



Bicester Office Park Non-Technical Summary

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Introduction

1. Scenic Land Developments Limited ('the Applicant') is seeking outline planning permission for the construction of an office park comprising up to 60,000m² gross external area (GEA) office space, associated highway, infrastructure and earthworks (the 'Proposed Development'). The Proposed Development site (the 'site') is located within Cherwell District Council (CDC), south of Bicester Village, in close proximity to the A41. The total site area is 13.1 hectares (ha) (see Figure 1 for the site red line boundary¹). The scheme is known as 'Bicester Office Park'.
2. This document is a non-technical summary (NTS) of the findings of an Environmental Statement (ES), which has been undertaken in order to identify the environmental and socio-economical effects that could result from the construction and/or operation of the Proposed Development.
3. The ES has been undertaken in accordance with the statutory procedures set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations')².

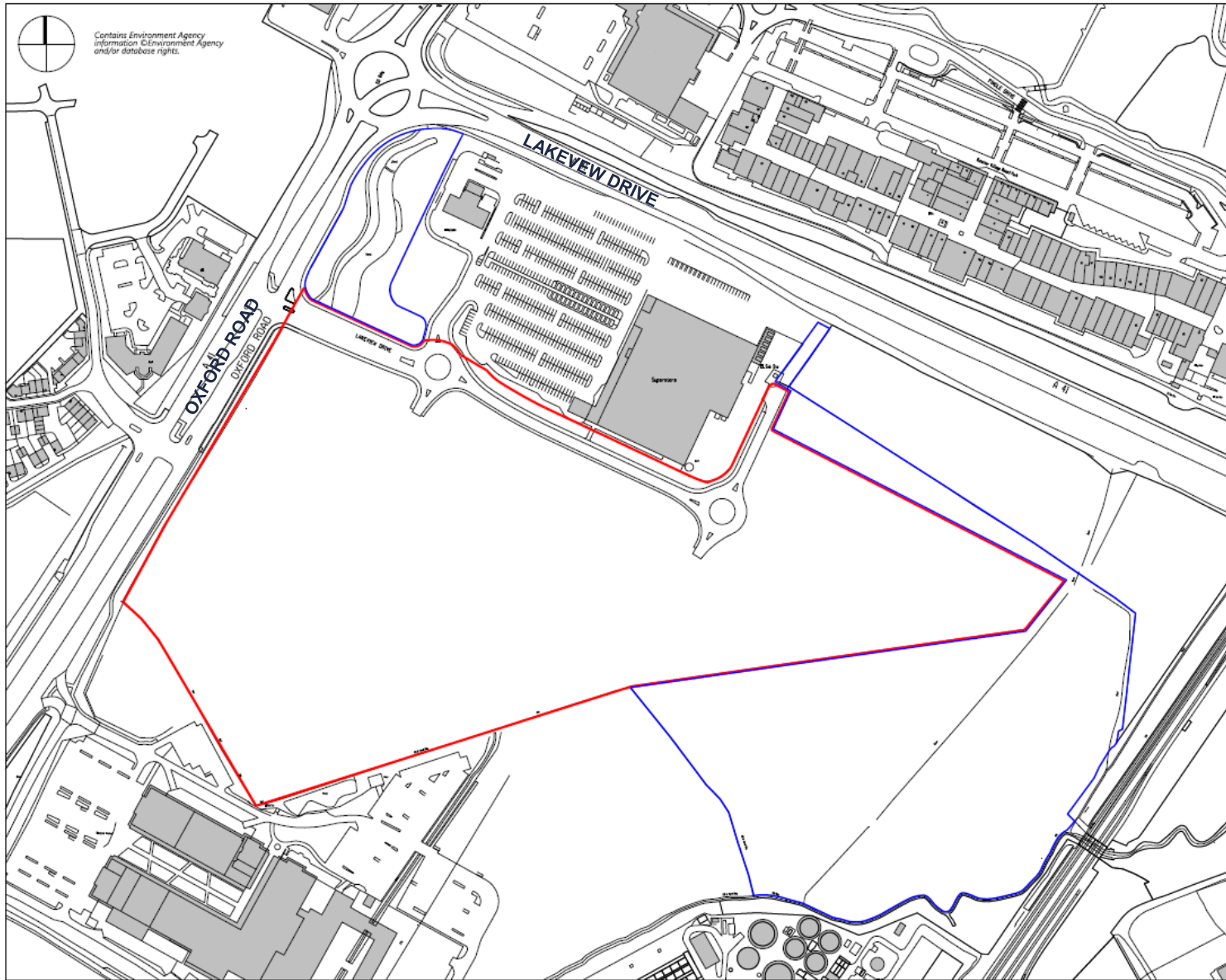
Why has an EIA been undertaken for the Proposed Development?

4. Environmental Impact Assessment (EIA) is an assessment process in which the likely significant effects of certain types of development projects on the environment are identified, assessed and reported upon. Mitigation (measures put in place to reduce or offset significant impacts) 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.
5. The Proposed Development falls within Schedule 2, Category 10(b) 'urban development projects' of the EIA Regulations and 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 of the Proposed Development.
6. In accordance with the Regulations, the 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.
7. This document, known as the non-technical summary (NTS) forms part of the Environmental Statement and provides a summary of the findings of the ES.
8. The ES is structured as followed:
 - **Volume I**
This is the main body of the ES and includes the results of the environmental topics assessed and includes potential significant environmental effects and measures proposed to mitigate against the likely effects;
 - **Volume II**
The appendices for the assessment, comprising background data, technical report, tables, figures and surveys; and
 - **Non-Technical Summary**
A non-technical overview of the findings of the ES (this document).

¹ The extent of the land sought for planning application is marked by a red line plan

² HM Government, 2017. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017. London: HMSO.

