



# Bicester Office Park

## Environmental Impact Assessment

### Volume 1: Environmental Statement

Prepared for:  
Scenic Land Developments Limited

Date:  
December 2017

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# Introduction

## Introduction

- 1.1 This Environmental Statement (ES) has been prepared on behalf of Scenic Land Developments Limited ('the Applicant') in accordance with the statutory procedures set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2011<sup>1</sup>, as amended in 2015<sup>2</sup> ('the EIA Regulations').
- 1.2 This ES relates to a commercial led development of an area of land located to the south of Bicester Village, in close proximity to the A41, within Cherwell District Council (CDC) ('the site'). This ES accompanies an outline planning application ('the Application') made by the Applicant to CDC in respect of the development proposals ('the Proposed Development') for the site.
- 1.3 Environmental Impact Assessment (EIA) is a process in which the likely significant effects of certain types of development projects on the environment are identified, assessed and reported upon. Mitigation is also identified as part of EIA. The process must be followed for such effects to be considered before a decision is made on whether planning permission should be granted.
- 1.4 The Applicant recognises that the Application falls within Schedule 2, Category 10(b) of the EIA Regulations as an 'urban development project' which, owing to its nature, scale and location, has the potential to give rise to significant effects on the environment. The Applicant has therefore commissioned an EIA for the Proposed Development.
- 1.5 In accordance with the EIA Regulations, this ES reports on the likely significant environmental effects of the Proposed Development. The ES describes the environmental and socio-economic effects of the Proposed Development during site preparation, construction and subsequent completion and operation. The ES is designed to inform readers of the nature of the scheme, the likely environmental effects and the measures proposed to protect the environment.
- 1.6 This process is critical to the development of a comprehensive and balanced ES. Views of key statutory and non-statutory consultees serve to focus the environmental studies and to identify specific issues, which require further investigation. Consultation is also an ongoing process, which enables mitigation to be incorporated as the design of the Proposed Development evolves, thereby limiting adverse effect and enhancing scheme benefits.
- 1.7 The EIA has been carried out by Trium Environmental Consulting LLP ('Trium') and a number of technical specialists. The EIA specialists, in addition to the Applicant's wider design and planning team, are presented in Table 1.2, along with their respective disciplines.
- 1.8 This ES has been undertaken following and in line with the Institute of Environmental Management and Assessment (IEMA) Quality Mark indicator checklist.

## Outline Application

- 1.9 The Application seeks outline permission for a set of parameters that define the use, amount of development, zones of development and scale of development that could come forward on this site. All matters are reserved except for access.
- 1.10 The combined parameter plan for the outline application contains information on:
  - Use – uses proposed for the development (B1(a) and B1(b) Office);
  - Amount of development – the maximum floor area proposed (60,000 square metres (m<sup>2</sup>) Gross External Area (GEA));

- Zones – indicating the maximum floor area and height for buildings within each zone; and
- Scale – an indication of the upper and lower limits for the height of the proposed buildings within the zones.

## Site Background

### Site Location

- 1.11 The site is located at National Grid Reference 457910, 221631, located to the south of Bicester Retail Village, in close proximity to the A41 as shown in Figure 1.1 and Figure 1.2.

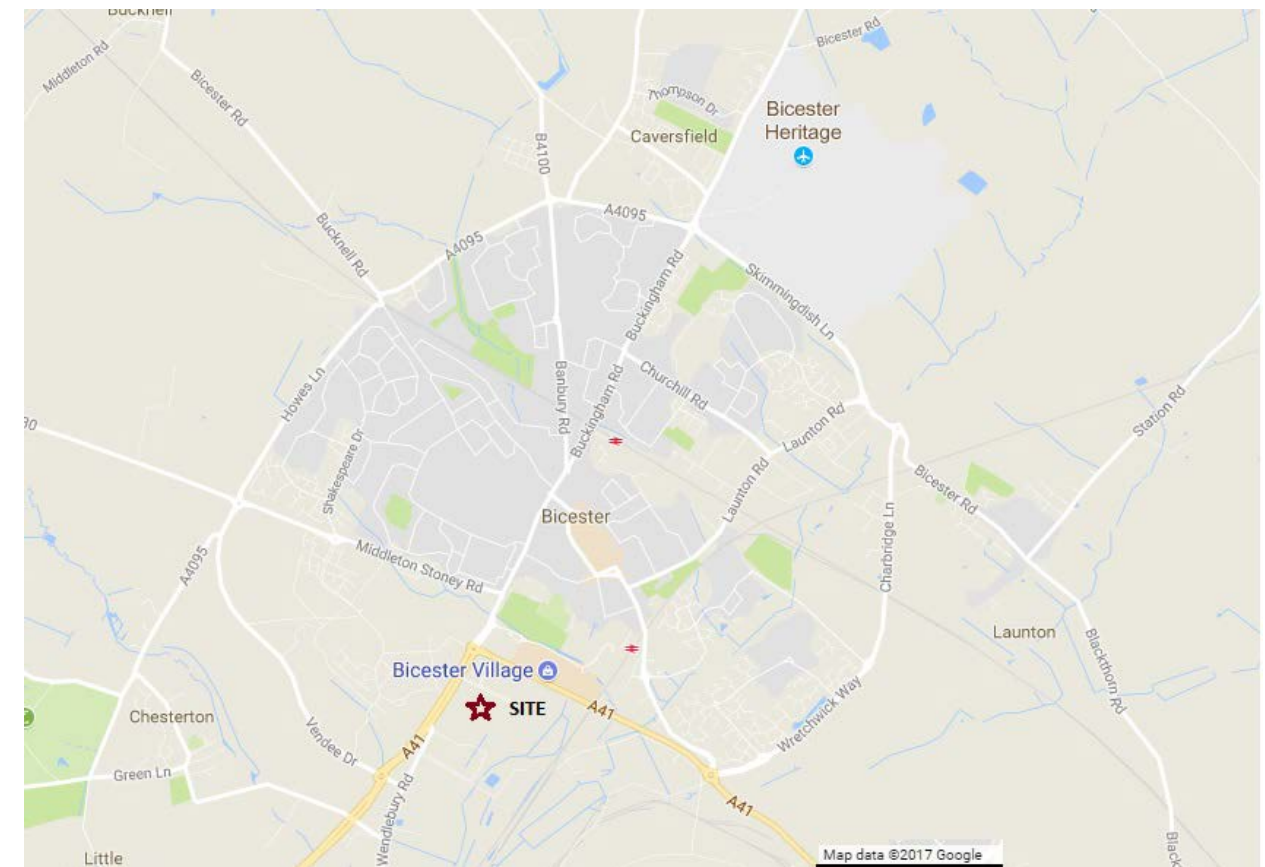


Figure 1.1: Site Location

<sup>1</sup> HM Government, 2011. The Town and Country Planning (Environmental Impact Assessment) Regulations 2011. London: HMSO. SI 2011/1824.

<sup>2</sup> HM Government, 2015. The Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations. London: HMSO. SI 2015/660.

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## 1.12 The site is bound by:

- A Tesco foodstore and associated carparking facilities to the north west and farmland to the north east, with the Bicester Village located further north beyond the A41;
- Farmland to the east, along with the Chiltern Railways railway line;
- Bicester Avenue Garden Centre and farmland fields to the south west and sewage treatment works to the south east; and
- A41 to the west, beyond which lies the Kingsmere Residential Estate (a phased development of 726 homes under construction) as well as a Premier Inn Hotel and the Brewers Fayre Pub and Restaurant.

## Site Description

- 1.13** The land encompassing the site is currently used for agricultural purposes (Grade 4). The site is generally flat, with a slight drop from +68.5 metres above ordnance datum (m AOD) in the north down to +64.5m AOD to the south and east. A drainage ditch runs north / south, from the access road in the north west of the site to the southern boundary, along the north of the drainage ditch is an area used for material storage. This area has plastic and concrete pipework, gravel and wood chippings. Two heaps of wood, comprising tree branches and timber up to 3m high, are located in the south of the site. The site is accessed from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road.
- 1.14** As shown in Figure 1.2 the site is irregular in shape with a loose triangular nature, and occupies an area of approximately 13.1 hectares (ha). In addition, Figure 1.2 shows that the Applicant's Ownership Boundary (blue line) comprises a larger area surrounding the red line boundary of the site extending further to north and south of the site.
- 1.15** The site's south-eastern boundary is located approximately 180m from a watercourse known as the Langford Brook and as a result falls within the flood zone of this watercourse. The majority of the site lies in Flood Zone 1, however, the site lies within Flood Zones 2, 3a and 3b along the south eastern boundary. Areas along the eastern boundary are considered medium and high risk of flooding respectively due to the proximity of Langford Brook to the site. See Figure 4.1 for further detail on the location of the Flood Zone boundaries. The proposed buildings will all be developed within Flood Zone 1, and this is reflected within the submitted parameter plans.
- 1.16** The site is not located within an Air Quality Management Area (AQMA) which are declared under the Environment Act 1995. It is noted that Bicester Town Centre, approximately 1 kilometre (km) to the north of the site, has been declared as an AQMA for exceedances of the annual mean NO<sub>2</sub> objective.

## Planning History

- 1.17** Part of land within the Applicant's Ownership Boundary (see Figure 3.3) was granted outline planning permission in 2010 (Planning Ref: 07/01106-OUT) for the construction of a 60,000m<sup>2</sup> B1 Business Park comprising 53,000m<sup>2</sup> of class B1 office space and a 7,000m<sup>2</sup> class C1 hotel, served by approximately 1,837 car parking spaces. This outline planning application was accompanied by an ES.
- 1.18** Subsequently, detailed planning consent was granted on part of land within the Applicants ownership boundary to the north of the site in November 2013 for the construction of a Tesco foodstore of 8,135m<sup>2</sup> and petrol filling station on part of the consented Business Park site referred to above (Planning Ref: 12/01193/F). The planning application in relation to the proposed Tesco foodstore was supported by a Transport Assessment which considered the effect of the Tesco foodstore on the highway network local to the site. The Tesco foodstore has been constructed and opened in April 2016. The development of the Tesco foodstore comprised the relocation and expansion of a previous Tesco foodstore which was situated adjacent to Bicester Village and the

development was linked to an extension to Bicester Village, known as Bicester Village Phase 4 which is currently under construction and scheduled to be completed in October 2017.

