile by being a pioneering development, an economic driver and by delivering environmental gains (paragraphs B.13, B.14 and B.15). Furthermore, the emerging Core Strategy at paragraphs B.3 and B.4 indicates that by 2026 Bicester's town centre will have been redeveloped and environmental and highway improvements will have been made to Market Square. The detailed proposals for Bicester are to be addressed through an Area Action Plan ('AAP'). The proposals for NW Bicester are consistent with this vision and policy objective.

Land to the north west of Bicester is identified at policy NWB1 to provide some 5,000 dwellings in total with 3,200 by December 2026 in an Eco Town, together with schools, local centres and facilities, a care home, B1 office accommodation, retail units and health care facilities along with other ancillary developments.

P3Eco and A2Dominion Group support the identification of land to the north west of Bicester for development and will continue to engage with the Council through the preparation of the Core Strategy and related policy framework.

5.1 Masterplan response and Consultation



Workshops



The development in parallel of the NW Bicester masterplan and the designs for the first phase will ensure the exemplar scheme responds properly to the emerging local context and the existing setting of the town and its surrounding villages.

The masterplan and exemplar have been developed in conjunction with the consultant team using a series of workstream-based workshops to discuss subjects such as design and sustainable construction, green infrastructure, transport and access, energy, waste and water, employment, training and local community facilities. The workshops have been attended by key stakeholders to allow for input at early stages and in turn to assist in the development of the proposals.

In addition the scheme has been presented and explained to the local community on a number of occasions and locations. A range of media, including a dedicated website has been deployed to gather comments and ideas from local residents and community representatives. Further details pertaining to the community involvement and consultation that has been undertaken is set out within the Statement of Community Involvement.



Public consultation events



The application is accompanied by a Statement of Community Involvement which sets out the evolution of the concept of the Eco Development and the formulation of the master plan and exemplar phase.

The detailed work to produce the wider master plan and the specific proposals for the Exemplar Phase began with an Open Planning Week which established local ambitions, context and concerns. Subsequently, there have been two further periods of consultation which have provided opportunities to scrutinise both outline and detailed plans for the Exemplar scheme.

The Design Teams' response to the comments from the consultation process can be found in the chapter entitled 'Process: Design Evolution, Involvement & Evaluation.'

5.2 The Amount and Uses

Framework for the Brief:

P3Eco have selected A2Dominion Group as its development partner for the promotion and implementation of the exemplar scheme, and also as affordable housing partner in respect of the wider master plan proposals. The land at North West Bicester is identified in the Supplement to PPS1 entitled 'Eco Towns' (July 2009) as a location for a potential Eco Town. The supplement sets out a range of criteria against which Eco Town proposals should be assessed.

P3Eco are promoting the overall site for residential development comprising an Eco Town through the preparation of the Cherwell Core Strategy DPD. Accordingly, representations were submitted in response to the preceding consultation drafts of the Core Strategy dated April 2010.

Within the Core Strategy, Cherwell District Council ("the Council") has identified that an eco-development of 5,000 homes and will be developed on land at North West Bicester with 3,200 to be delivered in the period to December 2026.

This need is reflected in the emerging Core Strategy (at policy NWB1 of the Preferred Options Draft), which identifies land at North West of Bicester as a strategic site for the provision of an Eco-Development.

The emerging policy also identifies that land at North West of Bicester is to:

Provide a development of 5,000 homes;

Create a development that will be a zero carbon development as defined in the PPS;

Deliver a high quality local environment taking into account climate change adaptation;

Homes that achieve Level 6 of the Code for Sustainable Homes (Code level 5 for the exemplar scheme);

Access to one employment opportunity for each new dwelling within easy reach by walking, cycling and / or public transport;

At least 50% of trips originating from the development should be made by means other than the car with potential to rise to 60%; and

40% of the total gross site area will be provided as green space of which half will be public open space.

It is the Council's intention to identify the land at NW Bicester as a strategic location in the Core Strategy and thus obviate the need for a further allocation in the site allocations DPD or similar. The bound-

ary of land that comprises the North West Bicester Eco-Development allocation is defined at Appendix "6" of the emerging Core Strategy.

The PPS1 supplement advises that it is for the local planning authority to decide whether it wishes to meet its strategic housing requirements by way of Eco Town or alternative means (para ET3.1). Proposals for Eco Towns are to be brought forward through the preparation of the Core Strategy and related DPDs (para ET4.1). However, where proposals are submitted in advance of the Core Strategy the policies set out in the Supplement are material (para ET5.1).

Further, PPS3 requires Council's to identify land that is available, suitable and achievable. The purpose of this document is to respond to the emerging policy and demonstrate the deliverability of the site, having regard to paragraphs 54 and 69 of PPS3.

In short, the scheme aims to :

Achieve high quality housing;

Provide a good mix of dwellings;

Use land effectively; and

Be in line with planning for housing objectives.

This Design and Access Statement is submitted in support of a planning application to develop land to the north west of Bicester to provide for residential mixed used development as the exemplar phase of the wider proposal to develop land at NW Bicester as an Eco Town pursuant to the Supplement to PPS1 and the emerging Core Strategy of Cherwell District Council.

The proposed development will provide for the following quantum of development:

393 Residential Units;

An energy centre (up to 400 square metres);

A nursery (up to 350 square metres);

A community centre (up to 350 square metres);

3 retail units (up to 770 square metres);

Office Accommodation (up to 1,100 square metres);

Eco business centre (up to 1,800 square metres);

An Eco-Pub (up to 190 square metres); and

A 1 form entry school contained on a 1.34 hectare site.