Figure 1: Red Line Boundary



- Land within planning application boundary
- Land within applicant's ownership

Site application area: 13.1 Hectares

Assessment Methodology and Significance Criteria

9. The assessments presented in the technical chapters of the ES broadly consider the sensitivity of the resource / receptors that could be affected and the magnitude of impacts in order to derive the classification of likely environmental effects.
10. Specific criteria for each technical topic have been applied to determine significance of effects, giving due regard to the following:
 - Nature and scale of the effect;
 - Duration of effect (short, medium or long term);
 - Whether the effect is direct or indirect, reversible or irreversible;
 - Whether the effect occurs in isolation, is cumulative or interactive;
 - Performance against environmental quality standards;
 - Sensitivity of the receptor; and
 - Compatibility with environmental policies.
11. Effects have been classified as being adverse, negligible or beneficial in nature. Where adverse or beneficial effects are identified, the scale of the effect has been further categorised as negligible, minor, moderate or major. Where possible, effects have also been assigned a geographic scale; for example, site-wide, local, district or regional.
12. The ES has highlighted the residual effects, which are those effects that remain following the incorporation of any identified mitigation measures.
13. In general, residual effects found to be 'moderate' or 'major' are deemed to be 'significant'. Effects found to be 'minor' are considered to be 'not significant', although they may be a matter of local concern. 'Negligible' effects are considered to be 'not significant' and not a matter of local concern. Mitigation measures, designed to offset or reduce any significant adverse environmental effects, have been incorporated into the project design wherever possible.
14. Note that only likely residual significant environmental effects have been detailed within this NTS, likely effects which are not significant (i.e. those that are minor in the scale of their effect) have not been detailed within the NTS, and can instead be found within each separate technical ES chapter.

The Existing Site and Surrounding Context

15. 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 2.
16. 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.
17. The land encompassing the site is currently used for agricultural purposes (Grade 4). The site is generally flat, with a slight drop to the south and east (see Figure 3 for photographs of the site in its current state). A drainage channel runs north to south, from the access road to the southern boundary. Along the north of the drainage channel is an area used for material storage.

18. The site is accessed from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road.
19. Bicester currently extends as far south as the A4030 Middleton Stoney Road in the west and the A41 Boundary Way in the east. The two roads meet in central south Bicester at a large four arm roundabout junction, known as the “Esso” roundabout junction. Here, the A41(east Boundary Way meets the A41 (south) where it is known as Oxford Road.
20. On the northern side of the A41 Boundary Way, between the site and the town centre is Bicester Village, a factory outlet shopping centre which attracts a large proportion of its visitors from outside Bicester. The Bicester Avenue Garden Centre, south of the site and the Tesco foodstore to the north of the site are the closest buildings to the site and are generally 2 storeys in height. There are established links for non-car users between the supermarket, Bicester Village, the town centre and railway stations.
21. 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, along the south eastern boundary, the site lies within Flood Zone 2, 3a and 3b. These areas along the south eastern boundary are considered to be of medium and high risk of flooding respectively due to the proximity of Langford Brook to the site.

Figure 2: Site Context

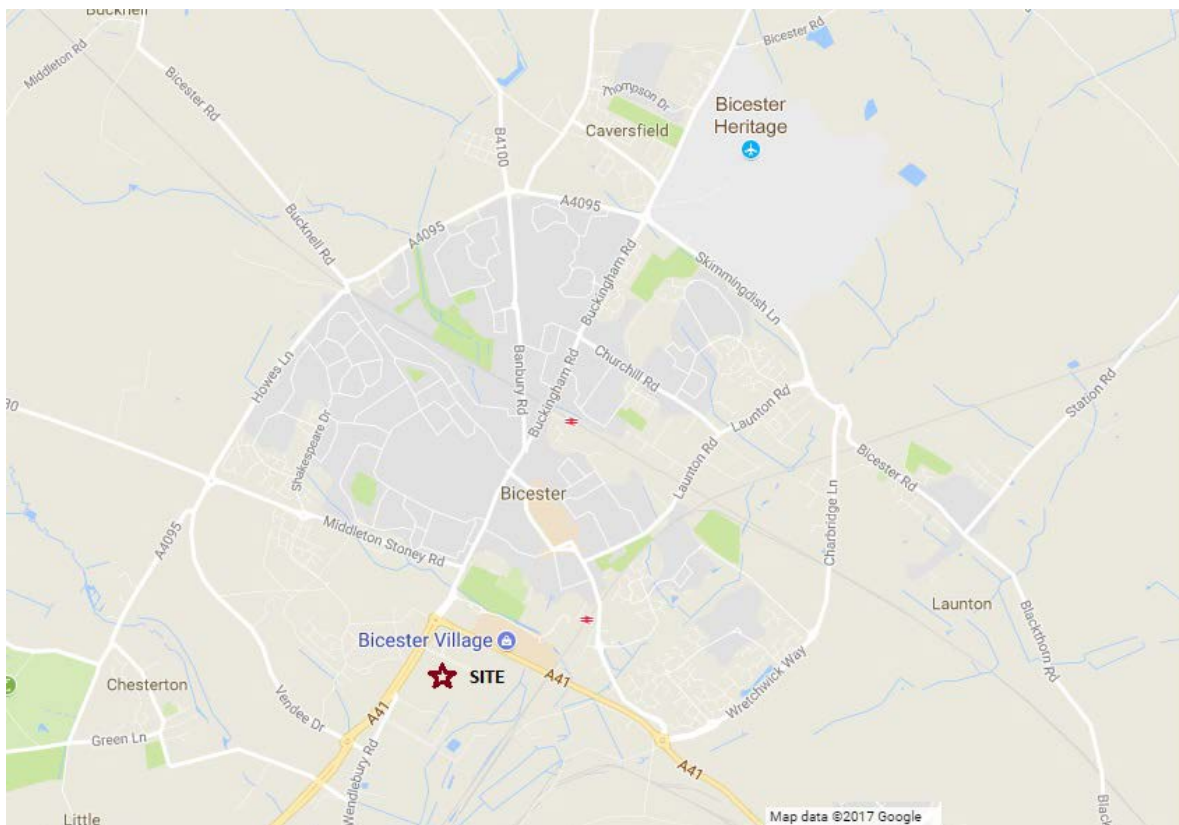


Figure 3: Photographs on site



Sensitive Receptors

22. When undertaking an EIA it is important to understand which receptors will be considered as part of the assessment. The EIA process has identified sensitive receptors to assessing the likely significant environmental effects during construction and operational phases of the Proposed Development.
23. The key sensitive receptors identified include:
 - Residential Properties – Kingsmere Residential Estate, isolated farm properties to the east of the railway line; further residential areas to the north at The Acorn Public House, beyond at Middleton Stoney Road, residential properties on Kings End;
 - Commercial Properties – Bicester Village Retail Park, Bicester Avenue Garden Centre; Tesco foodstore, Sewage Treatment Works;
 - The local economy;
 - Archaeological resources;
 - Ecology – designated sites, ecosystems, habitat and protected species;
 - Bicester Conservation Area approximately 0.35km north of the site including listed buildings within the conservation area such as the Grade II* Old Priory and attached garden walls in Priory Lane north east of the site and the Grade II* listed Old Vicarage located in Church Street also north east of the site;
 - Local Air Quality - although the site itself does not fall within an Air Quality Management Area (AQMA), Bicester Town centre is declared an AQMA;
 - Water Resources – Langford Brook located east of the site and two tributary streams, Pingle Stream and Town Brook, north of the site. In addition the site is located within and adjacent to Flood Zone 2, 3a and 3b (land identified to be of a higher risk of flooding);
 - Pedestrians, cyclists and road users within proximity of the site;
 - The local highway network and public transport; and
 - Landscape character and key short, medium and long-distance views;

Design Evolution and Alternatives

24. In line with the EIA Regulations, the ES provides an outline of the main alternatives studies 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 section reviews 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

25. 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 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 and create between 3,307 to 4,300 jobs;
 - The Applicant has committed to agreeing a landscaping strategy, approved by a suitably qualified ecologist, to both protect and promote local ecology;
 - The detailed landscape strategy agreed through a planning condition and will ensure a high quality public realm.

