BIDWELLS

BABRAHAM RESEARCH CAMPUS
FIRST PROPOSALS CONSULTATION (REGULATION 18) – DEC 2021
PLANNING REPRESENTATIONS
APPENDIX 3 : SOCIO-ECONOMIC ASSESSMENT

Babraham Research Campus Ltd

December 2021

BABRAHAM RESEARCH CAMPUS
SOCIOECONOMIC ASSESSMENT

Contents

Figures and Tables

1 Introduction

1.1 Background

1.1.1 This Socioeconomic Assessment has been prepared by Bidwells LLP on behalf of Babraham Research Campus Ltd (BRCL) to understand the socioeconomic impact of their proposed expansion of the Babraham Research Campus (BRC). The Campus has grown rapidly in recent years, exhausting its supply of permitted floorspace while demand for premises benefiting from the unique services offered at BRC continues to grow.

1.1.2 This Assessment is submitted in response to the First Proposals (Regulation 18) consultation on the emerging Greater Cambridge Local Plan. The BRC is currently identified within the First Proposals consultation document, under Policy S/BRC, as a Policy Area, with a proposed policy direction to remove the developed area of the Campus from the Green Belt. (see **Figure 1.1**).

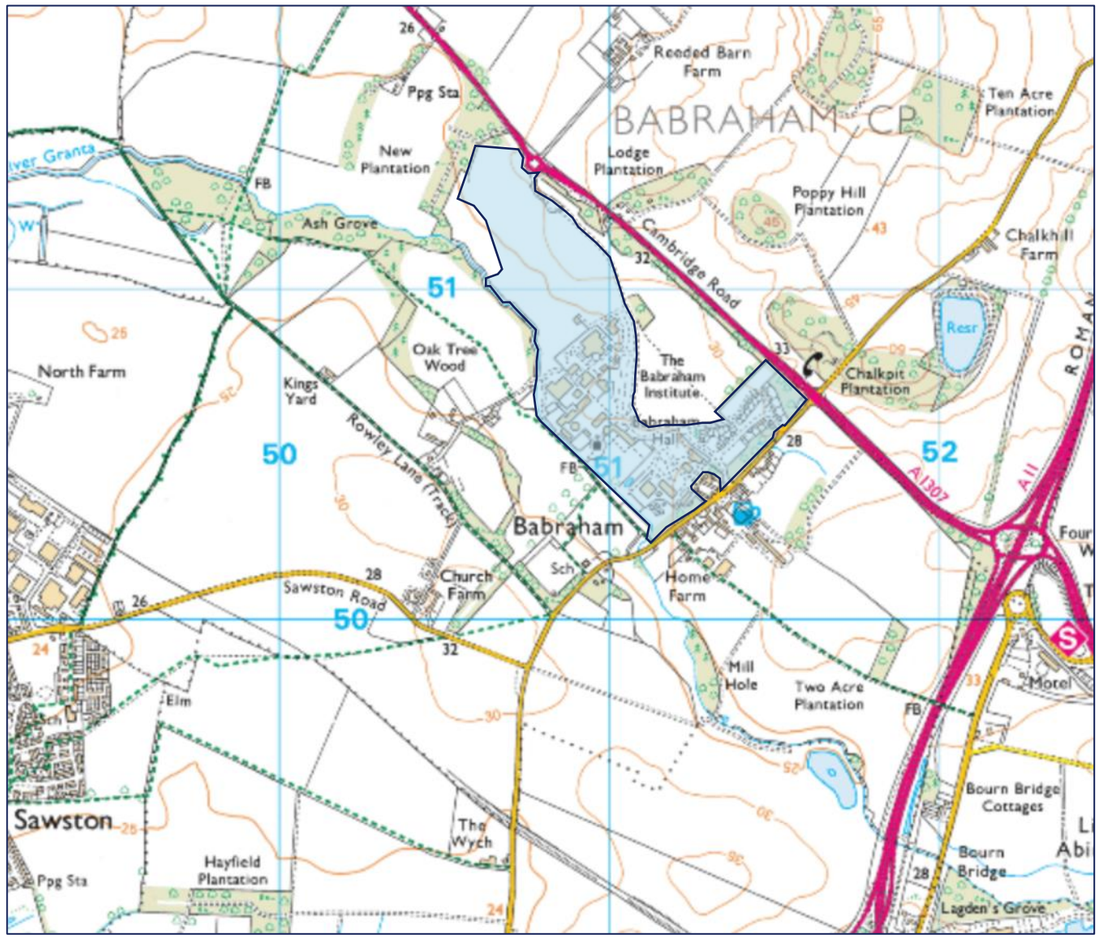
1.2 Babraham Research Campus

1.2.1 The BRC is one of the UKs leading places to support early-stage bio-science enterprise and is distinct both locally and nationally in its co-location of life-science research enterprises with world class academic research. It is home to over 60 bioscience organisations, the world renowned Babraham Institute and a community of 1800 people.

1.2.2 The BRC vision is to be one of the best places in the world for discovery bioscience research and innovation; a leading sustainable ecosystem to start, nurture, scale and grow bioscience business, benefiting our local life science cluster, the UK economy and the health challenges across the globe. However, to achieve this additional space is required for start ups, business incubation, and to enable companies to grow on as well as land for amenities and housing to support the campus community. The campus expansion will allow the life sciences sector to grow and benefit from the opportunities found at BRC.

1.2.3 Today, the Campus plays a pivotal role in the Cambridge life science ecosystem, supporting discovery bioscience, and the start-up and scale-up of entrepreneurial business. It caters for a segment of life science companies that is typically under-served UK wide; namely those in the early stage of incubation and with ambition to scale to an Initial Public Offering (IPO). The Campus provides critical bio-incubator capability along with the wider support needed – people, infrastructure and investment networks required to connect discovery to prosperity and public good.

Figure 1.1: The BRC and Babraham Institute



Indicative area to be removed from the Green Belt.

1.2.4 Fundamental to the success of the BRC is the campus' own internal ecosystem.. It is a distinct co-location of academic research and commercial bioscience enterprise, where the research community is delivering research and innovation with a shared focused on key questions in biology that resonate with the Campus' commercial community, global investors, and society more widely.

1.2.5 The purpose of campus expansion is to:

1. address the market failure in providing space for new and growing companies in the life science sector; and

2. to support local businesses and national growth objectives by enabling access to the benefits associated with operating in BRC.

1.2.6 It will extend an environment where companies can focus on developing their science and building their business in a supportive and highly networked community, helping to create new medicines, jobs and growth, and maximising the impact of UK science. Growth immediately adjacent to the current campus buildings is critical in order to expand the distinctive ecosystems which arise from the current mix of enterprises on BRC collocated with the Babraham Institute.

1.3 BRC Partners

1.3.1 Babraham Research Campus Ltd is responsible for the development and management of the Campus on behalf of its shareholders; BBSRC-UKRI and the Babraham Institute. Formed in 1996, the company was known as Babraham Bioscience Technologies Ltd. The company changed its name to Babraham Research Campus Ltd. in 2021.

1.3.2 Biotechnology and Biological Sciences Research Council (BBSRC) is part of UK Research and Innovation, a new body which works in partnership with universities, research organisations, businesses, charities, and government to create the best possible environment for research and innovation to flourish. It aims to maximise the contribution of each of its component parts, working individually and collectively. It is a major investor in world-class bioscience and supports around 1,600 scientists and 2,000 research students in universities and institutes across the UK.

1.3.3 The Babraham Institute as it exists today was established in 1993 to study the biological mechanisms underpinning human biology, health and ageing. Research on the Babraham estate dates back to the Institute of Animal Physiology established in 1948 to help the nation recover following the Second World War. The Institute is supported by strategic programme grants from the BBSRC and additional funding from research councils, the EU and charities.

1.3.4 BRC is primarily funded by the UK taxpayer through the UKRI-BBSRC and is home to such organisations as the Medical Research Council (MRC), Astra Zeneca, Cancer Research UK, BitBio, Kymab (Sanofi), Mission Therapeutics, etc. The campus is a national capability with an international reach.

1.3.5 The Institute undertakes world class life science research to generate new knowledge of biological mechanisms underpinning ageing, development and the maintenance of health. This research focuses on cellular signalling, immunology and epigenetic regulation and their impact at different stages of life. By determining how the body reacts to dietary and environmental stimuli and manages microbial and viral interactions, the Institute aim to improve wellbeing and support healthier ageing.

1.3.6 The Institute looks to maximise the impact of their research through Knowledge Exchange, Commercialisation and Public Engagement activities. This is done by collaborating with other academics, policy makers, charities, schools, the general public and industry, including companies on the BRC.

1.3.7 This has enabled the BRC to become an established community of like-minded businesses that share common objectives. Nowhere else in Greater Cambridge, or indeed the UK, has been able to create such a community, contributed to by the unique relationship between the BRC and the Institute.