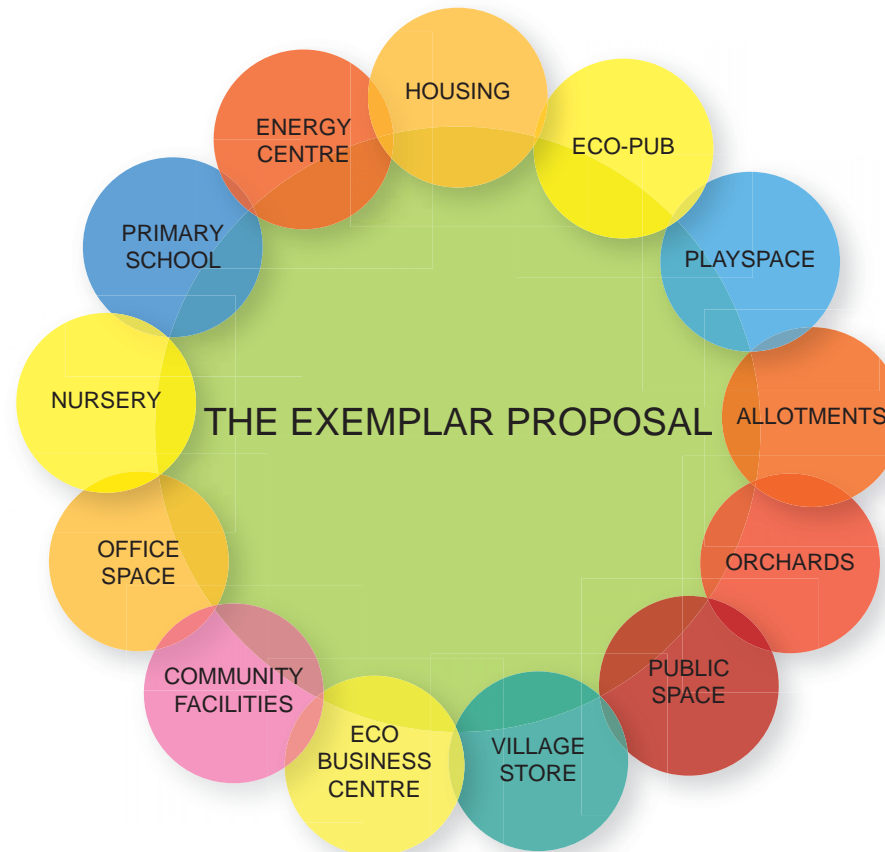
5.2 The Amount and Uses

The aspirations for the NW Bicester Eco Town will begin to be expressed in the first phase of the development. NW Bicester is proposed in the Annex to Planning Policy Statement 1 on sustainable development and supplement sets out the range of minimum standards for Eco Towns. Many of these are more challenging than would normally be required for new developments with the aim of ensuring that Eco Towns are exemplars of good practice and provide a showcase for sustainable living.

The initial phase of the masterplan provides for almost of a third of the houses in the first envisaged village in NW Bicester. It is important for the exemplar phase and the wider masterplan that the new community is representative and inclusive and to this effect at least 30% of the housing will be affordable comprising of shared ownership and social rented properties at a range of sizes. The Client has chosen to exceed the PPS1 requirement for the houses to achieve Code for Sustainable Homes level 4, instead choosing level 5 for the first phase. The houses will also achieve Building for Life Silver Standard and meet Lifetime homes standards.

Houses alone will not make a community and P3Eco have carefully developed a viable brief to support the residents and minimise car journeys whilst not challenging the amenities of the town centre.

The first local centre, around which the housing is arranged, will ultimately contain village shops, a primary school (land provision), a nursery, an eco pub, offices, an eco business centre and community facilities. Across the site there will be play space for a range of ages, as well as leisure trails and allotments and orchards for food production.



The brief is varied and rich

5.3 The Layout and Design



The Exemplar layout

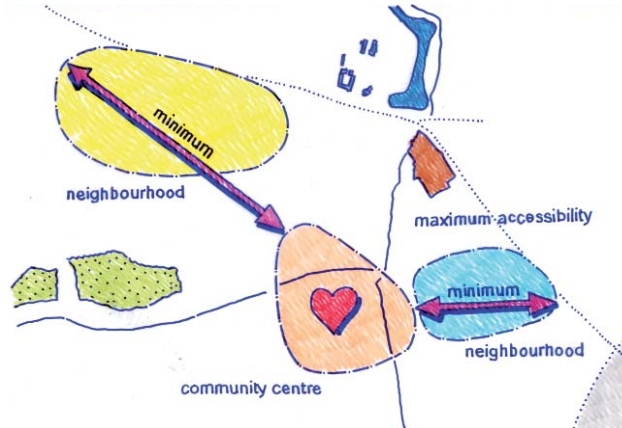
5.3 The Layout and Design

The layout seeks to unify and deliver the aspirations for the wider NW Bicester proposals in the first phase of the development.

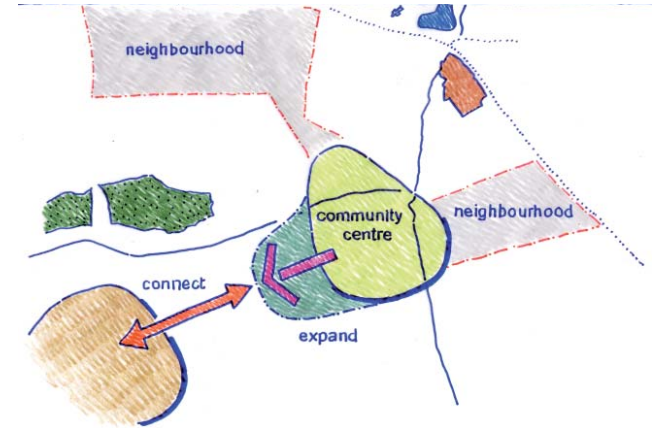
A key consideration for the eco town is the delivery of a modal shift away from private car usage to walking and cycling and subsequently access to amenities is of paramount importance. The village centre is therefore placed near the heart of the development to minimise walking distances, resulting in housing neighbourhoods to either side. The central location facilitates the expansion of the village centre with subsequent phases and connections to the future Hawkwell village.

The first phase delivers a connection to Bicester town by creating a new route from the southern field along Banbury Road. A crossing adjacent to the roundabout links with the cycle and pedestrian routes to town and the Bure Park development. Meanwhile, the first phase has an intentionally permeable edge offering pedestrian and cycle connections to subsequent phases of development and promoting links along the key green infrastructure routes.

