

12 POPULATION AND HUMAN HEALTH

Introduction

- 12.1 This chapter of the ES assesses the likely significant effects of the Development on the environment in respect of issues related to the population and their health. In particular, the chapter considers the impact of the Development on housing delivery, employment generation, household expenditure and the population's health and wellbeing. It also considers the additional demand created by the Development's new residential population for social infrastructure and therefore considers the effect of the Development on education (early years, primary and secondary phase), primary healthcare (General Practitioner (GP) and dentist provision) and open/play space.
- 12.2 The chapter has been prepared by Barton Willmore (see Appendix 1.2 Statement of Expertise).
- 12.3 This chapter should be read in conjunction with the following figures, which have been used to inform the assessment:

Figure 12.1: Study Area;

Figure 12.2: Early years/childcare provision;

Figure 12.3: Primary school provision;

Figure 12.4: Secondary school provision;

Figure 12.5: GP provision;

Figure 12.6: Dentist provision; and

Figure 12.7: Open space provision.

Policy Context

- 12.4 A summary of the national and local planning policy relevant to this assessment is provided below.

National Planning Policy Frameworkⁱ

- 12.5 National planning policy is contained principally in the National Planning Policy Framework (NPPF) (February 2019). At the centre of the NPPF is the principle of sustainable development, with three overarching objectives: economic, social and environmental.

- 12.6 The social objective supports strong, vibrant and healthy communities by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being (paragraph 8).
- 12.7 The economic objective is to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure (paragraph 8).
- 12.8 Significant adverse impacts on these objectives should be avoided and wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed or compensatory measures should be considered (paragraph 32).
- 12.9 So that sustainable development is pursued in a positive way, at the heart of the NPPF is a presumption in favour of sustainable development, in which 'plans should positively seek opportunities to meet the development needs of their area and be sufficiently flexible to adapt to rapid change' (paragraph 11).
- 12.10 The NPPF requires planning authorities to work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area (paragraph 38).
- 12.11 Planning policies and decisions should aim to achieve healthy, inclusive and safe places that promote social interaction; are safe and accessible; and enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example, through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling (paragraph 91).
- 12.12 To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should ensure an integrated approach to considering the location of housing, economic uses and community facilities and services (paragraph 92).
- 12.13 In respect of education, the NPPF states that it is important that a sufficient choice of school places is available to meet the needs of existing and new communities, with local authorities taking a proactive, positive and collaborative approach to meeting this requirement through:

giving greater weight to the need to create, expand or alter schools through the preparation of plans and decisions on applications; and working with school promoters, delivery partners and statutory bodies to identify and resolve key planning issues before applications are submitted (paragraph 94).

- 12.14 The NPPF is supported by Planning Practice Guidance (PPG) on a range of different topics. Guidance is provided in respect of EIA, but socio-economic considerations are not specifically addressed.

Local Planning Policy

- 12.15 The Development is located within the administrative area of Cherwell District Council (CDC). The relevant local planning policy document for the Site comprises The Cherwell Local Plan 2011-2031, which was adopted on 20th July 2015 (incorporating Policy Bicester 13, re-adopted on 19th December 2016).

The Cherwell Local Plan 2011-2031ⁱⁱ

- 12.16 The Cherwell Local Plan sets out the long-term spatial vision for the CDC area over the period 2011 to 2031. Policies that are relevant to population and human health are:

- **Policy BSC 1: District Wide Housing Distribution**, requires 22,840 additional dwellings to be provided in the CDC area between 2011 and 2031, which is equivalent to 1,142 net additional dwellings per annum;
- **Policy BSC 3: Affordable Housing**, requires 30% of new housing on sites of 11 or more dwellings in Bicester to be provided as affordable homes;
- **Policy BSC 4: Housing Mix**, requires all new residential development to provide a mix of homes to meet current and expected future requirements;
- **Policy BSC 7: Meeting Education Needs**, seeks to ensure the provision of pre-school, school, community learning and other facilities;
- **Policy BSC 10: Open Space, Outdoor Sport and Recreation Provision**, encourages partnership working to ensure that sufficient quantity and quality of, and convenient access to open space, sport and recreation provision is secured;
- **Policy BSC 11: Local Standards of Provision – Outdoor Recreation**, requires development proposals to contribute to the provision of open space, sport and recreation, together with secure arrangements for its management and maintenance. The amount, type and form of open space will be determined having regard to the nature and size of development proposed and the community needs generated by it. Provision should be

made in accordance with CDC's minimum standards (detailed in Table 12.1); and

- **Policy Bicester 1: North West Bicester Eco-Town**, a new mixed used development including:
 - Up to 6,000 homes;
 - 10,000 ha of employment land;
 - Education – it is expected that four 2 Forms of Entry (FE) primary schools and one secondary school will be required;
 - Health – to provide for a 7 GP surgery;
 - Green infrastructure – 40% of the gross site area will comprise green space meeting the requirements of Policy BSC 11; and
 - Community facilities.

Table 12.1: CDC Open Space Standards (Policy BSC 11)

Type of provision	Quantitative Standard	Accessibility Standard
Play space (combining provision for younger and older children including Multi Use Games Areas (MUGAs))	0.78 ha per 1,000 people	400m 1,200m (Neighbourhood Equipped Area for Play (NEAPs))
Outdoor sports provision (combining tennis courts, bowling greens, golf courses and playing pitches - to be accompanied by changing facilities where appropriate)	1.13 ha per 1,000 people	800m (football, rugby, cricket) 1,200m (tennis) 12,000m (bowling greens and golf courses)
Allotments	0.37 ha per 1,000 people	800m
General green space (parks and gardens / semi-natural green space / amenity green space)	2.74 ha per 1,000 rural/urban edge dwellers	400m (amenity space) 1,200m (other green space)

Assessment Methodology

Consultation

12.17 Consultation was undertaken with CDC through a formal scoping exercise, as set out in Chapter 2 EIA Methodology. The proposed approach to the assessment of effects in relation to population and human and health was set out in the submitted EIA Scoping Report (Appendix 2.1 of the ES). This chapter has been prepared based on the Scoping Opinion received from CDC (Appendix 2.2 of the ES), in accordance with the requirements of the "EIA Regulations". CDC's Scoping Opinion agreed with the proposed approach to the assessment of effects related to population and human health.

12.18 The submitted Scoping Report proposed to scope out effects on employment during the operational phase as the Development does not incorporate any operational employment generating uses. The Scoping Opinion acknowledged this point but requested that employment opportunities should be considered (such as how home working could be accommodated) as part of employment requirements of the wider Exemplar Scheme as detailed in Policy Bicester 1 of the adopted CDC Local Plan. In response to the Scoping Opinion, the assessment has included effects on employment during the operational phase and considered these within the context of the potential economic activity status of future residents and potential for home working based on existing baseline conditions. This is considered to provide a worst-case assessment (conservative estimate) of potential home working because home working has significantly increased as a result of the COVID-19 pandemic and it is expected that such trends will continue into the future once the pandemic is over.

Technical Scope of the Assessment

12.19 This assessment has been undertaken in accordance with the Development set out in ES Chapter 3: Site and Development Description and the following likely significant socio-economic effects from the Development have been assessed:

Construction phase:

- Employment generation (direct and indirect); and
- Wider human health.

Completed Development:

- Delivery of new housing;
- Household expenditure;
- Early years/childcare;
- Primary school education;
- Secondary school education;
- GP provision;
- Dentist provision;
- Open/play space;
- Wider human health; and
- Employment.

12.20 Construction phase effects on housing, education, healthcare and open space have been scoped out of the assessment, as it is expected that the construction workforce and their families would not move to the area and therefore not create any additional demand. There would either be no effect during the construction phase on these receptors or effects would be so small as to be insignificant.

12.21 The assessment comprises the following stages:

- Identification of current and future baseline conditions with respect to the above topics using information and statistics available in the public domain;
- Assessment of likely significant effects of the Development on the environment by reviewing the baseline conditions and determining the change attributable to the Development using published formulae and guidance to assess effects;
- Recommendation of mitigation or enhancement measures, if necessary;
- Assessment of residual effects assuming implementation of the mitigation/ enhancement measures; and
- Assessment of the cumulative schemes described within Chapter 2 EIA Methodology of the ES for the potential to have likely significant cumulative effects on the environment when combined with the Development.

Spatial Scope of the Assessment

12.22 ES Chapter 3: Site and Development Description details the Site context. Whilst the Development will be located to the north west of Bicester, it is considered that the Development could impact on the whole of Bicester. The three electoral wards of: Bicester East; Bicester North and Caversfield; and Bicester West have been selected to represent Bicester, as shown in Figure 12.1. The three electoral wards have been used to represent the local Study Area for this assessment. Baseline conditions for the Study Area (local area) are compared to the authority area of CDC (borough level) and England as a whole (national level). Table 12.2 summarises the spatial area used within this assessment for each receptor.

Table 12.2: Receptor Selection Criteria

Receptor	Spatial Area	Justification
Housing	Borough level	The residential units provided by the Development will contribute towards the housing requirement for the CDC area.
Household Expenditure	Borough level	Household expenditure generated by the Development's households has the potential to be spent in the wider CDC area, rather than limited to within the Study Area.

Receptor	Spatial Area	Justification
Early Years/Childcare	Local level	People can register with any childcare provider. However, to limit assessment, provision within the Study Area has been considered as the area most likely to be impacted upon by the Development.
Primary Education	Local level. 3.2km from the Site and associated primary school planning area(s)	Based on the distance threshold of 2 miles (3.2km) for under-eights at which free-school transport is available as detailed in S 444(5) of the Education Act 2006 ⁱⁱⁱ . The associated primary school planning area(s) for all primary schools within 3.2km are identified and all primary schools within those primary school planning areas have been selected for assessment.
Secondary Education	Local level. 4.8km from the Site and associated secondary school planning area(s)	Based on the distance threshold of 3 miles (4.8km) for over-eights at which free-school transport is available as detailed in S 444(5) of the Education Act 2006. The associated secondary school planning area(s) for all secondary schools within 4.8km are identified and all secondary schools within those secondary school planning areas have been selected for assessment.
GP Provision	Local level	Since 2015, people can register with any GP of their choice. However, to limit assessment, provision within the Study Area has been considered as the area most likely to be impacted upon by the Development.
Dentist Provision	Local level	People can register with any dentist. However, to limit assessment, provision within the Study Area has been considered as the area most likely to be impacted upon by the Development.
Wider Human Health	Local level	The population most affected by the Development comprises residents closest to the Site.
Employment	Borough level (Construction phase) Local level (Operational phase)	Construction of the Development will provide employment opportunities across the CDC area and whilst the operational phase will provide no employment opportunities directly on-Site, a proportion of future residents will be economically active and some will be working from home
Open Space	Local level	Based on the various radial catchments for each type of open space as set out in Policy BSC 11 of CDC's adopted Local Plan (refer to Table 12.1 of this chapter).