1.4 The Campus Today

1.4.1 At Babraham, BRC Ltd holdings are co-located with holdings of BBSRC, the Babraham Institute, Biomed and Kadans. Between them they offer:

- **Acceleration space**: Flexible space to support to the earliest stages of life science ventures :

- ACCELERATE@BABRAHAM provides easy-access laboratory and office space, combined with additional support programmes within Moneta.
- All buildings have a degree of flexibility to provide this function.

- **Start-up space:** designed to support the early stage needs of new life-science ventures by providing easy-access laboratory and office space in units from approximately 56m^2 (600sq.ft) on short flexible lease terms::
  - Meditrina: 1,858m^2 (20,000sq.ft) of laboratory and office accommodation, divided into 20 units of approximately 93m^2 (1,000sq.ft) each and let as individual or multiple units.
  - Maia: Small laboratory and office units from approximately 53m^2 (570sq.ft).
  - Moneta: Units of approximately 56m^2 (600sq.ft) available as individual or multiple units.
  - Minerva: 1,858m^2 (20,000sq.ft) providing ideal grow-on space, designed to provide highly flexible chemistry and molecular biology laboratory and office space.
  - Building 580: 929m^2 (10,000sq.ft) of scientific and technical services facilities, offering core science services to Babraham Institute and the campus.
- **Scale-up buildings:** bespoke R&D laboratory and office space, including:
  - The Jonas Webb Building: A 1,486m^2 (16,000sq.ft) research building designed to provide highly flexible chemistry and molecular biology laboratory and office space.
  - The Eddeva Building: A 1,858m^2 (20,000sq.ft) mix of laboratory and office accommodation.
  - The Bennet Building: A 1,858m^2 (20,000sq.ft) follow-on building providing molecular biology laboratory and office areas around central core facilities. The Bennet Building is also home to Signatures café.
  - Kadans Science Partner Building : A 4,599m^2 (49,500sq.ft) laboratory and office building offering high quality bio- and chemistry laboratory facilities;
  - Biomed buildings B940/B950 comprise approximately 9,214m2 (99,180sq.ft) let to a variety of undertenants.
  - Building B960: planning consent has been given for a 3,840m2 multi tenanted office and laboratory building with associated car parks, servicing and landscaping (known as B960). The primary purpose of the building is to provide grow on space for companies already located on the Campus which are expanding. The building is flexibly designed so that it can be configured (and reconfigured) to facilitate the rapid growth of companies or smaller space requirements of start-ups, as required.
- 45 **residential properties**: 8 one and two-bed flats, 38 detached or semi-detached three and four-bed houses. All are rented from BI by tenants working with the institute and businesses on the campus.
- **Social infrastructure** within the campus buildings including a gym, catering outlets, cash point and conference facilities.
- **Outdoor open space** including sports pitches, green and blue infrastructure for other recreational activities and to hire for social events.

1.5 The Need for Development

1.5.1 Against a back drop of growing demand for space at BRC, in 2019/20 the Campus partners (the Babraham Institute, BBSRC, and BRCL) undertook a strategic review of the Campus and the opportunity for its future development. This review is built on evidence and understanding of the Campus' success to date and existing strengths as

identified in the Campus Impact Report[1].

1.5.2 The strategy[2] sets the course for the continued development of the Campus. as a highly connected, sustainable and dynamic ecosystem that creates new discoveries, therapeutics, jobs and growth to support the UK economy. Further details on the need for development are provided in Chapter 3.

1.5.3 A Campus Strategy Plan and emerging Illustrative Masterplan have been prepared to explore the opportunities and constraints for expansion at BRC. An emerging illustrative masterplan indicates four development zones for future growth of the Campus, as set out in **Figure 1.2**:

- 1. A R&D development zone, which will see a net increase in floorspace of approximately 23,440m^2 (GIA) on undeveloped land to the immediate edge of the Campus.
- 2. A R&D redevelopment zone. Overall there will be approximately 12,050m^2 (GIA) of new academic, commercial life science R&D facilities plus amenity space on previously developed land within the existing Campus. It is anticipated that this will result in a net increase in floorspace of approximately 5,430m^2 (GIA).
- 3. A housing, amenity and community zone. This will include low density redevelopment of existing Campus-linked housing to provide up to 60 new dwellings and 100 new student apartments. The existing 500m^2 nursery will be replaced by a new nursery of up to 930m^2 (GIA) and a small amount of new retail provision. Overall it is anticipated that this is anticipated to result in a net increase in non-housing floorspace of approximately 830m^2 (GIA). For the purposes of calculating employment, an indicative 350m^2 (GIA) is assumed.
- 4. A Supporting Infrastructure and Renewable Energy Zone. This will involve redevelopment of the existing farm complex to the south of the River Granta for new estate facilities accommodation to support the future management and maintenance of the Campus. This will include workshops, offices, staff facilities and storage barns. For the purposes of calculating employment, an indicative net increase in floorspace of 2,220m^2 (GIA) is assumed. This zone also includes an opportunity to allocate approximately 3.4ha of land as a potential location for renewable infrastructure.

1.5.4 The development proposals provide additional commercial space and address the issue of affordable housing for workers at BRC and requirements for associated social infrastructure to support residents and workers, The economic and social impacts of the proposals are consider in Chapters 4 and 5 of this report.

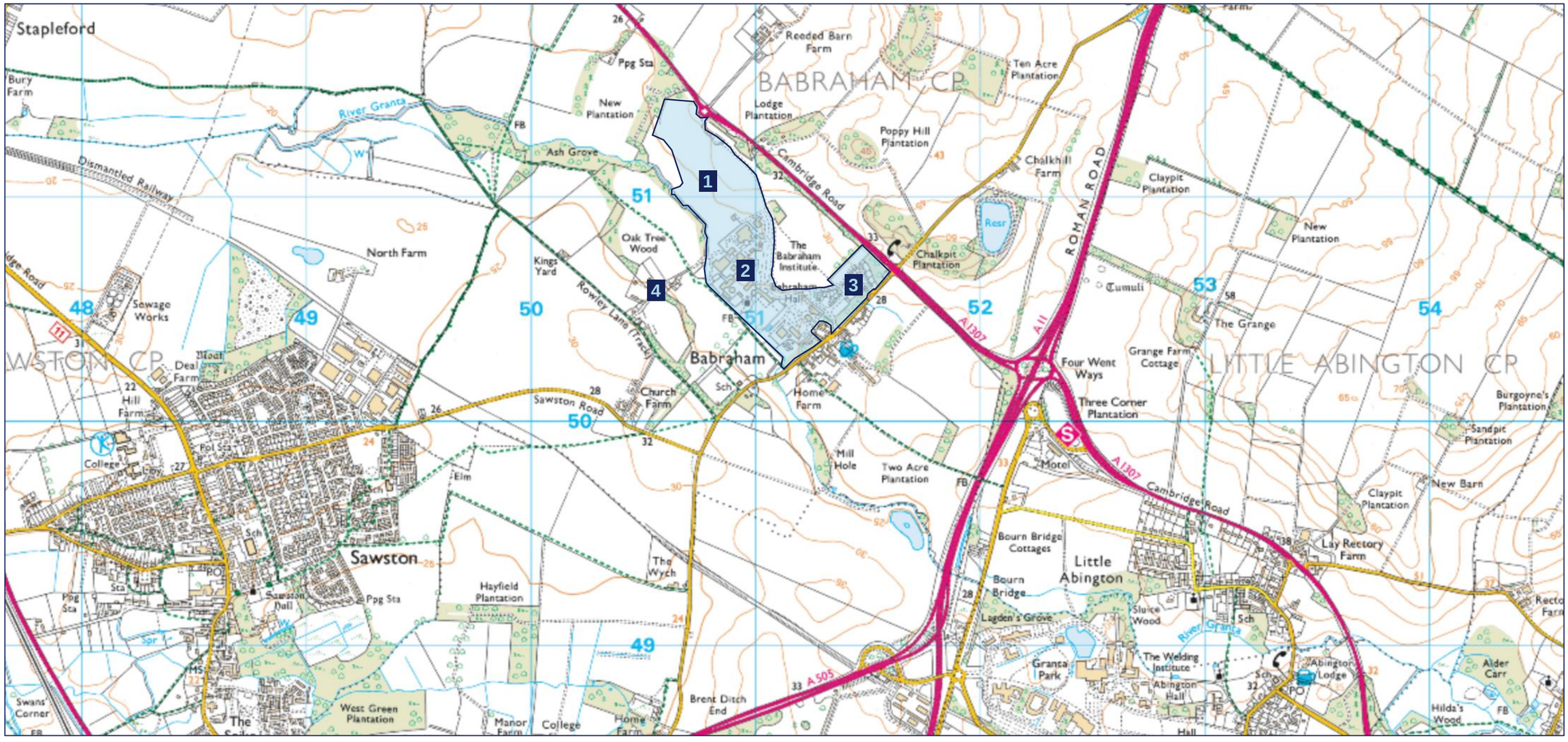
1.5.5 BRC values the health and wellbeing of workers at BRC and the wider residential community of Babraham in which campus is situated. The proposals build in a range of measures to ensure healthy living and working environments. Chapter 6 provides a summary of these health benefits.