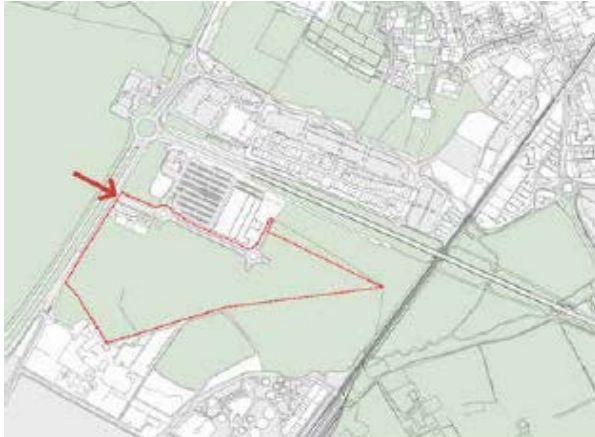
Alternative Sites

26. No alternative sites or locations have been considered for the Proposed Development as the site is owned by the Applicant and the Applicant did not consider sites which are the property of a third party. Furthermore, the site is identified by CDC as an area where employment use should be located, as part of the Local Plan Site Allocation Bicester 4.

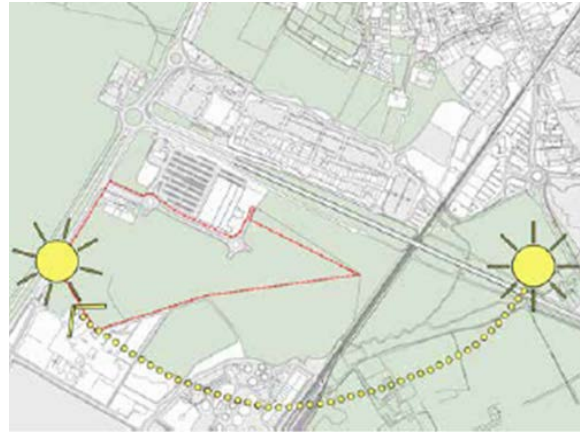
Design Evolution

27. As part of the initial design evolution, key site constraints were considered which would have influences on the scheme parameters for example neighbouring building heights and the nearby floodplain. As the Application is being made in outline, the design process focused on the parameters which form the basis of the Proposed Development.
28. The site and its surroundings were initially studied in respect of the following criteria (as shown in Figure 4):
- Site boundary and existing entrances: these have been determined by the neighbouring A41, the adjacent floodplain and neighbouring developments;
 - 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; and
 - Surrounding land uses and neighbouring development: the majority of surrounding land uses are commercial in nature. Figure 4 illustrates the site's 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 foodstore is the equivalent height of a three-storey building.
29. The Applicant's ownership boundary, as shown in Figure 1 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 1 which excludes part of the Applicant's ownership boundary to the far south east of the site adjacent to the Langford Brook.

Figure 4: Site Constraints and Parameter Evolution



Site Boundary and Entrance



Site Orientation



Surrounding Land Uses



Water Resources

Description of the Proposed Development

30. The Proposed Development comprises the following:

“The construction of a business park of up to 60,000m² (GEA) of Class B19(a)/(b) office floorspace; parking for up to 2,000 cars; and associated highways, infrastructure and earthworks”
31. The site will be accessed from Lakeview Drive via the signalled controlled junction with the A41 Oxford Road.
32. 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 identifies a series of six development zones (A-F) covering the majority of the site, within which more detailed proposals will come forward as part of future reserved matters submissions. The zones indicate the maximum floor area and height for future buildings as well as an indication of the upper limits for the height of proposed buildings within the zones. The proposals, in these regards, is consistent with the consented 2010 scheme and the adopted Local Plan allocation.
33. Table 1 details the maximum heights of buildings and maximum floorspace, within each development zone. Within each zone there may be a number of buildings of differing heights, although none would exceed the maximum height or floorspace permitted for the development zone. All car parking spaces would also be located within the development zones.