Topic-specific Methodologies

Population

12.23 The baseline population is established using the Office for National Statistics (ONS) 2019 Mid-Year Population Estimates (MYPE)^{iv}. The ONS, 2018-based Sub National Population Projections (SNPP) have been used to provide a future population for the year in which the Development is proposed to be complete and operational (2027). The SNPP are only published for local authority areas, regions and England and therefore the SNPP are not available for the Study Area.

12.24 The number of people anticipated to live in the Development has been determined by

multiplying the number of dwellings proposed by the Development by the average household size for the CDC area according to the 2011 Census.

Housing

- 12.25 Existing baseline housing conditions in respect of average household size, the number, type and tenure of homes have been informed by the ONS, 2011 Census. The Study Area used for this assessment is based on 2016 electoral wards and therefore 2011 Census data is not available for the Study Area's component 2016 electoral wards. For this reason, the 2011 Census electoral wards of Bicester East, Bicester North and Bicester West have been used to represent baseline housing conditions for the Study Area sourced from the 2011 Census only.
- 12.26 Baseline conditions in respect of housing delivery in CDC have been informed by CDC's Annual Monitoring Report 2020^v.
- 12.27 The impact of the Development on the local housing stock is a qualitative assessment based on the contribution that the Development will make to the identified housing requirements for the CDC area set out in the adopted Cherwell Local Plan 2011-2031.

Household Expenditure

- 12.28 Baseline conditions in relation to household expenditure have been sourced from Experian, Retail Planner Data^{vi}. Expenditure data is not available for the Study Area and therefore data for the CDC area has been used.
- 12.29 A quantitative assessment of likely significant effects has been made on the potential for new households living in the Development to increase spending on goods and services. This has been assessed by multiplying the Development's number of residential units by the average annual household expenditure on convenience, comparison and leisure goods and services for the CDC area.

Early Years Education/Childcare

- 12.30 Registered early years/childcare providers in non-domestic settings, providing year-round care, have been sourced from Ofsted^{vii}. All facilities within the Study Area have been included for assessment as shown on Figure 12.2. The number places provided by each facility is presented. However, information is not available on the number of children currently enrolled at each facility and therefore capacity data is not available.

12.31 To estimate the number of early years children generated by the Development that will require additional provision, child yield multipliers for the CDC area used by Oxfordshire County Council (OCC)^{viii}, who are the Local Education Authority in which CDC is located, are applied to the Development's housing mix. The pupil yield multipliers used in this assessment are presented in Table 12.3.

Table 12.3: OCC Child Yield Multipliers for the CDC area

	Number of children per unit by bedroom size of unit			
	One-bed	Two-bed	Three-bed	Four-bed
Early years (0-4 years)	0.03	0.16	0.36	0.41
Primary (4/5 to 10/11 years)	0.00	0.17	0.39	0.51
Secondary (11-15 years)	0.00	0.09	0.23	0.35

Source: OCC

12.32 The assessment is quantitatively based on the number of early year places generated by the Development versus the number of places within the existing early years/childcare provision.

Primary and Secondary Education

12.33 All state-maintained, primary schools located within 3.2km of the Site and all state-maintained, non-selective secondary schools located within 4.8km of the Site (refer to Table 12.2 for explanation of selection criteria) have been identified. The school planning areas in which these schools are located have also been identified and all schools within the identified planning areas have been included within this assessment (shown on Figure 12.3 and Figure 12.4). Planning areas are used by OCC for the purpose of school place planning. For primary, this assessment has included the planning areas of Bicester North Town Primary, Bicester South West Primary and Bicester South East Primary. For secondary, this assessment has included the planning area of Bicester Secondary.

12.34 Independent, special and selective schools have been excluded. This represents a worst-case scenario for assessment, as it assumes that all pupils living at the Development will enter mainstream state-maintained, non-selective schools.

12.35 Baseline conditions in respect of the existing numbers of pupils on each individual school roll, along with current school capacities, have been informed by the Department for Education (DfE) Get Information about Schools Service^{ix}. This data has been used to determine baseline surplus or deficit school places.

12.36 Future baseline conditions in respect of primary and secondary school capacities have been

informed by the DfE, School Place Planning Data, specifically the estimated number of primary places needed for years 2019/20 to 2023/24 and secondary places needed for years 2019/20 to 2025/2026^x. Capacity forecasts are only published for school planning areas and are not available for individual schools. For this reason, consideration has been given to the forecasts for the school planning areas of Bicester North Town Primary, Bicester South West Primary, Bicester South East Primary and Bicester Secondary.

- 12.37 The number of primary and secondary school places required by the Development's resident population has been calculated using OCC pupil yield multipliers for the CDC area^{xi} (detailed in Table 12.3) applied to the Development's housing mix.
- 12.38 The assessment is quantitatively based on the number of primary/secondary pupils generated by the Development versus the level of surplus or deficit forecast primary/secondary school places.
- 12.39 For the purposes of this assessment, secondary education is defined as school years 7 to 11 (children aged 11 to 15 years).

GP Provision

- 12.40 Since 2015, people have a legal right to register with any GP of their choice to best suit their needs. There is no requirement to reside in a specific catchment area, and the GP practice must register you unless there are reasonable grounds not to do so. However, to limit assessment, all GP provision (practices and any associated branches) located within the Study Area has been selected for this assessment (shown on Figure 12.5).
- 12.41 Baseline conditions for GP provision are assessed through reference to the National Health Service (NHS) GP Workforce Statistics^{xii}, which provide total patient list size for individual GP practices and the number of full time equivalent (FTE) GPs at each practice. It should be noted that the NHS only publishes GP and patient data at a practice level. Data is not published for individual branches associated with a larger practice.
- 12.42 To determine whether existing GP provision is under or over-capacity, GP to patient ratios of selected practices have been compared to the Healthy Urban Development Unit (HUDU) standard of 1 GP for every 1,800 people. Reference has also been made to the NHS Choices website^{xiii} (as of 11 March 2021) to establish whether each of the GP practices are currently accepting new patient registrations.
- 12.43 The assessment of likely significant effects has been quantitatively based on the number of

future residents anticipated to live in the Development versus the number of surplus or deficit patient places within the selected GP provision. To assess the worst-case, it has been assumed that all residents of the Development will be new to the area and therefore not already registered with a local GP.

Dentist Provision

- 12.44 All dental surgeries located within the Study Area have been selected for this assessment (shown on Figure 12.6). It is not possible to determine the precise number of patient places available as no central census of dentists is conducted and no definitive ratio of patients per dentist exists. To counter this, baseline conditions for dental surgeries have been informed through reference to the NHS Choices website^{xiv} or individual practice website (as of 11 March 2021) to identify whether each of the identified dental practices is accepting new NHS or private patients. Capacity within the existing provision is based on the ability to accept NHS patients only.
- 12.45 The assessment of likely significant effects has been qualitatively based on the number of future residents anticipated to live in the Development versus NHS capacity within the existing provision.

Wider Human Health

- 12.46 A qualitative assessment has been made of the potential for the Development to result in likely significant effects with respect to wider human health issues. Health is a multi-disciplinary topic and many individual technical documents submitted in support of the planning application are relevant to health. The World Health Organisation defines health as, "*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*". For this reason, a wide-ranging assessment of health effects has been undertaken.
- 12.47 Construction phase effects of the workforce have not been assessed in detail because safe working practices will be adhered to in accordance with the requirements of the Health and Safety Executive and relevant legislation including The Construction (Design and Management) Regulations 2015^{xv}, which will minimise the potential for accidents and other situations with a detrimental effect on employees' health.
- 12.48 Construction and operational phase effects on nearby sensitive receptors including the local population have been assessed qualitatively, cross referencing the relevant ES chapters (including Chapter 8: Noise and Vibration) and standalone technical assessments submitted

in support of the planning application. These include the following:

- Transport Assessment;
- Design and Access Statement; and
- Planning Statement.

12.49 The conclusions of the planning documents have been used to indicate whether significant health effects will be likely, without and with mitigation in place. Professional judgment and knowledge of the baseline conditions of the local area have also been used to forecast how the health of the existing and future population / Site users may be affected by the Development.

Employment

12.50 Baseline employment conditions in relation to economic activity have been informed by the ONS, Annual Population Survey (APS)^{xvi}, for the 12 months to September 2020. Data for the Study Area is not available from this data source and therefore baseline conditions on economic activity are only presented for the CDC area and England. However, baseline conditions in relation to unemployment within the Study Area have been sourced from the ONS Claimant Count^{xvii} for the month of February 2020 (to represent pre-Covid-19 pandemic) and January 2021 (to represent the latest data^{xviii} but which is within the Covid-19 pandemic). In addition, claimants of Jobseeker Allowance (JSA)^{xix} for the months of February and January 2021 have been considered for the Study Area to determine the number of people looking for employment and the occupations sought.

12.51 Baseline employment conditions in relation to the number of jobs (workplace-based) by industrial sector, have been sourced from the ONS, Business Register and Employment Survey (BRES) 2019^{xx}. The BRES provides a count of employees, excluding self-employment jobs and government-supported trainees and HM Forces.

12.52 Baseline employment conditions in relation to commuting patterns (travel to work statistics) have been sourced from the 2011 Census^{xxi}. Travel to work statistics are not available for the Study Area and therefore data is presented for the CDC area only.

12.53 Assessment is quantitatively made based on the number of jobs created during the construction phase and the increase in economically active residents and home working potential during the operational phase.

12.54 The number of direct jobs generated during the construction phase has been assessed using the Construction Industry Training Board (CITB), Labour Forecasting Tool (LFT)^{xxii}. Build cost data (£ per sqm by type of floorspace) from Costmodelling^{xxiii} has been applied to the Development's proposed floorspace set out in detail in ES Chapter 3: Site and Development Description, to calculate an indicative construction cost for the Development. The LFT has then been run using the indicative construction cost over a 60-month construction programme from 1 April 2022 to 31 March 2027. The number of indirect jobs (nationwide) generated during the construction phase of the Development has been assessed quantitatively by applying the ONS, Type 1 Employment Multiplier^{xxiv} to the direct number of jobs.

Open/Play Space

12.55 Baseline conditions in respect of open/play space have been informed through reference to Ordnance Survey (OS) Open Greenspaces^{xxv}.

12.56 A qualitative assessment has been made based on the proximity of the Site to existing open space and the quantum and accessibility of open space proposed by the Development. Open space requirements are based on CDC's accessibility and quantity standards detailed in Policy BSC 11 of the adopted Cherwell Local Plan 2011-2031 (summarised in Table 12.1 of this chapter).

Limitations and Assumptions

12.57 There are no further limitations or assumptions made other than those covered in the topic specific paragraphs above.

