

# ENVIRONMENTAL STATEMENT VOLUME 1

PLOT SGR1, BICESTER

---

MARCH 2018

Quod

Ingeni Building | 17 Broadwick Street, London, W1F 0DE



## Contents

### Volume 1

Chapter 1: Introduction

Chapter 2: Site and Setting

Chapter 3: EIA Methodology

Chapter 4: Alternatives

Chapter 5: Description of the Development

Chapter 6: Transport

Chapter 7: Cultural Heritage

Chapter 8: Cumulative Effects

Chapter 9: Mitigation Measures, Monitoring and Residual Effects

Glossary and Abbreviations

**Volume 2** – Landscape and Visual Impact Assessment

**Volume 3** – Technical Appendices

## Glossary

Amenity	A pleasant or advantageous aspect of the environment.
Aquifer	A below ground, water-bearing layer of soil or rock.
Baseline Studies	Studies of existing environmental conditions which are designed to establish the baseline conditions against which any future changes can be measured or predicted.
Conservation Area	An area designated by the Local Authority as being of special architectural or historic interest under the provisions of the Planning (Listed Buildings and Conservation Areas 1990) Act, the character or appearance of which it is desirable to preserve or enhance.
Construction Environmental Management Plan	Tool for implementing the mitigations identified within the Environmental Statement and the conditions of the planning application.
Construction Traffic Management Plan	A tool for controlling the movement of freight associated with the design and construction phase. This will aid in minimising disturbance to receptors such as residents, businesses and the environment.
Construction Method Statement	A document which addresses the health and safety risks to workers and other personnel on site during the construction phase of a project.
The 'Development'	Outline planning permission with all matters reserved (excluding access) for a residential development of up to 75 residential units, pedestrian and cycle routes, provision of open space, play space, parking and associated works.
Dust	Particles typically in the size range 1 to 75 µm in aerodynamic diameter
Environmental Impact Assessment	A process by which information about the environmental effects of a project is collected, both by the developer and from other sources, and taken into account by the relevant decision making body before a decision is given on whether the development should go ahead.
Environmental Statement	A statement that includes such information that is reasonably required to assess the environmental effects of a development.
Flood Risk	The risk of flooding posed to a defined receptor. Sources can include fluvial (rivers), tidal (estuaries and the sea), groundwater, surface water runoff, artificial drainage systems, canals and impounded waterbodies (i.e. canals, reservoirs, ponds, flood defences). Receptors that can be affected include people, property, infrastructure and wildlife.
Impact Significance	Opinions from a relevant planning authority at an initial stage as to what are the nature and potential scale of the environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.

Listed Buildings	A building or structure included in the list made by the Secretary of State for Culture Media and Sport of special architectural or historic interest.
Local Nature Reserve	Statutory designations made under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006, by principal local authorities with wildlife or geological features that are of special interest locally.
Mitigation	Any process, activity of thing designed to avoid, reduce or remedy adverse environmental impacts likely to be caused by a development project.
Mitigating Factor	A matter to be taken into account as a benefit on balance to offset against any perceived or demonstrable harmful impact.
Mitigation Measure	Measure aiming at reducing an adverse environmental effect.
Non-technical Summary	A summary of the Environmental Statement in 'non-technical language'.
On-site	Taking place or available on the Site.
Off-site	Referring to a location other than the Site.
Ordnance Datum	Land levels are measured relative to the average sea level at Newlyn, Cornwall. This average level is referred to as 'Ordnance Datum'.
Pathways	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors.
Permeability	The extent to which an environment allows people a variety of access routes through it. A permeable environment is one where there is ease of movement and where people have a choice of the routes they may use.
Phase 1 Contaminated Land Desk Study	An assessment to establish the previous uses of the Site or land nearby or adjacent to it, and to identify potential sources of contamination, receptors and pathways.
PM <sub>2.5</sub>	The term PM <sub>2.5</sub> refers to the fraction of particles with aerodynamic diameters equal to, or less than, 2.5 µm. More precisely, the definitions specify the inlet cut-off for which 50% collection efficiency by a particle separator is obtained for these sizes.
PM <sub>10</sub>	The term PM <sub>10</sub> refers to the fraction of particles with aerodynamic diameters equal to, or less than, 10 µm. More precisely, the definitions specify the inlet cut-off for which 50% collection efficiency by a particle separator is obtained for these sizes.
Residual Impacts	Those impacts of the development that cannot be mitigated following implementation of mitigation proposals.
Risk Assessment	An assessment of the likelihood and severity of an occurrence.
Runoff	The overland flow of water from either impermeable surfaces, or areas where precipitation is collecting faster than it can infiltrate into the ground.

Scheduled Monument	A 'nationally important' archaeological site or historic building, given protection against unauthorised change.
Setting	The context in which a building or area can be appreciated.
The 'Site'	The Site is a 5.03 hectare area comprised of two plots of arable land separated by a private access road that extends from Banbury Road to Home Farm.
Site of Special Scientific Interest	The best sites for wildlife and geological features in England as designated under the Wildlife and Countryside Act 1981.
Topography	The natural and man-made features of an area collectively.

## Abbreviations

AADT	Annual Average Daily Traffic flows
AOD	Above Ordnance Datum
AQMA	Air Quality Management Area
ATC	Automatic Traffic Counts
CA	Conservation Area
CDC	Cherwell District Council
CEMP	Construction Environmental Management Plan
CIHT	Chartered Institute of Highways and Transport
CMIHT	Chartered Members of the Institute of Highways and Transportation
COMAH	Control of Major Accident Hazard
CTMP	Constructions Traffic Management Plan
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment
ES	Environmental Statement
FRA	Flood Risk Assessment
GLVIA	Guidelines for Landscape and Visual Impact Assessment
Ha	Hectares
HGV	Heavy Goods Vehicles
IEMA	Institute of Environmental Management and Assessment
LCT	Landscape Character Type
LPA	Local Planning Authority

LNR	Local Nature Reserve
LVIA	Landscape and Visual Impact Assessment
km	Kilometres
m	Metres
NO <sub>2</sub>	Nitrogen dioxide
NPPF	National Planning Policy Framework.
PIC	Personal Injury Collision
SAC	Special Areas of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
SuDS	Sustainable Drainage Systems
TA	Transport Assessment
TPO	Tree Preservation Order
TPS	Transport Planning Society
ZSV	Zone of Significant Visibility
ZTV	Zone of Theoretical Visibility

# 1 Introduction

## 1.1 Background

- 1.1.1 This Environmental Statement (ES) has been prepared by Quod on behalf of SGR (Bicester 1) Limited (the 'Applicant') and accompanies an outline application (with all matters reserved excluding access) for development of land on Plot SGR1 at Caversfield in north-west Bicester (the 'Site'). The planning application has been submitted to Cherwell District Council ('CDC') and the proposed development is subsequently referred to as the 'Development'. The Development would provide up to 75 new residential units with a range of unit mixes, creation of new access point from Charlotte Avenue, pedestrian and cycle routes, open space, orchards, allotments, car parking and playspace.
- 1.1.2 The outline planning application is accompanied by a suite of parameter plans and a Development Specification which provide a framework of controls which will inform and control all reserved matters applications.
- 1.1.3 The ES reports the findings of an Environmental Impact Assessment (EIA) process for the Development. EIA is a systematic process whereby the likely significant environmental effects of a proposed development are assessed.
- 1.1.4 The ES has been prepared in line with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>1</sup> (the 'EIA Regulations').