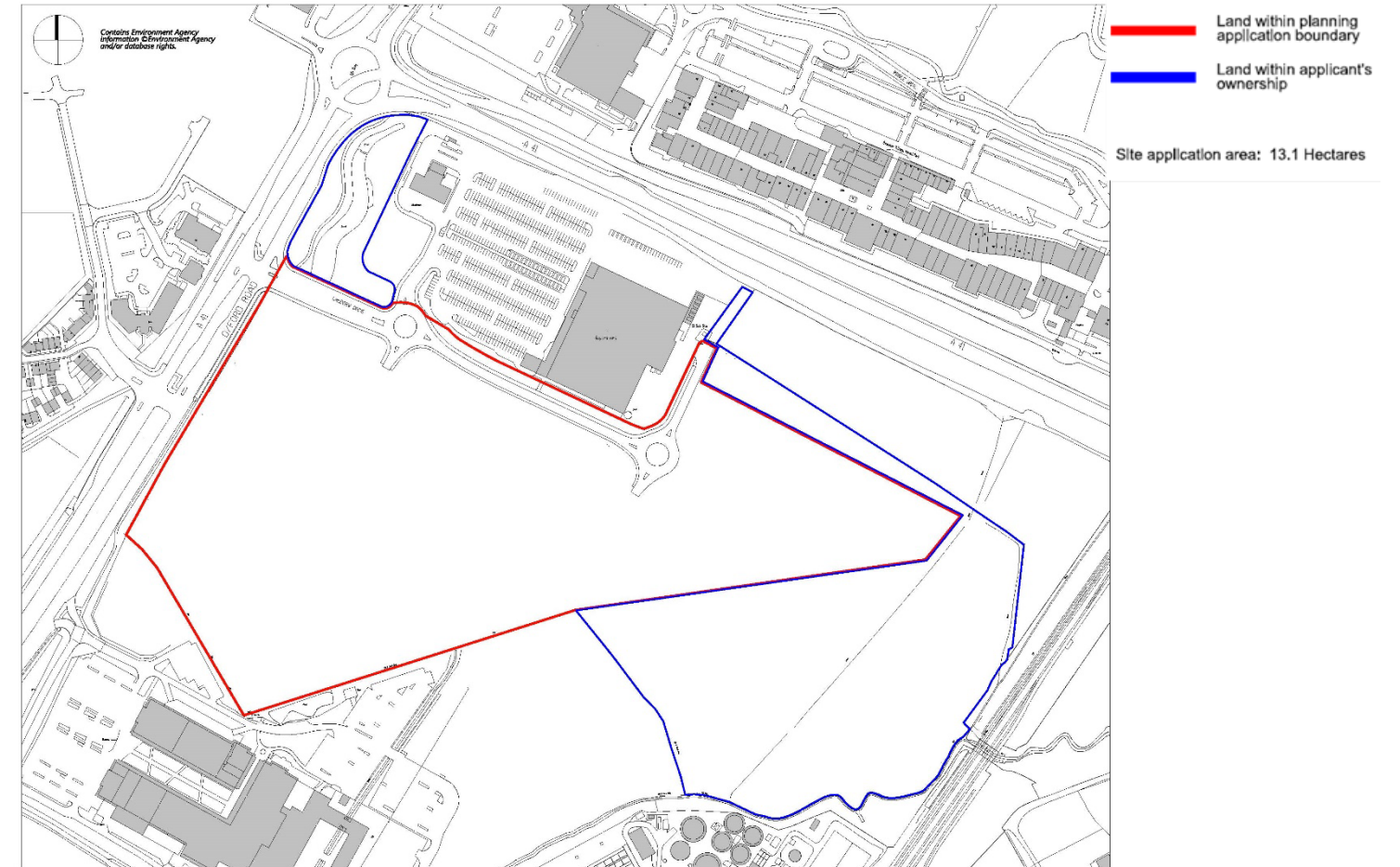


Figure 1.2: Site Redline Boundary and Applicant Ownership Boundary



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## The Proposed Development

**1.19** The Proposed Development, comprises the construction of a business park of up to 60,000 m<sup>2</sup> GEA of Class B1(a) and B1(b) office floorspace, parking for up to 2,000 cars and associated highways, infrastructure and earthworks. The Bicester Office Park will be made up of differently sized buildings which will vary in height between 2 and 4 storeys and located within a landscaped space. The site will be accessed from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road.

## Planning Policy Context

**1.20** While the ES is not an assessment on the conformity to planning policy (which is covered in the Planning Statement), it is necessary to consider the Proposed Development against relevant policies and guidance at local, regional and national levels. This ES takes into consideration the National Planning Policy Framework (NPPF) (2012)<sup>3</sup>, which replaces the previous suite of national Planning Policy Statements and Planning Policy Guidance documents. The policies contained within the NPPF articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. On a national level this ES also takes into consideration the national Planning Practice Guidance (PPG)<sup>4</sup>.

**1.21** On a regional and local level, this ES has taken into consideration the following: the Cherwell Local Plan 2011 – 2031, Part 1 Adopted 20 July 2015 (incorporating Policy Bicester 13 re-adopted on 19 December 2016), July 2015, Cherwell District Council, which sets out the vision and spatial strategy for Cherwell District; the Bicester Masterplan, Consultation Draft, August 2012, Supplementary Planning Document<sup>5</sup>, which incorporates a detailed set of proposals for connecting the transport and movement, housing, employment, green infrastructure and the town centre actions together.

**1.22** In addition, within the CDC's Adopted Policies Map, the site is identified as land for employment uses (Figure 3.1: Site Context Plan).

## Environmental Statement Structure

### Environmental Statement and Technical Appendices

**1.23** The ES comprises two technical volumes. Volume 1 of the ES is the main body of the ES providing the description of the Proposed Development, the methodology of assessment, technical chapters and conclusions. Volume 2: Technical Appendices provides further detail to support the main ES. These comprise background data, tables, figures and surveys (refer to Chapter 2: EIA Methodology of this ES for further details).

- Volume 1: ES Main Report, comprising the following chapters:

- Table of Contents
- Chapter 1: Introduction
- Chapter 2: EIA Methodology
- Chapter 3: Alternatives and Design Evolution
- Chapter 4: The Proposed Development
- Chapter 5: Construction
- Chapter 6: Socio-Economics

- Chapter 7: Transportation and Access
- Chapter 8: Noise and Vibration
- Chapter 9: Air Quality
- Chapter 10: Buried Heritage (Archaeology) Built Heritage
- Chapter 11: Ecology
- Chapter 12: Landscape and Visual Impact Assessment
- Chapter 13: Water Resources and Flood Risk
- Chapter 14: Effects Interactions
- Chapter 15: Residual Effects and Conclusions
- Glossary of Terms and Abbreviations

- Volume 2: Technical Appendices, comprises the following:

- Appendix 2.1: EIA Scoping Report
- Appendix 2.2: EIA Scoping Opinion
- Appendix 2.2: Phase I Environmental Risk Assessment -Appended to the EIA Scoping Report
- Appendix 6.1: Legislative and Planning Policy Context
- Appendix 6.2: Baseline Conditions
- Appendix 7.1: Transport Assessment (TA)
- Appendix 8.1: Legislative and Policy Context
- Appendix 8.2: Noise and Survey Results
- Appendix 8.3: Construction Noise Calculations
- Appendix 8.4: Road Traffic Noise Calculations
- Appendix 8.5: SoundPLAN Computer Model Output – Site Activity – Peak Hour
- Appendix 9.1: Glossary
- Appendix 9.2: Legislative and Planning Policy Context
- Appendix 9.3: Construction Dust Assessment Procedure
- Appendix 9.4: EPUK & IAQM Planning for Air Quality Guidance
- Appendix 9.5: Professional Experience
- Appendix 9.6: Modelling Methodology
- Appendix 9.7: Construction Mitigation
- Appendix 10.1: Site Gazetteer

<sup>3</sup> Department for Communities and Local Government. 2012. The National Planning Policy Framework. HMSO.

<sup>4</sup> Department for Communities and Local Government (Live Document) Planning Practice Guidance [online] Available: <http://planningguidance.communities.gov.uk/>

<sup>5</sup> Cherwell District Council, 2012. Bicester Masterplan, Consultation Draft, August 2012, Supplementary Planning Document. CDC.

# Introduction



- Appendix 10.2 Setting Assessment Methodology
- Appendix 10.3: Legislative and Planning Policy Context
- Appendix 10.4: Site Walkover
- Appendix 10.5: Plates and Figures
- Appendix 10.6: Written Scheme of Investigation
- Appendix 11.1: Preliminary Ecological Appraisal
- Appendix 11.2: Bat Survey Report
- Appendix 11.3: Great Crested New Survey Report
- Appendix 11.4: Legislative and Planning Policy Context
- Appendix 12.1: Drawings and Photographs
- Appendix 12.2: Legislative and Planning Policy Context
- Appendix 12.3: Assessment Methodology
- Appendix 12.4: Photography Methodology
- Appendix 13.1: Flood Risk Assessment and Drainage Strategy
- Appendix 13.2: Legislative and Planning Policy Context

## Non-Technical Summary

**1.24** A separate summary of the ES is presented in a stand-alone document, providing a concise summary written in non-technical language, of the Proposed Development, alternatives, likely significant environmental effects and mitigation measures.

## Location of Information within the ES

**1.25** The EIA Regulations, Part 1.2 requires that an ES includes “such of the information in Part 1 of Schedule 4 that is reasonably required to assess the environmental effects of the development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile”. This information and its location within the ES are presented in Table 1.1.

Table 1.1: Location of Required Information within the ES		
Number	Specified Information	Location within ES
<b>Part I</b>		
1	Description of the development, including in particular – <ul style="list-style-type: none"> <li>• a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;</li> <li>• a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used; and</li> <li>• an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the development.</li> </ul>	ES Chapter 4: The Proposed Development ES Chapter 5: Construction

Table 1.1: Location of Required Information within the ES		
Number	Specified Information	Location within ES
2	An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.	ES Chapter 3: Alternatives and Design Evolution
3	A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.	ES Chapters 6 - 13 of Volume 1 and Appendix 2.2 (Phase I Environmental Risk Assessment)
4	A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from: <ul style="list-style-type: none"> <li>• the existence of the development;</li> <li>• the use of natural resources;</li> <li>• the emission of pollutants, the creation of nuisances and the elimination of waste; and</li> <li>• the description by the applicant or appellant of the forecasting methods used to assess the effects on the environment.</li> </ul>	ES Chapters 6 - 13 of Volume 1
5	A description by the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.	ES Chapters 6 - 13 of Volume 1
6	A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.	Non-Technical Summary
7	An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant or appellant in compiling the required information.	ES Chapter 2: EIA Methodology ES Chapters 6 - 13 of Volume 1
<b>Part II</b>		
1	A description of the development comprising information on the Site, design and size of development.	ES Chapter 4: The Proposed Development
2	A description of the measures envisaged in order to avoid, reduce, and, if possible remedy significant adverse effects.	ES Chapter 5: Construction ES Chapters 6 - 13 of Volume 1
3	The data required to identify and assess the main effects which the development is likely to have on the environment.	ES Chapters 6 - 13 of Volume 1
4	An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for his choice, taking into account the environmental effects.	ES Chapter 3: Alternatives and Design Evolution
5	A non-technical summary of the information provided under paragraphs 1 to 4 of this Part.	Non-Technical Summary

# Introduction



## Other Documents

**1.26** A number of other documents have been submitted to CDC as part of the Planning Application. These are summarised as follows:

- Completed Application Forms and Ownership Certificates;
- Site Location and Ownership Plan;
- A Single Combined Parameter Plan;
- Design and Access Statement;
- Planning Statement; and
- Transport Assessment (including Appendices / Travel Plan);

## Project Team

**1.27** The key members of the team including their respective roles in relation to the EIA, as relevant, are presented in Table 1.2.