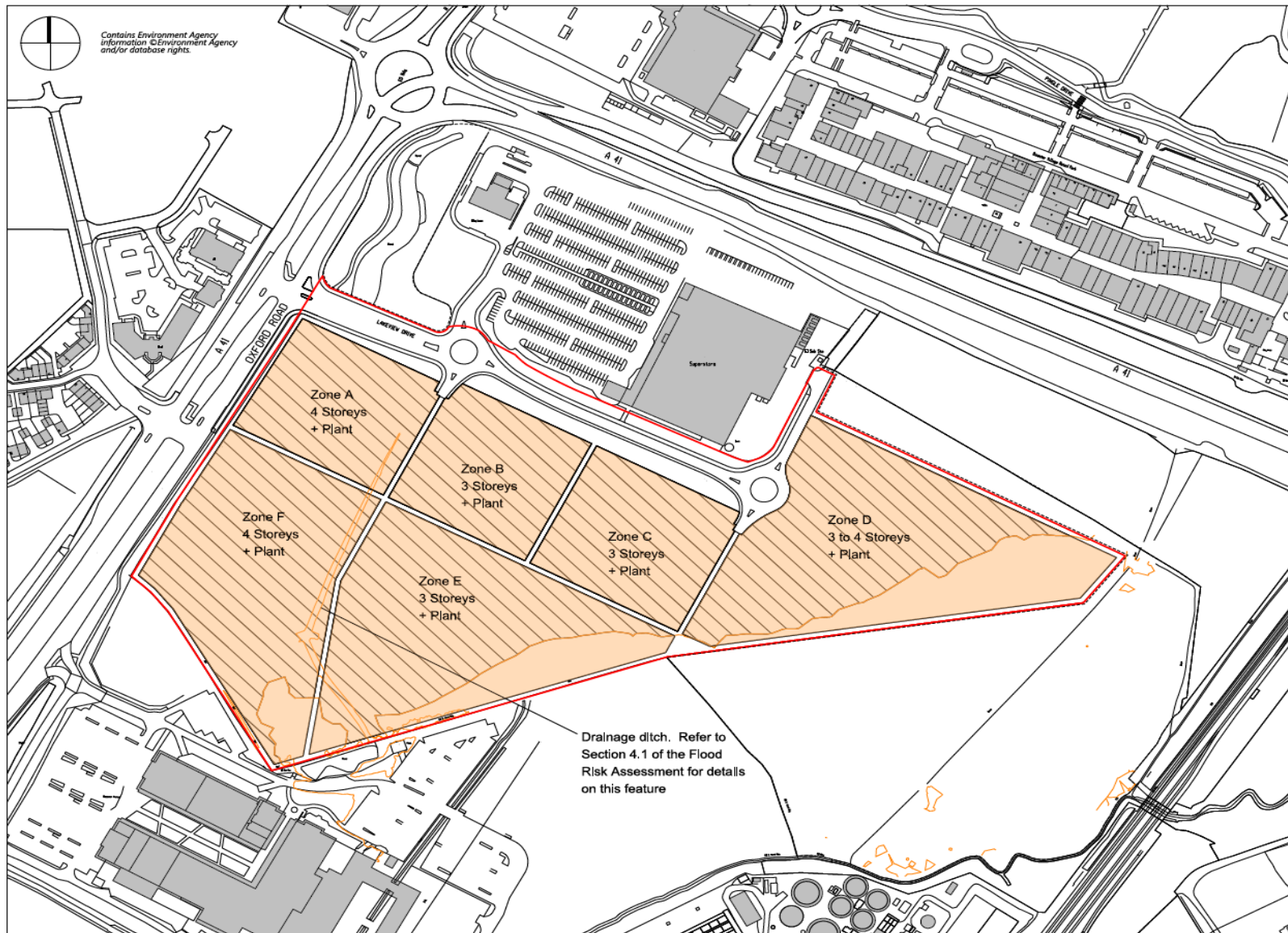
Table 1: Proposed Building Heights

	M AOD (Top of Roof Level)	Metres above Ground	Storeys	Maximum Floorspace (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

34. The landscape proposals will be 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, landscape character and protection of existing ecological habitats;
 - To provide ecological enhancement through the creation of range of new habitats, including grasslands, water features and native planting;
 - Flight corridors for bats across the site have been identified and have been included with the Proposed Development design, the corridors will include a vegetated path along hedge and ditches;
 - A strip of wildflower meadow will be created between the site and the flood zone to the south east (green area of Figure 8) to provide habitat for reptiles and nesting skylark; and
 - 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.
35. The illustrative masterplan (Figure 6) 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 EIA. Whilst the buildings could be developed anywhere in the location of the development zones (in the defined developable areas) as shown in Figure 5, the floorspace would not exceed 60,000m² GEA. A typical scheme could provide a development focused around a group of 8 primary office buildings addressing a central, associated landscaping, with 3 additional larger buildings located to the west and east. Buildings range from ground plus 3 storeys to ground plus 4 storeys. Each building has its own adjacent dedicated car parking area.

Figure 5: Combined Parameter Plan



Key

- Development Zone
- Zone in which B1(a) / B1(b) class buildings can be built
- Site Application Area
- 1 in 100 year flood + 35%

Notes

Area Summary (GEA)

Zone	Development Area	Building Area	Maximum floor area
Zone A	10,875	10,875	5,460
Zone B	10,745	10,745	7,740
Zone C	11,650	11,650	7,740
Zone D	27,730	20,180	14,390
Zone E	25,000	19,750	11,610
Zone F	22,470	20,900	13,060
Total	13.1 Ha	108,470 sq.m	94,100 sq.m
		60,000 sq.m	

Scale @ A3 Scale @A1 Revision Date
 1 : 2500 1 : 1250 171130
 YY MM DD

Figure 6: Indicative Masterplan



Construction

36. There is no requirement for the demolition of any buildings on-site as the site is predominantly used for agricultural purposes.
37. The construction of the Proposed Development would be phased on an 8 to 9 year period with construction occurring in phases and completing in 2026. The outline construction programme assumes that the buildings are built sequentially in accordance with the following phasing scenario, however this phasing may vary on dependent on market demands:
 - Phase 1 – Zones B and C;
 - Phase 2 – Zone A;
 - Phase 3 – Zone D; and
 - Phase 4 – Zones E and F.
38. It is anticipated that the core working hours for construction works will be as set out below:
 - 07:00 – 18:00 hours weekdays;
 - 07:30 – 14:00 hours Saturday; and
 - Working on Sunday will be subject to reasonable notice.
39. The construction programme will be designed to minimise disruption to local residents, the general public, and the environment. A principal contractor for the demolition phase will be appointed to develop a Construction Environmental Management Plan (CEMP). The CEMP will identify all the procedures to be adhered to through construction. Individual trade contracts will incorporate environmental control, health and safety regulations, and current guidance. This will ensure that all contractors involved with the demolition and construction phases are committed to agreed best practice.

Socio-economics

40. Chapter 6: Socio-Economics presents the findings of the assessment of the likely significant socio-economic effects as a result of the Proposed Development on a range of socio-economic factors during construction and operation of the Proposed Development.
41. An assessment of the permanent socio-economic effects of two different potential schemes has been undertaken (Option A and Option B), as follows:
 - **Option A:** The Proposed Development provides a total of 49,000m² (NIA) of B1a (offices) Use floorspace.
 - **Option B:** The Proposed Development provides a total of 36,750m² (NIA) of B1a (offices) Use floorspace and 12,250m² of B1b (research and development) Use floorspace.
42. In assessing the socio-economic effects of the Proposed Development, existing information (baseline) on a variety of socio-economic indicators was identified and interpreted to provide a picture of the socio-economic strengths and weaknesses of a local area.
43. The key messages from the assessment of baseline conditions include:
 - Population – There is a higher proportion of working age people and a lower proportion of people of retirement age within the local impact area compared to the national average. However, the same figures for Cherwell are more comparable to the national average;
 - Housing – Average house prices are significantly higher within the local impact area compared to the national average, yet more people still own their own home either outright or with a mortgage than the national average;
 - Employment – A high proportion of the working age population in Cherwell are economically active, with good levels of job density and lower levels of unemployment and benefit claimants compared to the national average;
 - Health conditions – Although health in Cherwell is generally better than the national average, there is a large gap between the life expectancy of people living in the most deprived and the least deprived parts of the local authority; and
 - Deprivation – The local impact area is mixed regarding deprivation, with a predominately better than average picture for employment and income deprivation but worse than average representation for education and skills deprivation.