1.5.6 Conclusions about the need for the development and its socioeconomic and health impacts are provided in Chapter 7.

1 Cambridge Economic Associates *et al*. (February 2020). Identifying, Capturing, and Demonstrating the Benefits and Impact of the Babraham Research Campus.

2 BRC Partners. (May 2021). The Babraham Research Campus Vision and Strategy.

Figure 1.2: The Proposed Development Zones



Indicative area to be removed from the Green Belt.

1. Indicative location of the proposed R&D development zone
2. Indicative location of the R&D redevelopment zone
3. Indicative location of the housing, amenity and community zone.
4. Indicative location of the supporting infrastructure and renewable energy zone

2 National and Local Policy

2.1 National Planning Policy

2.1.1 The National Planning Policy Framework (NPPF)[3] sets out the Government planning policies for England and is therefore central to this assessment. Paragraph 8 explains that to achieve sustainable development, the planning system has three interdependent objectives:

- a) **an economic objective** – 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;
- b) **a social objective** – to support 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 well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- c) **an environmental objective** – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

2.1.2 Consequently, paragraph 38 states that Local Planning Authorities (LPAs) should:

> *"… work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible."*

2.1.3 The NPPF then continues with sections on specific aspects affecting sustainable development, including paragraph 81, which states that:

> *"Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation[4], and in areas with high levels of productivity, which should be able to capitalise on their performance and potential."*

2.2 National Life Science Strategy

2.2.1 The Government's Industrial Strategy makes specific references to the Life Sciences Sector Deal:

> *"The Sector Deal will help ensure new pioneering treatments and medical technologies are produced in the UK, improving patient lives and driving economic growth. The deal involves substantial investment from private and charitable sectors and significant commitments in research and development from the government.*
>
> *The life sciences sector is highly productive and export focused, generating £64bn of turnover and employing more than 233,000 scientists and staff. The UK is home to world-leading businesses such as GSK and AstraZeneca, a strong small and medium-*

3 MHCLG. (July 2021). National Planning Policy Framework.

4 *"The Government's Industrial Strategy sets out a vision to drive productivity improvements across the UK, identifies a number of Grand Challenges facing all nations, and sets out a delivery programme to make the UK a leader in four of these: artificial intelligence and big data; clean growth; future mobility; and catering for an ageing society. HM Government (2017) Industrial Strategy: Building a Britain fit for the future."*

sized business sector, major health charities such as the Wellcome Trust and Cancer Research UK, and the globally-admired NHS."

2.2.2 Building upon the sector deal, the Government's Life Science Strategy[5] recognises that the UK is the European leader in life science research. The latest indicators show that the UK continues to perform well but has more to do to compete with the US and emerging economies.

2.2.3 The Life Science Strategy addresses a series of challenges under five key themes:

- Science: Continued support for the science base, maintaining strength and international competitiveness.
- Growth: An environment that encourages companies to start and grow, building on strengths across the UK, including expansion of manufacturing in the sector.
- NHS: NHS and industry collaboration, facilitating better care for patients through better adoption of innovative treatments and technologies.
- Data: Making the best use of data and digital tools to support research and better patient care.
- Skills: Ensuring that the sector has access to a pool of talented people to support its aims through a strong skills strategy.

2.2.4 In particular, to facilitate growth, the Strategy recommends that:

"Government, local partners and industry should work together to ensure the right infrastructure is in place to support the growth of life sciences clusters and networks."

2.2.5 Earlier this year the Government published its future vision for the life science sector[6]. Building on the previous Strategy, this document states that:

"The collective ambition of the Government and the Sector is for the UK to build on the scientific successes and ways of working from COVID-19 to tackle future disease challenges – silent pandemics – including cancer, obesity, dementia, ageing; securing jobs and investment and becoming the leading global hub for Life Sciences."

2.2.6 As part of this, the Government intends to work with the Sector to:

"Establish a Life Science Scale Up Taskforce to drive progress on the ease with which Life Science companies can start, grow, and scale up in the UK. This will consider and develop recommendations on issues that inhibit scale-up and growth, identified through the development of the Vision, as well as the recommendations of the Productive Finance Working Group (which is due to report later this year) in the context of the Life Sciences industry."

2.2.7 Clearly a lack of suitable floorspace can significantly inhibit scale-up and growth.

2.2.8 Specifically in relation to the Babraham Institute's focus on ageing, the document sets out an overarching objective to:

"…understand the pathways associated with multisystem ageing and to utilise these to discover new diagnostics, therapeutic and medtech interventions."

2.3 Local Planning Policy

2.3.1 At the local authority level the development plan for the site comprises the South Cambridgeshire Local Plan[7]. While the emerging Greater Cambridge Local Plan will replace this, the currently adopted Local Plan provides a good understanding of the importance of the life science sector to the City and District.

2.3.2 Policy S/2 makes clear that the local economy, particularly in terms of research and

5 Office for Life Sciences. (August 2017). Life Sciences: Industrial Strategy.
6 UK Government. (July 2021). Life Sciences Vision.
7 South Cambridgeshire District Council. (September 2018). Adopted Local Plan.

development, is paramount as the first objective of the Local Plan:

> *"To support economic growth by supporting South Cambridgeshire's position as a world leader in research and technology based industries, research, and education; and supporting the rural economy."*

2.3.3 Paragraph 8.4 states that (emphasis added):

> *"Recent evidence suggests that the local high-tech cluster is 'maturing' and that growth in the research and development sector will be slower than in the past, and other sectors will account for a higher proportion of growth. New sectors are likely to include renewable technologies, the creative ICT sectors, digital, **health/bioscience**, high-technology manufacturing, professional business services, tourism and leisure."*

2.3.4 The importance of the BRC is highlighted in the 'key facts' on page 172:

> *"The area has proved resilient to the impacts of the downturn with a range of successful business and research parks including Cambridge Science Park, Granta Park, and the Babraham Institute."*

2.3.5 And at paragraph 8.9:

> *"South Cambridgeshire has a good supply and range of existing employment sites. Additionally existing commitments with planning permission provide a wide variety and types of employment development, including significant opportunities at research parks for high technology and Research & Development (R&D), including at:*
>
> - *Granta Park,*
> - *Babraham Institute,*
> - *Wellcome Trust Genome Campus and*
> - *Cambridge Research Park."*

2.3.6 However, the supply at the Babraham Institute and BRC has now been exhausted, as is set out in the sections below, as a result of its unprecedented success.

2.3.7 Policy E/9 'Promotion of Clusters' states that (emphasis added):

> *"1. Development proposals in suitable locations will be permitted which support the development of employment clusters, drawing on the specialisms of the Cambridge area in the following sectors:*
>
> - ***Biotechnology and biomedical**;*
> - *Computer services;*
> - *Electronic engineering;*
> - *High-technology manufacturing;*
> - *Information technology / telecommunications;*
> - ***Healthcare, teaching and research**;*
> - ***Research and development**;*
> - *Clean Technology;*
> - *Other locally driven clusters as they emerge.*
>
> *2. Employment land allocations especially suited for cluster development are Northstowe, North-west Cambridge, and the new employment provision on the edge of Cambridge (Policies E/1 and SS/4). These areas will be expected to include provision of a range of suitable units, including for start-ups, SMEs, and incubator units."*

2.3.8 The BRC is missing from the list, most likely because when the Local Plan was originally drafted in 2013/14, it was a significantly smaller enterprise. However, in the past few years it has significantly grown in scale, as set out in **Section 3.2**.

2.3.9 This is also evidenced by the Campus' omission from the list of Established Employment Areas in Policy E/15.

2.3.10 The evidence base for the emerging Greater Cambridge Local Plan however, recognises the importance of the BRC and consultation documents propose the

existing campus and an area for future expansion be designated for employment[8].

2.4 Life Science Strategy for the C&PCA

2.4.1 This new Life Science Strategy[9] highlights just how fundamental the sector is to the Cambridgeshire and Peterborough economy. On page 41 it states that:

> *"Between these nine science parks, the Combined Authority is home to the most mature property infrastructure for life sciences firms in Europe. However, vacancy rates are running at just a few percent and we heard repeatedly during our interviews that there is an acute shortage of space for start-up and scale-up firms. While facilities such as Babraham are intended to address the requirements of early-stage firms, the existing stock of specialist laboratory and flexible workspaces for these businesses across the combined authority has proven insufficient to meet the current level of demand. One of the key challenges at Babraham is that start-up companies on the site have grown to the point that there is no space to accommodate the next generation of businesses, in part because the growing companies themselves have nowhere to move on to. Derek Jones, CEO of Babraham Bioscience Technologies commented 'Because there is nowhere for the companies at Babraham to grow on to, it means the campus struggles to accommodate the start-up businesses it was intended for'. However, supporting and encouraging requested expansions at adjacent sites like Granta Park could alleviate this problem."*

2.4.2 The last sentence is largely correct, however, nowhere else has the same concentration of scientists in the field of biotech and the benefits this brings. The importance of this was repeatedly highlighted in interviews with BRC tenants.