Table 1.2: Project Team	
Company	Role
Scenic Land Developments Limited	The Applicant
Bennetts Associates Architects	Architect
DP9	Planning Consultant
Trium Environmental Consulting LLP	EIA Project Manager and Co-ordinator Author of the non-technical chapters of the ES
Motion	Transport Consultant
Indigo Planning	Socio Economics
Sharps Gayler	Noise and Vibration
Air Quality Consultants	Air Quality
AOC Archaeology	Buried Heritage (Archaeology) Built Heritage
Buro Happold Engineering	Ground Conditions, Water Resources and Flood Risk Assessment, Outline Drainage Strategy
Prime Environment Ltd	Ecology
Highland Edgar Driver	Landscape and Visual Impact Assessment (LVIA)

## ES Availability and Comments

**1.28** CD versions of the ES are available to purchase from Trium.

**1.29** Copies of the planning application and ES are also available for viewing by the public in the Planning Department of CDC during normal office opening hours and on the CDC's website.

**1.30** Comments on the planning application should be forwarded to CDC at the address below:

Bodicote House  
Bodicote  
Banbury  
Oxfordshire  
OX15 4AA

# EIA Methodology

## Introduction

- 2.1** This chapter of the ES sets out the overall approach to the EIA and, in particular, details the response to best practice requirements, the definition of significance within the EIA and the method of assessing environmental and socio-economic impacts and resultant effects and their significance.
- 2.2** Whilst the overall approach and methodology is described in this chapter, further detail on how the methodology has been tailored to each technical aspect of the EIA is presented in the relevant technical assessment chapters of this ES.
- 2.3** This chapter is accompanied by the following technical appendices within ES Volume 2:
- Technical Appendix 2.1: EIA Scoping Report;
  - Technical Appendix 2.2 EIA Scoping Opinion; and
  - Technical Appendix 2.2: Phase I Environmental Risk Assessment (Phase 1), appended to the EIA Scoping Report.

## Environmental Impact Assessment General Approach

- 2.4** EIA Regulations set out the statutory process and requirements for EIA and the contents of an ES. They prohibit the granting of planning permission for EIA developments likely to have significant environmental effects, unless information is provided on those effects and they are considered by the competent authority in reaching its decision on an application.
- 2.5** This ES has been prepared in accordance with current guidance for the preparation of EIAs, together with applicable national and international legislation for the EIA process. In particular, the ES has been prepared with due consideration to:
- HM Government. 2011. The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 HMSO<sup>1</sup>. (as amended in 2015<sup>2</sup>). It is noted that the Scoping Report was submitted before 16 May 2017 when the new 2017 EIA Regulations<sup>3</sup> came into force. Therefore, this EIA and corresponding ES has been prepared under the 2011 EIA Regulations (as updated in 2015).
  - Institute of Environmental Management and Assessment (IEMA), 2004. Guidelines for Environmental Impact Assessment<sup>4</sup>;
  - Institute of Environmental Management and Assessment: Special Report into the State Environmental Impact Assessment Practice in the UK, 2011<sup>5</sup>;
  - DCLG, 2006. Environmental Impact Assessment: A guide to good practice and procedures (consultation paper)<sup>6</sup>; and
  - DCLG, 2014. Guidance for Environmental Impact Assessment. On-line Resource<sup>7</sup>.
- 2.6** This ES has considered the likely impact of the Proposed Development on its surroundings, neighbours, wider area and overall context. Both beneficial and adverse, short and long-term effects have been considered. Where mitigation measures have been identified to either eliminate or reduce the significance of adverse effects, these have been, where appropriate, incorporated into the project design. Other measures may relate

to environmental management controls e.g. throughout construction. In cases where no practical mitigation measure has been identified or are not required, the ES has highlighted remaining or 'residual' effects and classified these in accordance with a standard set of significant criteria (see 'Significance Criteria section below).

## Environmental Statement Requirements

### Screening Requirements

- 2.7** Applications for development that are within the scope of the EIA Regulations are termed 'EIA applications'. Screening of developments to identify whether an EIA is necessary is based on the likelihood of significant effects arising from the project. EIA applications are divided into Schedule 1 and Schedule 2 development under the EIA Regulations.
- 2.8** The need for an EIA for all other projects is determined on the basis of the following set criteria:
- The development is within one of the classes of development stated in Schedule 2 of the EIA Regulations; AND
  - EITHER it exceeds the size threshold for that class of development in Schedule 2; OR it is in a sensitive area; AND
  - it is likely to have significant effects on the environment by virtue of factors such as its nature, size, or location.
- 2.9** These are known as Schedule 2 developments. Given the scale of the Proposed Development and the location of the site, it was accepted by the Applicant that the Proposed Development has the potential to have significant effects on the environment and that it falls within Schedule 2 paragraph 10(b) within the category of 'Urban Development Projects'. Given the size and nature of the Proposed Development, an EIA has been undertaken and the results are reported in this ES. Accordingly, a request for screening to CDC was not considered necessary.

### Scoping Requirements

- 2.10** Scoping is the term used in the EIA Regulations whereby the Applicant can request a formal opinion from the local planning authority on the content of the ES, the methodology for assessments and the extent of the information to be considered in the assessments. The purpose of scoping is to focus the EIA on the environmental issues and potential impacts which need the most thorough attention; to identify those which are unlikely to need detailed study; and to provide a means to discuss methods of impact assessment so as to reach agreement on the most appropriate methodologies.
- 2.11** A Scoping Report was submitted to CDC on 15 May 2017 which requested an EIA Scoping Opinion from CDC and other statutory consultees on the scope of the EIA. The EIA Scoping Report is provided in ES Volume 2: Technical Appendix 2.1, and sets out a description of the emerging Proposed Development at the time of writing; the potential key environmental impacts and likely significant effects to be considered as part of the EIA; as well as the proposed approach that would be adopted for the EIA including the proposed scope and assessment methodology to predict the scale of effects and to assess the significance in each case.

<sup>1</sup> HM Government, 2011. The Town and Country Planning (Environmental Impact Assessment) Regulations 2011. London: HMSO. SI 2011/1824

<sup>2</sup> HM Government, 2015. The Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations. London: HMSO. SI 2015/660.

<sup>3</sup> HM Government, 2017. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. London: HMSO.

<sup>4</sup> Institute of Environmental Management and Assessment (IEMA), 2004. Guidelines for Environmental Impact Assessment. IEMA.

<sup>5</sup> Institute of Environmental Management and Assessment (IEMA), 2011. Special Report into the State Environmental Impact Assessment Practice in the UK, 2011. IEMA.

<sup>6</sup> Department for Communities and Local Government, 2006. Environmental Impact Assessment: A guide to good practice and procedures – a consultation paper. DCLG.

<sup>7</sup> Department for Communities and Local Government, 2014. Guidance for Environmental Impact Assessment. DCLG.



**2.12** CDC issued their EIA Scoping Opinion on 8 August 2017 which is provided in Technical Appendix 2.2, ES Volume 2. Key consultees involved in the process included:

- CDC;
- Environment Agency;
- Highways England;
- Natural England;
- Thames Water;
- BBO Wildlife Trust;
- Oxfordshire County Council Single Response; and
- The local public.

**2.13** The EIA Scoping process has informed the content of the ES. The potentially significant environmental issues that were identified during the EIA Scoping Process and the resultant Scoping Opinion received from CDC and that have been addressed within this ES are listed below:

- Construction (Chapter 5);
- Socio Economics (Chapter 6);
- Transportation and Access (Chapter 7);
- Noise and Vibration (Chapter 8);
- Air Quality (Chapter 9);
- Buried Heritage (Archaeology) Built Heritage (Chapter 10);
- Ecology (Chapter 11);
- Landscape and Visual Impact Assessment (Chapter 12);
- Water Resources and Flood Risk (Chapter 13); and
- Effects Interactions (Chapter 14).

**2.14** A Phase 1 Environmental Risk Assessment (Volume 2: Technical Appendix 2.3) was prepared to support the EIA Scoping Report and has defined the risks in relation to the redevelopment of the site on human health and the environment, including controlled waters.

**2.15** The risks can however be adequately managed (through industry recognised standards and best practice measures), and so the redevelopment of the site is unlikely to generate any significant ground conditions (including groundwater) related environmental effects. As such, it is considered that the risks and resultant effects are sufficiently well understood and that based on the information currently available, it is likely that the residual effects associated with ground conditions and groundwater would be insignificant.

**2.16** Furthermore, several planning conditions attached to the planning permission are envisaged to cater for the further reporting, site investigation works and (if required) remediation prior to the start of works on site are anticipated. On this basis, a full ground conditions (including groundwater) impact assessment was scoped out of the EIA.

## The Outline Planning Application and Parameter Based Approach

**2.17** The planning application seeks outline permission for a set of parameters that define the use, amount of development, zones and scale on this site. An outline planning application is considered the most appropriate mechanism for providing a combination of planning certainty whilst maintaining a degree of future flexibility for the Applicant but allowing CDC and stakeholders to fully acknowledge the potential impacts of the Proposed Development.

**2.18** The Applicant has adopted a 'parameter based' approach to ensure that the flexibility required for the outline planning application can be taken into account in the EIA. The approach involves establishing parameters that govern or define the range of development possibilities - and hence the likely significant environmental effects. The development parameters for the Proposed Development site are shown on the "Combined Parameter Plan" that accompanies the Planning Application and cover a range of 'matters'; all matters are 'reserved' for subsequent approval by CDC, except for access. The Parameter Plan contains information on the following matters:

- Use – uses proposed for the development (B1(a) and B1(b) Office);
- Amount of development – the maximum floor area proposed (60,000m<sup>2</sup> GEA);
- Zones – indicating the maximum floor area and height for buildings within each zone;
- Scale – an indication of the upper and lower limits for the height of the proposed buildings within the zones.

**2.19** The Design and Access Statement also explains and justifies the principles behind the intended design of the Proposed Development. The Design and Access Statement explains the context and parameters that the final form of the Proposed Development will need to comply with and within which details (such as appearance) will be approved at a later date pursuant to applications for the approval of reserved matters.

**2.20** Since the final form of the Proposed Development cannot be fully defined at this stage by the very nature of the outline planning application, the EIA assesses a "reasonable worst case". This may be different for each topic considered in the EIA, therefore, each topic identifies its own 'reasonable worst case' for assessment.

## Environmental Impact Assessment Approach

### Baseline Characterisation

**2.21** The purpose of the EIA is to predict how environmental conditions may change as a result of the Proposed Development. The assessment of the scale and significance of a predicted change is undertaken against a reference condition, known as the baseline. In most cases, the baseline represents the environmental condition of the site and the surrounding area at the time of the assessment. However, the Transport, Air Quality and Noise and Vibration assessments also include a future baseline (e.g. future traffic flows), at 2026, which is the projected year of completion of the Proposed Development.