Construction Phase

44. The construction of the Proposed Development will create approximately 624 temporary construction jobs. Given the scale of building activity, there is considerable scope to provide training, apprenticeships and work experience in a range of construction trades. These opportunities will be available during the construction phases of the Proposed Development. This training will be formalised and committed to in the form of an Employment and Skills Plan agreed between Cherwell District Council and the main contractor for the building project.
45. The Proposed Development is therefore considered likely to have **temporary** effects of **moderate beneficial** significance on construction employment and economic well-being as a result of the wider effect of increased employment on the local economy, and the Proposed Development is likely to have a **temporary** effect of **minor to moderate beneficial** significance, on construction training.

Completed Development

46. The complete and operational Proposed Development is considered to have **long-term** effects of **major beneficial** significance on employment and the economy. During the operational phase, Option A of the Proposed Development will create between **3,307 to 4,300 jobs**. Option B, which includes the research and development use, would create between **2,658 to 3,493** additional jobs. Furthermore,

the Applicant will commit to an Employment and Skills Plan agreed between CDC and key employers at the office park which will be monitored during the operational phase. The plan will include initiatives that will be tailored to meet the needs of local people and prospective employers. Typically, these initiatives provide help for local people with confidence-building, interview skills and skills for life development, as well as support for employers in identifying dedicated staff with real potential resulting in effects of **moderate beneficial** significance on training and skills development opportunities.

Traffic and Transport

47. Chapter 7: Traffic and Transport presents the findings of the assessment of the likely significant effects on traffic and transport as a result of the construction and operational traffic effects of the Proposed Development on the highway network local to the site. Issues such as delay, severance, intimidation and safety were considered in accordance with relevant guidelines.
48. The pedestrian footway network and pedestrian crossing facilities in the vicinity of the site provide convenient connections towards local services and facilities as well as local retail opportunities and residential areas.
49. Public transport facilities in the vicinity of the site provide the opportunity for future users of the Proposed Development to undertake journeys by public transport and provide connections to local services and facilities as well as local retail opportunities and residential areas.
50. The completion year of 2026 forms the future baseline scenario as agreed with Oxfordshire County Council (OCC), with a current baseline year of 2017. Potential effects were considered for the morning (0800 - 0900) and evening (1700 – 1800) peak hours and throughout the day.

Construction Phase

51. There are considered to be **no likely residual significant effects** on traffic and transport as a result of the construction of the Proposed Development post-incorporation of mitigation measures including the preparation of a CEMP (as detailed in the 'Construction Works section above). The CEMP will also include measures for the monitoring and management of any potential effects of construction traffic associated with the Proposed Development in order for construction activity to occur in an efficient and sustainable manner.

Completed Development

52. There are **no likely significant effects** anticipated as a result of the operation of the Completed Development, after the incorporation of relevant mitigation measures.
53. The Proposed Development is likely to result in a negligible residual effect on the highway network local to the site.
54. A Framework Workplace Travel Plan has been prepared and submitted alongside the planning application and it is envisaged that a final Workplace Travel Plan would be secured by Condition.
55. The Travel Plan would seek to encourage travel to the site by sustainable mode of travel and reduce reliance on the private car. To this extent the Travel Plan would seek to reduce the overall vehicle trip attraction of the site.

Noise and Vibration

56. Chapter 8: Noise and Vibration presents the findings of an assessment of the likely significant effects associated with the Proposed Development in terms of:
 - Noise to surrounding sensitive receptors from construction activities and construction traffic;
 - Increased noise from road traffic during operation of the proposed development.
57. The site is not subject to any existing sources of vibration. Construction is unlikely to take place

sufficiently close to residential properties or for a sufficient length of time, as to give rise to vibration that could have amenity or structural implications. The operational development is unlikely to give rise to any vibration that would be measurable beyond the site boundary. Vibration, was therefore not assessed.

58. The noise environment across the site, and in the vicinity, is dominated by road traffic noise from the A41. The nearest receptors are located some 65m to the west, fronting on to the A41, and some 20m from the carriageway. Noise surveys were undertaken, therefore, at a location on site to represent the noise environment at those properties in accordance with relevant British Standards.

Construction Phase

59. With the implementation of the mitigation measures set out in Chapter 8: Noise and Vibration as well as implementation of the CEMP, noise levels during the construction phase will be reduced and the impact on sensitive receptors minimised.
60. In day-to-day operations, it is assumed that no activity will be undertaken outside of daytime hours which could be expected to give rise to noise noticeably above current prevailing background noise levels at nearby properties.
61. **No likely significant effects** with regards to noise were identified as a result of the construction of the Proposed Development.

Completed Development

62. Given that full details of other plant and machinery was not available, owing to the outline nature of the application, a planning condition will be imposed if necessary to limit the plant noise emissions from the Proposed Development as a whole. Large office park sites have the potential to produce adverse effects and it is therefore a typical requirement that the noise level from commercial plant should not exceed the existing background sound level. Measures such as selection of quiet plant and engineering noise control can easily be introduced as part of the design and roof top plant rooms can be screened as an integral part of the architectural approach during submission of any reserved matters application.
63. The increase in traffic noise levels due to operational traffic associated with the Proposed Development considered to be negligible.
64. The noise assessment identifies **no likely significant effects** as a result of the operation of the Proposed Development.

Air Quality

65. Chapter 9: Air Quality presents the findings of the assessment of the likely significant effects pertaining to air quality as a result of the Proposed Development. Potential impacts are associated with potential emissions from construction plant, dust generation during site works, additional road traffic and heating and power plant emissions attributed to the operational development.
66. The air quality baseline was determined from analysis of local air quality monitoring stations in order to understand the local air quality conditions at the site. Whilst the site is not located within an Air Quality Management Area (due to the exceedance of the national objectives for nitrogen dioxide and particulate matter (dust)), a number of Air Quality Management Area's (AQMA) are located within the CDC. The closest AQMA is located 600m north of the site.