2.4.3 On page 53 the Strategy sets out its recommendations (**emphasis added**):

> *"There is currently a shortage of grow-on space within the Cambridge area with the result that expanding companies are occupying facilities meant for start-ups, such as at Babraham. While there is currently land available to build further life science infrastructure, and indeed new space is being planned, it will be important to ensure that the availability of development land with the appropriate planning use is sufficient to meet the needs of at least a 40% increase in employment in the sector. A very conservative estimate of the new space required to accommodate such growth suggests that more than one million sq. ft. of additional life sciences space is required.*
>
> *This report therefore recommends a detailed space planning exercise is undertaken, taking into consideration the amount of potential life sciences space that could be supplied at the existing and planned sites. This should then be matched against forecast demand along multiple growth trajectories and progress monitored. Planning and zoning decisions can then be made in the context of future demand so as to ensure the availability of land for life science development doesn't fall short of that needed.*
>
> *Further to this,* ***there is an immediate need for space to accommodate start-up companies. These are well catered for at Babraham campus, but there is currently no more space to accommodate them on site. The building of incubator facilities for start-up companies is less commercially viable than for more established businesses. Without space to accommodate start-ups it is likely that their creation could be slowed, they could end up in sub-optimal locations or be forced to move out of the area completely****.*
>
> *Consequently, consideration should be given to supporting the development of further start-up facilities."*

8 GL Hearn. (November 2020). Greater Cambridge Employment Land and Economic Development Evidence Study. On behalf of South Cambridgeshire District Council and Cambridge City Council.

9 Cambridgeshire and Peterborough Combined Authority. (April 2021). Life Science Strategy for the Cambridgeshire and Peterborough Combined Authority.

3 Need for the Proposed Development

3.1 Introduction

3.1.1 The development proposals include:

- Over 28,000m2 of R&D space;
- 60 new dwellings and 100 student apartments (replacing the existing 45 homes);
- ~1800m2 of retail and nursery provision; and
- Estate management facilities and renewal energy zone.

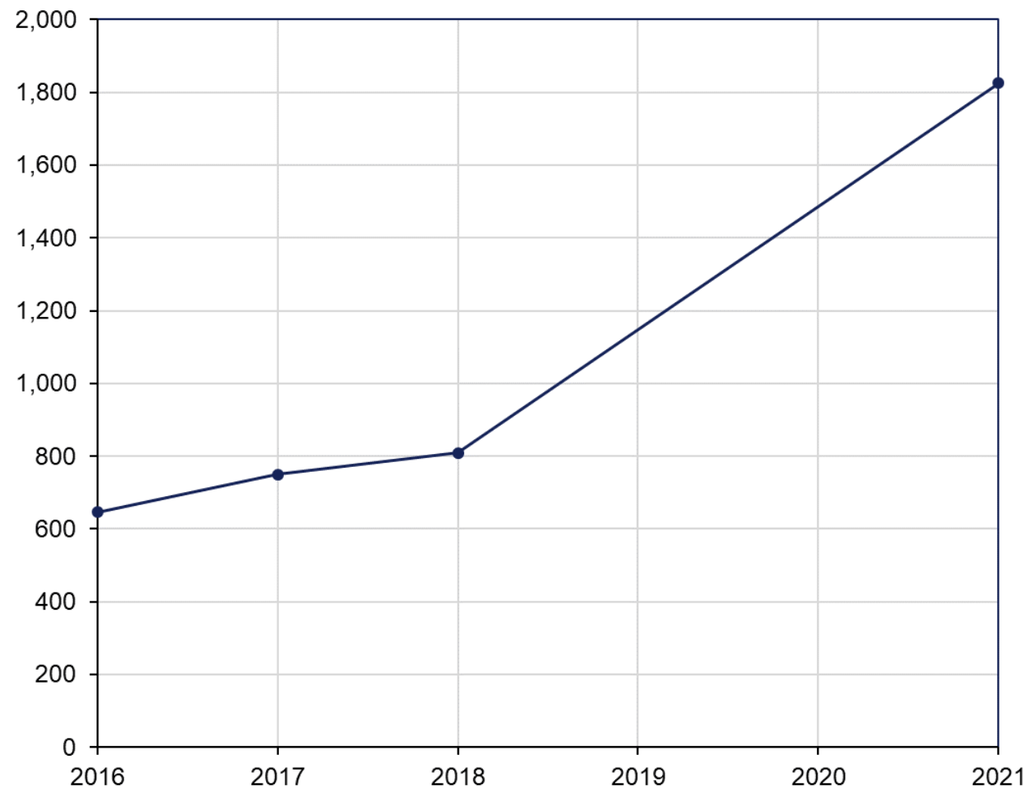
3.1.2 This chapter explores why additional R&D space is needed at BRC (Demand outstripping supply, the benefits of BRC life-science ecosystem, market failure to deliver suitable premises and a lack of suitable alternative locations for the growth of life sciences) and how housing and social infrastructure is essential to support the BRC ecosystem as well as meet local social, health and environmental imperatives.

3.2 Growth of the BRC – Demand outstripping supply

3.2.1 The BRC has been hugely successful. Employment surveys have been undertaken on behalf of BRCL in 2016, 2017, 2018 and 2021 (**Figure 3.1**). These indicate that the BRC has seen rapid growth over the last five years, increasing on average by more than 36% per year. By comparison, according to the latest ONS data, Cambridgeshire and Peterborough saw employment growth of 1.9% per year between 2015 and 2019. This data excludes the BI, MRC and AstraZeneca/Medimmune, which also provide considerable employment on the wider site.

3.2.2 It is possible to chart the success of 22 businesses that were recorded in all four surveys. While not all have seen equal success, combined, these 22 businesses have seen their workforce increase from 538 people in 2016, 637 people in 2017, 738 people in 2018 and 843 in 2021.

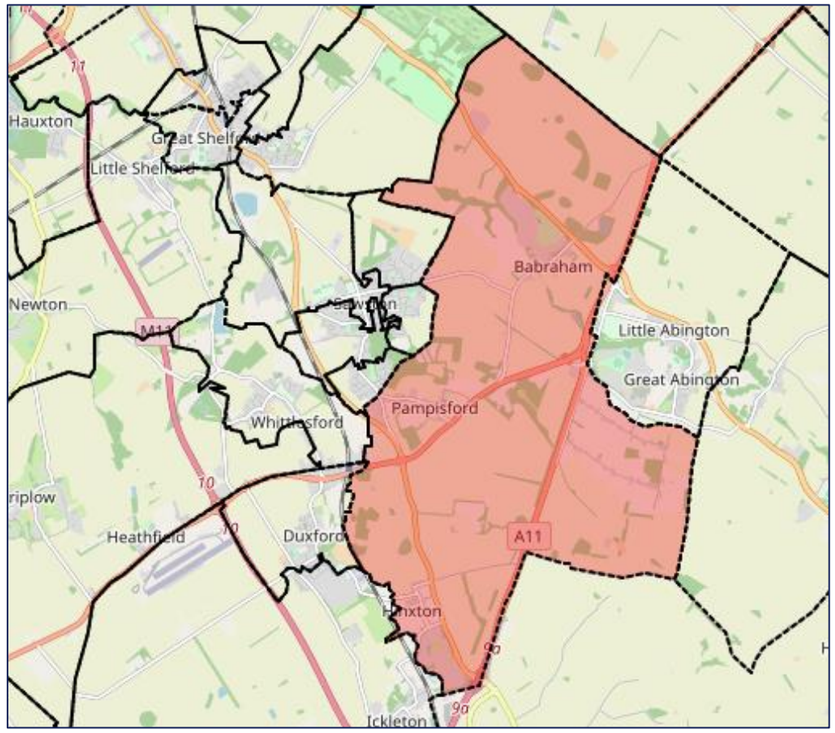
Figure 3.1: Employment Growth at BRC, 2016-2021



Source: BRCL

3.2.3 Indeed, the LSOA[10] that includes the BRC (**Figure 3.2**), according to the BRES[11], was ranked 1st in 2019 in England and Wales for the number of people in employment in 'research and experimental development on biotechnology'. The LSOA was also ranked joint 2nd with the adjacent area covering Granta Park for 'other research and experimental development on natural sciences and engineering', close behind the 1st place LSOA which includes the Cambridge Science Park.