Determining the Significance of Effects

12.58 There are no recognised standards against which the predicted impacts on population and human health receptors can be assessed, other than those that relate specifically to other technical areas (pollution, noise etc.). These are dealt with in detail, in separate ES chapters, if necessary and, where appropriate, summarised within this chapter.

12.59 The significance of effects on population and human health receptors is therefore assessed using professional judgement having regard to the baseline position and the sensitivity and magnitude criteria detailed within ES Chapter 2: EIA Methodology.

12.60 Those effects which are considered to have a moderate or major beneficial or adverse effect have been considered as significant and where effects have been established as significant

adverse, appropriate mitigation measures have been identified to inform the assessment of residual effects.

Baseline Conditions

Population

- 12.61 The ONS 2019 MYPE estimate that the Study Area has a population of 25,900 people, accounting for 17% of CDC's total population (150,000 people).
- 12.62 The Study Area has a younger age profile than that of the CDC area and England with a higher proportion of people aged 16 to 64 years (64% compared to 62%) and a smaller proportion of people aged 65+ years (16% compared to 18%). The proportion of children in the Study Area (20%) is similar to the CDC area (20%) but marginally higher than the national average (19%), as shown in Table 12.4.

Table 12.4: Age Profile by Broad Age Group (2019)

	Study Area	CDC area	England
Aged 0 to 15	20%	20%	19%
Aged 16 to 64	64%	62%	62%
Aged 65+	16%	18%	18%
All ages	100%	100%	100%

Source: ONS, 2019 MYPE. All figures have been rounded and may not sum.

- 12.63 It is anticipated that construction of the Development will commence in 2022 and be completed by 2027. The ONS, 2018-based Sub National Population Projections (SNPP)^{xxvi} indicate that by the year 2022, there will be 154,100 living in the CDC area and that by the year 2027, this will have increased to 158,700 people (the SNPP are not published for geographies below local authority level). An increase of 4,600 people represents a 3.0% growth in population (2022-2027). In comparison, England's population is projected to increase by 2.7% over the same period.
- 12.64 By 2027, 61% of the CDC area's total population will be aged 16-64 years (working age) which remains the same as in 2022. In contrast, the population aged 65+ years in the CDC area is projected to increase from 19% in 2022 to 21% by 2027. An ageing population is a trend seen nationally.

Housing

- 12.65 The 2011 Census recorded approximately 59,100 households in the CDC area, 13% of which

(7,900) are within the Study Area. There is no housing on the Site currently.

12.66 Table 12.5 highlights that accommodation within the Study Area is varied with an equal proportion of detached, semi-detached and terraced properties (32% respectively). Compared to the CDC area and England, the Study Area has a higher proportion of detached properties (32% compared to 30% and 22% respectively) and a higher proportion of terraced properties (32% compared to 23% and 24% respectively). In contrast, the Study Area has a lower proportion of semi-detached properties (32%) than compared to the CDC area average (35%) but which is higher than the national average (31%). A further 4% of accommodation within the Study Area is flats, which is considerably lower than the average for the CDC area (11%) and England (22%).

12.67 The majority of accommodation in the Study Area is owned (75%), the same trend seen in the CDC area and England. However, the Study Area has a higher proportion of owned accommodation than the CDC area (69%) and England (63%) as shown in Table 12.5. 13% of accommodation in the Study Area is privately rented, slightly lower than the average for the CDC area (16%) and England (17%). A further 11% of accommodation in the Study Area is socially rented, which again, is lower than the proportion in the CDC area (12%) and England (18%).

Table 12.5: Household Accommodation Type and Tenure (2011)

Type	Study Area	CDC Area	England
Detached	32%	30%	22%
Semi-detached	32%	35%	31%
Terraced	32%	23%	24%
Flats	4%	11%	22%
Tenure			
Owned	75%	69%	63%
Shared Ownership	0%	1%	1%
Social Rent	11%	12%	18%
Private Rent	13%	16%	17%
Living rent free	1%	2%	1%

Source: ONS, 2011 Census, Tables KS401EW and KS402EW
Caravans and other temporary structures are not included. All figures have been rounded and may not sum.

12.68 According to the 2011 Census^{xxvii}, the average household size in the Study Area was 2.61 persons per household, slightly higher than the average for the CDC area (2.45 persons per household), which in turn is higher than the national average (2.36 persons per household).

12.69 CDC's Annual Monitoring Report 2020 identifies that between 2011 and 2020 there have been a total of 8,614 net housing completions in the CDC area. This provides a shortfall of 1,664

homes over the same period based on an annual requirement of 1,142 dwellings as detailed in Cherwell Local Plan Policy BSC 1. However, this shortfall is the result of fewer completions between 2011 and 2015. Since 2015, annual completions have exceeded 1,100 dwellings per annum.

Household Expenditure

12.70 Retail expenditure data from Experian reports the average annual household expenditure in the CDC area on convenience (food), comparison (non-food) and leisure goods and services as follows:

- Convenience = £5,753 per household per annum;
- Comparison = £10,062 per household per annum; and
- Leisure = £10,078 per household per annum.

12.71 On the basis that there are 7,900 households in the Study Area and 59,100 households in the CDC area (as identified in the housing baseline), this would suggest current household expenditure of £204.4m per annum by residents of the Study Area and £1,529.2m per annum by residents in the CDC area.

Early Years Education/Childcare

12.72 A total of nine registered non-domestic childcare and early years facilities (which includes any nursery provision linked to a primary school) have been identified within the Study Area. These nine childcare facilities are detailed in Table 12.6, along with the number of places available. Figure 12.2 identifies the physical location of these childcare and early years facilities in relation to the Site.

Table 12.6: Existing Non-Domestic Childcare and Early Years facilities within the Study Area

Location on Figure 12.2	Name	Places
1	Bubbles Pre-School	32
2	Busy Bees Day Nursery at Bicester	110
3	Toad Hall Day Nursery (Bicester) Ltd	92
4	Rainbow Bicester	44
5	Fundamentals Childcare Limited	45
6	Jack And Jill Preschool	45
7	Impact Montessori Nursery	45

Location on Figure 12.2	Name	Places
8	Courtyard Preschool	21
9	Child First Bicester	166
Total		600

Source: Ofsted

- 12.73 The nine registered non-domestic childcare and early year facilities collectively offer 600 places. The closest childcare and early years facility to the Site is Bubbles pre-school which offers 32 places.

Primary Education

- 12.74 There are a total of nine primary schools within 3.2km of the Site which are located within the three Primary School Planning Areas of Bicester North Town Primary, Bicester South West Primary and Bicester South East Primary. In total there are 14 primary schools located within these three Primary School Planning Areas, all of which have been included for assessment. Table 12.7 details these schools along with the number of pupils on roll and current capacity figures. Figure 12.3 identifies the location of these primary schools in relation to the Site.

Table 12.7: Existing Primary School Provision and Capacities

Location on Figure 12.3	Name	Planning Area	Capacity (Places)	Pupils on Roll	Surplus/ Deficit (Places)
1	Gagle Brook Primary School	Bicester North Town Primary	210	41	169
2	Southwold Primary School	Bicester North Town Primary	420	279	141
3	Bure Park Primary School	Bicester North Town Primary	480	461	19
4	Glory Farm Primary School	Bicester North Town Primary	435	401	34
5	King's Meadow Primary School	Bicester South West Primary	432	426	6
6	Brookside Primary School	Bicester South West Primary	315	315	0
7	St Mary's Catholic Primary School, Bicester	Bicester South West Primary	315	223	92
8	Longfields Primary and Nursery School	Bicester South East Primary	420	387	33
9	St Edburg's Church of England (VA) School	Bicester South West Primary	420	391	29
Sub Total: Available places within 3.2km of the Site			3,447	2,924	523

Location on Figure 12.3	Name	Planning Area	Capacity (Places)	Pupils on Roll	Surplus/Deficit (Places)
10	Launton Church of England Primary School	Bicester South East Primary	164	135	29
11	Langford Village Community School	Bicester South East Primary	420	438	-18
12	Chesterton Church of England Voluntary Aided Primary School	Bicester South West Primary	150	138	12
13	Five Acres Primary School	Bicester South East Primary	420	360	60
14	Charlton-on-Otmoor Church of England Primary School	Bicester South East Primary	105	90	15
Sub Total: Available places: Bicester North Town			1,545	1,182	363
Sub Total: Available places: Bicester South East			1,529	1,410	119
Sub Total: Available places: Bicester South West			1,632	1,493	139
Grand Total: Available places (three planning areas combined)			4,706	4,085	621

Source: DfE <https://get-information-schools.service.gov.uk/> (as of 11 March January 2021)

- 12.75 The nearest primary school to the Site is Gagle Brook Primary School, located within the wider Exemplar Scheme. Gagle Brook Primary School opened in September 2018 as one of the 2FE primary schools required according to the Cherwell Local Plan (Policy Bicester 1) and has opened on a phased basis, with only Reception, Year 1 and Year 2 currently open. For this reason, the number of pupils currently on roll is significantly below the overall capacity of the school with Table 14.7 illustrating 169 available places within Gagle Brook Primary School.
- 12.76 In total, the nine primary schools within 3.2km of the Site are operating under-capacity by 523 places. Across the three Primary School Planning Areas combined there are a total of 621 primary school places available, of which 363 are within Bicester North Town Primary Planning Area, 139 within Bicester South West Primary Planning Area and 119 within Bicester South East Primary Planning Area.
- 12.77 DfE, School Place Planning data^{xxviii} provides future baseline conditions in respect of primary school capacities. As stated in the assessment methodology, future capacities are only available for school planning areas (not individual schools). By 2023/24, Bicester North Town Primary Planning is forecast to have 511 primary school places available; Bicester South East Primary Planning 546 primary places available; and Bicester South West Primary 57 primary school places available. In total, the DfE forecasts indicate that there will be a surplus of 1,114 primary school places within the three planning areas combined by 2023/24.

Secondary Education

12.78 There are four secondary schools within 4.8km of the Site which are located within the Bicester Secondary Planning Area. There is one further all-through school (Heyford Park School) which provides both primary and secondary education located just beyond 4.8km from the Site but which is located within the Bicester Secondary Planning Area and has therefore been included for assessment. Table 12.8 details the number of pupils on roll and current capacity figures for all five schools, excluding the primary and sixth form element where applicable. Figure 12.4 identifies the physical location of the schools in relation to the Site.

Table 12.8: Existing Secondary School Provision and Capacities within Bicester Secondary Planning Area (School Years 7 to 11)

Location on Figure 12.4	Name	Capacity (Places)	Pupils on Roll	Surplus/ Deficit (Places)
1	The Cooper School	1,100	1,090	10
2	The Bicester School	1,230	1,026	204
3	Bicester Technology Studio	160	77	83
4	Whitelands Academy	600	n/a	n/a
5	Heyford Park School	390	329	61
	Total	2,880*	2,522	358

Source: DfE <https://get-information-schools.service.gov.uk/> (as of 20 January 2021)

*Total excludes capacity of Whitelands Academy.