Construction

67. Measures to mitigate dust emissions will be required during the construction phase of the Proposed Development in order to minimise effects upon nearby sensitive receptors. The site has been identified as low risk during earthworks, construction and for trackout. Mitigation measures, following best practice measures and adherence to relevant guidance will be employed during the construction stage, forming

part of a CEMP.

68. No **likely significant effects** with regards to air quality were identified as a result of the construction of the Proposed Development.

Completed Development

69. Owing to the outline nature of the planning application, there was no indication that a centralised energy plant or other plant would form part of the Proposed Development. If a centralised energy plant was proposed, then further assessment would be required to determine the potential impacts and likely effects on air quality. This could be secured through planning condition.
70. Measures to reduce pollutant emissions from road traffic are principally being delivered in the longer term by the introduction of more stringent emissions standards, largely via European legislation (which is written into UK law).
71. The Proposed Development will not cause any exceedances of the air quality objectives and, therefore, it is not considered appropriate to propose further mitigation measures for this scheme. The overall effect of the Proposed Development with regards to air quality will be '**not significant**'.

Archaeology and Built Heritage

72. *Chapter 10: Archaeology and Built Heritage* presents the findings of the assessment of the likely significant effects on Archaeology and Built Heritage as a result of the Proposed Development.
73. No archaeological or heritage designated assets are located within the site. One Scheduled Monument is located within 1km of the site. A number of Listed Buildings (Grade I and Grade II) are located within 1km of the site. The site itself does not fall within a Conservation Area. The Bicester Conservation Areas falls within 1km of the site.

Construction

74. The assessment has identified the potential for previously unrecorded finds and deposits of prehistoric (including paleoenvironmental) to medieval periods to survive within the site. Taken into consideration the known archaeological remains within the site, a programme of strip, map and record will be undertaken to establish the extent of any surviving archaeological remains that might be damaged during construction of the site. Further to that an archaeological watching brief will take place on areas not included in the strip, map and record. This will be secured as a condition of planning.
75. With the mitigation outlined above being undertaken, this would ensure preservation by record of the known heritage assets within the site and would enable identification and preservation by record of any hitherto unrecorded archaeological remains. Following the implementation of the outlined mitigation residual effects upon the assets within the site would be negligible and **not significant**.

Complete and Operational

76. No **additional residual effects** in relation to archaeology and built heritage would occur from the operation of the Proposed Development to those outlined for the construction of the Proposed Development.

Ecology

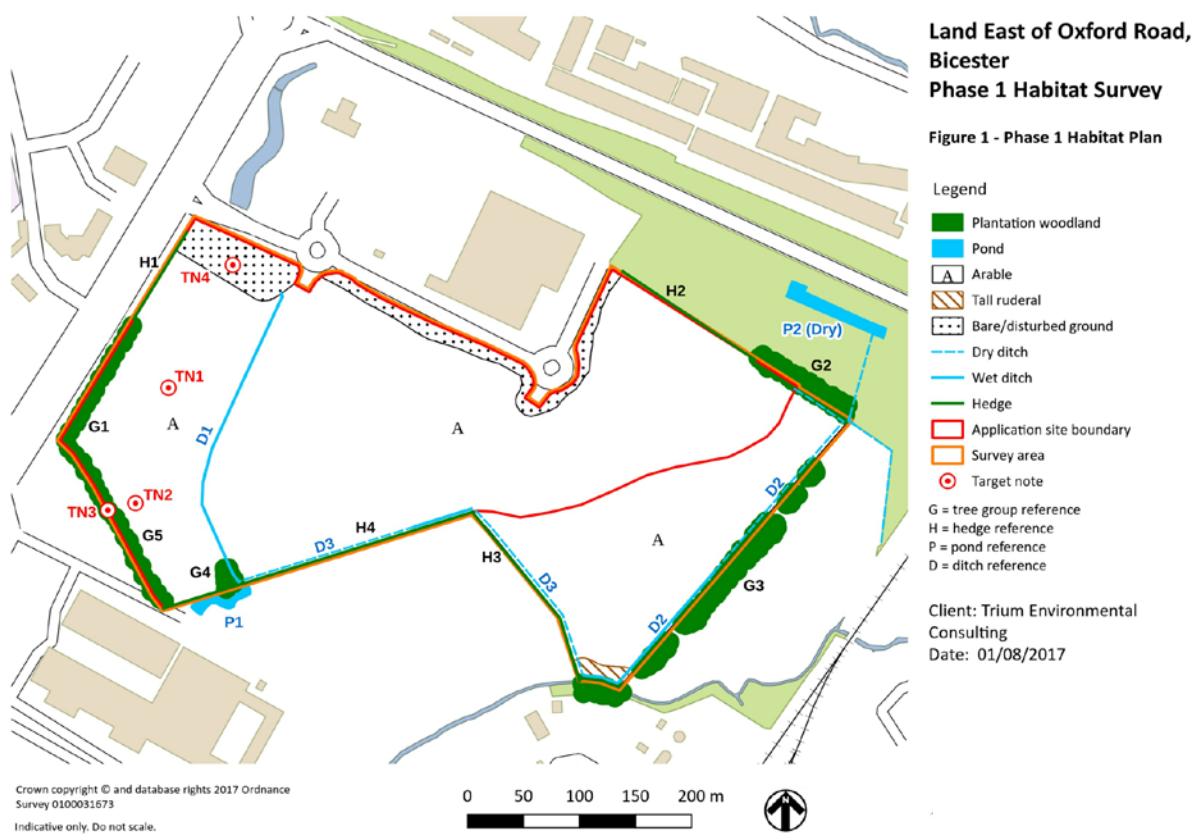
77. Chapter 11: Ecology presents the findings of the assessment of the likely significant effects as a result of the Proposed Development on ecology and nature conservation. Likely impacts during the construction phase and operation of the Proposed Development have been identified.
78. The site is part of an arable field to the south of Bicester. The whole field has hedge and tree lines to most boundaries, except where a supermarket has been constructed in the north west of the site. The ecological features present within the site are shown in Figure 7.

79. The assessment considered the potential for impacts on the following ecological features:

- Field Margins;
- Hedgerows;
- Trees;
- Ditches;
- Reptiles;
- Birds – nesting in hedgerows;
- Birds – skylark;
- Birds – Red kite;
- Badgers; and
- Bats.

80. The assessment demonstrated that the site is not of sufficient ecological value to warrant whole scale protection from development. However, the site does support nesting birds (including skylark) and is used by commuting and foraging bats. The assessment therefore includes proposals to ensure that habitat loss is compensated, and that bats can continue to move through the site through bat corridors.