Figure 3.2: LSOA E01018289: South Cambridgeshire 017D



Source: NOMIS

3.2.4 Across the entire scientific research and development sector, which also includes research into social sciences and humanities, the LSOA containing the BRC is ranked joint 1st with the LSOA that contains the Cambridge Science Park, both with approximately 4,000 people working in the sector.

Future Need for Biotech R&D

3.2.5 The success of businesses in BRC continues, bringing with it demand for grow on space and ideas needing new start up space and desire from others wanting to relocate to the BRC.

3.2.6 A considerable amount of interest has been recorded by BRCL . Twelve existing tenants wish to increase their floorspace. Most need this space in 2021 while others have suggested it would be needed in 2022 or 2023. Combined, these existing tenants currently occupy 68,300sq.ft (6,345m^2, approximately 25% of the existing available floorspace) and are looking to increase this to 120,600sq.ft (11,204m^2, approximately 45% of the existing available floorspace).

3.2.7 These twelve tenants do not include two tenants that have decided to leave the BRC in search of more floorspace due to the lack of availability at the BRC. Moving off site is a risk as it can affect staff retention with some seeking alternative opportunities at the BRC rather than relocating with their current workplace, even if this is as close as Granta Park or Sawston. Given that a knowledge-based industry can only thrive when it has access to the right qualified people, the need for more floorspace must be considered a substantial constraint for it to offset the possibility of losing existing staff and finding it more difficult to attract staff in the future.

3.2.8 The loss of these two tenants will generate approximately 10,600sq.ft (985m^2) of available space but this is insufficient to meet the existing requirement of 52,300sq.ft

10 There are 34,753 Lower Super Output Areas (LSOAs) that cover England and Wales. LSOAs are collections of Output Areas (OAs), which have been prepared by ONS to have similar population sizes, according to the 2011 Census, and be as socially homogenous as possible based on tenure of household and dwelling type.

11 The Business Register and Employment Survey (BRES) is the ONS' official source of employee and employment estimates by detailed geography and industry. It collects employment information from businesses across the UK economy for each site that they operate. This allows the ONS to produce employee and employment estimates by detailed geography and industry split by full-time/part-time workers and whether the business is public/private.

(4,859m^2) from existing tenants. This alone therefore would justify the expansion of the BRC by at least 41,700sq.ft (3,874m^2) of lettable floorspace (i.e. excluding communal areas).

3.2.9 In addition, there have been nine enquiries so far this year from businesses wishing to relocate to the BRC. In total these would suggest a further demand for another 40,400sq.ft (3,753m^2).

3.2.10 The recent planning approval for Building B960 (3,840m^2 equivalent to known onsite requirements) will provide some relief for the pend up demand. But the relief will be short lived as it is anticipated that the buildings will be let on completion leaving no further space for business start-up or growth at BRC or companies wanting move onto the site as they require grow on space.

3.3 What it Means for Businesses to be Located at the BRC

3.3.1 The high demand for space at BRC reflects the benefits of being part of the BRC ecosystem and property arrangements tailored to the specific needs of start-ups and growing businesses in the life science sector.

Ecosystem

3.3.2 For start-ups, one of the most powerful ingredients in determining the speed and success of the journey is not just the idea itself but how to build the company around their ideas – the people, infrastructure, processes, positioning, communications, legal frameworks, sales and much more. Often those with the ideas have an in-depth knowledge of the science but not all the components that go into making it a commercial success.

3.3.3 This is where the Campus Network really comes in. Entrepreneurs starting out on the journey are surrounded by people who have the knowledge and experience in building out ideas into funded and successful realities and are willing to invest time in sharing their learnings. But it is not just people who have been there and done it themselves in the network but also IP, comms, business development specialists and many more who can help ensure new ventures are in the right position to seek investment.

3.3.4 Multi tenanted buildings and shared spaces bring the added benefit of being amongst likeminded people on the same journey, to bounce ideas off and learn from each other's experiences.

3.3.5 Several businesses that were interviewed as part of this assessment highlighted the importance of casual discussions in a corridor, café, car park etc. to generating new ideas for collaboration. This undoubtedly occurs in other areas such as Granta Park and the Cambridge Science Park, but it is much more limited with those involved in biotech research distributed amongst other scientific disciplines. Indeed, several interviews highlighted that many businesses would likely move abroad rather than relocate to elsewhere in Cambridgeshire, with Boston in the US highlighted as a particularly close competitor.

Services

3.3.6 The Campus provides a wide range of scientific and operational services, including equipment and facilities hire, technology help and scientific expertise, to help facilitate growth and further the development of science concepts in the most efficient and cost-effective way. BRCL campus team help Campus companies run smoothly, creating an environment within which they can flourish.

3.3.7 Since the science is particularly focused on the BRC, it is possible for the Campus to provide communal equipment that would be otherwise too expensive for many start-ups to afford. Other shared core services provided at the BRC include waste services, bulk buying, storeroom/deliveries (e.g. gas and dry ice). This enables start-ups that would not otherwise be financially viable and allows much of the research to be undertaken faster on the BRC than on other science parks. Other functions have also become communal such as some office space, the café, nursery and open space which create a high quality, healthy place to work.

3.3.8 In addition, the Babraham Institute maintains nine cutting-edge science facilities that are accessible to Campus companies. Access to these facilities includes expert advice, support with experimental design, data analysis and trouble shooting.

3.4 Market Failure

3.4.1 The scarcity of space for start ups and wet labs is well reported in the Cambridgeshire

market. Research by Cambridge Ahead[12] identified the market was mismatched with the needs of such businesses particularly in respect of rental levels, strength of covenant, inappropriate leases terms, finance and funding and supporting infrastructure,

3.4.2 Rents: In a competitive market rents are being driven up reducing the share of capital and grants left to use on research, or necessitates time and effort searching for premises or seeking additional capital raising. Both, detract from business activities and slow company growth.

3.4.3 Covenant: The uncertain viability and therefore higher risk profile of early stage incubation companies makes them far less attractive as tenants to more commercially orientated science parks.

3.4.4 Leases: Standard leases are too long and inflexible to cope with rapid scaling up, particularly when these companies want to minimise disruption to business and stay close to their origins. Furthermore, the standard commercial science park offering of shell and core buildings on long leases, are also unfavourable and unappealing to these companies and their investors.

3.4.5 Finance and funding: short term phasing of capital raising is not compatible with longer term funding of property. Added to which the costs of providing space for a number of small occupiers is more than for a single occupier making this sector unattractive to typical landlords.

BRC Fills the Gap

3.4.6 BRCL provides startup and wet lab space which fills the gap created by this market failure. It offers a mix of specialised start up and scale up space, with access to world-class facilities and on lease terms tailored to the needs of start-up space. The Campus caters to those in the early stage of incubation and with ambition to scale to an Initial Public Offering (IPO). Working with them accepting, their higher risk profile. Units of 60m2 of more as well as daily rentable bench and office space allow companies to customise their property needs. For those a little bit further on in the journey who require their own easy-access laboratory and office space, there are multi-occupancy buildings, specifically designed to support chemistry and molecular biology requirements.

3.4.7 BRCL understands that the start-up journey is both challenging and unpredictable and tailor terms to be flexible as possible, so that emerging companies do not need to worry about being tied into lengthy and expensive contracts.

3.4.8 Research led by Cambridge Economic Associates[13] provides evidence of the critical role public investment, leveraged through BBSRC, has played in enabling the Babraham Research Campus to overcome this clear market failure and offer a stable and supported community within which these organisations are able to flourish. This, in turn, has led to faster growth in the life science sector in Cambridge. Companies at the Babraham Research Campus have estimated that being located on Campus had on average accelerated their fundraising by three months and increased the amount of funds raised by 10%.

3.5 Alternative Locations for Biotech R&D

3.5.1 The adopted Local Plan highlights that there is considerable floorspace for R&D available in South Cambridgeshire, but none are entirely compatible with the niche biotech cluster and co-location of the Babraham Institute at the BRC:

3.5.2 Policy E/1 supports appropriate proposals for employment development and redevelopment on the Cambridge Science Park (CSP) where they enable the continued development of the Cambridge Cluster of high technology research and development

[12] Mansley N, Cambridge Real Estate Research Centre, University of Cambridge (2018) Review of Wet Lab Space and Incubator Space for the Life Sciences in the Cambridge Area, pub Cambridge Ahead

[13] Cambridge Economic Associates in association with Cambridge Econometrics, Cambridge University Centre for Business Research, Savills and Professor Lisa Hall (2020) Identifying, Capturing, and Demonstrating the Benefits and Impact of the Babraham Research Campus

companies. However, CSP is home to an eclectic range of R&D companies. These do include biotech R&D but not with the same concentration as at Babraham. Furthermore, many are established businesses, rather than start-ups. Finally, CSP does not provide the same level of support for start-ups in biotech as BRC, particularly in terms of the communal use of expensive equipment and the cost and space savings associated with the provision of other core services.