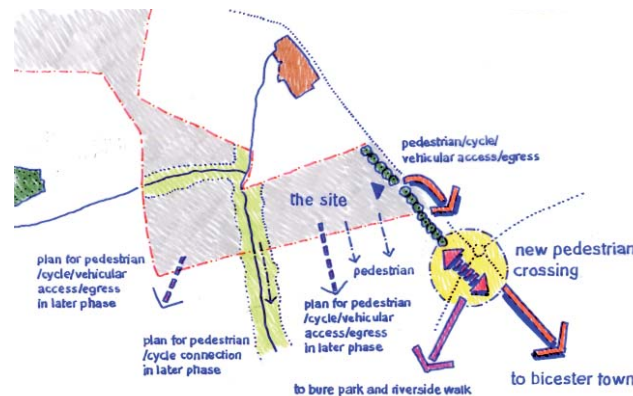
The inherited landscape features of the site have driven the masterplan for the first phase. The hedgerow pattern and the topography of the land have been used to derive a framework for the layout of the development. The flat fields to the south and north with their ordered pattern of hedgerow patterns and their working arrangements have suggested an orthogonal framework within which variety is supported. South and north are then subtly distinguished with a north/south emphasis to the former and an east/west bias to the latter, inspired by an extract from an historic map dated 1830.



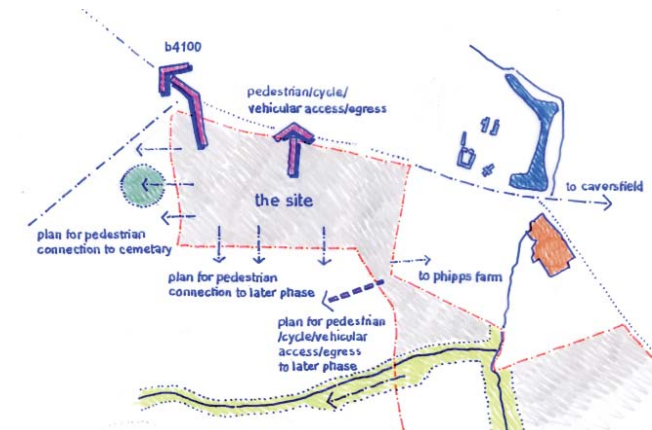
The village centre is placed at the heart of the scheme



The centre is located to facilitate expansion and connection

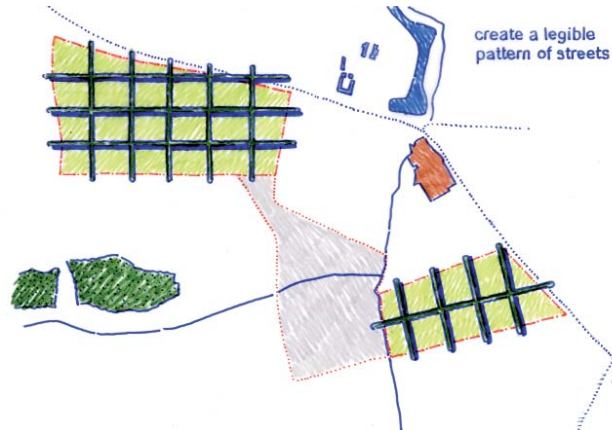


A new connection is made to Bicester



Connections are made to later phases

5.3 The Layout and Design



The network of hedgerows suggest an orthogonal response to the Southern and Northern fields

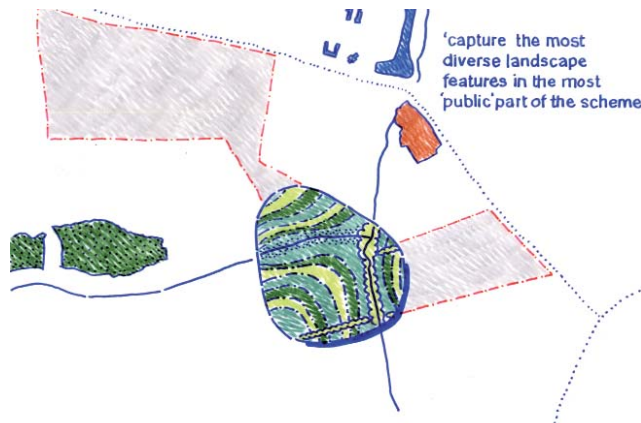


Sample of map dated 1830

In contrast the middle field with its rolling landscape and watercourse features is celebrated with organic forms and gentling curving plots fronting the landscape features and their incumbent wildlife.

Hedgerows and existing habitats have been retained throughout where possible and supplemented to increase biodiversity by introducing hedgerow buffer zones, green corridors, swales, ponds, orchards and allotments. This in turn has allowed for the softening of the edges of the development, to allow amongst others for the setting of the listed properties of Home farm and St Laurence's Church.

The landscape settings have created distinct character areas, including the High Street, the watercourses and the northern fields, linked by a connection that varies character as it passes through each zone but restricted and manipulated to dissuade vehicular movement and promote public transport, cycling and walking.



The central area is contrasted using the topography and watercourses for their inspiration



Hedgerows and existing habitats have been supplemented to create new landscape settings

5.3 The Layout and Design

The travel distances and site parameters:

The Site:

The shape and distribution of the site define the principle travel distances across the scheme.

The site consists of an upper and lower field to the NW and SE respectively joined by a triangular central section in the middle.

The dimensions of the upper field are approximately: 490m x 275m

The dimensions of the lower field are approximately: 565m x 185m

The central triangular section is approximately 200m on 2 sides and 275m on the third.

The resulting distances from the south eastern corner of the lower field to the north western corner of the upper field is 1170m.

The principal travel distances considered within the site were the requirements for a maximum distance of 800m to a school / 400m to a bus stop.

The layout of the road hierarchy combined with the treatment of the landscape combines to reduce the dominance of the car.

The layout of the road hierarchy compared with the treatment of the landscape attempts to reduce the dominance of the car.