**2.22** As discussed in Chapter 1: Introduction, the site is currently used for agricultural purposes (Grade 4). The site is generally flat, with a slight drop from +68.0m above ordnance datum (m AOD) in the north down to +65.0 m AOD to the south and east. A drainage ditch runs north / south, from the access road in the north west of the site to the southern boundary, along the north of the drainage channel is an area used for material storage. This area has plastic and concrete pipework, gravel and wood chippings. Two heaps of wood, comprising tree branches and timber up to 3m high, are located in the south of the site.

### Sensitive Resources and Receptors

**2.23** The EIA process has included the identification and assessment of impacts to and effects on potentially sensitive receptors resulting from site construction and operational phases of the Proposed Development. The

# EIA Methodology

receptors which may be sensitive to the Proposed Development and for which additional mitigation and protective measures may be required, are detailed below:

- Existing residential properties comprising Langford Farm and Langford Park Farm;
- Existing Commercial Properties comprising: Bicester Village Retail Park, 'Blooms' Garden Centre, Tesco Superstore and the Sewage Treatment Works;
- Existing ecological features comprising Gravenhill Wood ancient/semi natural Woodland, mature trees surrounding the site and protected species;
- Existing Archaeological Resources;
- Pedestrians and cyclists including visitors to Bicester Village Retail Park and recreational users of public rights of way in the area;
- The sites location in Flood Zone 1 and 2, 3a and 3b;
- Local Air Quality;
- Existing transport infrastructure, in particular the local highway network and public transport facilities;
- Landscape views and townscape character areas; and
- Future commercial facility occupants and users of the Proposed Development.

## Impact Assessment

- 2.24** Impact assessments are undertaken for the following stages of the Proposed Development:
- During demolition and construction works - typically assessing the peak construction related activities and vehicle movements to represent a worst-case assessment (it is noted no demolition would take place as part of this Outline Application as the site is not built up and is in use as agricultural land; and
  - Once the Proposed Development is complete and operational.
- 2.25** Detailed methodologies for the assessment of each of the environmental topic areas scoped into the EIA are provided within each technical chapter of this ES Volume, however, in general terms, the assessments have been based upon:
- A review of the current situation at and surrounding the site for the environmental topic area under consideration via various sources of existing information, data and reports;
  - Desk-top studies;
  - Site surveys;
  - Consideration of relevant legislation and relevant planning policies (national, regional and local);
  - Consideration of potentially sensitive receptors that could be affected by the Proposed Development;
  - Identification of likely environmental impacts and effects, with an evaluation of their likely duration, magnitude and significance;
  - Expert opinion;
  - The use of technical guidance and best practice; and
  - Specific consultations with appropriate organisations.
- 2.26** Mitigation is the term used to refer to the process of avoiding, reducing and remedying potential adverse impacts of a development. Mitigation measures can be embedded at design stage or committed to during the construction stage or operation of the completed development. Equally, measures can be proposed in order to enhance aspects of the development to generate positive benefit.
- 2.27** Within each technical chapter of this ES, the assessment of the potential effects that are likely to arise as a consequence of a potential impact/change to environmental receptors from the Proposed Development is initially presented. If any mitigation measures are required, further to that already integrated into the parameters throughout its evolution, these are incorporated and the parameters are reassessed to ascertain the likely residual effects and the likely significant environmental effects. This is reported on within each technical chapter of this ES.
- 2.28** Unless otherwise required by published assessment guidance (e.g. air quality), the EIA has made a distinction between:
- impacts: the change or action; and
  - effects: the result/consequence/outcome of the change.
- 2.29** A range of potential effects are considered - including direct or indirect (or secondary), permanent or temporary, reversible and irreversible, short term or long term, and cumulative:
- Direct effects are those which arise as a direct consequence of a project action, e.g. the loss of habitat or the run-off of surface water to a watercourse;
  - Indirect effects include, for example, the decline in the abundance of a species as a result of the loss of habitat or the damage to aquatic vegetation as a result of water pollution. Other common examples include the effect on air quality and ambient noise as a result of increased traffic movements; and
  - Inter and Intra cumulative effects (refer to paragraph 2.45 onwards).
- 2.30** How the Proposed Development might affect the environment relies on predictions about what impact a certain action will have. Some predictions can be made using mathematical or simulation models, particularly where there are well known relationships between cause and effect. For example, the degree to which noise levels may increase as a result of additional traffic flows can be predicted using a mathematical equation. The level of air pollution from a known traffic flow can also be predicted from a computer-based simulation model. The visibility of a building can be predicted by accurately superimposing its outline and position over a photograph. Other impacts are less easy to predict in quantitative terms; for example, whilst the extent of a loss of a habitat can be measured, the effect on the abundance of individual species is more difficult to predict. In such cases, the EIA attempts to quantify the anticipated scale of impact using empirical experience, literature and professional judgement.
- 2.31** In all cases, the overall approach and specific methods of predicting the likely nature and scale of impact and effect is set out in each of the technical assessments. Where used, recognised specific predictive methods are referenced. Any assumptions or limitations to knowledge are stated. In either case the thought process leading to the conclusions is based on reasonably reliable data and so is considered to be legally prudent and robust.
- 2.32** In the context of the Proposed Development, temporary effects would be typically those associated with the demolition and construction works, and long-term effects would typically be those associated with the completed and operational development. Typically, local effects would be those affecting receptors neighbouring the site, whilst effects upon receptors within the wider CDC boundary are assessed at a district level. Regional effects would be those affecting receptors within Oxfordshire. Effects upon different parts of the country, or England as a whole, are considered to be at a national level. Finally, effects across national boundaries would be considered at an international level (albeit there are no such effects).

## Significance

- 2.33** The assessment of environmental effects is important in that it informs the determination by the planning authority of the overall acceptability of the Proposed Development. Determining significance relies on accepted thresholds and criteria where available or, for situations in which such are not available, expert interpretations and value judgments.
- 2.34** Significance is usually a function of the vulnerability or importance of the resource affected (receptor) and the scale (magnitude and duration) of the potential impact. Importance might be a function of international designation or local relevance. Thus, significance is a concept that can be applied objectively to individual effects. Throughout this ES the same terminology is used to describe these individual effects, unless specific alternative terminology exists in recognised issue specific guidance, for example in ES Chapter 9: Air Quality.
- 2.35** Within this ES, significance has been evaluated with reference to definitive standards, accepted/published criteria and legislation, where available. Where it has not been possible to quantify likely effects, qualitative assessments have been carried out, based on expert knowledge and professional judgement. Where uncertainty exists, it has been noted in the relevant assessment and a prudent or conservative approach has been adopted so that the significance will not be under-estimated.
- 2.36** For transparency, specific conventions have been developed to define significance, wherever possible, using the criteria listed below:
- The sensitivity of the receptor to the change or potential impact, based on a scale of high, medium and low;
  - The magnitude of the potential impact, based on a scale of high, medium, small, neutral and unknown;
  - The likelihood of the effect occurring, based on a scale of certain, likely or unlikely;
  - The duration of the effect, based on a scale of long, medium and short term (temporary);
  - The geographical extent of the effect at local, district, regional, national and international levels; and
  - The reversibility of the effect, being either reversible or irreversible.
- 2.37** In order to provide a consistent approach to the presentation of the significance of effects, the following terminology has been used throughout the ES to describe the type/nature of potential and residual effects:
- **Adverse** - detrimental or negative effect to an environmental resource or receptor;
  - **Neutral** - an effect that on balance, is neither beneficial nor adverse to an environmental resource or receptor; and
  - **Beneficial** - advantageous or positive effect to an environmental resource or receptor.
- 2.38** The scale of the predicted effect has then been classified according to the following scale. The definitions of the scale used follow either that set out below, or, as specified within the individual technical ES chapters:
- **Negligible** - imperceptible effect;
  - **Minor** - slight, very short or highly localised effect;
  - **Moderate** - limited effect (by magnitude, duration, reversibility, value and sensitivity of receptor) which may be considered significant; and
  - **Major** - considerable effect (by magnitude, duration, reversibility, value and sensitivity of receptor) which may be more than of a local significance or lead to a breach of a recognised environmental threshold, policy, legislation or standard).

**2.39** There are some exceptions to this scale due to established terminology for certain topic specific assessments. For example, the Air Quality assessment uses 'slight' instead of 'minor'.

**2.40** Throughout the ES, residual effects have been predicted as either 'significant' or 'not significant'. Significant effects are considered material to the planning decision process. Residual effects of moderate and major scale could be considered significant, but would be dependent on the relevant technical assessment, as well as the existence of published assessment guidance. Where published assessment guidance is not definitive in respect of categorising/determining significant environmental effects, professional judgement would be applied, taking into account the duration, extent and context of the effect, to determine significant effects.

## Intra-Project Cumulative Effects

**2.41** Intra-project cumulative effects from the Proposed Development itself on surrounding sensitive receptors during the construction works and also once the Proposed Development is completed will be considered. It is possible however, that depending on the predicted individual 'completed developments' effects, only the construction work effects will actually be considered as often they generate the greatest likelihood of interactions occurring and hence significant effects. Indeed, construction effects are usually more adverse (albeit on a temporary basis) than effects as a result of a completed development.

**2.42** Dependent on the relevant sensitive receptors, the assessment will focus either on key individual receptors or on groups considered to be most sensitive to potential interacting effects. The criteria for identifying those receptors which are considered to be potentially sensitive would include existing land uses, proximity to the construction works and the site, and likely duration of exposure to impacts.

**2.43** It should be noted that only residual effects that are minor, moderate or major in magnitude in scale will be considered within this assessment, as negligible effects are, by definition, imperceptible in their nature. The results are presented within the ES in a discrete chapter in a matrix table, Chapter 13: Effects Interactions.

**2.44** With regards to the potential for cumulative effects to occur, it is anticipated that standard mitigation measures as detailed in a site-specific Construction and Environmental Management Plan (such as dust suppression measures, use of quiet plant, restrictions on working hours) (as referred to in Chapter 5: Demolition and Construction) can be applied to prevent temporary unacceptable effects from the interaction of effects occurring on-site.

## Inter-Project Effects

**2.45** Inter-project effects arising from the Proposed Development in combination with 'cumulative schemes' during the demolition and construction works and also once the Proposed Development is complete will be considered by the EIA. The EIA Regulations require an assessment of potentially significant cumulative effects of the Proposed Development along with other developments. There are no legislative or policy requirements which set out how a cumulative impact assessment should be undertaken.

**2.46** Each individual ES technical chapter present the assessment of combined effects of the Proposed Development with certain other cumulative schemes. Only schemes which are considered to be reasonably foreseeable will be considered i.e. consented and subject to a high degree of certainty of being delivered (a resolution to grant planning consent but ideally with a signed legal agreements).