## 1.2 Development Site and Context

- 1.2.1 The Site is located approximately 2.2 kilometres (km) north of the centre of Bicester. It is approximately square in shape and is centred at National Grid Reference SP579251. The Site covers an area of 5.03 hectares (ha) and is consists of two plots which are separated by a private access road. The Site currently comprises agricultural land used for pasture.
- 1.2.2 The Site's location and planning application boundary are shown in Figure 1.1 and Figure 1.2, respectively. Figure 1.3 provides an aerial photograph of the Site. A description of the Site and its setting is provided in Chapter 2: Site and Setting.



Figure 1.2: Site Location Plan

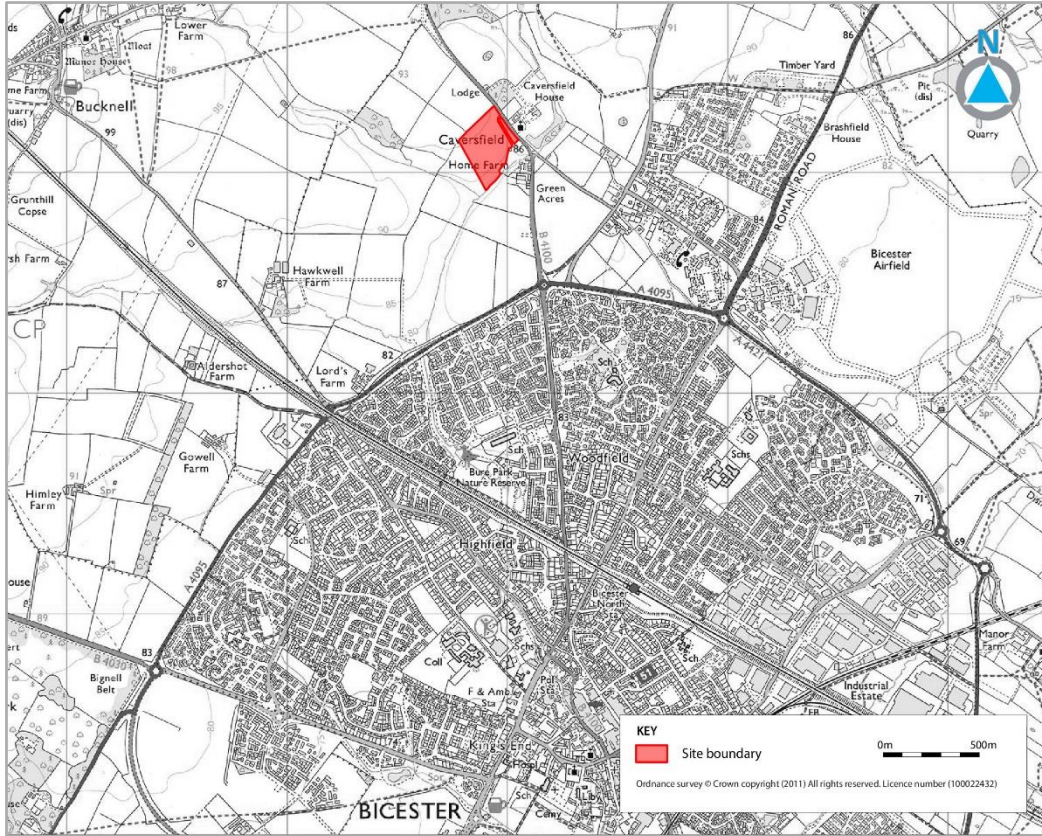


Figure 1.1: Site Boundary Plan

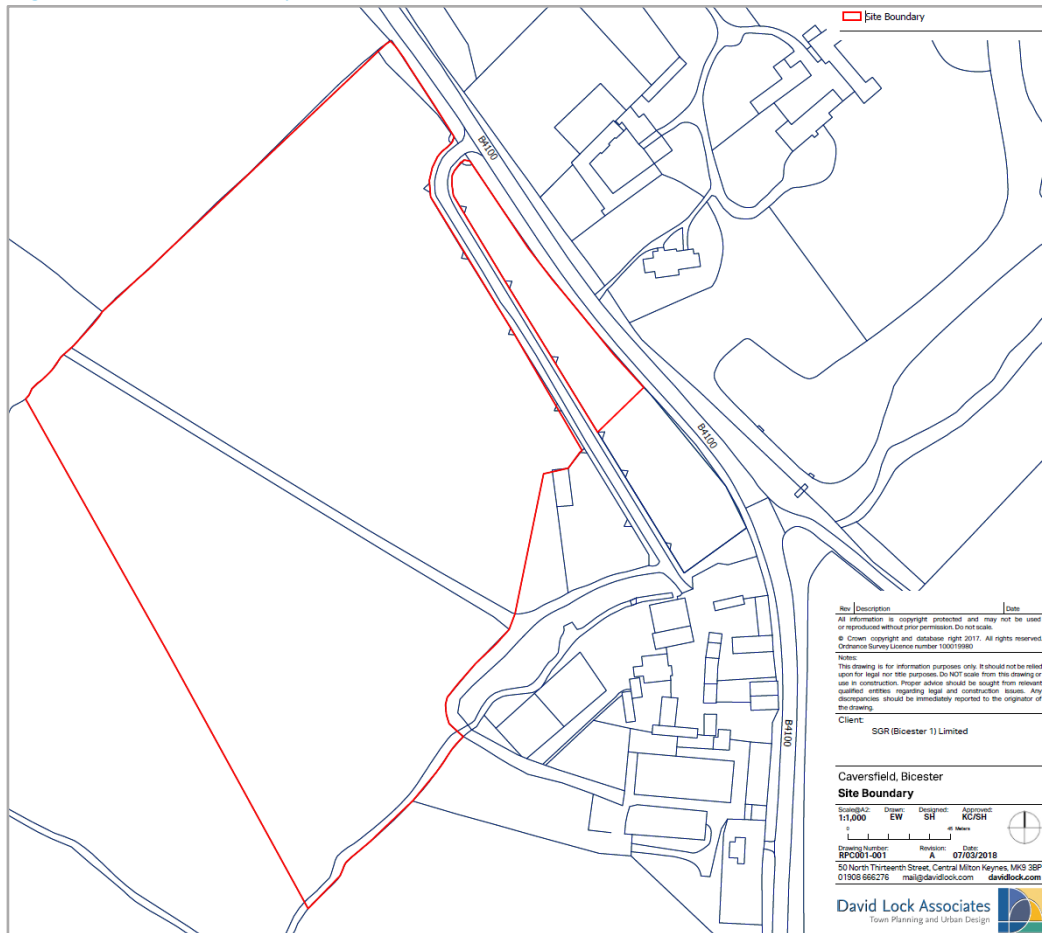


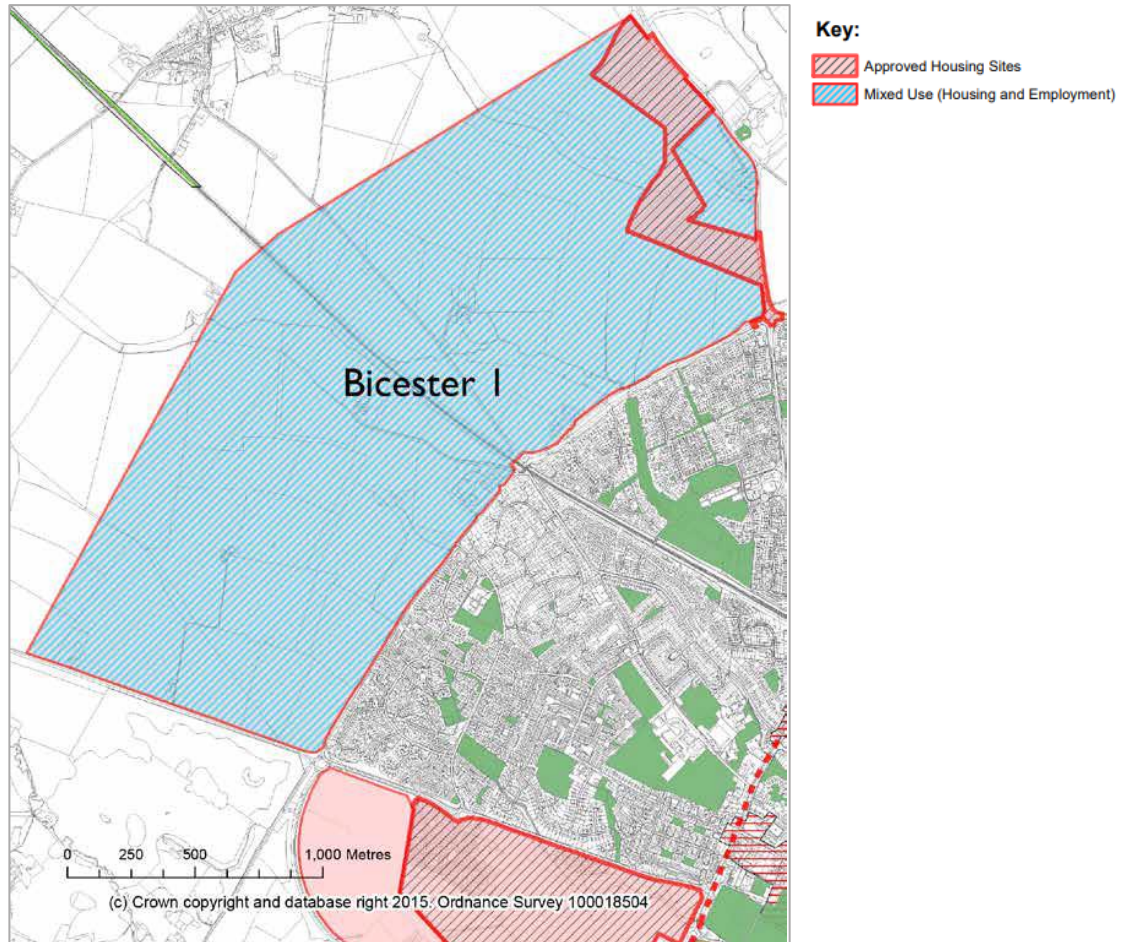
Figure 1.3: Aerial View of the Site



### 1.3 Planning Policy Context

- 1.3.1 Eco-towns: Planning Policy Statement 1 (Supplement)<sup>2</sup> identified four locations for eco-towns in England, including one at Bicester (of which the Site is part), and sets out a range of criteria to which eco-town developments should respond to be exemplars in good practice and provide a showcase for sustainable living. In accordance with PPS1 (Criteria ET 20). A masterplan has been prepared for the North-West Bicester Eco-Town area (hereafter referred to as the 'Eco-Town').