3.5.3 Policy E/2 allocates the extension of the Cambridge Biomedical Campus (CBC), which gained planning permission in 2017. The planning applications, submitted by Bidwells, included a new headquarters building for Abcam, which has been completed and occupied. The remainder will be developed for commercial R&D and clinical floorspace. The buildings proposed are substantial and are likely to be suitable only for established businesses that would have some synergy with Addenbrookes Hospital. It is unlikely that they would be suitable for start-ups with none of the benefits of the BRC.

3.5.4 Policy E/3 allocates the land east of Fulbourn Road, adjacent to the Peterhouse Technology Park (PTP). An outline planning application for the Cambridge International Technology Park (CITP) was submitted by Bidwells earlier this year on behalf of Peterhouse College. It is intended that occupiers of the CITP will be similar to those at the PTP, such as ARM, and therefore unlikely to be suitable for biotech R&D businesses. It would also not have the benefits for start-ups that the BRC has.

3.5.5 No additional land is currently allocated at Granta Park, the Wellcome Genome Campus or Cambridge Research Park. While redevelopment in these areas is supported, it is unlikely that it would be commercially viable to replace larger buildings suitable for established businesses with specific floorspace for start-ups, which are a higher risk investment.

3.5.6 There are a number of other locations suitable for R&D occupiers, such Unity Campus (Sawston) and Northstowe but these do not offer the concentration of biotech operators or the core services that make BRC so attractive to start ups and grow-on businesses.

3.5.7 It is concluded therefore that there are no suitable alternative locations for biotech R&D start-ups.

3.6 Need for Dedicated Housing

3.6.1 Greater Cambridge has one of the highest rates of housing delivery in England, but is still lagging behind other key areas in the region such as Greater Norwich, Central Bedfordshire and South Oxfordshire[14]. As a result, house prices are high and despite relatively high wages, Greater Cambridge is one of the most unaffordable places in the country. For the BRC this has significant implications.

3.6.2 The BRC thrives in attracting the brightest minds in the biotech sector. Many are initially doctoral graduates of Cambridge University but originate from outside of the UK, do not have specific ties to the UK and will receive offers from across the world. If they are to be retained in the Greater Cambridge area, they need initial accommodation – a first step on the housing ladder.

3.6.3 If this housing is not co-located with the BRC and earmarked only for students or employees at the site, those the BRC is seeking to attract will need to compete with the rest of the housing market. While the Greater Cambridge Local Plan will facilitate higher rates of housing delivery, it will be sometime before this has a meaningful effect on house prices and availability. The BRC needs the accommodation now otherwise the rapid growth of the Campus seen in recent years is likely to stall.

3.7 Summary

3.7.1 The Campus partners recent strategic review of the Campus confirmed the Campus's unique selling points and its role in combatting property market failures for biotech start-ups and wetlabs. It informed the current Campus Strategy which sets the course for the continued development of the Campus, to deliver a highly connected, sustainable and

14 MHCLG. (January 2021). Housing Delivery Test: 2020 measurement.

dynamic ecosystem that creates new discoveries, therapeutics, jobs and growth to support the UK economy.

3.7.2 Expansion is necessary to meet high demand for start-up and grow on space, which is not provided for at other locations and is inhibited by market failures. The significant ecosystem and service benefits can only be derived from locating expansion immediately adjacent to the existing campus. All of which creates need for additional and updated campus maintenance and additional low carbon energy facilities.

3.7.3 Providing housing ring fenced for campus employees helps to overcome the acute housing affordability issues in South Cambridge and aid recruitment. Retail and additional nursery provision assists with meeting the needs of and strengthening the campus community.

4 Local Economic Impact

4.1 Introduction

4.1.1 The number of workplaces directly provided in a development can usually be calculated by using standard employment density multipliers produced for Homes England (HE, also known as the Homes and Communities Agency (HCA)) in their Employment Density Guide (EDG)[15]. However, the EDG is not exhaustive and for some employment uses the previous guidance[16,17] should still be applied as well as various other sources[18,19,20].

4.1.2 For research and development floorspace, the EDG suggests densities of 40-60m^2 net internal area (NIA) per Full Time Equivalent (FTE)[21] workspace might be appropriate. However, the EDG also states that *"lower densities will be achieved in units with higher provision of shared or communal spaces",* which was the case for the proposed B960 building. Therefore an alternative approach was taken.

4.2 Calculating Direct Employment

4.2.1 To calculate the likely direct employment in B960 (subject of a pending full planning application), a detailed review has been undertaken of the 2021 employment survey to understand how similar sized areas are occupied. It was concluded that a density of 17.9m^2 tenanted floorspace per job (i.e. excluding communal areas), which could be either full or part time. Overall therefore B960 was estimated to support 174 jobs.

4.2.2 This approach however cannot be applied to the areas now promoted because the buildings have not been designed yet and it is not possible to anticipate how much floorspace would be communal or tenanted. Instead the total area of B960 (3,840m^2) is divided by the 174 jobs it is estimated to support, resulting in a density of 22m^2 per job.

4.2.3 This density can then be applied to the two R&D zones (which include B960):

- 1. The proposed R&D development zone: 23,440m^2 net additional floorspace is estimated to support 1,065 jobs.
- 2. The R&D redevelopment zone within the existing campus: 5,430m^2 net additional floorspace is estimated to support 247 jobs.

4.2.4 In total therefore the proposed development is estimated to generate an additional 1,312 jobs in the R&D zones, the majority of which will be actively involved in life science research.

4.2.5 In addition, some increase in floorspace is anticipated in the campus linked housing and amenity zone. If a standard retail density multiplier of 20m^2 net internal area (NIA) is applied to the 830m^2 (GIA) net additional floorspace, it is estimated that this zone could support a further 39 FTE jobs.

4.2.6 The renewable energy and supporting infrastructure zone will comprise a net increase in offices, workshops and stores of approximately 2,224m^2 (GIA). The exact division of uses is unknown and therefore a relatively worst-case low density of 50m^2 is applied to reflect the average density across all the potential uses. This would suggest this zone would support 44 FTE jobs.

4.2.7 Using ONS data from 2019[22], it is estimated that in total the proposed development could support 1,400 jobs (full and part time), which would likely equate to 1,200 FTE

15 HCA. (November 2015). Employment Density Guide, 3rd Edition.
16 HCA. (February 2010). Employment Densities Guide 2nd Edition.
17 EP. (July 2007). Employment Densities.
18 Roger Tym and Partners. (August 2002). Demand and Supply of Business Space in London.
19 DTZ. (May 2004). Use of Business Space and Changing Working Practices in the South East.
20 BCO. (September 2013). Occupier Density Study 2013.
21 For the purposes of this assessment, it is assumed that one workplace equates to one FTE, which is defined as *"one [job] that involves working a standard 30 hour week or longer (excluding breaks) and is filled"*. This has been applied consistently by ONS in the 2011 Census and many other publications.
22 ONS. (August 2021). HOUR01 SA: Actual weekly hours worked (seasonally adjusted).

jobs (both are rounded to the nearest 100).

4.3 Direct Employment and GVA

4.3.1 ONS define Gross Value Added (GVA) as a measure of the increase in the value of the economy due to the production of goods and services. ONS prefer the 'balanced' (GVA(B)) approach to GVA which combines the two previous production (GVA(P)) and income (GVA(I)) approaches. By dividing GVA by the total workforce jobs, it is possible to estimate the contribution a single job on average makes to the national economy. It is one possible measure of productivity and the best way to measure the contribution a development might have to a local economy.

4.3.2 For the purposes of this assessment, the professional, scientific and technical activities GVA(B) for the East of England for 2018 is used[23]. This shows that in 2018 this sector generated £12,084m. This is generated by 313,000 workforce jobs[24], averaging £38,607 per job.

4.3.3 If each of the 1,312 R&D jobs generated an average of £38,607 in GVA, the proposed development would contribute £50.7m to the national economy.

4.4 Other Economic Effects

4.4.1 On average each household spends £575.80 per week[25], which equates to £29,941.60 per year (**Table 4.1**). This excludes life assurance, income tax, national insurance and the costs related to the purchase or alteration of a dwelling. It therefore reflects the 'basic' net expenditure per household.

4.4.2 The proposed development includes 120 dwellings and would therefore likely contribute £3.6m to the economy per year. However, there will be some duplication of economic effect with the job creation elsewhere on the site since each household will include at least one person employed at the BRC. It is simply not possible at this stage to estimate the likely interplay between these factors but notwithstanding this it is an important effect since it ensures that the some of the wages earned on the campus are retained in the immediate surrounding area and will circulate in the local economy rather than being lost through commuting.