12.79 The nearest secondary school to the Site (The Cooper School) is currently operating under-capacity by 10 places (school Years 7 to 11). In total, there are currently 358 available secondary school places within the Bicester Secondary Planning Area. This total excludes Whitelands Academy. Whitelands Academy only opened in September 2020 and therefore there are no current statistics for the number of pupils on roll.

12.80 DfE, School Place Planning data^{xxix} provides future baseline conditions in respect of secondary school capacities. By 2025/26, there is forecast to be 651 available secondary school places in the Bicester Secondary Planning Area.

GP Provision

12.81 There is one GP surgery operating within the Study Area (Victoria House Surgery), which is associated with a GP practice (Alchester Medical Group) located outside of the Study Area to the south of Bicester. As GP data is only published for GP practices including any associated branches, the GP practice linked to the GP branch within the Study Area has been included

for assessment. There are two further GP practices (Montgomery House Surgery and Bicester Health Centre) located on the boundary of the Study Area, which have also been included for assessment. Table 12.9 provides details of the GP provision included for assessment, detailing the number of registered patients and the number of FTE GPs. Figure 12.5 shows the physical location of the GP practices and branches in relation to the Site.

Table 12.9: Existing GP Provision and Capacities (December 2020)

Location on Figure 12.5	Surgery Name	GPs (FTE)	Patients	Ratio (Patients to 1 GP)	Surplus capacity (Patients) ¹	Accepting New Patients? ²
1	Montgomery House Surgery	7.4	15,823	2,138	- 2,503	Yes
2	Bicester Health Centre	7.0	15,343	2,192	- 2,743	Yes
3	Alchester Medical Group	8.0	20,542	2,568	- 6,142	Yes
3a	Victoria House Surgery					
3b	Alchester Medical Group					

Source: NHS, GP Workforce Statistics

Notes: 1. Capacity is calculated by subtracting the existing ratio (patients to 1 GP figure) from the HUDU average (1 GP for every 1,800 people) and multiplying this by the number of GPs at the relevant surgery.

2. NHS Choices <https://www.nhs.uk/service-search/find-a-dentist> (as of 11 March 2021)

- 12.82 All GP provision within the Study Area is currently operating over-capacity when compared to the HUDU standard of 1 GP for every 1,800 patients, indicating no capacity within the existing GP provision. However, reference to NHS Choices (as of 11 March 2021) identifies that all three GP practices are currently accepting new patient registrations.

Dentist Provision

- 12.83 A total of nine dental practices are operating within the Study Area, all located within Bicester. Table 12.10 details the dentists included for assessment along with an indication of whether they are accepting new patients according to the NHS Choices website/dental practice website (as of 11 March 2021). Figure 12.6 shows the physical location of the dental practices in relation to the Site.

Table 12.10: Existing Dental Provision and Capacities

Location on Figure 12.6	Name	Postcode	Accepting New NHS Patients?	Accepting New Private Patients?
1	Bicester Dental Care & Implant Centre	OX26 6LP	Yes	Yes
2	Damira Dental Studios	OX26 6JU	No	Yes
3	Portman Smile Clinic	OX26 6FA	No	No

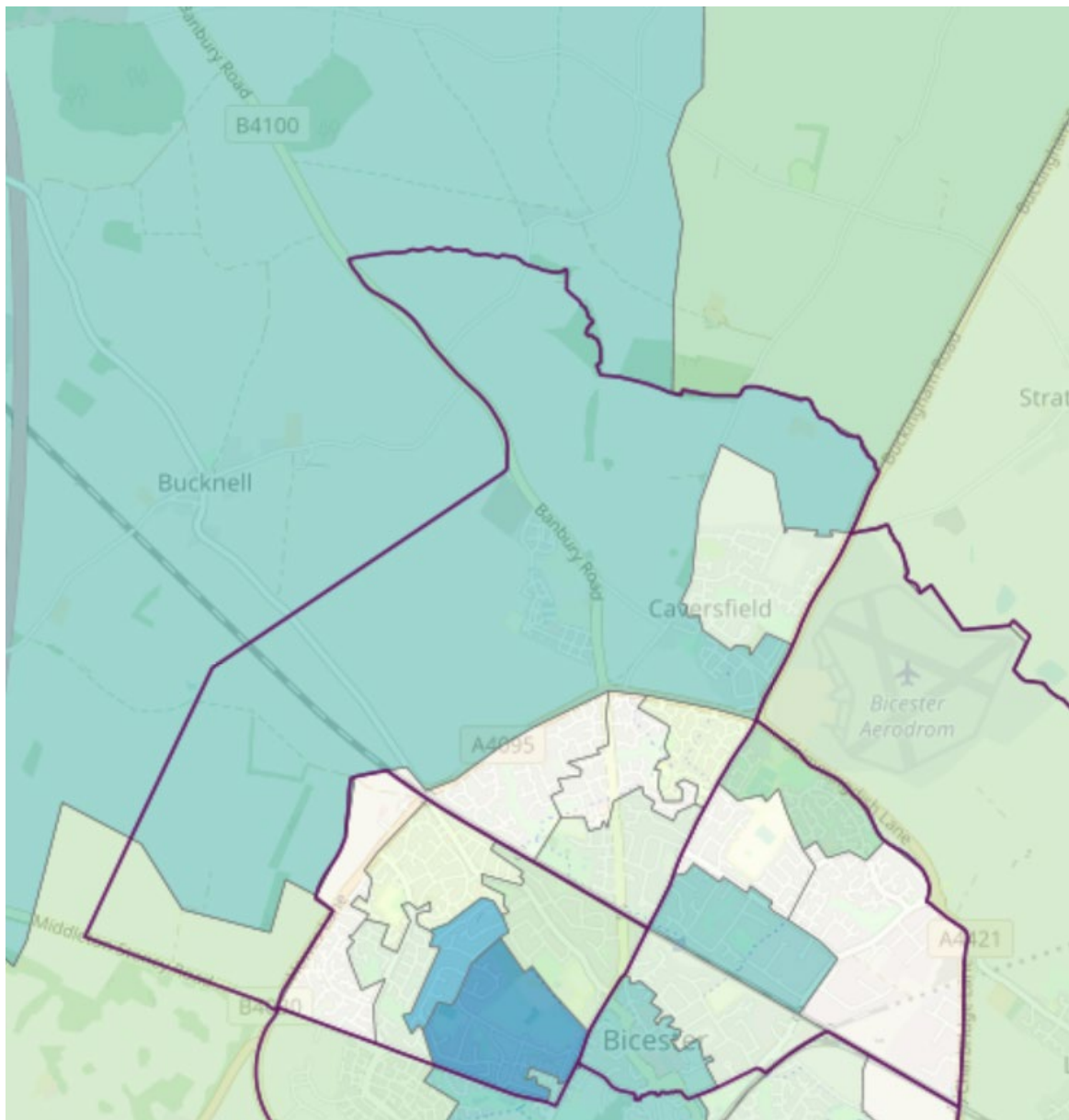
4	Greytown Dental Practice	OX26 6JJ	No	No
5	Portman Smile Clinic	OX26 6EH	No	No
6	Market Square Dental	OX26 6AD	Yes	Yes
7	Causeway Dental Practice	OX26 6AN	Yes	Yes
8	Bicester Dental Clinic	OX26 6AT	Yes	Yes
9	Audley Dental Solutions	OX27 9AU	No	No

Source: NHS Choices <https://www.nhs.uk/service-search/find-a-dentist> (as of 11 March 2021)

12.84 Table 12.10 reveals that four of the nine dental practices are accepting new NHS patients indicating limited capacity within the existing dental provision within the Study Area.

Wider Human Health

12.85 An overview of the health baseline conditions at the Site are included within the Health Impact Assessment (HIA) (submitted with the planning application). The baseline conditions of health are identified for the local area using the English Index of Multiple Deprivation (IMD) at Lower Super Output Areas (LSOAs). The Site is located within one LSOA; Cherwell 011B LSOA^{xxx}. LSOA Cherwell 011B also includes the existing residential development adjacent to the south of the Site at the Exemplar Scheme and the existing residential development at Bucknell, to the west of the Site. The Cherwell 011C LSOA is located to the south east of the Site and comprises the existing residential development in Caversfield. These two LSOAs (see locations on Graphic 12.1 below) are selected as representative of the IMD for the Site as they comprise the majority of existing residential receptors that form the basis of this assessment.

Graphic 12.1: LSOAs surrounding the Site.

12.86 Cherwell 011B LSOA and Cherwell 011C LSOA are ranked 15,914th and 25,836th out of 32,844 LSOAs in England respectively, on the 2019 IMD; where 1 is the most deprived LSOA. Cherwell 011B and Cherwell 011C LSOA's overall IMD ranks score within the 50% most deprived and 30% least deprived neighbourhoods in the country, respectively. Both Cherwell 011B and Cherwell 011C LSOAs have multiple domains of deprivation which are in the mid-top tier percentages (i.e. the least deprived 10-40% neighbourhoods in the country), including Income, Employment, Education and Health. However, both Cherwell 011B and Cherwell 011C LSOAs score low (within the 10% most deprived neighbourhoods) for the Barriers to Housing and Services domain, indicating that the existing conditions surrounding the Site comprise physical and financial barriers to access housing and local services. Cherwell 011B is within the 20% most deprived neighbourhoods for the Crime domain and the 10% most deprived

neighbourhoods for the Living Environment domain, which contrasts to Cherwell 011C, which is within the 10% and 20% least deprived neighbourhoods, for each of these domains respectively. The Health Deprivation scores for both the LSOA's are located within the least deprived 30-40% neighbourhoods in the country, indicating the Site is in an area that experiences good health levels. Additional information is included within the HIA (submitted with the planning application).

12.87 In addition, a review of the Health Profile for Cherwell, available from Public Health England^{xxxi}, has been undertaken as part of this assessment. The Health Profile includes information on various health features and provides a comparison with data for England. Table 12.11 below presents the data recorded by Public Health England for Cherwell.