Figure 7: Habitat Plan



Construction

81. In order to mitigate potential adverse effects during construction, an appropriate pollution prevention and control method statement will be produced to control construction activities. This will include (but not be limited to), dust, run-off and chemical spills. In addition to the CEMP, the plan will include avoiding illuminating the bat corridors at relevant times.
82. All retained trees and hedgerows will be protected in accordance with relevant British Standards detailed Chapter 11: Ecology. If works are required to trees for health and safety or to clear overhanging branches, these will be subject to individual bat tree assessments to ensure that bat roosts are not

directly affected.

83. Before any works in areas that may support reptiles begin (arable margins, any other ruderal (a plant species that is first to colonize disturbed lands), scrub or tall grassland habitats other than arable crop) the area will be cleared of vegetation in a staged manner. The vegetation will be cut to 200 mm, left over night, then cut to ground level.
84. Construction of the Proposed Development would have a **significant adverse effect** of a **temporary** nature on the following ecological features: Field Margins; Ditches; Log Piles; Reptiles; Skylarks and Bats (at **Local Level**), and Birds Nesting in Hedgerows and Red Kites (**at a Site Level only**).

Complete and Operational

85. 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 scheme design evolution based on the outline plan below Figure 8). 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.
86. Where external lighting (e.g. street lights or security lights) are required in proximity to the bat corridor, they will be designed to include appropriate height, cowling or other deflection devices to minimise light spill to a maximum of 1 lux at ground level within the dark corridor. Should any buildings be situated within 20m of a dark corridor, further screening (such as evergreen hedges or fencing) will be provided to maintain the dark corridor. The lighting scheme will be approved by a suitably qualified ecologist.
87. To compensate for the loss of arable margin habitats and provide habitat for reptiles and nesting skylark, a strip of wildflower meadow of variable widths along its length will be created between the site and the flood zone to the south east (green area of the plan). A management plan for the meadow will be produced to set out preparation, control, monitoring, responsibility for intervention and maintenance. This will be agreed by a suitably qualified ecologist.
88. The meadow will include three 3x3m skylark plots 24m from each other and from buildings. Plots will be managed to provide areas of lower / more sparse vegetation within the sward.
89. Two log pile habitats will be created to provide habitat for invertebrates and hibernating reptiles. To maximise the use of space the log piles will include a 3 x 4m wide and 2m deep pit, filled with logs to a height of 2m.
90. The landscape strategy will include a water feature which might double as attenuation as part of the surface water drainage solution. The landscape strategy will be agreed by a suitably qualified ecologist.

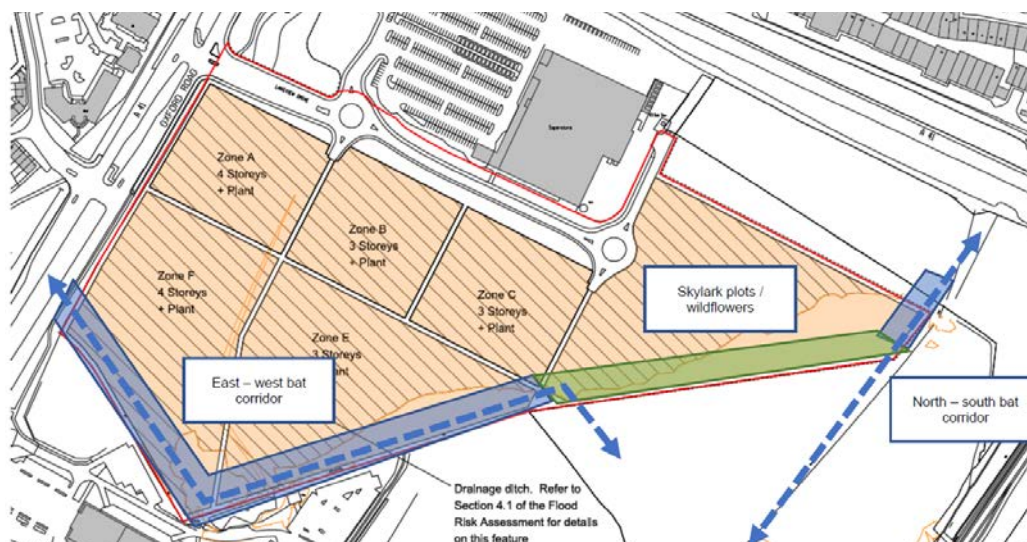


Figure 8: Proposed Bat Corridors

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91. Given the above, one significant effect with regards to ecology was identified as a result of the operation of the Proposed Development, with Birds Nesting in Hedgerows experiencing a **permanent significant adverse effect** at **Site Level** only. No long-term adverse effects of the Proposed Development are significant above a site level.

Landscape and Visual Impact Assessment

92. Chapter 12: Landscape and Visual Impact Assessment presents the findings of the assessment of the Proposed Development during construction and operation in relation to its local and wider setting by considering a number of pre-selected views.
93. The visual appraisal concludes that the site is not visually prominent within the wider landscape nor is it widely perceptible from the built-up areas of Bicester Town. The topography of the site and that of the wider landscape is flat with areas of gently rolling countryside and, as a result views towards the site from near or middle-distance views are mainly screened by intervening vegetation. Views from the southern edge of Bicester are screened by vegetation or buildings particularly Bicester Village and the elevated section of the A41.
94. Views towards the site from further to the east are screened either by intervening vegetation or landform. Graven Hill is an effective barrier in curtailing views from the southeast. Views towards the site from further to the south from the villages of Chesterton and Wendlebury are effectively screening by either landform or intervening vegetation. There are some local views from the east and south east direction towards the Proposed Development from the recently constructed Kingsmere residential estate and are generally from frontage buildings only.
95. Landscape and visual measures will be incorporated at detailed design stage to prevent or reduce construction and operational effects as an integral part of the design development process. These measures have been taken into account in the landscape and visual assessment of potential landscape and visual effects.
96. These features include the following elements:
- Retaining all of the existing trees and hedges along the western, eastern and southern boundary of the site;
 - New native trees and shrub screen planting to reinforce existing boundaries which needs to be developed as part of an overall landscape design strategy for the site. The landscape strategy plan will need to be agreed with the local planning authority through a reserved matter planning condition;
 - Trees and hedges within the site to define the plots and boundaries and filter the mass of the buildings which will need to be developed as part of an overall landscape design strategy for the site. The landscape strategy plan will need to be agreed with the local planning authority through a reserved matter planning condition;
 - Material, form and details of the dwellings that complement the character of the existing surrounding built form will need to be agreed with the local planning authority; and
 - The elevation and massing of the buildings that complement the adjacent built development.
97. The proposals, in these regards, is consistent with the consented 2010 scheme and the adopted Local Plan allocation.