**2.47** Spatial and scale of development criteria has been developed based on professional judgement to determine whether cumulative schemes have the potential for cumulative effects when combined with the Proposed Development's effects. The criteria applied to the cumulative schemes is those which are:

- located within 1 km of the redline boundary of the site; spatially linked to the site by means of the local road network; or visible in views to and from the site; and
- at least 10,000m<sup>2</sup> GEA in floor area or would give rise to > 150 residential units.

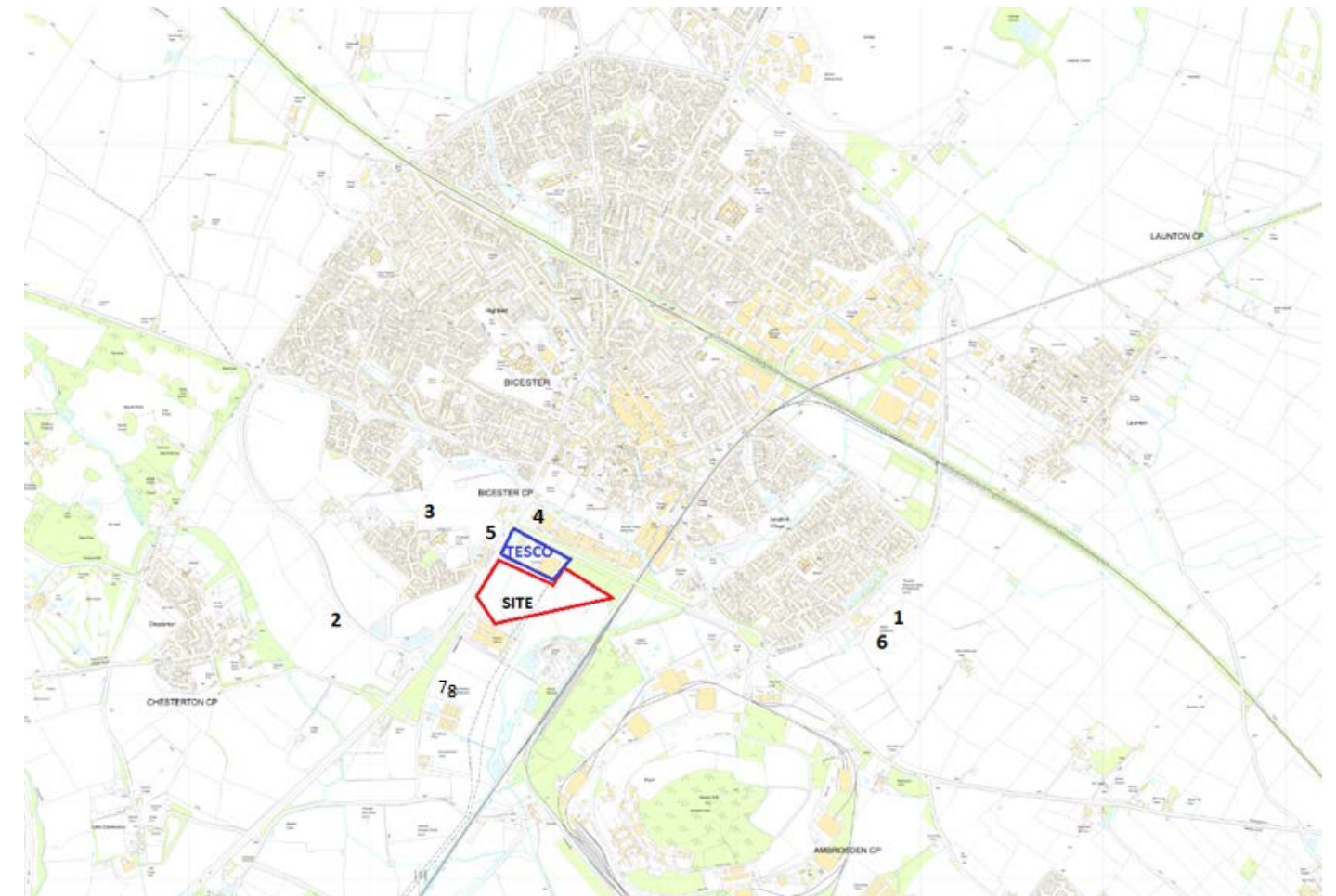


# EIA Methodology

**2.48** The list of cumulative schemes that should be incorporated within this ES has been agreed with CDC through the scoping process. Each technical topic area has reviewed the list and included within their individual discipline's assessment those cumulative schemes which have the potential for cumulative effects. It will be clearly stated within each technical chapter what cumulative schemes have been excluded from the assessment and why.

**2.49** The location of each scheme is shown in Figure 2.1 and listed in Table 2.1.

**2.50** An application was submitted in May 2017 on behalf of Tesco Stores Ltd for a drive-thru restaurant (class A3/A5) for McDonald's on the land to the west of Tesco at Lakeview Drive, Bicester. The scheme has not been considered in the cumulative impact assessment as the scheme does not have resolution to grant.



**Figure 2.1: Cumulative Schemes**

**2.51 Table 2.1: Cumulative Schemes**

No.	Site	Proposal / Description	Status	Approximate distance from site
1	SE Bicester Extension	Site Allocation – Bicester 12: A mixed use site for employment and residential development to the east of the ring road to the south east of Bicester for 1,500 homes	Site Allocation	5km
2	NW Bicester Extension	Site Allocation – Bicester 1: A new zero carbon(i) mixed use development including 6,000 homes will be developed on land identified at North West Bicester.	Site Allocation	2.9km
3	Kingsmere Residential Estate	Site Allocation – Bicester 3: A development of 726 homes with associated services, facilities and other infrastructure with contributions toward community facilities, education, health, and open space. The development area is 29ha.	Site Allocation	700m
4	Bicester Village Phase 4	5,181 m <sup>2</sup> GIA of retail floorspace and 147 car parking spaces	Permission granted November 2016	200m
5	Bicester Gateway Retail	Outline application for 4 no. Class A1 units (7,840 m <sup>2</sup> GIA); 1 Class A3 unit (435 m <sup>2</sup> GIA); and 1 Class D2 unit (967 m <sup>2</sup> GIA) with car parking area (345 spaces)	Resolution to grant at April 13 <sup>th</sup> committee.	0.8km
6	Graven Hill	Future phases in relation to reserved matters approval (15/02159/OUT) 2,100 homes	RMA approved, NMA to increase GIA figures was permitted March 2017.	3.7km
7	Bicester 10 Allocation Site	Site Allocation: Bicester 10; Use classes – B1 Business uses: high tech knowledge industries  Jobs to be created – approximately 3,500. Site constraints may reduce numbers slightly	Site Allocation	0.8km
8	Gateway Office Park (Phase 1 of Bicester 10 Allocation Site)	Phase 1 of the Bicester 10 Allocation Site (therefore fulfilling park of the 3,500 job creation allocation, comprising Class B1 employment buildings (up to 14,972 m <sup>2</sup> GEA); a hotel (up to 149 beds); and associated infrastructure and car parking.	Resolution to grant at April 13 <sup>th</sup> committee.	0.8km

## Assumptions and Limitations

**2.52** The principal assumptions that have been made, and any limitations that have been identified, in undertaking the EIA are set out below. Assumptions specifically relevant to each technical topic have been set out in each technical chapter of the ES.

- Baseline conditions have been established from a variety of sources, including historical data, but due to the dynamic nature of certain aspects of the environment, conditions at the site and surrounding land uses may change;
- The assessments contained within each of the ES Volume 1 technical chapters and in ES Volume 2 are based on the assumption that the mitigation measures proposed throughout the ES are implemented;
- The assessments contained within the ES Chapter 8: Noise and Vibration and ES Chapter 9: Air Quality are based on industry-average specifications for construction, mechanical and services plant as project-specific details will be finalised during the construction planning and procurement stages;



# EIA Methodology

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- Construction works across the site would take place substantially in accordance with the programme of works described in Chapter 5: Construction;
- Where detailed information has not been available, reasonable assumptions have been made, and have been clearly set out in each technical chapter to enable assessment of likely significant effects; and
- Consented or reasonably foreseeable cumulative schemes will be implemented in accordance with current available scheme information.

## Structure of Technical Assessment Chapters

**2.53** Each key environmental topic considered in the EIA has been assigned a separate chapter in ES Volume 1 (Chapter 6 to Chapter 13 inclusive). Within each of the ES Volume 1 technical chapters the assessment is presented and reported in the following format:

- Introduction – which provides a brief introduction to the assessment;
- Legislative and Planning Policy Context – which the relevant policy and legislative requirements of relevance to the specific technical area, further information on the planning policy is provided in the relevant technical appendix in Volume 2 of the ES;
- Assessment Methodology – an explanation of the information gathering and assessment methodology as well as an explanation of the approach to defining the significance of likely environmental effects;
- Baseline Conditions - a description of the baseline condition;
- Assessment of Effects – an assessment of the likely significant effects of the Proposed Development without the implementation of mitigation;
- Mitigation and Monitoring - a description of the mitigation and any relevant monitoring that has been incorporated into the Proposed Development's design;
- Residual Effects - an assessment of the likely residual effects of the Proposed Development, assuming implementation of mitigation which are identified in accordance with the significance criteria defined in the respective assessments;
- Cumulative Effects – an assessment of Inter-project Cumulative Effects; and
- Conclusions.

# Alternatives and Design Evolution

# 3

## Introduction

- 3.1 This chapter of the ES describes the background to the Proposed Development and details the site opportunities, constraints and considerations that have influenced the scheme. It provides an illustration of the evolution of the design leading to the current illustrative Bicester Office Park Proposed Development.
- 3.2 The EIA Regulations require the ES to report on the main alternatives studied and to give an indication of the main reasons for the Applicant's choice of the final scheme, whilst taking into account the environmental effects. This chapter of the ES therefore also explores how the Proposed Development has evolved in response to the environmental and planning context within which they are being brought forward.

## Description of the Site and its Surrounds

- 3.3 The site is located at National Grid Reference 457910, 221631, located approximately 1km south of Bicester Village Town Centre. On the northern side of the A41 Boundary Way, between the site and the town centre, is Bicester Retail Village, a factory outlet centre that attracts a large portion of its visitors from outside Bicester. On the southern side of the A41 Boundary Way, adjacent to the north of the site, is a Tesco foodstore with associated car parking facilities. Past developments in Bicester have taken place to the north, east and west of the town and the southern expansion of the built-up area has been less extensive. Therefore, the southern edge of the urban area is currently much closer to the town centre than the northern, eastern and western fringes.
- 3.4 The site is irregular in shape with a loose triangular nature and covers approximately 13.1ha of land, which is currently used for agricultural purposes (Grade 4). The site is generally flat, with a slight drop from +68.0m above ordnance datum (m AOD) in the north down to +65.0m AOD to the south and east. A drainage channel/ditch runs north-south, from the access road in the north west of the site to the southern boundary. Along the north of the drainage channel is an area used for material storage. A description of the site and its surrounds are illustrated in Figure 3.1: Site Context Plan with images of the site presented in Figure 3.6.