The exemplar development provides approximately a third of the houses in the first village, grouped around the first local centre, which provides appropriate facilities and employment. The exemplar will have a bus service and offsite pedestrian and cycle routes linking to the town centre along Banbury Road. In further phases the masterplan will provide additional local services and employment uses to extend the village centre, with further footpath and cycle routes to link to Bure Park and to the later phases of the NW Bicester development. The exemplar is designed to enable these facilities to extend and achieve a balanced and cohesive development with adjacent phases.

Travel Distances:

Distances to the School:

From the north western most dwelling to the school entrance is 769m as the crow flies.

From the south eastern most dwelling to the school entrance is 425m as the crow flies.

A typical walking distance from the northern most homezone to the

school is 800m, from the southern most home zone it is 400m.

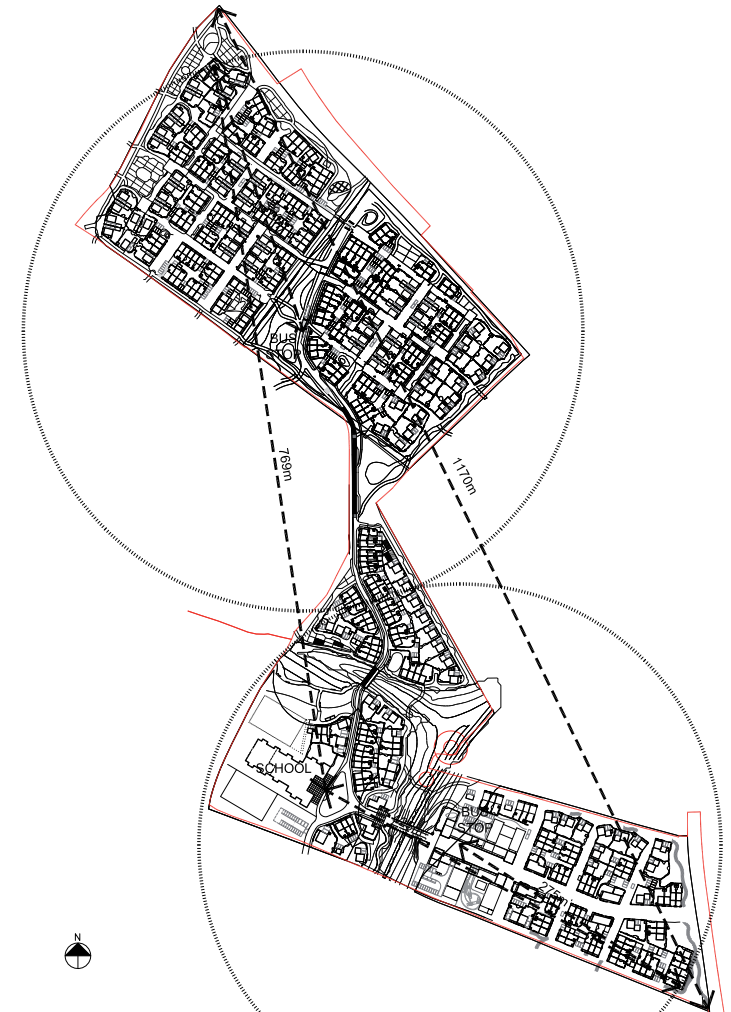
Distances to the Bus Stops

There are 2 principal bus stops on the scheme. One located along the high street in the lower field, the other located mid way along the central spine road in the upper field.

From the north western most dwelling to the northern bus stop is 295m as the crow flies.

From the south eastern most dwelling to the high street bus stop is 275m as the crow flies.

A typical walking distance from the northern most homezone to the bus stop is 300m, from the southern most home zone to the bus stop / high street is 220m.



Travel distance diagram

5.3

The Layout and Design

The scheme is principally a residential scheme of mixed size and tenure.

In addition to the 393 residential units, the non-residential uses to be included are:

A village store containing post-office and pharmacy
2 retail units
An eco pub
A nursery with external play space
An Eco Business Centre
Community space
Office space
An Energy centre
A one form entry primary school

The location of the non-residential uses within a Village Centre has been determined based upon the analysis in section 5.3 and on the following:

A key consideration for the eco town is the delivery of a modal shift away from private car usage to walking and cycling and subsequently access to amenities is of paramount importance. The village centre is therefore placed near the heart of the development to minimise walking distances, resulting in housing neighbourhoods to either side. The central location facilitates the expansion of the village centre with subsequent phases and connections to the prospective Hawkwell village as per the emerging master plan.

The centre of the settlement has been located to support further growth of Home Farm Village to the north, south (creating frontage onto Lord's Lane) and west (bridging across the watercourse). In turn the road network facilitates the growth of the centre to support expansion of existing facilities (school) and also additional non-residential uses to sustain the increased population.

Within the Village Centre the uses are organised in the following arrangement:

The uses along the parade have been carefully considered. A village store provided by the Co-op Group anchors the centre of the High Street, with two retail units leading to the watercourse. The corner unit enjoys views of the landscape feature and would be well placed to support a café or eatery. Above is office space. The service yard's efficiency is maximised by sharing its use with the village store and the biomass deliveries to the energy centre. The latter is placed adjacent to the hedgerow boundary to allow for future expansion to support the next phase to the south. The Eco Business centre is located to the

northerside of the street and this facility shares its parking/drop off provision with the nursery located overlooking the watercourse. The nursery provides community space at first floor level and is located to the western end to minimise journey times to the primary school.

The layout of the central zone has been driven by the requirements of the Co-op Group to ensure the relationship between uses are complimentary and the proposals are viable. The location and form of the proposed retail site has been informed by the requirements of the Co-op, whilst the proposals for the Creche and other non residential uses reflects market demand and general operational requirements. The bridge sits formally on axis with the High Street as the height of the land falls towards the watercourse. This allows for a dramatic opening of views (upon stepping beyond the closed end of the parade) of the watercourse and along the valley in both directions. Traffic is constricted to reduce speeds. There are footpaths either side of the carriageway leading to the public house and the school beyond. The bridge design has a character fitting of its context. Its surface is a continuation of the High Street hard landscape palette whilst its light balustrading allows for views up and down the watercourse.