- 1.3.2 The Cherwell Local Plan 2011 - 2031 Part 1<sup>3</sup>, which was formally adopted by Cherwell District Council (CDC) on 20<sup>th</sup> July 2015, identifies the Site under Policy Bicester 1 for mixed use (housing and employment). This identifies the Site and surrounding fields within a 390 ha area of land for an Eco-Town development to deliver, inter alia, approximately 6,000 new homes and up to 4,000 new jobs over the next 20-30 years. The extent of this development area is shown in Figure 1.4.

Figure 1.4: Policy Bicester 1: North West Bicester Eco-Town from Cherwell Local Plan (Part 1)



Source: Cherwell Local Plan 2011 - 2013 Part 1

- 1.3.3 Further details of the planning applications for the other sites within the Eco-Town area are provided in Chapter 3: EIA Methodology.
- 1.3.4 The North West Bicester Masterplan<sup>4</sup> was adopted as a Supplementary Planning Document (SPD) in February 2016. As illustrated in Figure 4.1 in Chapter 4: Alternatives, this SPD identifies the Site for housing in its western third, with the other component of the Site proposed for green infrastructure.
- 1.3.5 An assessment of the Development in the context of relevant national, regional and local planning policy is set out within the Planning Statement which accompanies the planning application. Planning policy is presented in the relevant technical chapters of this ES as appropriate for context in consideration of the environmental effects.

## 1.4 ES Structure

1.4.1 The following provides a summary of each document that comprises the ES:

- ES Volume 1 – the main body of the ES;
- ES Volume 2 – Landscape and Visual Impact Assessment;
- ES Volume 3 – Appendices; and
- ES Non-Technical Summary.