## Water Resources and Flood Risk

- 3.5 The site's south-eastern boundary is located approximately 180m from a watercourse known as the Langford Brook and as a result falls within the flood zone of this watercourse. The majority of the site lies in Flood Zone 1, however, the site lies within Flood Zones 2, 3a and 3b along the south eastern boundary. Areas along eastern boundary considered medium and high risk of flooding respectively due to the Langford Brook proximity to the site.

## Transport

- 3.6 The site is accessed from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road. The A41 Oxford Road runs on a broadly north-south alignment and connects north to Bicester town and south to the M40.
- 3.7 At the north-east corner of the site, the A41 Oxford Road connects with the A41 at a junction known as the Esso roundabout. The A41 links east from the Esso roundabout towards Aylesbury. North of the A41 junction, Oxford Road forms a junction with Pingle Drive which provides access to the Bicester Village shopping park.

- 3.8 The consented development proposals for Bicester Village Phase 4 and the constructed Tesco foodstore included a package of highway works which are currently under construction and are expected to be completed by September 2017. The highway works include improvements to the Oxford Road junctions with Pingle Drive, Esso roundabout and Lakeview Drive.
- 3.9 Local Pedestrian Network - Footways are provided along both sides of the site access as well as the eastern side of the A41, Oxford Road. These connect with the existing pedestrian network on Oxford Road and Pingle Drive offering access to the residential developments to the north as well as Bicester Village to the north east.
- 3.10 Local Cycle Network - The National Cycle Network Route 51, a signed route along Wendlebury Road and Pingle Drive is located within the immediate vicinity of the site. This route connects the area to Oxford to the south and Bedford via Bletchley to the north east.
- 3.11 Local Bus Network - The nearest bus stops to the site are located approximately 500m to the north on Oxford Road and are served by the S5 and X5 services. The S5 operates between Oxford City Centre and Launton, as well as the Bicester Park & Ride facility. The X5 operates between Cambridge Parkside Bus Station and Oxford City Centre via Milton Keynes Railway Station.
- 3.12 A further bus stop is located on Pringle Drive approximately 800m to the north east and is served by the Bicester Village Shuttle operating towards Bicester North Railway Station.
- 3.13 Local Rail Network - The nearest station is Bicester Village Railway Station located approximately 1.4km to the north east of the site. Bicester Village Station is located on the Oxford to London Marylebone line. Bicester North Railway Station is located approximately 1.8km to the north of the site and offers connections to London Marylebone, Banbury and Birmingham Moor Street and Snow Hill.

## Surrounding Building Heights and Land Uses

- 3.14 The Tesco foodstore adjacent to the north of the site and the Garden Centre south of the site are the closest buildings to the site and are the equivalent in height of a two-storey building. Bicester Retail Village north of the Tesco food store is the equivalent height of a three-storey building.
- 3.15 Land uses surrounding the site are predominantly commercial in nature (the Tesco foodstore, the Garden Centre and Bicester Retail Village).

## Heritage

- No designated assets are located within the site. One Scheduled Monument is located within 1km of the site; Alchester Roman site (site 195). One hundred and twelve Listed Buildings stand within 1km of the site. These are all Grade II Listed, with the exception of: Church of St Edburg, Church Street to the north-west, which is Grade I Listed, and The Old Priory and Attached Garden Walls, Priory to the north-east, and The Old Vicarage, Church Street to the north-east which are both Grade II\* Listed. The listed building which lies in closest proximity to the site is the Grade II Listed Langford Park Farmhouse, A41 approximately 460m south west. The remaining Grade II Listed Buildings are all concentrated to the north of the site within Bicester town centre.
- 3.16 The site itself does not fall within a Conservation Area. The Bicester Conservation Area is located 1km to the north of the site.
  - 3.17 There are 83 heritage assets within 1km of the site. These include sites and artefacts dating from the Neolithic to the 20th century. Three records relating to archaeological sites, finds discoveries or events within the site itself. A Mesolithic flint scatter with later prehistoric and Roman features was recorded within the north of the site during an evaluation for Bicester Business Park (Chapter 10: Built Heritage).



# Alternatives and Design Evolution

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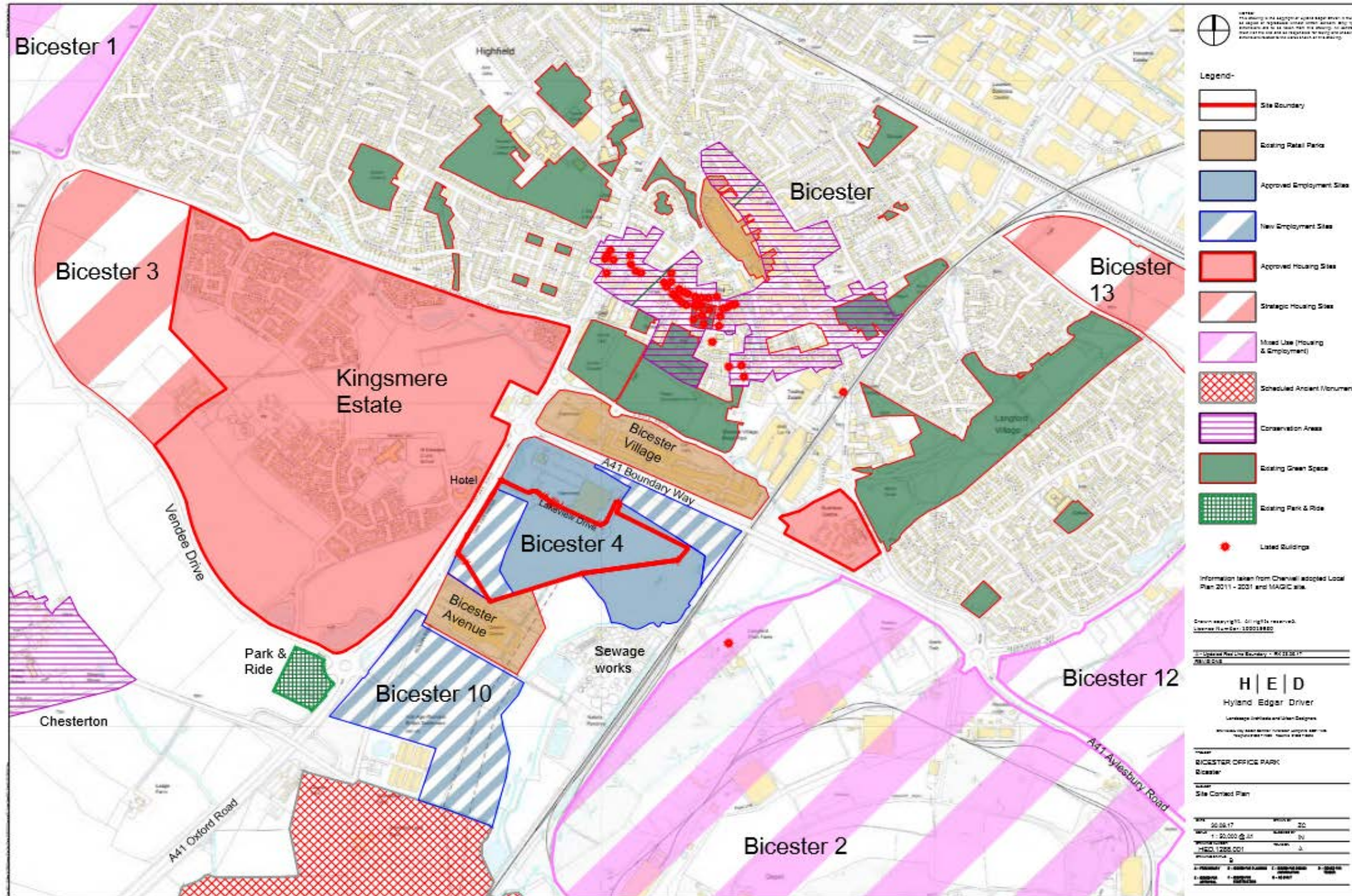


Figure 3.1: Site Context Plan



# Alternatives and Design Evolution

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**3.18** A watching brief for a power line replacement took place on the site, but no archaeological remains were recorded.

**3.19** No World Heritage Sites, Registered Parks and Gardens or Registered Historic Battlefields fall within 1km of the site.

## **Ecology**

**3.20** The site is an arable field with rough grassland margins and hedgerows with trees, as can be seen in Figure 3.6. The site mainly comprises:

- An arable field;
- Arable margins;
- Hedgerows;
- Trees;
- Ditches; and
- Log piles.

**3.21** The hedgerows are a habitat within the site which is a species of principal importance.

**3.22** The site is not covered by or immediately adjacent to any statutory designation, and there is only one statutory designated wildlife site (within 2km for local and national sites and 5km for international sites): Bure Park Local Nature Reserve (LNR). The LNR includes grass meadow, young broad-leaved woodland, hedges and scrub, located to the north of the site.

## **Air Quality**

**3.23** CDC monitors concentrations of nitrogen dioxide (NO<sub>2</sub>) using 42 passive diffusion tubes throughout the District. This includes eight locations in Bicester town centre, all within 2km of the site of Proposed Development. Monitoring data for the year 2015 at these locations indicate that annual mean concentrations of NO<sub>2</sub> are above or just below the objective along Queens Avenue, Field Street and the B4100, while well below the objective elsewhere. Four Air Quality Management Areas (AQMAs) have been declared to date in the District, including one in Bicester town centre, declared for exceedances of the annual mean NO<sub>2</sub> objective (Cherwell District Council, 2016).

## **Planning History and Site Allocation Status**

**3.24** Part of the site was granted outline planning permission in 2010 for the construction of a 60,000m<sup>2</sup> B1 Business Park comprising 53,000m<sup>2</sup> of B1 office space and a 7,000m<sup>2</sup> C1 hotel, served by approximately 1,837 car parking spaces (Planning Ref: 07/01106-OUT). This outline planning application was accompanied by an ES.

**3.25** Detailed planning consent was subsequently granted on part of the site in November 2013 for the construction of a Tesco foodstore of 8,135m<sup>2</sup> and petrol filling station on part of the consented Business Park site (Planning Ref: 12/01193/F). The planning application in relation to the proposed Tesco foodstore was supported by a Transport Assessment which considered the effect of the Tesco foodstore on the highway network local to the site. The Tesco foodstore has been constructed and opened in April 2016. The development of the Tesco foodstore comprised the relocation and expansion of a previous Tesco foodstore which was situated adjacent to Bicester Village and the development was linked to an extension to Bicester Village, known as Bicester Village Phase 4 which is currently under construction and scheduled to be completed in October 2017.

**3.26** The site is part of a larger parcel of land identified in the Cherwell Local Plan 2011 (Policy H13) for the development of the 'Bicester Urban Extension: South West Bicester'.

## **Assessment Alternatives**

**3.27** Under the EIA Regulations, an ES is required to provide an outline of the main alternatives studied by the Applicant and an indication of the main reasons for the choice of the final scheme, taking into account the environmental effects. The following sections review those alternatives to the Proposed Development that have been considered by the Applicant, including:

- The 'Do Nothing' scenario;
- Alternative sites; and
- Alternative designs and design evolution.