Table 12.11: Summary of the Health Profile for Cherwell

Recorded Health Features for Cherwell	Comparison to Benchmark (England)
Life expectancy at birth (Male)	Better
Life expectancy at birth (Female)	Similar
Under 75 mortality rate from all causes	Better
Under 75 mortality rate from all cardiovascular diseases	Better
Under 75 mortality rate from cancer	Similar
Suicide rate	Similar
Killed and seriously injured (KSI) casualties on England's roads	Similar
Emergency Hospital Admissions for Intentional Self-Harm	Better
Hip fractures in people aged 65 and over	Similar
Cancer diagnosed at early stage (experimental statistics)	Not compared
Estimated diabetes diagnosis rate	Worse
Estimated dementia diagnosis rate (aged 65 and over)	Similar
Admission episodes for alcohol-specific conditions – Under 18s	Similar
Admission episodes for alcohol-specific conditions	Better
Smoking Prevalence in adults (18+) – current smokers	Similar
Percentage of physically active adults	Similar
Percentage of adults (aged 18+) classified as overweight or obese	Similar
Under 18s conception rate/1,000	Better
Smoking status at time of delivery	Better
Breastfeeding initiation	Better
Infant mortality rate	Better
Year 6: Prevalence of obesity (including severe obesity)	Better
Deprivation score (IMD 2015)	Not compared
Smoking Prevalence in adults in routine and manual occupations (18-64)-current smokers	Similar
Children in low income families (under 16s)	Better
Average GCSE Attainment	Similar
Percentage of people aged 16-64 in employment	Better
Statutory homelessness – Eligible homeless people not in priority need	Better
Violent crime – hospital admissions including sexual violence)	Better
Excess winter deaths index	Similar
New STI diagnoses (exc chlamydia aged <25/100,000	Better
TB incidence (three year average)	Similar

12.88 Table 12.11 above identifies that the list of recorded health features of Cherwell are generally

better or similar to those recorded for England.

Employment

- 12.89 In the year ending September 2020, there were 77,900 residents in the CDC area who were classified as economically active (this includes all those people in employment or available to work, for example the unemployed). This is equivalent to 82% of all 16 to 64 year olds in the CDC area (or 52% of the total population of the CDC area), which is higher than the average for England (79%).
- 12.90 76,600 CDC residents were in employment which is equivalent to 81% of all 16 to 64 year olds (or 51% of the total population), which again is higher than the average for England (76%).
- 12.91 The unemployment rate (among the population aged 16+ years) in the CDC area was 2.4% in the year to September 2020 which is significantly lower than the average for England (4.3%). With an unemployment rate of 2.4%, there were 1,900 people unemployed in the CDC area in the year to September 2020.
- 12.92 Whilst not a measure of total unemployment, Claimant Count data provides a count of the number of people claiming unemployment related benefits including JSA and Universal Credit (UC) in the Study Area. Table 12.12 presents Claimant Count data for the Study Area, CDC area and England in February 2020 (pre-COVID) and January 2021 (during COVID).

Table 12.12: Claimant Count

		Study Area	CDC area	England
February 2020	Number of claimants	180	1,435	1,050,875
	Claimants as % of residents aged 16-64 years	1.1	1.5	3.0
January 2021	Number of claimants	555	3,810	2,200,965
	Claimants as % of residents aged 16-64 years	3.3	4.1	6.3

Source: ONS, [downloaded from NOMIS 11 March 2021]

- 12.93 In February 2020, 180 residents of the Study Area were claiming unemployment related benefits, which was equivalent to 1.1% of all residents aged 16 to 64 years. The claimant count in the Study Area (1.1%) was marginally lower than the CDC area average (1.5%) and lower than the national average (3.0%).
- 12.94 As a result of the current COVID-19 pandemic, unemployment has increased. In January 2021, 555 residents of the Study Area were claiming unemployment related benefits. This is

equivalent to 3.3% of all residents aged 16 to 64 years and is lower than the average for the CDC area (4.1%) and England (6.3%). The increase in people claiming unemployment related benefits is a trend seen nationally, not just within the Study Area and the CDC area.

12.95 In January 2021, 475 residents of the CDC area were claiming JSA, 100 of whom were resident in the Study Area. Of those claiming JSA in the Study Area, the majority (80%) were seeking employment in Elementary Trades, Plant and Storage related occupations and the remainder seeking employment in Sales occupations.

12.96 Data from the ONS, 2019 BRES, identifies that there are 11,500 people working in the Study Area which represents 14% of people working in the CDC area (85,000 people). The BRES data excludes those who are self-employed, government-supported trainees and HM Forces. Table 12.13 provides a breakdown of the industries people are working within in the Study Area, the CDC area and England.

Table 12.13: Percentage of the Workforce (workplace-based) by Industrial Structure

Industry	Study Area	CDC Area	England
Wholesale (Part G)	16%	6%	4%
Retail (Part G)	12%	13%	9%
Manufacturing (C)	11%	11%	8%
Professional, scientific & technical (M)	8%	8%	9%
Education (P)	8%	6%	8%
Accommodation & food services (I)	7%	6%	7%
Health (Q)	5%	9%	12%
Business administration & support services (N)	5%	13%	9%
Transport & storage (inc postal) (H)	4%	4%	5%
Information & communication (J)	4%	3%	4%
Construction (F)	4%	5%	5%
Arts, entertainment, recreation & other services (R,S,T and U)	4%	4%	5%
Motor trades (Part G)	3%	4%	2%
Public administration & defence (O)	3%	4%	4%
Property (L)	1%	2%	2%
Financial & insurance (K)	1%	1%	3%
Mining, quarrying & utilities (B,D and E)	0%	1%	1%
Agriculture, forestry & fishing (A)	0%	1%	1%
Total	100%	100%	100%

Source: ONS, 2019 BRES [downloaded from NOMIS 11 March 2021]

All figures have been rounded and may not sum.

12.97 Table 12.13 shows that within the Study Area there are a comparatively high proportion of employees working in wholesale (16%) in comparison to the CDC area (6%) and England

(4%). The retail sector is also an important industry within the Study Area accounting for 12% of all employment, broadly comparable to the average for the CDC area (13%).

12.98 The BRES data has identified that there is a construction workforce, significant in size, already working within proximity of the Site, with the number of people working in the construction industry totalling 4,000 in the CDC area, of which 475 are working in the Study Area.

Data from the 2011 Census reveals that 58% of residents in the CDC area that are in employment, also work in the CDC area and of those, 12% work from home. The remaining 42% of residents in the CDC area commute to employment outside the CDC area, including: Oxford (13%); West Oxfordshire (3%); Oxford (3%) and South Northamptonshire (3%).

Open/Play Space

12.99 Reference to OS Open Greenspace identifies the provision of open/play space within proximity of the Site as illustrated on Figure 12.7. Table 12.14 provides detail of the existing open/play space, indicating the distance of the provision from the Site alongside the required distance based on CDC's accessibility standards presented earlier in the chapter in Table 12.1.

Table 12.14: Existing Open/Play Space Provision within 1200m of the Site

Location on Figure 12.7	Name	Description	Radial Catchment from Site (m)	CDC Standard (m)	Meets CDC standard
1	Play Space at Charlotte Avenue	Play Space	400	400	Yes
2	Springfield Road	Public Park Or Garden	800	400	No
3	Bicester Play Area 15	Play Space	800	400	No
4	Bicester Play Area 14	Play Space	800	400	No
5	Bicester Play Area 17	Play Space	800	400	No
6	Bicester Play Area 16	Play Space	800	400	No
7	Bicester Play Area 13	Play Space	800	400	No
8	Sheen Close	Playing Field	800	800	Yes
8	Sheen Close Play Park	Play Space	800	400	No
8	Sheen Close	Other Sports Facility	800	800	Yes
9	Bicester Play Area 7	Play Space	800	400	No
9	Bure Park Nature	Public Park Or Garden	800	400	No

Location on Figure 12.7	Name	Description	Radial Catchment from Site (m)	CDC Standard (m)	Meets CDC standard
9	Bure Park Playing Field	Playing Field	800	800	Yes
10	Bicester Play Area 12	Play Space	800	400	No
11	Cranesbill Play Park	Play Space	1,200	400	No
12	Southwold	Public Park Or Garden	1,200	400	No
12	Southwold Play Area	Play Space	1,200	400	No
13	Bicester Play Area 19	Play Space	1,200	400	No
14	Bicester Play Area 11	Play Space	1,200	400	No
15	Bicester Play Area 21	Play Space	1,200	400	No
16	Bicester Play Area 33	Play Space	1,200	400	No
17	Bicester Play Area 22	Play Space	1,200	400	No
18	Bicester Play Area 18	Play Space	1,200	400	No
19	Bicester Play Area 40	Play Space	1,200	400	No
20	Bicester Play Area 8	Play Space	1,200	400	No
21	Bicester Play Area 10	Play Space	1,200	400	No
22	Bicester Play Area 9	Play Space	1,200	400	No
23	Bicester Play Area 28	Play Space	1,200	400	No
24	Bicester Play Area 31	Play Space	1,200	400	No
25	Bicester Play Area 30	Play Space	1,200	400	No
26	Bicester Play Area 27	Play Space	1,200	400	No
27	Bicester Play Area 35	Play Space	1,200	400	No
28	Bicester Play Area 29	Play Space	1,200	400	No
29	Bainton Road Allotments	Allotments	1,200	800	No
29	Bainton Road	Public Park Or Garden	1,200	400	No
29	Bainton Road Play Space	Play Space	1,200	400	No

Source: OS Open Greenspace

12.100 Figure 12.7 and Table 12.14 demonstrate that there is range of formal open/play space provision within 1.2km of the Site. However, the distance of such provision from the Site is beyond the CDC accessibility standard. There is only one area of play space (Charlotte Avenue) that meets CDC accessibility standard from the Site (within 400m) and three areas of outdoor sports provision that meet CDC accessibility standard (within 800m). This demonstrates that there is limited formal open/play space provision within proximity of the Site that meets CDC's accessibility standards.

Likely Significant Effects

Construction Phase

Effects on Employment

12.101 The construction phase of the Development will generate jobs across all construction disciplines from ground workers to construction management. Populating the LFT with the assumptions set out earlier in this chapter in the assessment methodology section, it is anticipated that the Development will produce employment for an average of 133 (FTE) workers per month, on-Site, over the 60-month construction period.

12.102 In addition to jobs created as a direct effect of the construction and management of the Development, further indirect employment (off-site) will be experienced as a result of the spin-off and multiplier effects. It is calculated that there will be a further 129 indirect jobs created off-site during the construction phase (=133 direct jobs x 0.97 ONS Type 1 multiplier).

12.103 In the context of the construction workforce in the CDC area currently (4,000 workers) as identified in the baseline assessment, the Development is considered to have a temporary, minor beneficial effect on employment during the construction phase at the Borough level, providing employment for workers in the CDC area.

Effects on Wider Human Health

12.104 The Development has the potential for adverse construction impacts on wider human health, including those resulting from dust, traffic emissions and noise. Chapters 7 (Air Quality) and 8 (Noise and Vibration) have each identified the potential effects on the local area during the construction phase. Chapter 7 Air Quality, of the ES identified effects of the Development, as a result of dust and vehicle/plant exhaust emissions, during construction. Predicted effects during construction are expected to be negligible. The risk of the potential impacts on human

health receptors would be minimised or prevented during construction. It should be noted that the effects from dust have only been determined with mitigation in place, which is in accordance with Air Quality Management guidance^{xxxii}.