Construction

98. Construction of the Proposed Development would have local, minor to moderate adverse effect of a temporary nature in relation to Landscape Character, Topography and Drainage and Vegetation, which are deemed 'Significant'. In addition, the construction phase, would have a local, minor to moderate adverse effects of a temporary nature on Short Distance Views from in and around the Site (relating to workers, pedestrian and residents) and Medium Distance Views around the Site (relating to

construction/farm/land workers, and residents with a view from the completed Kingsmere Estate), which are all deemed to be **Significant**.

Complete and Operational

99. The results of the visual assessment and preparation of the ZVI plans of the Proposed Development Zones demonstrate that only limited filtered and partial views of the upperparts of the development zones are visible from the surrounding area, in particular from the south and east of the site which are being developed for housing at present.

Water Resources and Flood Risk

100. Chapter 13: Water Resources and Flood Risk presents the findings of the assessment of the likely significant effects on Water Resources and Flood Risk as a result of the Proposed Development both during the construction phase and once the Proposed Development is operational.
101. The nearest surface water feature to the site is Langford Brook which flows past the site to the south-east. There is also a small pond along the south east boundary of the site which forms part of the surface water drainage strategy for the Bicester Avenue Garden Centre.
102. In accordance with the EA's flood zone classification, the majority of the site lies in Flood Zone 1. However, along the south eastern boundary, the site lies within Flood Zone 2, 3a and 3b. These areas along the eastern boundary are considered to be of medium and high risk of flooding respectively due to the proximity of Langford Brook to the site.

Construction

103. The assessment considered the potential for impacts resulting from the following construction activities:
- Increase in sediment loads caused by site run-off;
 - The release of pollutants (e.g. oils) into the on-site drainage system due to a large number of vehicles accessing the site, leakage from oil / fuel storage tanks and accidental spillages;
 - Accidental leaks and use of hazardous materials;
 - Dust and debris caused by poor management of site; and
 - Leaks or breakage of temporary sewerage system infiltrating groundwater and/or migrating to surface waters.
104. The Water Resources assessment concluded that construction activity could potentially cause temporary but significant effects on water quality. However, with the suggested mitigation (adherence to the CEMP, a full overview of which is provided in Chapter 13: Water Resources and Flood Risk), the effects to all nearby water bodies that could be affected are considered **not to be significant**.

Complete and Operational

105. The assessment considered the potential for impacts resulting from the following aspects during operation of the Proposed Development.
- Pollutants contained within surface water run-off contaminating water bodies through overflows / leaks to the sewer system;
 - A decrease of vegetation, trees and other green areas in the Proposed Development;
 - Water services infrastructure may not be able to maintain the increased water demand; and
 - The effect on sewerage infrastructure on increased foul discharges and waste water to the network.
106. The Water Resources assessment concluded that although there will be an increase in water demand and capacity required for foul drainage, the Proposed Development will need to meet water efficiency standards through a number of measures. This will assist in reducing potable water and foul water demand. Furthermore, the foul water sewerage system passing through the site has been designed

with consideration of development on the proposed site, so has sufficient capacity to manage the needs of the Proposed Development.

107. **No likely significant effects** with regards to water resources and flood risk were identified as a result of the operation of the Proposed Development.

Cumulative Effects

108. A number of cumulative schemes which are in construction, have been submitted for planning as well as sites which have been allocated by CDC for development, located within close proximity to the site have been considered cumulatively. The cumulative effects of the cumulative schemes have been assessed in each technical area.
109. The only technical area which has significant cumulative effects is socio-economics, which is considered to have long-term effects of major beneficial significance on employment (in terms of number of permanent jobs and net additional permanent jobs) and the benefit to the economy from increased spending, and effects of moderate beneficial significance on training and skills development opportunities. In relation to the townscape cumulative effects the various developments in close proximity to the Proposed Development site are sufficiently distinct entities to ensure that cumulative landscape and visual effects are not significantly greater than those identified for the individual projects.
110. There were no significant cumulative effects in relation to the other technical areas because it can be assumed that the 'other developments' would mitigate their own effects either through design or further mitigation measures, or the cumulative schemes were too far away to have any effect.
111. The 'in combination' cumulative effects assessment shows that there is the potential for adverse combined cumulative effects. The adverse combined cumulative effects occur throughout the construction phase and during the operation of the Proposed Development. The combined cumulative effects have the potential to affect fauna and flora, construction workers during construction, and occupants of neighbouring and local commercial properties and residents existing utilities and infrastructure during the operation of the Proposed Development.

Conclusion and Summary of Residual Effects

112. The ES includes a summary of the residual effects for all the topics considered. A thorough assessment has been undertaken of the likely significant environmental effects of the Proposed Development.

Construction Effects

113. The construction of the Proposed Development results in the following likely significant environmental effects:
- long-term effects of major beneficial significance on employment (in terms of number of permanent jobs and net additional permanent jobs) and the economy (in terms of gross value added), and effects of moderate beneficial significance on training and skills development opportunities;
 - Temporary significant adverse effects on the following ecological features: Field Margins; Ditches; Log Piles; Reptiles; Skylarks and Bats (at Local Level), and Birds Nesting in Hedgerows and Red Kites (at a Site Level only); and
 - local, minor to moderate adverse effects of a temporary nature on Short Distance Views from in and around the Site (relating to workers, pedestrian and residents) and Medium Distance Views around the Site (relating to construction/farm/land workers, and residents with a view from the completed Kingsmere Estate), which are all deemed to be Significant. However, it should be noted that the principle of the Proposed Development has been established through the 2010 consent and is supported, in principle, by the Local Plan allocation, Bicester 4.

Completed and Operational Effects

114. The operation of the Proposed Development results in the following likely significant environmental effects:

- Permanent significant adverse effect on birds nesting in hedgerows (at site level only);
- The effect on Landscape Character (0-15 years) is moderate adverse (0-15 years), and short distance views from in and around the site (Views 1-3) – residents (0-15 years) has a minor to moderate adverse effect, both of which are deemed to be significant; and
- Long-term effects of major beneficial significance on employment (in terms of number of permanent jobs and net additional permanent jobs) and the economy (in terms the benefit to the economy from increased spending), and effects of moderate beneficial significance on training and skills development opportunities. 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, district and regional areas.

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