## **Do-Nothing Scenario**

**3.28** The Do-Nothing scenario refers to the option of leaving the site in its current state. In this event, the following opportunities would not be realised:

- The long term economic effects of the Proposed Development created by the Proposed Development has been assessed as a beneficial impact of major significance at the regional level. The Proposed Development will create a major new employment hub which will make a very significant contribution to the delivery of jobs and economic growth for the local, core and wider impact areas for the assessment. The gross, on site employment of 3,769 to 4,900 full-time equivalent permanent jobs created by the Proposed Development represents an increase of between 7.5% and 9.8% in the number of full-time jobs throughout Cherwell District Council (Chapter 6: Socio Economics);
- Given the sites potential to support protected species, the Applicant has committed to agreeing a landscaping strategy, approved by a suitably qualified ecologist, to both protect and promote bat habitats and provide habitats for reptiles and nesting skylarks (see Chapter 11: Ecology); and
- The detailed landscape strategy agreed through a planning condition and will ensure a high quality public realm.

## **Alternative Sites**

**3.29** No alternative sites or locations have been considered for the Proposed Development. The site had outline consent for the provision of office use and is also identified in CDCs local plan as an area suitable for employment use.

## **Design Evolution**

**3.30** The design brief prepared by the Applicant was to provide a regional business park promoting high quality office space, and urban feel, with a landscaping strategy to improve open space and deliver a high quality Proposed Development. The scheme would also need to be capable of being delivered in stages.

**3.31** The site aims to deliver 55,000 - 60,000m<sup>2</sup> GEA of B1(a) and B1(b) employment floorspace. The project is likely to extend over an 8 - 9 year construction period and would provide suitable infrastructure for the Proposed Development and users of the office space.

**3.32** The following sub-sections of this chapter describe the design evolution processes undertaken by the Applicant's design team. It describes site constraints which have influences the parameters for example



# Alternatives and Design Evolution

# 3

neighbouring buildings heights and the nearby floodplain. As the Application is being made in outline, the design process on the parameters which form the basis of the Proposed Development.

**3.33** The site and its surroundings were initially studied in respect of the following criteria (as shown in Figure 3.1 to 3.5):

- Site boundary and entrances: these have been determined by the neighbouring A41, the adjacent floodplain and neighbouring developments (Figure 3.2-3.5);
- Site orientation: the diagrams are oriented north. The sun will pass from east to west during the day, providing east facing morning light, south facing daytime sun and west facing evening light (Figure 3.3);
- Surrounding land uses and neighbouring development: the majority of surrounding land uses are commercial in nature. Figure 3.4 illustrates the sites proximity to Bicester Town Centre to the north (2); the Bicester Village Retail Park (4) and associated parking (3) north of the Tesco foodstore (5) as well as the Garden Centre (6) and Sewage Works (7) to the south of the site. The Tesco foodstore adjacent to the north of the site and the Garden Centre south of the site are the closest buildings to the site and are the equivalent in height of a two-storey building. Bicester Retail Village north of the Tesco food store is the equivalent height of a three-storey building; and
- Water resources and local ecology described in more detail below.

## Water Resources

**3.34** The Applicant's ownership boundary, as shown in Figure 1.2 comprises a larger area surrounding the redline boundary of the site extending further to north and south. The area to the south east of the redline boundary during initial design evolution formed part of the site for this application. However, given the fact that this area is located predominantly in Flood Zone 2, 3a and 3b, where development is not preferred, the Proposed Development focuses on the western and northern parts of the Applicant's ownership boundary. This has led to the final redline boundary for the site as presented in Figures 3.5, which excludes part of the Applicant's ownership boundary to the far south east of the site adjacent to the Langford Brook.

**3.35** A detailed Flood Risk Assessment document by Buro Happold Engineering has been compiled which is included within the Appendix 13.1 of this ES, the FRA is also summarised in Chapter 13: Water Resources.

## Ecology

**3.36** The site as a whole is not of sufficient intrinsic ecological value to warrant whole-scale protection from development; the majority of the site's habitats which would be affected by the proposal are common and widespread and are considered to be of low intrinsic biodiversity value. However, ecological features which required consideration throughout the design process, including considerations for mitigation and compensation, comprised:

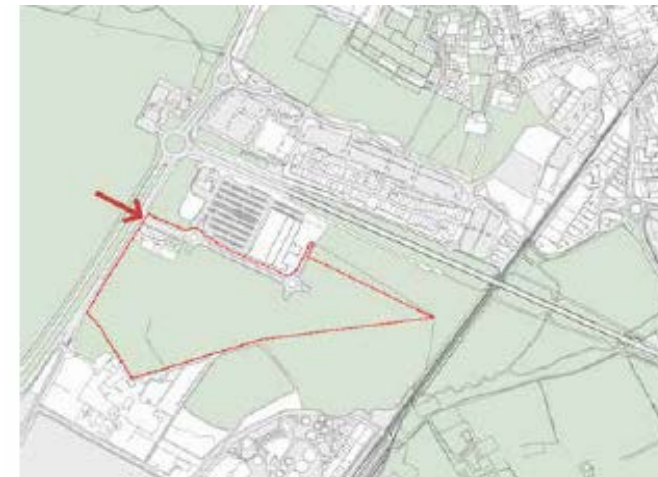
- The Bicester Wetland Nature Reserve located approximately 230m south-south west of the site;
- Ditches;
- Great crested newts;
- Reptiles;
- Birds;

- Bats; and
- Badgers.

**Figure 3.2: Site Boundary and Entrance**



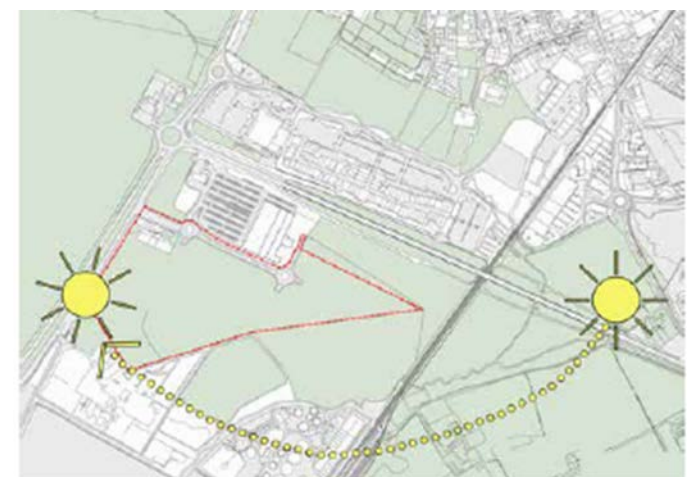
**Figure 3.4: Surrounding Land Uses**



**Figure 3.3: Site Orientation**



**Figure 3.5: Water Resources**



## Illustrative Masterplan

**3.37** An illustrative masterplan has evolved over time and has taken into consideration views of CDC and local stakeholders. Figure 3.7 presents the final indicative Masterplan for the Proposed Development.

**3.38** The illustrative masterplan comprises a development of 60,000m<sup>2</sup> GEA as a business park. This would create a mix of buildings of different sizes located within extensive landscaping. The illustrative plan combines commercial office spaces with leisure use and landscaping. A typical scheme could be laid out with the core of the development focusing around a group of seven primary office buildings each of approximately 4,000m<sup>2</sup> addressing a central, intensively landscaped water feature, with three additional larger buildings located to the west and east. Each building could potentially have its own adjacent dedicated car parking area.



# Alternatives and Design Evolution

- 3.39 A network of pathways could provide pedestrian access between buildings, encouraging walking and animating the landscape. A road system could also serve the buildings and car parks although there is the potential to keep this to a minimum in the centre of the site around the lake which could provide a relatively car free environment in this area.
- 3.40 Buildings could be orientated to maximise views and pedestrian access onto the central lake and landscaped area with car parking, vehicular drop off and front entrances on the opposite sides of the buildings. There would be no vehicular spaces within the central landscape area. The buildings are orientated in the illustrative masterplan to take full advantage of natural light. Office ground floors could open onto sunny south facing terrace spaces on the northern waterfront or private decks projecting into the water itself on its south side.
- 3.41 Chapter 4: Proposed Development, of this ES, provides further detail on the illustrative masterplan and Parameter Plans for the Proposed Development.



Figure 3.6: Current Conditions On-site



Figure 3.7: Final Illustrative Masterplan



# The Proposed Development

## Introduction

- 4.1** This chapter of the ES provides a description of the Proposed Development for the purposes of identifying and assessing the potential environmental impacts and likely environmental effects of the Proposed Development in the technical assessments of ES Volume 1 (Chapters 6 - 14). In accordance with the EIA Regulations, this chapter sets out the physical characteristics of the Proposed Development.
- 4.2** A general description of the site is provided in ES Chapter 1: Introduction and Chapter 3: Alternatives and Design Evolution. Each technical assessment within ES Volume 1 provides more detailed site descriptions where relevant.

## Proposed Development

- 4.3** The Applicant is seeking outline planning permission for the development of the site illustrated by the red line plan in Figure 1.2. All matters are reserved except for access. The total site area within the red line is 13.1ha. The Applicant's Ownership Boundary is also shown on this plan in blue. The Proposed Development comprises the following:
- 4.4** The construction of a business park of up to 60,000m<sup>2</sup> (GEA) of Class B1 office floorspace; parking for up to 2,000 cars; and associated highways, infrastructure and earthworks. The site will be accessed from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road.

## Outline Parameters

- 4.5** There is one main parameter plan along with a site red line boundary drawing submitted as part of this outline planning application for which planning approval is being sought. The parameter plan establishes the parameters for:
- Use – uses proposed for the development (B1(a) Office and B1(b) Research and development of products and processes);
  - Amount of development – the maximum floor area proposed (60,000m<sup>2</sup> GEA);
  - Zones – indicating the maximum floor area and height for buildings within each zone;
  - Scale – an indication of the upper and lower limits for the height of the proposed buildings within the zones.
- 4.6** Access to the Proposed Development from the north west of the site (Lakeview Drive) has already been constructed. Lakeview Drive is accessed via the signalled controlled junction with the A41 Oxford Road. Access is therefore not being sought via an outline parameter as part of this Application.

## Developable Area and Use Class

- 4.7** The applicant is seeking outline permission for employment (B1(a) and B1(b) floorspace, with a maximum quantum of development of 60,000m<sup>2</sup> GEA. B1(b) floorspace will not exceed 15,000m<sup>2</sup> of the total 60,000m<sup>2</sup> floorspace proposed.
- 4.8** The parameter plan identifies a series of six development zones (A-F), within which more detailed proposals will come forward as part of the future reserved matters submissions. Each development zone does not define individual building envelopes or boundaries, but buildings would be designed in compliance within the parameters of these broad massing envelopes. There are six main development zones (A to F) covering the majority of the site.
- 4.9** The illustrative masterplan (Figure 4.3) provides an indicative layout that could be developed in accordance with the parameters, however it should be noted that this is provided for illustrative purposes only and the parameter plans form the basis of assessment. Whilst the buildings could be developed anywhere in the

location of the development zones (in the defined developable areas) as shown in Figure 4.1, the floorspace would not exceed 60,000 m<sup>2</sup> GEA. All car parking spaces would also be located within the development zones.