## Project Team

- 1.4.2 The Applicant's Project Team, who have contributed to the design and EIA process are included in Table 1.1. A statement on the competency of each technical team that has contributed to the EIA is provided in the technical ES chapters 6 and 7.

Table 1.1: Consultation Project Team

Organisation	Consultant Role/Input
Applicant	SGR (Bicester 1) Limited
Quod	Planning Consultants EIA Co-ordinator
David Lock Associates	Architect
Peter Brett Associates	Energy and Sustainability Consultants
David Jarvis Associates	Accurate Visual Representations Consultant
<b>ES Volume 1 (ES Chapter)</b>	
Chapters 1 – 5: Introduction; Site Description; EIA Methodology; Alternatives; Description of Development	Quod
Chapter 6: Transport	Peter Brett Associates
Chapter 7: Cultural Heritage	CgMS
Chapter 8: Cumulative Effects	Quod
Chapter 9: Summary of Mitigation, Monitoring and Residual Effects	Quod
<b>ES Volume 2 – Landscape and Visual Impact Assessment</b>	David Jarvis Associates
<b>ES Volume 3 – Appendices</b>	Various
<b>Non-Technical Summary</b>	Various

## 1.5 Environmental Statement Availability

- 1.5.1 The ES and all application documents are available for review at the Planning Offices of CDC. Additional copies of the ES can be provided on request (at a reasonable fee). Alternatively, a CD Rom version in Acrobat™ .pdf file format is available for a fee of £15. The NTS can be obtained free of charge and can be made available upon request. All ES documents are available from:

Quod  
Ingeni Building  
17 Broadwick Street  
London  
W1F 0DE

1.5.2 Alternatively, copies can be requested via [reception@quod.com](mailto:reception@quod.com).

1.5.3 Comments on the outline planning application can be made online via <https://www.cherwell.gov.uk/info/115/planning>. Alternatively, comments can be provided in writing at the following address:

Development Management  
Cherwell District Council  
Bodicote House  
Bodicote  
Banbury  
OX15 4AA

## REFERENCES

---

<sup>1</sup> Her Majesty's Stationary Office (HMSO), 2017. *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017*. The Stationary Office. May 2017.

<sup>2</sup> Department of Communities and Local Government, 2009. *Planning Policy Statement, Eco-towns: planning policy statement 1 (supplement) (updated 2015)*, July 2009.

<sup>3</sup> Cherwell District Council, 2015. *Cherwell Local Plan 2011-2031 Part 1*, July 2015.

<sup>4</sup> Cherwell District Council and Oxford County Council, 2016. *North West Bicester Masterplan Supplementary Planning Document*, February 2016.

## 2 Site and Setting

### 2.1 Introduction

- 2.1.1 This chapter provides a description of the Site and the surrounding areas, including key features, designations and key sensitive receptor locations that may be affected by the Development. A full description of the baseline conditions relevant to the technical assessments is provided in Chapter 6: Transport and Chapter 7: Cultural Heritage.

### 2.2 Site Location and Extent

- 2.2.1 The Site is located approximately 2.2 kilometres (km) north of the centre of Bicester and extends to 5.03 ha. The Site location plan is shown in Figure 1.1 and the Site boundary is shown Figure 1.2. The Site falls within the planning jurisdiction of Cherwell District Council (CDC).

### 2.3 Site Description

- 2.3.1 The Site is bound by Banbury Road (the B4100) to the north-east, Home Farm which comprises a farm with light-industrial (B2) and office (B1) use tenancies in its outbuildings and arable land to the south-east, and emerging residential development associated with the Exemplar site (or Elmsbrook) development to the south-west and north-west (Ref: 10/01780/HYBRID) (see Chapter 8: Cumulative Effects for further information).
- 2.3.2 The Site is comprised of two plots of arable land separated by a private access road towards the south-east of the Site, no more than 10m in width. The plot that is bound by the private road and the B4100 is significantly smaller than the other plot on the Site, reaching approximately 0.30 ha in extent (hereafter referred to as the 'Eastern plot'). The majority of the Site is encompassed by the larger plot, which extends to approximately 4.73 ha (hereafter referred to as the 'Western plot').
- 2.3.3 There are no buildings or structures on-site and records from early mapping shows that the Site has remained undeveloped since 1881. Access to the Site is currently from the western boundary (via Charlotte Avenue).
- 2.3.4 The River Bure runs within the south-eastern Site boundary and an unnamed tributary of the Bure is located in close proximity to the south-western Site boundary. The Site ranges from 89.66m Above Ordnance Datum (AOD) to 83.16m AOD from north to south, with decreases in elevation to the south-east and south-west along the Site boundaries that are in close proximity to these watercourses. The majority of the Site is located in Flood Zone 1 (less than 0.1% annual probability of flooding), although the south-eastern boundary of the Site is located within Flood Zone 3 (1% or greater annual probability of fluvial flooding).

### 2.4 Surrounding Area

#### Land Use

- 2.4.1 The Site is in a currently agricultural area, with the conurbation of Bicester (population approximately 30,000<sup>1</sup>) approximately 550m to the south and Caversfield (population approximately 1,800<sup>2</sup>) approximately 540m to the east. Farms and associated agricultural buildings are scattered throughout the wider landscape to the north and west.
- 2.4.2 However, the Site has an emerging suburban context with the majority of the agricultural land surrounding the Site currently consented for residential-led, mixed-use development as part of the North-west Bicester Eco-Town<sup>3</sup>, as illustrated in Figure 1.4 and described in more detail in Section 1.3. The future development of the area includes proposals for up to 6,000 new residential units, new office

accommodation, new public amenities such as a nursery, schools, community facilities and a new Strategic Link Road.

- 2.4.3 Construction works have commenced in the fields adjacent to the north-western and south-western Site boundaries associated with the Exemplar site. Early phases of this development are complete and occupied in the fields located extending circa 100m from the southern Site boundary to Howes Lane (the A4095), located approximately 560m to the south, as shown in Figure 2.1.

**Figure 2.1: View of emerging Exemplar Site (to south-west of Site)**



- 2.4.4 Arable land extends widely to the north-east and north-west beyond the B4100 and the emerging Exemplar Site development.
- 2.4.5 Further west, the Bicester Eco-Town Exemplar Site ('SGR2 Site') (Ref: 14/01384/OUT) has resolution to grant planning consent on what is currently agricultural land for up to 2,600 residential dwellings along with associated commercial and community floorspace, one new primary school and land to accommodate an extension to the primary school associated with the Exemplar Site.
- 2.4.6 Further details of this consented scheme are provided in Chapter 8: Cumulative Effects.