The arrival space to the end of the bridge is framed by the eco pub and residential accommodation acknowledging the transition over the green space. The public house is typically placed at a transition point, where the lane meets the High Street and it is envisaged that the outside seating will begin to animate this space and the terraced beer garden benefit from its watercourse setting.

An informal village green concludes the High Street sequence in this phase, with the school sat on axis terminating the view and presenting its main entrance and coach bay area to the green space in front. The village green marks the transition point northwards and in the later phase southwards (as explained in the Movement and Linkages chapter) forging a connection with Hawkwell Village.

The location of the school was driven by Oxfordshire County Council's requirements for a relatively flat site and for the need to allow its expansion (to support the development of future phases) into specified neighbouring fields. Refer to the diagrams shown in section 5.10.3

In terms of residential development, the layout of the development has been informed by the requirements of A2Dominion Group following detailed negotiation with the Council both in terms of the distribution of dwelling types (including mix) and tenure.

The affordable units are seen as tenure blind and they are located in clusters throughout the scheme.

In addition the scheme offers play space and green space: refer to the landscape section 6.0

Evaluation:

A key decision for the development was the location of car parking in relation to the houses.

It is proposed to place car parking on plot to the front of houses. This model would be commercially viable and had simpler access and self policing issues.

The Eco Town aspires to reduce dependency on private vehicles and therefore promotes improved accessibility to other modes of transport whether by foot, by bike or by public transport. Subconsciously by removing vehicles from the public realm this will also begin to have a psychological effect on behaviour.

Following the site visit to the development adjacent to the Garth it was decided with the Local Planning Authority that building frontages should be closer to the street edge and to locate car parking for the terraced accommodation to the rear of the homes. This resulted in more detailed discussions with Thames Valley Police to ensure the car courts were familiar, small in size, secure and overlooked. This approach presented the opportunity to create a shared amenity to the rear of the properties and to resolve access to bike stores and refuse facilities.

- Using the concepts developed in the above sections we have designed safe, vibrant and successful places by:
 - Creating a hierarchy of streets and homezones that promote walking and cycling
 - Used overlooking of houses to create community and help police the spaces they define
 - Typically moved car parking to the side and rear of houses to allow for greater interaction with the street
 - Created a hierarchy of streets to reduce traffic speeds
 - Created a rich and varied landscape design so that the scheme changes in character as the resident or visitor moves through it
 - Provided playspace across the site
 - We have used feature housing to help provide orientation through the development
 - We have grouped local amenities in an accessible location and established a centre for the village
 - We have consulted with Thames Valley Police to ensure principles of Secured by Design are adopted.

5.4 Process- Design Evolution, Involvement and Evaluation

The layout for the exemplar development has progressed through a series of iterations before arriving at the proposal set out in this Design and Access Statement. The text below identifies key stages in this development.

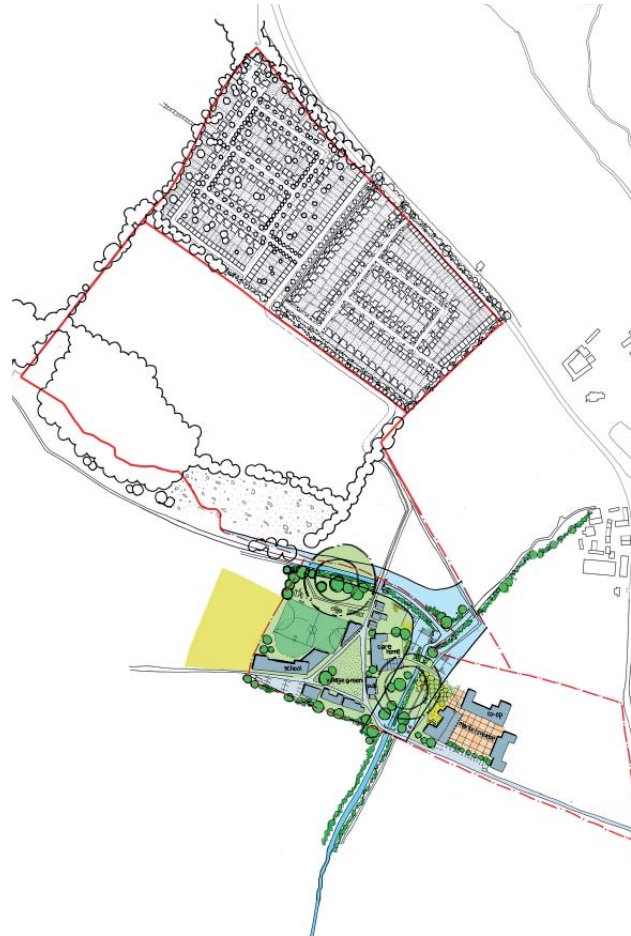
Involvement

Prior to the drawing up of the first layout an Open Planning Week (refer to section 5.1 & the statement of community involvement) community workshop was undertaken and the feedback from this event helped to develop the brief for the exemplar. Comments included;

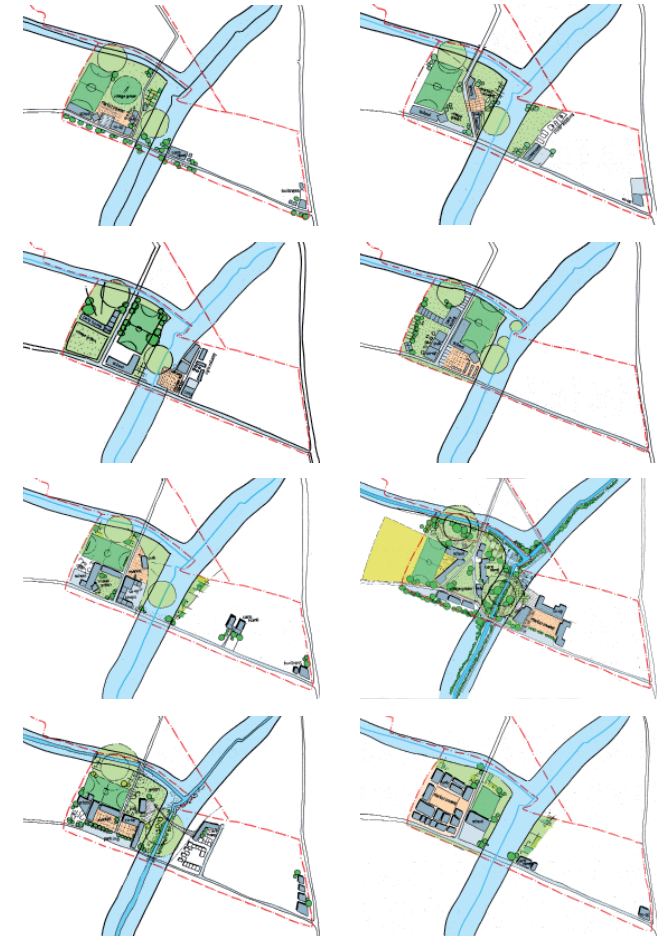
- A pub is wanted
- Play areas
- Theatre arts and culture space (community space)
- Bus link
- Local shops with local produce
- Recycling facilities
- Nursery school