## Maximum Building Heights

- 4.10** The parameter plan shows the maximum heights of the building zone, these heights are set out in mAOD at the top of roof level, within which the buildings would be designed in detail and constructed. Within each zone, there may be buildings of differing heights, although none will exceed the maximum height permitted for the development zone. The actual height of buildings within each zone along with their design will be determined at the Reserved Matters stage. The maximum heights proposed for each zone are included in Table 4.1 below.

## Site Access

- 4.11** The site has two vehicular access points from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road. Footways are provided along both sides of the site access as well as the eastern side of the A41, Oxford Road. These connect with the existing pedestrian network on Oxford Road and Pingle Drive offering access to the residential developments to the north as well as Bicester Village to the north east.
- 4.12** Signal controlled pedestrian crossing facilities are provided across the site access road, Lakeview Drive and across the northern Oxford Road arm of the site access junction. Further signal controlled pedestrian crossing facilities are provided at the junction between the A41 Oxford Road and Kingsmere Residential Estate, a short distance south of the site.
- 4.13** Where appropriate pedestrian and vehicular routes through the site would be differently treated to clearly identify the transition. Pedestrian access from existing public transport nodes into each development zone would be provided, as would cycle paths throughout the site.
- 4.14** The Proposed Development will maximise access to all parts of the site, its facilities and services for people who are occupants, visitors and members of staff regardless of disability and as required by relevant legislation and local, regional and national policy. The development will be designed to ensure that required standards for accessibility are met at the outset and as part of mainstream inclusive design wherever possible.
- 4.15** A wide range of diverse means of transport will be provided for the Proposed Development:
- Car parking will be provided in accordance with CDC policy and will include disabled spaces, immediately adjacent to the various key access points serving the buildings on the park;
  - Provision will be made bicycle parking throughout the Proposed Development in accordance with local policy;
  - Separate car parking will be provided for each individual building with main access provided from the north west corner of the site from the A41 Oxford Way.
  - A new shuttle bus from Bicester North railway station will be provided as an integral part of the Proposed Development, and will encourage the use of public transport by offering a convenient, modern and safe facility; and
  - The proposed design will ensure clear, unimpeded routes without possible trip hazards throughout the Proposed Development.

# The Proposed Development

4

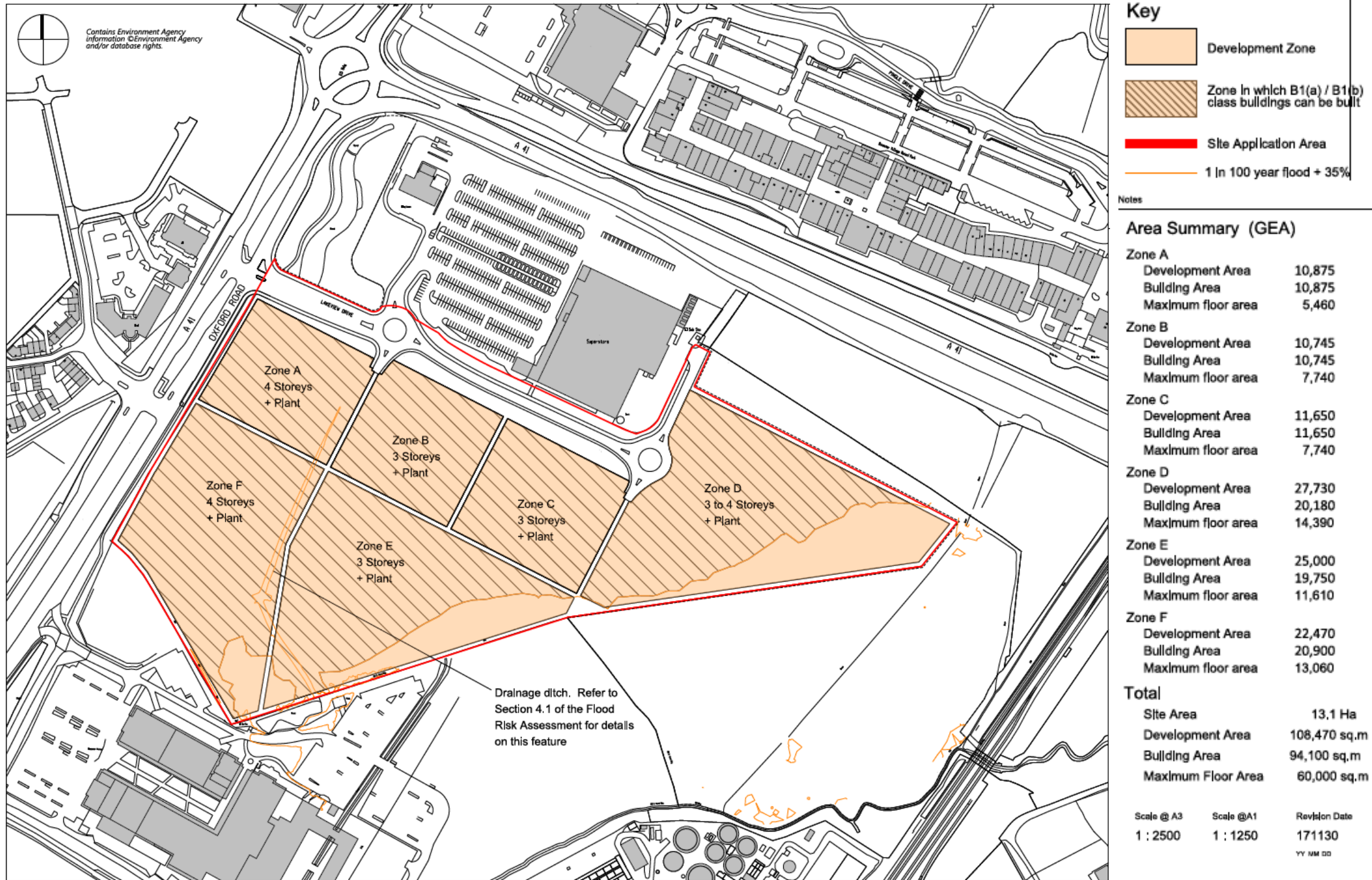


Figure 4.1: Combined Parameter Plan



# The Proposed Development

**Table 4.1 – Maximum Building Heights**

	M AOD (Top of Roof Level)	Metre above Ground	Storeys	Maximum Floorspace (m <sup>2</sup> GEA)
Zone A	85.75	20	(4 Storeys)	5,460
Zone B	83.0	16	(3 Storeys)	7,740
Zone C	82.50	16	(3 Storeys)	7,740
Zone D	85.50	16-20m	(3 – 4 Storeys)	14,390
Zone E	82.00	16m	(3 Storeys)	11,610
Zone F	85.0	20m	(4 Storeys)	13,060

## Landscaping and Public Realm

**4.16** The landscape proposals are based on the following principles:

- To integrate the Proposed Development into the landscape setting, drawing on the existing character of the site and its surroundings;
- To retain and protect key mature trees and boundary vegetation on boundaries of the site to maintain visual amenity and landscape character; and
- To provide ecological enhancement through the creation of range of new habitats, including meadows, waterways and native planting.

**4.17** In order to retain flight corridors for bats across the site to the wider landscape an east – west and north-south bat corridor has been identified (this has been included in the Proposed Development design evolution based on the outline plan as shown in Figure 4.3). The corridors will include a vegetated path along hedge and ditches which will be subject to careful control of lighting and will be approved by a suitably qualified ecologist.

**4.18** A strip of wildflower meadow will be created between the site and the flood zone to the south east (green area of the plan) to provide habitat for reptiles and nesting skylark. Two log pile habitats (using logs from the piles within the site) will be created to provide habitat for invertebrates and hibernating reptiles. In addition, the landscape strategy will include a water feature which includes no less than 600m<sup>2</sup> of shallow margins planted with native aquatic and semi-aquatic species.

**4.19** The Proposed Development landscape design strategy will look to retain all of the existing site boundary vegetation and develop a management plan to enhance the boundaries by reinforcing the existing trees and improving their current management regimes. This will include retaining all of the existing trees and hedges along the western, eastern and southern boundary of the site.

## Drainage

**4.20** The primary water supply and drainage infrastructure to serve the Proposed Development was constructed and completed in December 2015. The anticipated water demand for the Proposed Development was agreed with Thames Water and a new water main installed alongside the new access road. The main was increased in size over and above what is required to serve the Proposed Development in order to provide water for firefighting for the Tesco Store to the north of the site. Therefore, there is excess capacity to serve the size and type of development proposed.

**4.21** The Proposed Development will result in low volumes of waste water. A 600mm foul sewer has been constructed under the access road with connections to serve the Proposed Development. The sewer has been adopted by Thames Water and also serves the Kingsmere Residential Scheme. The volume of waste water arising from the Proposed Development will be insignificant in comparison with the capacity of the sewer.

**4.22** The Drainage Strategy (Appendix 13.1) includes more detail regarding proposals for surface water drainage and associated demands from the Proposed Development. A summary of the proposals is provided here:

- “Store rainwater for later use”. It is proposed to use rainwater harvesting within the Proposed Development.
- “Use infiltration techniques, such as porous surfaces in non-clay areas”. French drains and infiltration trenches are proposed. Permeable pavement is recommended for all car parking areas. It is not suitable for servicing/waste storage areas;
- “Attenuate rainwater by storing rainwater in ponds or open water features for gradual release”. Ponds or water features could be incorporated into the landscape proposals. The system would provide temporary storage required during storm events and promote pollutant removal; and
- “Attenuate rainwater by storing in tanks or sealed water features for gradual release”. The surface water attenuation system will be designed for 1 in 100 year storm event + 20% climate change and to adopt the Greenfield runoff rate of 9.47 L/s/ha.

## Resources and Emissions

**4.23** In line with the EIA Regulations this ES also provides an estimate, by type and quantity, of expected residues and emissions resulting from the operation of the Proposed Development. A full description and estimate of these residues and emissions can be found in technical chapters 6 – 13, Volume 1, of this ES.

## Operational Management Controls

**4.24** A number of environmental operational management controls have been proposed and **would** be secured by a planning condition. They include but are not limited to:

- Commercial Framework Travel Plan;
- The noise level from commercial plant should not exceed the existing background sound level. This will be imposed by way of a planning condition if necessary to limit the plant noise emissions from the Proposed Development as a whole;
- The delivery of training opportunities will be monitored operation of the Proposed Development. This monitoring will take the form of an Employment and Skills Plan agreed between Cherwell District Council and key employers at the office park; and
- A Habitat Management Plan.