### **Transport and Access**

- 2.4.7 The Site is bound by Banbury Road (B4100) and Howes Lane (the A4095) is approximately 560m south of the Site boundary. These roads provide links to the centre of Bicester to the south of the Site, and to the A43 and the settlements of Baynard's Green, Anyho, Adderbury and Twyford to the north.
- 2.4.8 In terms of bus access, the Site sits within convenient walking distance of the existing half hourly service (E1) on Banbury Road approximately 50m south of the Site boundary that provides a link to Bicester Town Centre. Future bus links would also be provided with on completion of the emerging Exemplar development. Bicester North rail station is located approximately 2km to the south of the Site boundary, providing rail links to London, Banbury and Birmingham.
- 2.4.9 There is a private road which passes through the Site providing access to Home Farm, separating the two plots. Vehicle and pedestrian access to the Site is currently from the western boundary (Charlotte Avenue) via the Exemplar Site. There are no Public Rights of Way (PRoW) on the Site, however one is 490m north of the Site.



2.4.10 An assessment of the Development in respect of transport and access is provided in Chapter 6: Transport of the ES.

### Heritage

2.4.11 The Site does not lie within a Conservation Area (CA). The closest CA is RAF Bicester, approximately 480m south-east of the Site boundary.

2.4.12 There are no buildings of historic value within the Site. There are a number of built heritage assets within the local area including: Home Farmhouse (Grade II listed) located approximately 75m south of the Site boundary (see Figure 2.2); Church of St. Laurence (Grade II\* listed), located approximately 30m east (beyond the B4100) (see Figure 2.3); and Caversfield House (non-listed), located approximately 60m east of the Site boundary.

2.4.13 The NW Bicester Masterplan: Strategic Environment Report (SER)<sup>4</sup> defines the Church of St Laurence as having high heritage value, while the Home Farm as a medium-low value asset.

2.4.14 An assessment of built heritage assets is provided in Chapter 7: Cultural Heritage.

Figure 2.2: Photograph of Home Farmhouse



Figure 2.3: Photograph of Church of St. Laurence



#### Ecology and Arboriculture

- 2.4.15 There are no ecological designations on the Site. The nearest statutory or non-statutory ecologically designated site is Bure Park Local Wildlife Site (LWS) located approximately 800m south-west of the Site boundary. Ardley Cutting and Quarry Site of Site of Special Scientific Interest is located approximately 1.95 km west of the Site boundary.
- 2.4.16 On-site habitat comprises pasture/grassland, with the Site boundaries predominantly comprised of hedgerows. These are interspersed with mature and semi-mature trees, with a small arc of semi-mature trees located on-site in proximity to the south-eastern corner of the Site.
- 2.4.17 The Site is not subject to any Tree Preservation Orders (TPOs) and does not support ancient woodland or Veteran Trees.

#### Air Quality

- 2.4.18 The Site is not located within an Air Quality Management Area (AQMA). The nearest AQMA is that designated for Kings End, Queens Avenue, Field Street and St Johns in Bicester town centre on the basis of exceedances of the annual mean nitrogen dioxide (NO<sub>2</sub>) Air Quality Objective, approximately 2km to the south of the Site boundary.

## REFERENCES

---

<sup>1</sup> <http://www.bicester.gov.uk/wp-content/uploads/2016/06/Planning-Committee-PL02-27th-June-2016.pdf>

<sup>2</sup> Oxford City Council and District Data Services, (2017). *Local insight Profile for Caversfield Area*. March 2017.

<sup>3</sup> Cherwell District Council, (2015). *Cherwell Local Plan 2011-2031 Part 1*. July 2015.

<sup>4</sup> Hyder Consulting, (2014). *NW Bicester Masterplan: Strategic Environmental Report*. March 2014.

## 3 EIA Methodology

### 3.1 Introduction

3.1.1 This Environmental Statement (ES) has been prepared by Quod on behalf of SGR (Bicester 1) Limited (the 'Applicant') and accompanies an outline application (with all matters reserved excluding access) for development of land on Plot SGR1 at Caversfield in north-west Bicester (the 'Site'). The planning application has been submitted to Cherwell District Council ('CDC') and the proposed development is subsequently referred to as the 'Development'. The Development would provide up to 75 new residential units with a range of unit mixes, creation of new access point from Charlotte Avenue, pedestrian and cycle routes, open space, orchards, allotments, car parking and playspace.

3.1.2 This chapter sets out the scope and methodology adopted in the Environmental Impact Assessment (EIA) process. It explains how the scope of the EIA was defined and sets out the general approach to defining the current and future baselines, the methods used to assess the environmental effects, and the criteria used to evaluate their significance. The assessment scenarios are also defined together with an explanation of how cumulative effects have been considered.

3.1.3 This chapter is accompanied by the following appendices:

- Appendix 3.1: Location of Specified Information in the ES;
- Appendix 3.2: EIA Screening Opinion Request (January 2018);
- Appendix 3.3: EIA Screening Opinion (February 2018);
- Appendix 3.4: Informal Scoping Note and CDC Response (February 2018);
- Appendix 3.5: Supplementary Scoping Correspondence; and
- Appendix 3.6: Rationale for Scoping out Non-Significant Topics.

### 3.2 Regulations and Good Practice

3.2.1 This Environmental Statement (ES) has been prepared to comply to comply with The Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>1</sup> (the 'EIA Regulations'). The EIA Regulations (Parts 1 and 2 of Schedule 4) define the information for inclusion in an ES. Appendix 3.1 sets out these requirements together with their location within the ES.

3.2.2 Good practice guidance documents have also been considered including:

- Planning Practice Guidance – Environmental Impact Assessment<sup>2</sup>;
- Special Report: The State of Environmental Impact Assessment Practice in the UK<sup>3</sup>;
- Guidelines for Environmental Impact Assessment: Institute of Environmental Management and Assessment<sup>4</sup>;
- European Commission – Environmental Impact Assessment of Projects: Guidance on the Preparation of the Environmental Impact Assessment Report<sup>5</sup>;
- EIA – Shaping and Delivering Quality Development (IEMA)<sup>6</sup>;
- Delivering Proportionate EIA (IEMA)<sup>7</sup>; and
- Topic specific guidance referred to in each technical chapter of this ES where appropriate.

3.2.3 Each technical assessment has taken account of relevant European, national and local planning policy and guidance as appropriate to their discipline.

### 3.3 EIA Screening

3.3.1 A request for a formal Screening Opinion, to determine if an EIA was required, was submitted on behalf of the Applicant to CDC on 17<sup>th</sup> January 2018 in accordance with Regulation 6 of the EIA Regulations (Appendix 3.2). The need for a Screening Opinion relates to the fact that the proposals are deemed an ‘urban development project’ under Schedule 2 of the EIA Regulations.