Layout One

At this point in the process the concept of locating the village facilities to the south and in central location was in place but the settings for the non residential functions had not yet been established and a number of studies for the centre were undertaken. The sketch studies illustrate various groupings but key features were discussed, including the location of the village store, the response to the watercourse and the potential settings. There were concerns from the retail provider that the number of units would not support a store in the heart of the scheme and passing traffic on the Banbury Road would need to be relied upon to make this viable. Initial ecological information was emerging and the design team were beginning to form views as to how to respond to the watercourse. In parallel with these studies research on post medieval poly focal villages was being undertaken for national settlements and local villages. This analysis led to an arrangement with a market square to the east and a village green to the west, providing different settings for the retail based uses and a quieter environment for the school and care home. The road link to the south was placed next to the hedgerow as it was believed that the main badger set sat in the middle of the watercourse and was to be avoided.



Layout One



Village Centre Studies

In this early phase it was assumed that the land available would support a single road connection without other uses in the middle zone. The fields to the north were informed by the orthogonal pattern of the hedgerow but are yet to provide suitable buffer zones for habitat retention or creation and the local open space provision was yet to be addressed.

5.4 Process- Design Evolution, Involvement and Evaluation



Layout Two

Involvement

There was a concern raised in the September's 'Testing Ideas' consultation that the hedgerows and trees would be lost. In parallel with the emerging analysis from the landscape assessment and ecology studies the design begins to respond more clearly to the existing natural features and provides buffer zones to the hedgerows. Similarly allotments were requested at this event and the design begins to provide locations for their inclusion. The criticism that the development would be a satellite led to further work being undertaken to develop the connection along Banbury Road and the crossing adjacent to the roundabout.

Layout Two

Further analysis was undertaken of local precedent to understand the size and the facilities of the village centre settings in relation to their population so that the village square and the village green designs could be progressed.

The second Masterplan begins to show a refinement of the village settings and seeks to create greater containment by placing accommodation to the south and opening the spaces to the watercourse.

The field pattern grain has now started to appear in the fields to the north and the south. In the former, two elements are used to work 'across' the grid; a green link supporting a wildlife corridor connecting with the ancient woodlands to the north and the vehicular route that is located by road engineering analysis of the Banbury Road. Similarly to the south the junction (due to its location relative to the roundabout) has resulted in a road that adds variety to the grid.

The initial responses to the landscape assessment and the ecology studies can be seen to be included with emerging buffer areas and a greater appreciation of the watercourses. Flood risk data is still unavailable and housing locations are not yet modified.

The key development in this stage was the opportunity provided by the evolution of the red-line boundary. Following discussions with the Phipps' family the middle zone is accommodated by the Care Home and housing, fronting the vehicular link and designating a crossing point for the farmer's livestock.

5.4 Process- Design Evolution, Involvement and Evaluation



Wolvertone



Wantage: flower market held monthly



Thornwood wetlands, Epping forest, Essex



Adderbury



Deddington; childrens entertainer, jubilee day celebrations, weekly market



gGreenwich ecology park, London



Bloxham

Village Green Studies



Eynsham; farmers market, morris dancing

Village Square Studies



Ranworth nature trail, Norfolk

Landscape Studies



Stave hill ecology park, London

5.4 Process- Design Evolution, Involvement and Evaluation



Layout Three



Village Green



Village Square

Involvement

The Planning Authority were concerned with the narrowness of the green link and its ability to support allotments/playspace and provide ecological habitats. The Planners expressed their concern that the car parking in front of properties would lead to a suburban typology that was not in keeping with the local area. The Planning authority organized for a visit to a recent development to the south-east of the Garth to promote the use of car courts as a means of reducing the prominence of vehicles and a means to move housing frontages closer to the street edge.

Layout Three

Further refinement of the village settings were developed in three dimensions to respond to the gradient and the bridge crossing. The school site is increased to 0.6 hectares to begin to address requirements for a first phase entry provision with outline designs for the school suggesting a more significant presence on the village green. The village square proportions are modified to allow for increased activities and to respond to more detailed input from the retail provider.

Housing continues to be shown as solely terraced to understand the street pattern but in parallel attitudes to key frontages are being discussed by the design team.

Pressure to optimise housing numbers results in the green link shrinking and losing connectivity and its ability to provide meaningful playspace. Car parking is on drive in front of the properties meaning that street edges are less well defined.

5.4 Process- Design Evolution, Involvement and Evaluation

Involvement

There was generally a positive response from the Pre application consultation event in October 2010, but further work was undertaken regarding the open spaces and landscaping and the Secured by design process following comments regarding these subjects.

Layout Four

There are a number of significant design changes at this point that result in the layout appearing more like the final proposal for the first phase.

To the north the green link and road link have been unified towards the centre of the plan making a more meaningful space with play facilities and a buffer habitat to the central hedgerow. The road network has become convoluted to increase car travel distances and the edge buffer zones have softened the plan. A level of complexity has been achieved within the streetscape but this idea continues to develop. The homezones are established and the network of pedestrian and cycle routes are developed.