12.105 Chapter 8 Noise and Vibration identified that the construction phase has the potential to temporarily increase noise at residential properties and other sensitive receptors in proximity to the Site through the operation of plant, equipment and an increase in Heavy Goods Vehicle (HGV) usage. Predicted construction noise is expected to be moderate adverse and construction vibration is expected to be negligible, in the absence of mitigation.

12.106 Further detail on the effects of the Development on human health is included within the HIA.

12.107 Overall, the significance of effect as a result of the construction phase of the Development on human health is considered to have a minor adverse effect, in the absence of any mitigation.

Completed Development

Effects on Housing Delivery

12.108 The Development will provide up to 530 dwellings comprising a mix of size (1-bed, 2-bed, 3-bed and 4-bed) and tenures. Table 12.15 details the indicative mix of the Development's residential units.

Table 12.15: Size and type of the Development's 550 dwellings

Size	Number of units		
	Private	Affordable	Total
1-bed	35	31	66
2-bed	93	71	164
3-bed	149	49	198
4-bed	90	12	102
Total	367	163	530

12.109 30% of the Development's proposed units (163 units) will be provided as affordable units, which is in accordance with the requirements of Cherwell Local Plan (2011-2031) Policy BSC 3: Affordable Housing.

12.110 The provision of 530 dwellings will increase the Study Area's housing stock by 6.7% and the CDC area's housing stock by 0.9%.

12.111 CDC's Annual Monitoring Report 2020 identifies a need for 1,142 net additional dwelling completions per annum in the CDC area, which amounts to 22,840 additional dwellings over the Local Plan period 2011 and 2031 (Local Plan Policy BSC 1). The Development's provision of 530 dwellings will contribute 2.3% of the CDC area's total housing requirement over the plan period (22,840 dwellings) and 9.3% of the CDC area's housing requirement over the Development's 5-year construction period (5,710 dwellings = 5 x 1,142).

12.112 On the basis of the Development providing an additional 530 homes in the CDC area across a range of tenures and sizes, contributing 9.3% of CDC's housing requirement over the 5-year construction period, it is considered that the Development will provide a permanent, moderate beneficial effect on housing at the borough level.

Effects on Household Expenditure

12.113 The Development will introduce up to 530 new households to the CDC area. The new households will provide an increase in consumer spending as they use shops and services to meet their day-to-day needs.

12.114 It is calculated that the 530 new households created by the Development could generate £13.7m in commercial expenditure per annum broken down as follows:

- Annual convenience goods expenditure of £3.0m (=530 x £5,735);
- Annual comparison goods expenditure of £5.3m (=530 x £10,062); and
- Annual expenditure on leisure goods and services of £5.3m (=530 x £10,078).

12.115 Baseline conditions identified current household expenditure of £1,529.2m per annum by residents of the CDC area. The additional £13.7m expenditure per annum created by the Development would increase household expenditure in the CDC area by 0.9% and on this basis, the Development is considered to have a permanent, minor beneficial effect on household expenditure at the borough level.

Effects on Early Years Education/Childcare

12.116 The Development will provide 530 residential units, comprising a mix of tenures and sizes (as detailed in Table 12.14). Applying the OCC child yield multipliers for early years set out in Table 12.2 of this chapter, to the proposed number of residential units it is estimated that the 530 residential units will yield a need for 142 early year places (rounded up to the nearest whole number) as shown in Table 12.16.

Table 12.16: Early Years Yield from the Development

	One-bed unit	Two-bed unit	Three-bed unit	Four-bed unit	Total
Early years multiplier	0.03	0.16	0.36	0.41	n/a
Number of units	66	164	198	102	530
Early years yield	2.0	26.2	71.3	41.8	141.3

Source: OCC

12.117 Baseline conditions identified a total of nine non-domestic, registered early years and childcare providers within the Study Area that provide a total of 600 early years/childcare places.

12.118 On the basis that the number of early years places currently provided within the Study Area (600 places) is in excess of the number of early years places generated by the Development (142 places), it is considered that the Development will have a negligible effect on early years education/childcare at the local level for which mitigation is not required.

Effects on Primary Education

12.119 Applying the OCC child yield multipliers for primary education set out in Table 12.2 of this chapter, to the Development's proposed 530 residential units by size (refer to Table 12.14), it is estimated that the Development will yield a need for 158 primary school places (rounded up to the nearest whole number) as detailed in Table 12.17.

Table 12.17: Primary Education Yield from the Development

	One-bed unit	Two-bed unit	Three-bed unit	Four-bed unit	Total
Primary multiplier	0.00	0.17	0.39	0.51	n/a
Number of units	66	164	198	102	530
Primary yield	0.0	27.9	77.2	52.0	157.1

Source: OCC

12.120 Baseline conditions identified a current surplus of 523 primary school places across the three primary school planning areas assessed (Bicester North Town Primary Planning Area, Bicester South West Primary Planning Area and Bicester South East Primary Planning Area). However, DfE forecasts indicate the by 2023/24 there will be a surplus of 1,114 primary school places in three primary planning areas combined.

12.121 On the basis that the number of primary school places required by the Development (158 places) could be accommodated within the forecast surplus capacity of places within the three primary planning areas nearest to the Site, it is considered that the Development will have a

negligible effect on primary education at the local level for which mitigation is not required.

Effects on Secondary Education

12.122 Applying the OCC child yield multipliers for secondary education set out in Table 12.2 of this chapter, to the Development's proposed 530 residential units by size (refer to Table 12.14), it is estimated that the Development will yield a need for 96 secondary school places (rounded up to the nearest whole number) as detailed in Table 12.18.

Table 12.18: Secondary Education Yield from the Development

	One-bed unit	Two-bed unit	Three-bed unit	Four-bed unit	Total
Secondary multiplier	0.00	0.09	0.23	0.35	n/a
Number of units	66	164	198	102	530
Secondary yield	0.0	14.8	45.5	35.7	96.0

Source: OCC

12.123 Baseline conditions identified a current surplus of 358 secondary school places within the Bicester Secondary Planning Area. However, DfE forecasts indicate the by 2025/26 there will be a surplus of 651 secondary school places within this planning area.

12.124 On the basis that the number of secondary school places required by the Development (96 places) could be accommodated within the forecast surplus capacity of places within the Bicester Secondary Planning Area, it is considered that the Development will have a negligible effect on secondary education at the local level for which mitigation is not required.

Effects on GP Provision

12.125 The Development will provide up to 530 residential units. Applying the projected average household size for the CDC area of 2.45 persons per household (as established within the baseline conditions), to the Development's 530 dwellings, suggests that the Development could provide homes for up to 1,299 people.

12.126 As outlined earlier in this chapter, to assess a worst-case, it is assumed that all 1,299 people residing in the Development will be new to the area and therefore will need to register with a local GP. On this basis, the Development is expected to create a need for 1,299 additional GP places.

12.127 Baseline conditions identified that there are three GP practices operating within the Study Area, all of which are currently operating over-capacity when assessed against the HUDU

standard of 1 GP for every 1,800 patients. However, reference to NHS Choices (as of 11 March 2021) identified that all three GP practices are accepting new patient registrations.

12.128 Nonetheless, it is considered that there is not capacity within the existing GP provision to accommodate an additional 1,299 patients and on this basis the Development would have an adverse effect on GP provision at the local level. The significance of effect is considered minor given the Development's population would require an additional 0.7 FTE GPs based on the HUDU standard of 1 GP for 1,800 patients. A minor adverse effect is not considered significant and therefore mitigation is not required.

Effects on Dentist Provision

12.129 The Development could provide homes for up to 1,299 people and it is assumed that all 1,299 people residing in the Development will be new to the area and therefore will need to register with a dentist (worst-case).

12.130 Baseline conditions identified that four of the nine dental surgeries located within the Study Area are accepting new NHS patients. On this basis, it is assumed that there is capacity within the existing dentist provision.

12.131 Given that there is capacity within the existing dentist provision in the Study Area, it is considered that the Development will have a negligible effect on dentist provision at the local level and therefore mitigation is not required.

Effects on Wider Human Health

12.132 The Development Parameters (Schedule and Plans) have been designed to enhance the existing green infrastructure of the Site and provide new areas of multi-functional green space within a short distance of all proposed residential dwellings. The Development will improve public access across the Site and to the surrounding areas, through the provision of a pedestrian and cycle connection zone across the Site. This will promote active lifestyles, through the provision of amenity and recreational open space on the Site, which is well connected. These are important for physical and mental health and wellbeing. Open spaces within the Development will be accessible to neighbouring residents and the links between the Site and surroundings will allow new and existing residents to integrate and make for an inclusive community.

12.133 The operational phase of the Development will not result in high levels of noise that would

adversely impact on mental health and overall quality of life. Chapter 8 Noise and Vibration of the ES concludes that the increase in road traffic volume from the Development would result in moderate adverse effects of noise and road traffic noise on existing receptors in the immediate vicinity of the Site. Chapter 7 Air Quality concludes that the change in pollutant concentrations resulting from the operational phase of the Development, such as through traffic emissions, will be negligible.

12.134 The Development will integrate the proposed routes to existing Public Rights of Way (PRoWs) in the surrounding area, which will improve linkages for pedestrians and cyclists through the Site and connect to the wider area. The level of cycle parking provision will be developed through future reserved matters applications, however, the Development will include cycle parking facilities. The cycle access connections and cycle parking spaces would have wider human health benefits, increasing the number of cyclists in the area and facilitating safer cycling.

12.135 As well as green space provision and improved access and linkages for pedestrians and cycles using the Development, the provision of equipped and non-equipped play areas and allotments, as part of the Development (refer to ES Chapter 3 and Development Parameters Schedule) would also have beneficial effects on wider human health, improving social and mental aspects of health, in particular. The Development will consist of high-quality dwellings designed around green space and new planting. Furthermore, the proposals include affordable housing provision to address local need.

12.136 The Development will enhance the opportunities already existing on the Site and improve the physical environment. Through the provision of open space areas on the Site, this will make it more of an attractive area for the surrounding communities to use and improve the quality of life for the existing and new residents. It will positively contribute to the health of the residents within the Development and the surrounding area.

12.137 On the basis of the above, the wider health effects are considered to be minor beneficial as a result of the Development. Further detail on the effects of the Development on human health is included within the HIA.

Effects on Employment

12.138 The Development does not provide any direct employment opportunities. However, applying the proportion of residents in the CDC area (51%) that are in employment, as identified in the baseline conditions, to the Development's future population (1,299 people), it is calculated that 662 of the Development's population will be in employment. Baseline conditions

identified that there are currently 76,600 CDC area residents in employment. An additional 662 employed residents created by the Development will increase resident-based employment by 0.9%.

12.139 Baseline conditions also identified that of those CDC area residents in employment, 12% work from home. Therefore, of the 662 residents of the Development who are estimated to be in employment, it is calculated that 79 of them will work from home.