Table 4.1: Average Household Expenditure

Component	Per Week	Per Year
Food and non-alcoholic drinks	£61.00	£3,172.00
Alcoholic drink, tobacco and narcotics	£12.60	£655.20
Clothing and footwear	£24.70	£1,284.40
Housing (net), fuel and power	£76.20	£3,962.40
Household goods and services	£40.90	£2,126.80
Health	£7.00	£364.00
Transport	£81.20	£4,222.40
Communication	£17.90	£930.80
Recreation and leisure	£75.00	£3,900.00
Education	£8.70	£452.40
Restaurants and hotels	£50.30	£2,615.60
Miscellaneous good and services	£43.80	£2,277.60
Other expenditure	£76.50	£3,978.00
Total	**£575.80**	**£29,941.60**

4.4.3 Similarly, it is probable that these households will substantially contribute to the viability of the retail elements of the proposed development.

23 ONS. May 2021. Regional gross value added (balanced) by industry.
24 ONS. June 2021. JOBS05: Workforce jobs by region and industry.
25 ONS. January 2019. Components of household expenditure: Table A1.

5 Social Infrastructure

5.1 Introduction

5.1.1 This Chapter sets out how the social infrastructure necessary to support the proposed development, particularly the housing element, will be delivered.

5.2 Housing

5.2.1 Babraham falls entirely within Output Area (OA) E00092237, the smallest geography that ONS use for the 2011 Census.

5.2.2 The Census shows there were 124 dwellings in 2011, of which nine were vacant. Some 111 were houses while the remainder were apartments. The only known change since 2011 is the construction of eleven dwellings on Oak Lane, which are believed to be affordable[26].

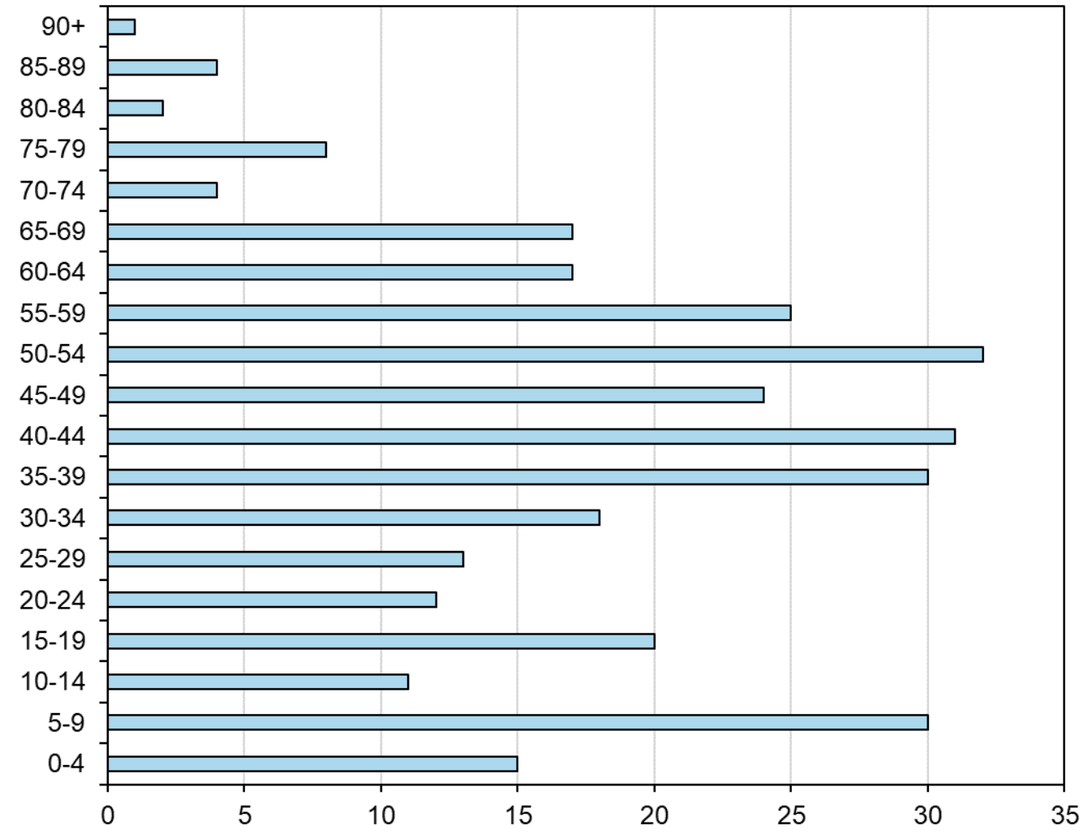
5.2.3 The 2011 Census suggests that 50 of the occupied dwellings were private rented, 23 of which were identified as being rented directly from the occupier's employer. Social housing only accounted for nine dwellings in 2011 but this has since increased to 20 dwellings.

5.2.4 The proposed development would result in a net increase of 120 dwellings in Babraham, an increase of 47%.

5.3 Population

5.3.1 For 2019, ONS estimated that OA E00092237 had a population of 314 people, see **Figure 5.1**. This would suggest a population density of between 2.33 and 2.49 people per household depending on whether the nine vacant dwellings identified in 2011, which may have been subsequently occupied, are taken into account. Both are within expected parameters for a small settlement.

Figure 5.1: Demographic Profile of Babraham in 2019



Source: ONS. (September 2020). Census Output Area Population Estimates – East, England.

26 S/0474/11. Erection of 11 no. affordable dwellings together with construction of new access road provision of open space and landscaping. Land To R/O Blacksmith's Close High Street Babraham Cambridgeshire.

5.3.2 **Figure 5.1** shows population profile that is somewhat different what might usually be expected for a small settlement. The profile is dominated by people between 30 and 69 years old, i.e. those that are most likely to be in full time employment. There is also a relatively high number of children of primary school age but significantly fewer of secondary school age, most likely reflecting the availability of schools within walking distance.

5.3.3 The proposed development is likely to approximately double the population aged between 0 and 69 years. Since the housing is for people that work within the BRC, it is unlikely to materially affect the population aged 70+, which are considerably more likely to be retired. Most of the population increase is likely to be amongst people aged 25-34 within the student accommodation. In total therefore the resident population of Babraham is likely to increase to just over 600 people.

5.4 Education

5.4.1 **Figure 5.2** shows the existing social infrastructure most likely to be serving Babraham.

5.4.2 Babraham benefits from its own primary school with capacity for 90 pupils[27]. For the academic year 2018/19 the DfE reported the school operating at capacity with 90 pupils. The latest school census for 2021 suggests that this has increased to 99 pupils.

5.4.3 However, the ONS population estimates for 2019 suggest a resident population of 35 children aged 5-11, which must mean that approximately two thirds of pupils must commute into Babraham each day for school. Given the distances to nearby settlements, it is unlikely that many of these walk or cycle. A few may travel by bus but the majority are likely to arrive at the school by private car.

5.4.4 The proposed development is unlikely to significantly alter this dynamic given that most of the proposed new housing will be for students. It is likely that demand from within the village will increase but it will be relatively limited. This will slightly increase the number of pupils living within the 400m catchment of the school and therefore more likely to walk or cycle to school.

5.4.5 That is not to say that the capacity issues in this school catchment area can be ignored; the proposed development will result in the displacement of some children who would otherwise attend Babraham. However, the impact will be relatively small and can be addressed at the planning application stage.