Throughout unit types are allocated with reduced massing to edges and significantly the housing is moved to the street edge by removing cars from driveways in front of the houses and placing them to the side and behind in car parking courts. The Care Home provider decided to wait for a latter phase for inclusion and housing has been grouped in the middle zone. The school site is expanded to 0.8 hectares, placing school fields next to the badger course in the east/west watercourse. Meanwhile next to the village square the energy centre (with Biomass) and village store are collocated to share the service yard and minimise the impact of the servicing requirements.

The Proposal



Layout Four- October Consultation

5.4 Process- Design Evolution, Involvement and Evaluation



The Proposal

The principles and detail of the proposal are explained in the following chapters, however the key changes from the layout four are:

- Road link minimised to become less intrusive, with improved frontage by houses
- Car courts are reduced in size and familiarised
- Greater complexity and layering in the landscape settings throughout the scheme.
- SuDS proposal developed
- Flood risk information made available and layout modified
- Ecological Assessments and interpretation made available to allow for development of habitats
- Non-residential uses grouped into a High Street concept that allows unifies education facilities and reduces walking distances and car parking duplication.
- School site expanded to 1.34 hectares
- Entrance features developed to mark arrival and departure from the site.
- Village Green replaced larger open green space along watercourse
-
-

5.5 Integration with wider NW Bicester

The designs for the NW Bicester masterplan and the first phase have progressed hand in hand resulting in a seamless transition between scales.

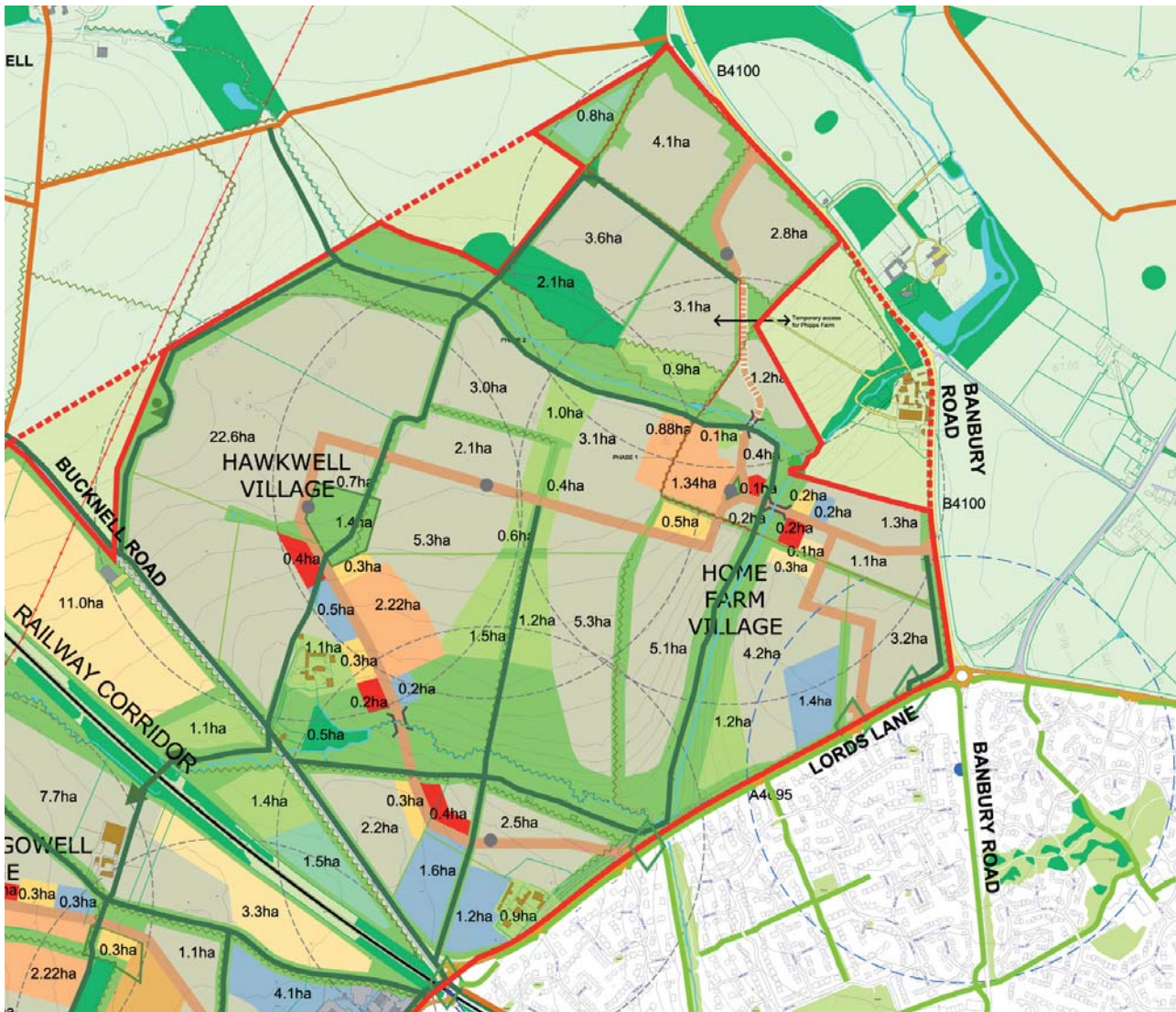
The exemplar scheme forms part of the most easterly village and like the remaining villages has its focus around a piece of significant green infrastructure. The existing landscape has provided the inspiration for the setting of the village, “working with the laws of nature” and in keeping with the masterplan approach defines its unique character. The watercourses also provide ecological corridors and habitats but also afford a network of pedestrian and cycle routes that connect with the masterplan linkages into Bicester town.

The centre of the settlement has been located to support further growth of Home Farm Village to the north (into the two remaining Phipps' fields), south (creating frontage onto Lord's Lane) and west (bridging across the watercourse). In turn the road network facilitates the growth of the centre to support expansion of existing facilities (school) and also additional non-residential uses to sustain the increased population of the village and offer 'missing' amenities that currently do not exist for the communities along Lords Lane.