12.140 On the basis that the Development will increase resident-based employment in the CDC area by 0.9%, some of whom will work in positions created by the Exemplar Site, and a further 79 who will work from home, it is considered that the Development will have a permanent, minor beneficial effect on employment on the local level.

Effects on Open/Play Space

12.141 As identified earlier in this chapter, the Development will provide homes for an additional 1,299 people. Table 12.19 details the open space requirements to support a population of 1,299 people through application of CDC's open space quantity standards set out earlier in this chapter in Table 12.1.

Table 12.18: The Development's Open Space Requirement and Provision

Type of provision	Quantitative Standard (hectares per 1,000 population)	Development Requirement (hectares to support 1,299 people)	Development Provision (hectares)
Play space (combining provision for younger and older children including MUGAs)	0.78	1.01	1.10
Outdoor sports provision (combining tennis courts, bowling greens, golf courses and playing pitches - to be accompanied by changing facilities where appropriate)	1.13	1.47	-
Allotments	0.37	0.48	0.50
General green space (parks and gardens / semi-natural green space / amenity green space)	2.74	3.56	8.51
Total		6.52	10.11

- 12.142 The Development will provide at least 40% green space (which equates to at least 9.5ha) provision on-Site which is in excess of the requirement according to CDC standards (6.52 hectares).
- 12.143 The Development's open space provision incorporates play space to the required standard, allotments to the required standard and general green space in excess of the required standard. The Development is not providing any outdoor sports provision on-Site. However, outdoor sports provision is being delivered elsewhere within the North West Bicester Eco-Town in accordance with the SPD framework, which can be utilised by the Development's future population.
- 12.144 Given that the Development's overall quantum of open/play space (at least 40% which equates to at least 9.5ha) is significantly in excess of the requirement of 6.52 ha to support the Development's population as presented in Table 14.21, it is considered that the Development will have a permanent, major beneficial effect on open space at the local level.

Mitigation Measures

Construction Phase

- 12.145 No significant adverse effects have been identified during the construction phase and therefore no mitigation is required.
- 12.146 A minor adverse effect on wider human health has been identified during the construction phase, which is not considered significant and therefore mitigation is not required. However, as set out in Chapters 7 (Air Quality) and 8 (Noise and Vibration), during construction, best practice measures to reduce noise, dust and emissions to air from construction activities, traffic and plant will be implemented through the Construction Environmental Management Plan (CEMP) and Construction Traffic Management Plan that will be agreed with CDC and secured by an appropriate planning condition prior to the commencement of works. This will reduce adverse effects on human health arising as a result of construction.

Completed Development

- 12.147 A minor adverse effect on GP provision has been identified during the completed development phase, which is not considered significant and therefore mitigation is not required.
- 12.148 No mitigation measures are required in respect of housing, household expenditure, early years education/childcare, primary education, secondary education, dentist provision, wider human

health, employment or open/play space as effects have been assessed as negligible or beneficial.

Residual Effects

Construction Phase

12.149 This assessment has identified that the Development is not expected to result in any significant adverse effects during the construction phase. The residual effect on employment therefore remains minor beneficial. Predicted concentrations of noise, dust and emissions during construction will have a negligible effect on human health with mitigation measures implemented.

Completed Development

12.150 This assessment has identified that the Development is not expected to result in any significant adverse effects during the operational phase. Therefore, the residual effect on housing remains moderate beneficial at the borough level; household expenditure remains minor beneficial at the borough level; early years education/childcare remains negligible at the local level; primary education remains negligible at the local level; secondary education remains negligible at the local level; GP provision remains minor adverse (not significant) at the local level; Dentist provision remains negligible at the local level; wider human health remains minor beneficial at the local level; employment remains minor beneficial at the local level; and open/play space remains major beneficial at the local level.

Cumulative Effects

12.151 Consideration has been given to the committed developments described within Chapter 2 EIA Methodology of the ES for the potential to have likely significant cumulative effects on the environment when combined with the Development.

Construction Phase

Effects on Employment

12.152 Construction of the committed developments will generate employment across all construction disciplines from ground workers to construction management. It is not possible to quantify the cumulative effect of employment generation because details of the number jobs during the construction phase is not available in the publicly accessible planning application material.

Furthermore, it is not known whether the construction phases of the committed developments overlap. To provide a 'worst case' assessment for construction employment, it is assumed that they do not overlap and therefore the same construction workforce could work on the Development and each of the committed developments. On this basis, it is considered that the committed developments and the Development combined will provide a temporary, minor beneficial effect on employment during the construction phase at the borough level, the same as was assessed for the Development in isolation.

Effects on Wider Human Health

12.153 It is assumed that each committed development will have a CEMP in place to put in prevention methods to control pollution incidents, dust generated and noise generated from both road traffic and construction plant. Therefore, it is considered that the committed developments and the Development will generate a negligible effect.

Completed Development

Effects on Housing

12.154 In total, the committed developments are estimated to deliver up to 5,834 dwellings in addition to the 530 units provided as part of the Development. The addition of up to 6,364 units will provide 28% of CDC's housing requirement over the period 2011 to 2031. On this basis, it is considered that the committed developments and the Development combined will provide a permanent, major beneficial effect on housing at the borough level for which mitigation is not required.

Effects on Household Expenditure

12.155 The addition of up to 6,364 homes by the committed developments (5,834 units) and the Development (530 units) could generate up to £164.7m in commercial expenditure per annum broken down as follows:

- Annual convenience goods expenditure of up to £36.5m (=6,364 x £5,735);
- Annual comparison goods expenditure of up to £64.0m (=6,364 x £10,062); and
- Annual expenditure on leisure goods and services of up to £64.1m (=6,364 x £10,078).

12.156 Baseline conditions identified current household expenditure of £1,529.2m per annum by residents of the CDC area. The addition of up to £164.7m expenditure per annum created by the committed developments and the Development combined will increase household

expenditure in the CDC area by up to 11%. It is therefore considered that the committed developments and the Development combined will have a permanent, major beneficial effect on local expenditure at the borough level.

Effects on Early Years Education/Childcare

12.157 The bedroom size of the committed developments 5,834 residential units is not known. For this reason, the required mix of homes according to the Oxfordshire Strategic Housing Market Assessment (SHMA) 2014^{xxxiii} has been assumed following the approach suggested in the OCC Developer Guide 2019^{xxxiv}. The SHMA identifies 15% 1-bed units; 30% 2-bed units; 40% 3-bed units and 15% 4+ bed units. Table 12.20 presents the early years yield arising from the committed developments.

Table 12.20: Early Years Yield from the Committed Developments

	One-bed unit	Two-bed unit	Three-bed unit	Four-bed unit	Total
Early years multiplier	0.03	0.16	0.36	0.41	n/a
Number of units	875	1,750	2,334	875	5,834
Early years yield	26.3	280	840.2	358.8	1,505.3

Source: OCC

12.158 The committed developments will yield a need for 1,506 (rounded up) early years places. The Development will yield a need for 142 early years places. In total therefore, the committed developments and Development will yield a need for 1,648 early years places.

12.159 Baseline conditions identified a total of nine non-domestic, registered early years and childcare provides within the Study Area, providing a total of 600 early years/childcare places. In addition, two of the committed developments (Bicester Eco Town Exemplar Site 10/01780/HYBRID and North and South Arcade at Bicester Eco Town Exemplar Site 15/00760/F) are providing new nursery provision which will increase the number of early years/childcare places available within the Study Area. The number of places offered by these two proposed nursery facilities is not known.

12.160 On the basis of the existing early years/childcare provision that exists within the Study Area currently and the new proposed nursery facilities by two of the committed developments, it is considered that the committed developments and the Development combined will have a negligible effect on early years education/childcare at the local level for which mitigation is not required.

Effects on Primary Education

12.161 The yield of primary aged pupils arising from the committed developments has been calculated using the same assumed housing mix as detailed above for calculating the early years yield. Table 12.21 presents the resulting primary yield from applying OCC's child yield multiplier for primary education.

Table 12.21: Primary Education Yield from the Committed Developments

	One-bed unit	Two-bed unit	Three-bed unit	Four-bed unit	Total
Primary multiplier	0.00	0.17	0.39	0.51	n/a
Number of units	875	1,750	2,334	875	5,834
Primary yield	0	297.5	910.3	446.3	1,654.1

Source: OCC

12.162 The committed developments will yield a need for 1,655 (rounded up) primary school places. The Development will yield a need for 158 primary school places. In total therefore, the committed developments and the Development will yield a need for 1,813 primary school places.

12.163 Baseline conditions identified a current surplus of 523 primary school places within the three primary school planning areas assessed which is forecast to increase to a surplus of 1,114 places by 2023/24. Nonetheless, this is not sufficient to accommodate demand arising from the committed developments and the Development.

12.164 Four of the committed developments provide land for the provision of four new 2FE primary schools; Bicester Eco Town Exemplar Site (14/01384/OUT); Bicester Eco Town Exemplar Site (10/01780HYBRID); Himley Village (14/02121/OUT); and Land Adj to Bicester Road and South West of Avonbury Business Park (14/01641/OUT). The provision of four 2FE primary schools will provide a total of 1,680 additional primary school places.

12.165 The additional places created by the four new primary schools being delivered by the committed developments and the forecast surplus of places within the existing primary schools, will provide sufficient places to accommodate demand arising from the committed developments and the Development (1,813 places). On this basis, it is considered that the committed developments and the Development combined will have a negligible effect on primary education at the local level for which mitigation is not required.

Effects on Secondary Education

12.166 The yield of secondary aged pupils arising from the committed developments has been calculated using the same assumed housing mix as detailed above for calculating the early years yield. Table 12.22 presents the resulting secondary yield from applying OCC's child yield multiplier for secondary education.

Table 12.22: Secondary Education Yield from the Committed Developments

	One-bed unit	Two-bed unit	Three-bed unit	Four-bed unit	Total
Secondary multiplier	0.00	0.09	0.23	0.35	n/a
Number of units	875	1,750	2,334	875	5,834
Secondary yield	0	1,575	536.8	306.3	2,418.1

Source: OCC

12.167 The committed developments will yield a need for 2,419 (rounded up) secondary school places. The Development will yield a need for 96 secondary school places. In total therefore, the committed developments and the Development combined will yield a need for 2,515 secondary school places.

12.168 Baseline conditions identified a current surplus of 358 secondary school places within the Bicester Secondary planning area which is forecast to increase to a surplus of 651 places by 2025/26. Nonetheless, this is not sufficient to accommodate demand arising from the committed developments and the Development.

12.169 However, one of the committed developments (Land Adjacent to Bicester Road and South West of Avonbury Business Park (14/01641/OUT)) is providing land to accommodate a new 8FE secondary school. An 8FE secondary will provide 1,200 additional secondary school places.