3.3.2 A Screening Opinion was issued by CDC on 7<sup>th</sup> February 2018 (ref: 18/00005/SO) (Appendix 3.3) which stated that the Development, in isolation, would not be ‘EIA development’. However, the Screening Opinion concluded that the proposals were ‘EIA development’ by virtue of the potential for cumulative effects of the Development and other development proposed in close proximity to the Site.

### 3.4 Scope of the EIA

3.4.1 Under the EIA Regulations, the Applicant has the option to request a Scoping Opinion from the local planning authority for their view on what issues the ES should consider. Seeking a formal scoping opinion is not mandatory and, due to project timescales, an opinion was not sought.

3.4.2 An informal scoping study for the EIA was undertaken by Quod to determine the scope of the ES. This study was informed by the Screening Opinion, baseline environmental studies and a review of the Development proposals. CDC was invited to comment on the proposed EIA scope through an informal Scoping Note, issued by Quod on 20<sup>th</sup> February 2018. CDC issued a response on 26<sup>th</sup> February 2018. The Scoping Note and CDC’s response are provided in Appendix 3.4.

3.4.3 The EIA Regulations are required to consider only the ‘likely significant environmental effects’ of a development. An informal scoping exercise has been undertaken by Quod in conjunction with other specialists and is set out in Table 2.1. This exercise has been informed by Planning Practice Guidance (PPG), which highlights the expectation that the ES should focus on the ‘main’ or ‘significant’ environmental effects only. The PPG states:

*“The Environmental Statement should be proportionate and not be any longer than is necessary to assess properly those effects. Where, for example, only one environmental factor is likely to be significantly affected, the assessment should focus on that issue only. Impact which have little or no significance for the particular development in question will need only very brief treatment to indicate that their possible relevance has been considered.”*

3.4.4 The scoping study has identified the following topics for further assessment within this ES, and these form the technical chapters of this ES:

- Transport (Chapter 6);
- Cultural Heritage (Chapter 7);
- Cumulative Assessment (Chapter 8); and
- Landscape and Visual Impact Assessment (Volume 2).

3.4.5 Justification for scoping out other topics is provided in Appendix 3.6.

### 3.5 Defining the Baseline

#### Study Area

- 3.5.1 The study area for each topic is based on the geographical scope of the potential impacts relevant to the topic or the information required to assess the likely significant impacts, as well as topic specific guidance and consultation with stakeholders.

#### Baseline Conditions and Future Baseline Scenarios

- 3.5.2 The baseline environmental conditions need to be established to enable an accurate assessment of potential changes to such conditions that may occur, and to assess the resultant environmental effects of the Development. Understanding baseline conditions also assists in the identification of the most appropriate mitigation which could be employed to minimise any significant effects.
- 3.5.3 Baseline information has been gathered to define and describe the existing environmental characteristics and receptors for each environmental topic. The baseline assessment year taken for the EIA is the Site as recorded in the most recent surveys, site inspections and available dataset (i.e. 2017/2018, unless stated).
- 3.5.4 The EIA Regulations requires the ES to include a description of the future baseline, i.e. the baseline conditions without implementation of the Development as far as natural changes from the baseline scenario can be assessed with reasonable effort. Future baseline conditions are considered under the 'Baseline Conditions' section as appropriate.

#### Sensitive Receptors

- 3.5.5 As part of the EIA process, the environmental effects of a given development or scheme are typically predicted in relation to sensitive receptors, including human beings (e.g. future site users), built resources (e.g. buildings) and natural resources (e.g. controlled waters). The criteria used for identifying potentially sensitive receptors include:
- Proximity to the Site;
  - Extent and duration of potential exposure to environmental effects; and
  - Vulnerability and ability to respond to change.
- 3.5.6 Further details on sensitive receptors is provided in the baseline assessment sections of the technical chapters of the ES (Chapters 6 & 7).

### 3.6 Assessment of Effects

#### Basis of Assessment

- 3.6.1 The assessment is based on Parameter Plans and a Development Specification document which form the basis of the outline planning application. The Parameter Plans provide the upper building limits and establish a 3-dimensional (3D) building envelope within which the detailed design of buildings can come forward through the submission of reserved matters applications.
- 3.6.2 The Development Specification defines and describes the principal components of the Development including the maximum amount of development and the uses proposed.
- 3.6.3 The EIA has principally assessed the Development by reference to the Parameter plans and the Development Specification. Due to the level of design flexibility provided by the Parameter plans, the

technical assessments in this ES provide an assessment of the maximum extent of the proposed Development which would represent a 'worst-case' assessment.

- 3.6.4 An Illustrative Scheme (the 'Development Framework') has also informed the Landscape and Visual Impact Assessment but the identification of significant effects is based on the Parameter plans, since these form the basis of the planning application.

#### Assessment Years and Phasing

- 3.6.5 The EIA considers the effects from construction, as well as completion and occupation of the Development. It has been assumed that works for the Development would commence at the end of 2018, although a different start date would not alter the findings of the assessment.
- 3.6.6 The principal assessment year for the EIA is based on completion of the whole Development. The year 2021 is nominally assumed as the year that the Development would be complete and occupied for the purposes of the assessment. This year may be subject to change, although this is unlikely to materially affect the outcome of the assessments. It should be noted that the Transport Assessment (Appendix 6.1) also assesses a future year of 2026.

#### Construction

- 3.6.7 Each technical assessment in the ES assumes a notional 'worst-case' scenario with respect to the envisaged construction methods, location (proximity to sensitive receptors), phasing and timing as outlined above and in Chapter 5: Description of Development.
- 3.6.8 The key activities during the construction phase which have informed the assessments are described in Chapter 5: Description of Development. An assumption is in place that contractors will adhere to a CEMP which is anticipated to be secured by planning condition(s). In-line with the Institute of Environmental Management and Assessment (IEMA) best practice, the CEMP can be defined as 'tertiary' mitigation which is defined as that which *"will be required regardless of any EIA assessment, as it is imposed, for example, as a result of legislative requirements and/or standard sectoral practices. For example, considerate contractors' practices that manage activities which have potential nuisance effects."*
- 3.6.9 As such, the CEMP forms part of the project description, and is taken as read in assessing effects. The basis of the EIA is therefore that this form of mitigation will be delivered.

#### Completed Development

- 3.6.10 The assessment of potential effects of the completed and occupied Development incorporates analysis of the permanent effects that could arise as a result of the Development.