Flexibility has been built into the road pattern to allow for expected deviations in bus routes to serve the later phases.

The design has responded to the local context described in sections 2.3 and 3.3 in the following ways:

- The selection of the land for the exemplar was driven by the desire to make connections to Bicester and to respond to the setting of Home Farm.
- The proposals sit within an emerging illustrative masterplan, that supports the application to ensure that they will sit comfortably within the emerging local context
- The village centre provides facilities to support the new community but intentionally does not look to draw custom away from the town centre
- The landscape has been considered the primary infrastructure with existing hedgerows, habitats and watercourses conserved, enhanced and integrated into the green infrastructure and the new development
- The existing hedgerow pattern have informed the layout of the northern and southern fields
- The watercourses and the varied topography of the middle zone has informed the organic nature of the layout for this area.
- The sensitive frontages onto St Laurence's Church and Home Farm have been composed to contain detached buildings with reduced massing



The exemplar in its emerging masterplan

5.6 Scale- Massing and Townscape

- The proposed non residential buildings look to make reference to St Laurence's Church and Home Farm in their selection of materials
- The material palette for the development is derived from an understanding of the local building fabric

The rich topography of the site is the driving factor behind the massing and townscape proposals for the first phase. The design response in terms of building bulk and height has been carefully considered to accentuate the complex contours of the site working with and contrasting the rising and falling nature of the land.

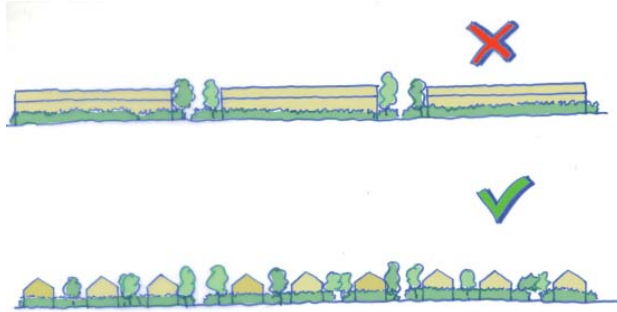
The local area exhibits buildings of typically two to three storeys, from domestic architecture to the larger footprints of agricultural buildings including barns. As a rule the proposal looks to minimise its impact on the surrounding areas and its hedgerow settings by placing the larger three storey buildings nearer the centre of the site, stepping down to two storey buildings of a residential character to the edge. This effect is further emphasised by placing detached properties to the eastern boundary reducing the massing to the sensitive settings of Home Farm and St Laurence's Church (listed buildings). In the northern fields this is further mitigated by softening the edge of the plans, creating a flowing edge to Caversfield House and similarly to the west. A variety of buffer planting arrangements are used for similar effect.

The interesting contours of the middle fields are used to define the response to Home Farm on the diagonal boundary keeping the building heights consistent and allowing for an exaggerated reading of the gradient. In contrast the high street is given more significance by containing the stepped forms between 'bookends', the fall of land naturally providing a greater emphasis to this particular composition.

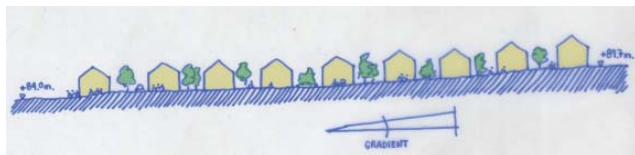
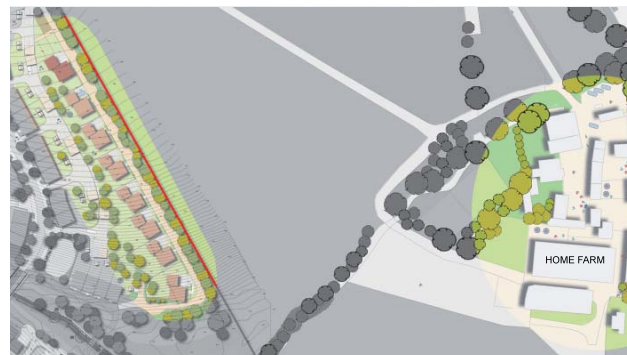
The residential buildings are these heights because:

- Housing is typically two storeys in the vicinity of the site
- In response to the local building type two storey housing is generically provided. Three storey flattened accommodation is provided to reinforce the scale of the High Street
- The three storey buildings are kept away from the edges of the scheme to minimise impact but are used to reinforce junctions and to emphasise the spatial sequence of the High Street
- The Higgs Young feature houses are special and therefore they become two and a half storey to provide variation in the skyline.
- The roof pitch of the properties has also been studied and typically a 40° roof pitch has been adopted to allow for the future habitation of the loft space, facilitated by the use of attic trusses.
- The utilisation of photovoltaics (PV) on the roofs of houses has led to the manipulation of roof angles to assist in maximising their use and efficiency.

Photomontages of the proposed scheme were modelled during the design process to access their impact on the skyline and the local setting.



Detached properties reduce massing to sensitive boundaries



A consistent building height emphasises the topography



The High Street is given more significance by using bookend features



5.6 Scale- Massing and Townscape



Viewpoint 1 - Proposed view 1 year following construction



Viewpoint 1 - Proposed view 15 years following construction

5.6 Scale- Massing and Townscape



Viewpoint 2 - Proposed view 1 year following construction



Viewpoint 2 - Proposed view 15 years following construction

5.6 Scale- Massing and Townscape



Viewpoint 3 - Proposed view 1 year following construction



Viewpoint 3 - Proposed view 15 years following construction

5.6 Scale- Massing and Townscape



Viewpoint 4 - Proposed view 1 year following construction



Viewpoint 4 - Proposed view 15 years following construction

5.6 Scale- Massing and Townscape



Viewpoint 5 - Proposed view 1 year following construction



Viewpoint 5 - Proposed view 15 years following construction



Viewpoint 6 - Proposed view 1 year following construction



Viewpoint 6 - Proposed view 15 years following construction

5.6 Scale- Massing and Townscape



Viewpoint 7 - Proposed view 1 year following construction



Viewpoint 7 - Proposed view 15 years following construction