12.170 Although there is forecast to be a surplus of 651 secondary school places within the Bicester Secondary planning area and the delivery of a new 8FE secondary school will provide a further 1,200 additional secondary school places, this will still not be sufficient to accommodate the cumulative demand for secondary school places arising from the committed developments and the Development combined.

12.171 On this basis, it is considered that there will be a moderate adverse cumulative effect on secondary education at the local level for which mitigation is required.

12.172 It is assumed that each of the committed developments will mitigate the impact of their own

development in the form of a financial contribution via S106/CIL and following mitigation, the residual effect on secondary education will be negligible.

Effects on GP Provision

12.173 Assuming that all residents of the new homes provided by the committed developments and the Development are new to the area and not already registered with a GP (a worst-case scenario), the committed developments 5,834 homes and the Development's 530 homes generate new demand for 15,592 GP places (=6,364 homes x 2.45 average household size for the CDC area).

12.174 Baseline conditions established that there is currently no capacity in the existing GP provision within the Study Area when assessed against the HUDU standard of 1 GP for every 1,800 patients and therefore there is no capacity to accommodate demand arising from the committed developments and the Development.

12.175 Whilst four of the committed developments propose the provision of new social and community facilities, it is unknown whether a medical facility is intended. Because it is unknown, the worst-case assessment is to assume that a medical facility will not be delivered.

12.176 The committed developments and the Development's population (15,592 people) will require an additional 8.7 FTE GPs. On this basis, it is considered that there will be a major adverse cumulative effect on GP provision at the local level for which mitigation is required.

12.177 It is assumed that each of the committed developments will mitigate the impact of their own development in the form of a financial contribution via S106/CIL and following mitigation, the residual effect on GP provision will be negligible.

Effects on Dentist Provision

12.178 It is assumed that all 15,592 people residing in the committed developments and the Development will also need to register with a local dentist.

12.179 Baseline conditions established that there are nine dentists currently operating within the Study Area and only four are accepting new NHS patients.

12.180 Whilst there is limited capacity within the existing dentist provision, it is not considered that there is sufficient capacity to accommodate cumulative demand arising from the committed developments and the Development.

12.181 On this basis, it is considered the committed developments and the Development combined will have a moderate adverse effect on dentist provision at the local level for which mitigation is required. It is assumed that each of the committed developments will mitigate the impact of their own development in the form of a financial contribution via S106/CIL and therefore following mitigation, the residual effect on dentist provision will be negligible.

Effects on Wider Human Health

12.182 It is assumed that each of the committed developments will be designed to a high-quality, making the best use of the land to create healthy, vibrant developments that will benefit the local area for where the Site and sites of the committed developments are located. Therefore, the cumulative effect on wider human health will be minor beneficial.

Effects on Employment

12.183 A large number of employment opportunities will be created by the committed developments through the provision of commercial and community floorspace. Furthermore, the additional resident population created by the committed developments and the Development will increase resident-based employment in the CDC area. It is calculated that of the 15,592 people expected to reside in the committed developments and the Development, 7,952 of these residents will be in employment (and of those, 954 are expected to work from home) increasing resident-based employment in the CDC area by 10%. On this basis, it is considered that the committed developments and the Development combined, will have a major-beneficial cumulative effect on employment at the borough level for which mitigation is not required.

Effects on Open/Play Space Provision

12.184 The committed developments and the Development's 6,364 units combined are expected to provide homes for an additional 15,592 people. Based on CDC's open space quantity standards set out earlier in this chapter in Table 12.1 a total of 78.3 hectares of open space is required to support the additional 15,592 residents of the committed developments and the Development.

12.185 The Development is providing at least 40% (which equates to at least 9.5ha) of open/play space provision. Furthermore, the description of development for the committed developments also refers to open space and landscaping although the exact quantum of open space that the committed developments are providing is unknown.

12.186 Nonetheless, given the committed developments and the Development are providing new areas of open/play space within the context of limited existing open/play provision as identified in the baseline conditions (refer also to Figure 12.7), it is considered that there will be a negligible cumulative effect on open/play space at the local level for which mitigation is not required.

Summary

12.187 An assessment has been made of the likely significant effects of the Development during the construction and operational phase in respect of issues related to the population; particularly the impact on housing delivery, household expenditure, early years education/childcare, primary education, secondary education, GP services, dentist provision, wider human health, employment and open/play space.

12.188 The Site currently comprises no residential or employment uses.

12.189 Construction of the Development will create an average of 133 FTE jobs per month on-Site across all construction disciplines from ground workers to construction management over the 60-month construction period. A further 129 FTE jobs per month will also be created off-Site through supply chain linkages. In the context of 4,000 construction workers in the CDC area currently, the Development is considered to have a temporary, minor beneficial effect on employment at the borough level.

12.190 The Development will have a negligible effect on wider human health with mitigation measures implemented during construction.

12.191 The Development will deliver up to 530 homes which will contribute 9.3% of CDC's housing requirement over the 5-year construction period and therefore will have a permanent, moderate beneficial effect on housing at the borough level.

12.192 The 530 new households created by the Development will generate £13.7m in commercial expenditure per annum, increasing household expenditure from the CDC area by 0.9%. On this basis, the Development will have a permanent, minor beneficial effect on local expenditure at the borough level.

12.193 The Development's future population will generate a need for 142 early years education places. Assessment has identified that there are nine providers of non-domestic, registered early years and childcare providers within the Study Area that provide a total of 600 places.

Given that the number of early years places available in the Study Area is in excess of the number of early years places generated by the Development, the Development will have a negligible effect on early years education/children at the local level.

12.194 The Development's future population will generate a need for 158 primary school places. Assessment has identified that there is forecast to be surplus of primary school places within the existing primary school provision that is sufficient to meet the needs arising from the Development. On this basis, it is considered that the Development will have a negligible effect on primary education at the local level.

12.195 The Development will generate a need for 96 secondary school places. Assessment has identified that there is forecast to be surplus of secondary school places within the existing secondary school provision that is sufficient to meet the needs arising from the Development. On this basis, it is considered that the Development will have a negligible effect on secondary education at the local level.

12.196 The Development is estimated to have a population of 1,299 people. It is assumed that all residents of the Development will need to register with a local GP and dentist. Assessment has identified that there is no capacity within the existing GP provision and on this basis the Development would have a minor adverse effect on GP provision at the local level, which is not considered significant and therefore no mitigation is required. Assessment has identified that there is capacity within the existing dentist provision to accommodate demand arising from the Development and therefore the Development will have a negligible effect on Dentist Provision, at the local level.

12.197 The wider human health effects of the Development are taken into consideration through the Development design and are considered to be minor beneficial effects. Through the provision of multi-functional green space, play areas and allotments on the Site, which are designed with the health and wellbeing of residents of all ages and abilities in mind, this will make for an attractive area for the surrounding communities to use. The Development will improve the quality of life for the existing residents and positively contribute to the health of the residents within the Development and the surrounding area.

12.198 Whilst the Development does not provide any direct employment opportunities, it is estimated that 662 of the Development's resident population will be in employment increasing resident-based employment in the CDC area by 0.9%. Some of the Development's future residents will work in positions created by the Exemplar Site and a further 79 of the Development's residents are expected to work from home. On this basis, it is considered that the Development will have a permanent, minor beneficial effect on employment at the local level.

12.199 The Development will incorporate at least 40% green space (which equates to at least 9.5ha) provision across the Site, which is significantly in excess of the requirement of 6.52 ha to support the Development's population based on CDC's open space quantity standards. On this basis, it is considered that the Development will have a permanent, major beneficial effect on open space at the local level.

12.200 Table 12.23 contains a summary of the likely significant effects of the Development.

Table 12.23: Table of Significance – Population and Human Health

Potential Effect	Nature of Effect (Permanent/Temporary)	Significance (Major/Moderate/Minor) (Beneficial/Adverse/Negligible)	Mitigation / Enhancement Measures	Geographical Importance*							Residual Effects (Major/Moderate/Minor) (Beneficial/Adverse/Negligible)
				I	UK	E	R	C	B	L	
Construction											
Employment	Temporary	Minor beneficial	None Required							X	Minor beneficial
Wider Human Health	Temporary	Minor adverse	Effects would be localised and temporary and controlled using measures set out in the Construction Environmental Management Plan (CEMP).							X	Negligible
Completed Development											
Housing	Permanent	Moderate beneficial	Not required							X	Moderate beneficial
Household Expenditure	Permanent	Minor beneficial	Not required							X	Minor beneficial
Early Years Education/childcare	Permanent	Negligible	Not required							X	Negligible
Primary Education	Permanent	Negligible	Not required							X	Negligible
Secondary Education	Permanent	Negligible	Not required							X	Negligible
GP Provision	Permanent	Minor adverse	Not required							X	Minor adverse
Dentist Provision	Permanent	Negligible	Not required							X	Negligible
Wider Human Health	Permanent	Minor beneficial	None required							X	Minor beneficial
Employment	Permanent	Minor beneficial	None required							X	Minor beneficial
Open Space	Permanent	Major beneficial	Not required							X	Major beneficial
Cumulative Effects											
<i>Construction</i>											
Employment	Temporary	Minor beneficial	None Required							X	Minor beneficial
Wider Human Health	Temporary	Minor adverse	Effects would be localised and temporary and controlled using measures set out in the Construction Environmental Management Plan (CEMP).							X	Negligible
<i>Completed Development</i>											
Housing	Permanent	Major beneficial	Not required							X	Major beneficial

Potential Effect	Nature of Effect (Permanent/Temporary)	Significance (Major/Moderate/Minor) (Beneficial/Adverse/Negligible)	Mitigation / Enhancement Measures	Geographical Importance*							Residual Effects (Major/Moderate/Minor) (Beneficial/Adverse/Negligible)	
				I	UK	E	R	C	B	L		
Household Expenditure	Permanent	Major beneficial	Not required							X		Major beneficial
Early Years Education/childcare	Permanent	Negligible	Not required								X	Negligible
Primary Education	Permanent	Negligible	Not required								X	Negligible
Secondary Education	Permanent	Moderate adverse	Each development to mitigate their own impact with a financial contribution via S106/CIL payment								X	Negligible
GP Provision	Permanent	Major adverse	Each development to mitigate their own impact with a financial contribution via S106/CIL payment								X	Negligible
Dentist Provision	Permanent	Moderate adverse	Each development to mitigate their own impact with a financial contribution via S106/CIL payment								X	Negligible
Wider Human Health	Permanent	Minor beneficial	None required							X		Minor beneficial
Employment	Permanent	Major beneficial	None required							X		Major beneficial
Open Space	Permanent	Negligible	Not required								X	Negligible

* **Geographical Level of Importance**

I = International; UK = United Kingdom; E = England; R = Regional; C = County; B = Borough; L = Local

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