#### Nature of Effect

- 3.6.11 For consistency, the findings of the various studies undertaken as part of the EIA adopt the following terminology to express the nature of the effect:
- **Adverse:** Detrimental or negative effect to an environmental resource or receptor;
  - **Negligible:** No significant effect to an environmental resource or receptor; and
  - **Beneficial:** Advantageous or positive effect to an environmental resource or receptor.
- 3.6.12 Following their identification, significant beneficial or adverse effects have been classified on the basis of their nature and duration as follows:

- **Temporary:** Effects that persist for a limited period only (due, for example, to particular activities taking place for a short period of time);
- **Permanent:** Effects that result from an irreversible change to the baseline environment (e.g. land-take) or which will persist for the foreseeable future (e.g. noise from regular or continuous operations or activities);
- **Direct:** Effects that arise from the effect of the project itself (e.g. removal of vegetation);
- **Indirect:** Effects that arise which are not a direct result of the project but are closely linked (e.g. changes to surface water quality due to change in land use and urbanisation);
- **Secondary:** Effects that arise as a consequence of an initial effect of the scheme (e.g. induced employment elsewhere);
- **Cumulative:** Effects that can arise from a combination of different effects at a specific location or the interaction of different effects over different periods of time.

3.6.13 In the context of the Development, short (up to 24 months duration) to medium (up to 48 months duration) term effects are generally determined to be those associated with construction activities, and the long term effects are those associated with the completed and occupied Development.

3.6.14 Local effects are those effects affecting receptors within and in close proximity to the Site, whilst effects on receptors in the wider study area are considered to be at a district (i.e. Cherwell) level. Sub-regional effects are those affecting adjacent districts, whilst effects on the county are considered to be at a regional level.

#### Evaluation of Significance

3.6.15 The prediction of environmental effects has been undertaken in accordance with definitive standards and legislation where such material is available. In cases where it is not possible to quantify effects, qualitative assessments have been carried out and are based on the available knowledge of the Site and potential effect, alongside professional judgement. Where uncertainty exists, this is detailed in the 'Assumptions and Limitations' section under 'Assessment Methodology' in the respective technical chapters.

3.6.16 Each technical chapter provides the specific criteria, including sources and justifications, for quantifying the level of effect significance. Where possible, this has been based upon quantitative and accepted criteria, together with the use of value judgements and expert interpretations to establish to what extent an effect is significant.

3.6.17 There is no statutory definition of what constitutes a significant effect and guidance is of a generic nature. However, it is widely recognised that 'significance' reflects the relationship between the magnitude of an impact and the sensitivity (or value) of the affected resource or receptor. Statutory designations and any potential breaches of environmental law take precedence in determining significance because the protection afforded to a particular receptor or resource has already been established as a matter of law, rather than requiring a project or site-specific evaluation. Thus, effects resulting in unacceptable risks to human health and safety, the pollution of controlled waters or harm to protected species cannot be permitted.

3.6.18 Where effects have been identified which are adverse or beneficial, these have generally been assessed against the scale set out in Table 3.1.



Table 3.1: Description of the Level of Significance of Environmental Effects

Level of Significance	Description
Major	Major effects (by extent, duration or magnitude) and/or a highly pronounced change in environmental conditions. Effects, both adverse and beneficial, which are likely to be important considerations at a regional or district level because they contribute to achieving regional or borough wide objectives, or, could result in exceedence of statutory objectives and/or breaches of legislation.
Moderate	Intermediate effects (by extent, duration or magnitude) and/or pronounced change in environmental conditions. Effect that is likely to be an important consideration at a local level.
Minor	Noticeable but small effect or change in environmental conditions. These effects may be raised as local issues but are unlikely to be of importance in the decision making process.
Negligible	No discernible change or neutral effect on environmental conditions. An effect that is likely to have a negligible influence, irrespective of other effects.

3.6.19 The matrix presented in Table 3.2 has generally been applied throughout this ES to determine the scale or magnitude of effects. Where different assessment criteria have been used, this is clearly stated within the relevant chapter.

Table 3.2: Significance Matrix

Sensitivity / Value of Receptor	Magnitude of Effect			
	High	Medium	Low	Negligible
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible

3.6.20 Specific criteria for the assessment of each potential effect have been developed giving due regard to the following:

- Extent and magnitude of the effect;
- Effect duration (whether short, medium or long term);
- Nature of effect (whether direct or indirect, reversible or irreversible);
- Performance against environmental quality standards;
- Whether the effect occurs in isolation or cumulatively;
- Sensitivity of the receptor; and
- Compatibility with environmental policies.

3.6.21 The sensitivity of a receptor is based on the relative importance of the receptor taking into account:

- Legislative/designated status;
- The number of individual receptors;
- The characteristics/rarity; and,
- Ability to absorb change

#### Cumulative Effects

3.6.22 The EIA Regulations require that, in assessing the effects of a particular development proposal, consideration should also be given to the cumulative effects. Potential cumulative effects are categorised into two types:

- **Intra-project effects:** The combined effects of individual effects resultant from the development upon a set of defined sensitive receptors, for example, noise, dust and visual effects; and
- **Inter-project effects:** The combined effects arising from another development site(s), which individually might be insignificant, but when considered together, could create a significant cumulative effect.

3.6.23 There is currently no guidance on how to define an appropriate study area for considering cumulative effects. A set of screening criteria has therefore been developed to identify which reasonably foreseeable developments in the vicinity of the Site should be subject to assessment. Schemes to be considered have been identified based on the following criteria:

- Those which are expected to be built-out at the same time as the Development and with a defined construction programme;
- Those sites that fall within the NW Bicester Eco-Town site allocation;
- Projects considered EIA development and for which an ES has been submitted with the planning application;
- Those subject to planning permission from CDC (granted or resolution to grant); and
- Those which introduce new sensitive receptors close within close proximity to the Site boundary (but are not EIA development).

3.6.24 The development schemes which meet the above criteria which have been included within the cumulative assessment are identified in Figure 8.1 and Table 8.1 in Chapter 8: Cumulative Assessment. Each technical assessment considers the potential for inter-project effects arising from the cumulative schemes.

## REFERENCES

---

<sup>1</sup> Her Majesty's Stationary Office (HMSO), 2017. *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017*. The Stationary Office.

<sup>2</sup> Department for Communities and Local Government (DCLG), 2015. *Planning Practice Guidance - Environmental Impact Assessment*. ID 4, updated: April 2015. Available online at:  
<http://planningguidance.planningportal.gov.uk/blog/guidance/environmental-impact-assessment/>

<sup>3</sup> Institute of Environmental Impact and Assessment (IEMA), 2011. Special Report: *The State of Environmental Impact Assessment Practice in the UK*. IEMA.

<sup>4</sup> IEMA, 2004. *Guidelines for Environmental Impact Assessment*. IEMA.

<sup>5</sup> European Commission, 2017. *Environmental Impact Assessment of Projects: Guidance on the Preparation of the Environmental Impact Assessment Report*

<sup>6</sup> IEMA, 2016. *EIA – Shaping and Delivering Quality Development*. July 2016

<sup>7</sup> IEMA, 2017. *Delivering Proportionate EIA: A Collaborative Strategy for Enhancing UK Environmental Impact Assessment Practice*. July 2017

## 4 Alternatives

### 4.1 Introduction

4.1.1 In accordance with the EIA Regulations, this chapter describes the reasonable alternatives to the Development considered by the Applicant, prior to the selection of the final design and provides a description of the main reasons for the choice made, including a comparison of the environmental effects.

4.1.2 The alternatives that have been considered in this chapter include:

- The 'No Development' alternative; and
- Alternative designs including layout, heights, massing and other aspects.

4.1.3 The Site is under the ownership of the Applicant. Alternative sites are therefore not considered further in this ES.

### 4.2 No Development Alternative

4.2.1 This alternative analysis outlines the consequences of no development taking place, and the Site remaining in its present condition in agricultural use. This option would be contrary to the Cherwell Local Plan 2011 - 2031 Part 1<sup>1</sup> and the North West Bicester Masterplan SPD<sup>2</sup>, which identifies the Site as an area for development, with the loss of the opportunity to provide new homes in the Eco-Town area.

4.2.2 Given the surrounding land has resolution to grant for development as part of the Eco-Town it would become an isolated agricultural plot surrounded by development and its functional value as an agricultural plot will be marginal.

4.2.3 The 'No Development' alternative would avoid construction activity in the area through the development period and hence associated temporary construction effects on nearby receptors, e.g. traffic, noise and vibration, air quality, townscape, heritage and visual. The 'No Development' Scenario is not considered a realistic prospect given the Site's allocation for development as part of the Eco-Town.

### 4.3 Alternative Sites

4.3.1 No alternative sites were considered for the Development. The Site is identified in the CDC Local Plan and North West Bicester SPD for residential development to respond to the CDC's recognised need for housing. The Applicant owns the land and therefore no alternative sites were considered. The subject Site is considered in policy terms and market suitability to be an appropriate location for the type of housing development proposed.

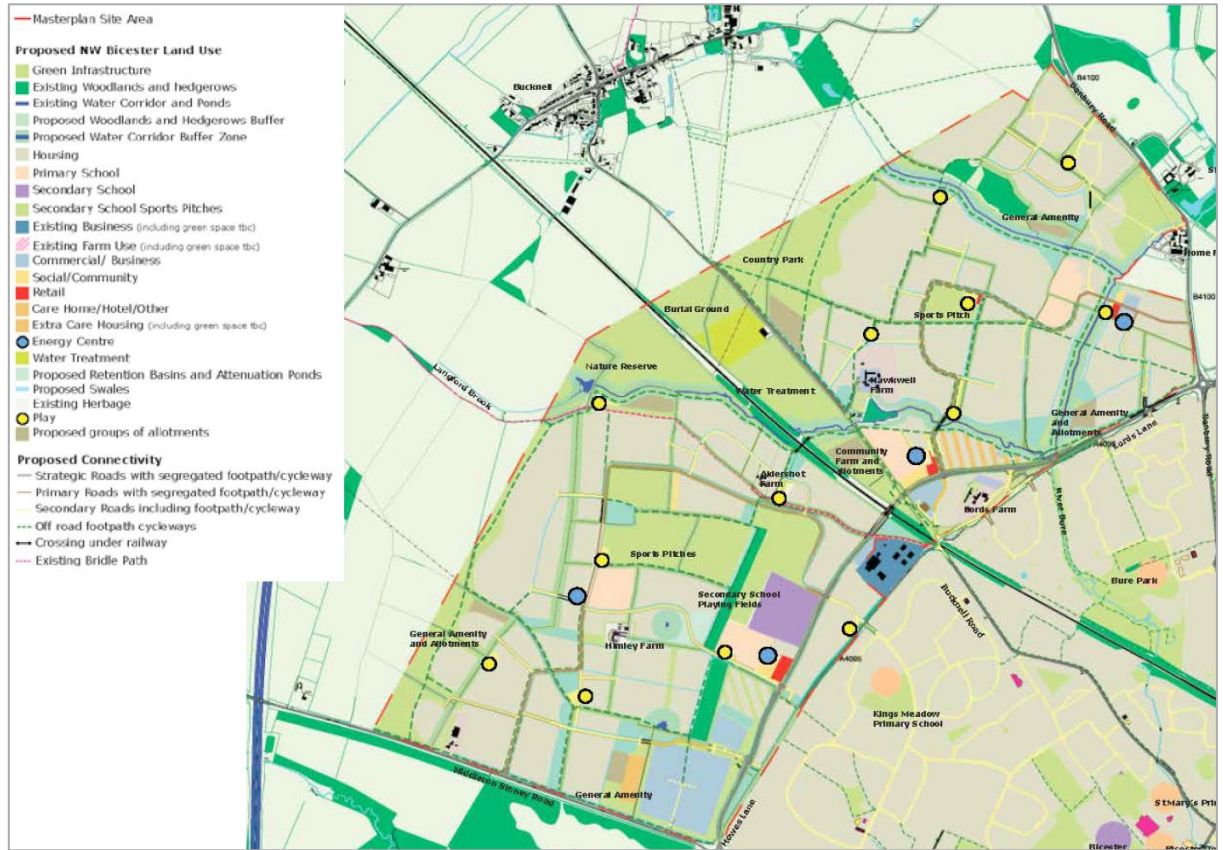
### 4.4 Alternative Layouts and Massing

4.4.1 This section summarises the design evolution of the Site and Development proposals and how environmental considerations influenced the current design iteration.

#### North West Bicester Masterplan SPD

4.4.2 The North West Bicester Masterplan Framework (Figure 4.1), provided within the SPD, was the basis of the concept proposal, which identified the western third of the Site for residential development with the remainder of the Site reserved for green infrastructure.

Figure 4.1: North West Bicester Masterplan Framework



Source: North West Bicester Masterplan SPD

### Concept Scheme Option 1 (December 2017)

- 4.4.3 Initial concept studies were developed in December 2017. These were designed following the principles of the North West Bicester Masterplan and with a view to connect to other future developments around the Site.
- 4.4.4 Option 1 extended maintained the boundary of the residential development in-line with the approximate line of the SPD. This generated a built development area of approximately 1.8 ha. As demonstrated in the illustrative site layout in Figure 4.2, at a residential density of 30 units per hectare this iteration would provide 54 new dwellings, while it would provide 63 dwellings at a residential density of 35 units per hectare.

Figure 4.2: Concept Scheme Proposal: Option 1