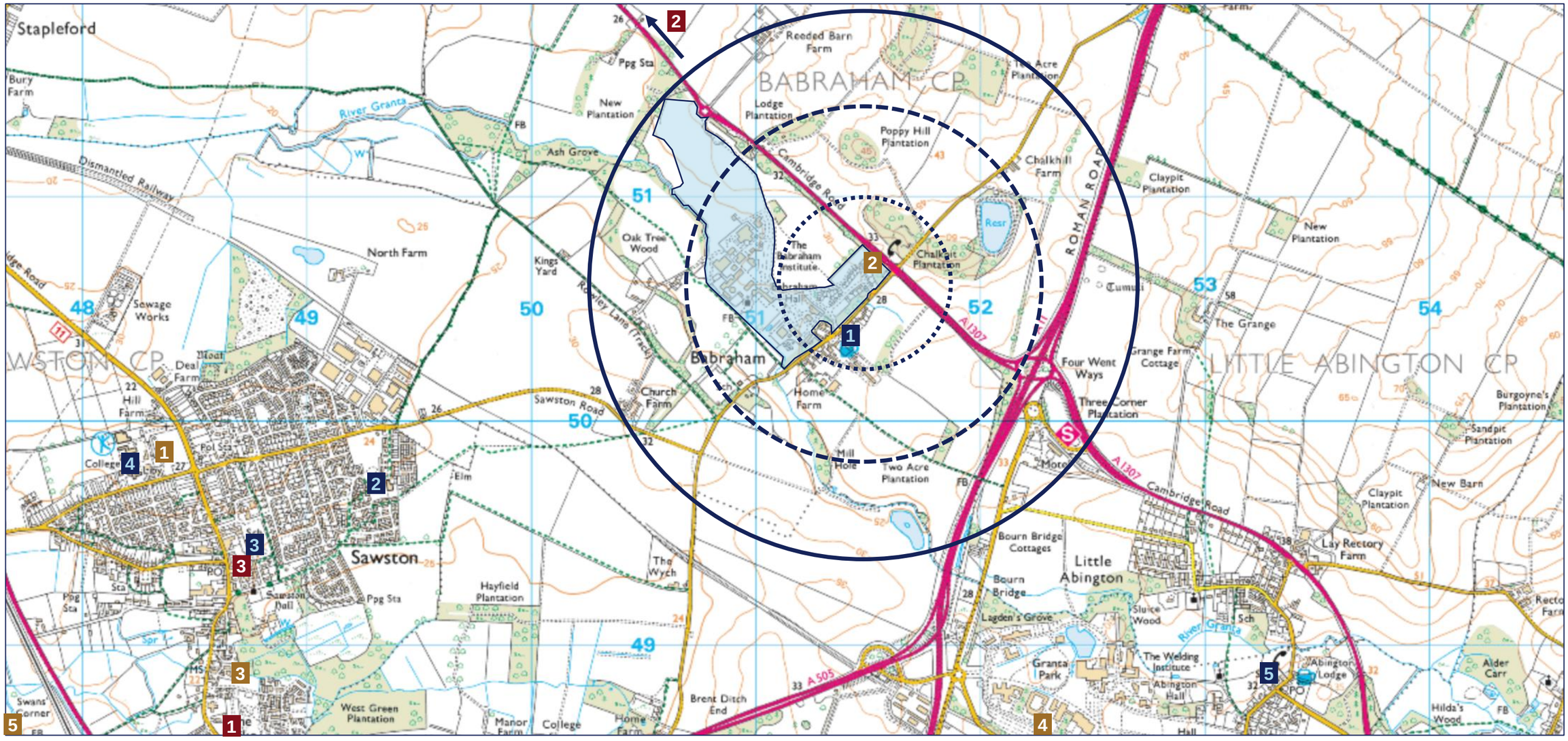
5.4.6 Sawston Village College provides the nearest secondary education with capacity for 1,150 pupils. As of 2021, it had 1,084 pupils on roll, which has been relatively static over the last ten years. However, development pressures in and around Sawston will mean that the College will either need to expand or additional provision elsewhere will be required in the next few years.

5.4.7 At present it is estimated that Babraham only contributes a maximum of 12 pupils to Sawston Village College with some children possibly being taught at nearby private schools or at home. The proposed development will marginally increase this. Growth of housing at Babraham will therefore not be a determining factor on how future secondary school provision is delivered.

5.4.8 Again, the impact will be relatively small and can be addressed at the planning application stage.

27 DfE. (August 2020). Academic Year 2018/19 School capacity.

Figure 5.1: Existing Social Infrastructure



- Indicative area to be removed from the Green Belt.
- 400m radius from the housing area
- 800m radius from the housing area
- 1,200m radius from the housing area

Primary Schools

1. Babraham CofE (VC) Primary School
2. The Icknield Primary School & Pippins Pre-School
3. The Bellbird Primary School, Sawston Child and Family Zone & Jigsaw Pre-School

Secondary Schools

4. Sawston Village College
5. Great Abington Primary School & Abington Pre-School

Healthcare

1. Sawston Medical Practice (including pharmacy), High Street Dental Practice & Bilson Opticians
2. Addenbrookes Hospital (4.3 miles from the site)
3. Boots Pharmacy, High Street Sawston

Other

1. Sawston Sports Centre & Sawston Library
2. Babraham Nursery
3. Sawston Nursery
4. Granta Park Nursery
5. Whittlesford Memorial Hall

5.5 Healthcare

5.5.1 Babraham is served by the Sawston Medical Centre, which is operated by Granta Medical Practices along with Linton Health Centre, Barley Surgery, Market Hill Surgery and Shelford Health Centre.

5.5.2 The population of the proposed development is unlikely to significantly increase demand for healthcare. The 300 residents of the proposed development are likely to be mainly younger adults rather than older people.

5.6 Private and Public Open Space

5.6.1 The proposed development will include improvements to the existing cricket pitch and community forest planting area. A play area will be included in the housing element and a new permissive path linking with existing public rights of way. The existing private open space within the BRC will also continue to be safeguarded, which can be used by employees on the site, including those resident in the housing element.

5.7 Retail and Other Services

5.7.1 Sawston provides a range of retail and other services for the residents of Babraham. The choice and accessibility of local retail provision will be enhanced by a small new retail provision within BRC, within walking distance of workers and local residents..

6 Health and Wellbeing

6.1 Introduction

6.1.1 This Chapter sets out how the proposed development encourages health and wellbeing for its residents and workers.

6.2 Policy Context

6.2.1 The built environment has a key role to play in ensuring health and wellbeing, which is reflected in the policies of the NPPF by ensuring planning policies and decisions support healthy, inclusive and safe places. National and local health priorities, align with the NPPF and include:

- Healthy weight environment;
- Good start in life;
- Good work for all;
- Preventing social isolation;
- Good air quality;
- Strong mental health;
- Affordable well-designed housing;
- Empowerment;
- Active living; and
- Aging well.

6.3 Health and wellbeing benefits of development at BRC

6.3.1 The proposed development has been assessed against these policy priorities. **Figure 6.1** provides a summary of the benefits and which policy objectives they address. The benefits have been categorised according to how they promote inclusive growth, healthy living, healthy working and reduce inequalities.

6.3.2 Healthy living opportunities are generated through high quality affordable housing, proximity of social infrastructure, accessible jobs, open space provision, low environmental impact design and support for businesses tackling major causes of disease and death.

6.3.3 Healthy working is generated through building design, access to amenities, healthy food and sociable environments, safe construction and work accessible by active travel.

6.3.4 Inclusive growth is supported by affordable accommodation with low running costs, accessible homes and jobs, community engagement, public services/amenities and long-term stewardship of the site with opportunities for local engagement.

6.3.5 Reducing inequalities is encouraged by early years child care, business support services, free access to open space, local sourcing and reducing barriers to work.

6.3.6 Overall the expansion of the BRC is anticipated to make a positive contribution to the health and wellbeing of the District, both directly and through the essential bioscience research and innovation that it facilitates.

Figure 6.1: Health and Wellbeing Benefits

HEALTHY LIVING

1. Homes built to Cambridge healthy homes standard and resilient to climate change.
2. Low environmental impact design
3. Job creation promotes economic security which enables healthier living.
4. Jobs are well located in terms of access by public transport, and cycling, and adjacent to a potential new public transport hub.
5. More affordable homes within walking distance of jobs: less stressful journey to work and less pollution.
6. Facilities already in place to support the new residents.
7. Access to local social infrastructure and people = opportunities to grow personal relationships, networks, civic engagement, trust and co-operative norms.
8. Range of blue and green open spaces, recreation and play spaces addressing local deficits, managed by BRC.
9. Open space links with existing network of green spaces to extend circular routes
10. Electric charging points in car parks and homes promotes less polluting local traffic.
11. Development enables the life sciences industry to innovate and thrive, tackling the major causes of death and disease.

HEALTHY WORKING

12. Commitment to modern building design meeting BREEAM excellent credits to ensure healthy air, thermal control and natural light.
13. Building design which induces physical activity.
14. Well maintained, extensive range of high-quality outdoor environments offers diverse activities, restorative, active and therapeutic environments.
15. Access to onsite amenities including nursery, gym, restaurant, allotments, and new shop.
16. Amenities, open space and healthy buildings empower individuals to manage their health, reducing reliance on company culture or policy to improve health
17. Access to healthy food and sociable eating provided through onsite restaurant, allotment and foraging opportunities.
18. Calorie labelling on restaurant food to prevent obesity.
19. Best practice construction methods will be deployed to foster a culture of safety, minimise nuisance and respond to residents /company concerns.
20. Active travel encouraged by
    - high quality, practical cycle facilities.
    - Safe and attractive walking environments provide through the site and link to surrounding networks.

34. Biophilic design connecting people to nature and natural processes.

INCLUSIVE GROWTH

21. Genuinely affordable homes
22. Low energy costs in residences.
23. Accessible homes and workspaces
24. Community engagement: Public events, temporary and meanwhile uses (arts, retail, bike servicing for the business community
25. Building and site design embraces key principles of inclusive design
26. New facilities available for public use (children play areas, gym, some open space, nursery)
27. Long term stewardship of the site with opportunities for local community engagement.

REDUCING INEQUALITIES

28. On-site childcare for children from 6-months facilitates returning to work after parental leave.
29. Range of services provided by BRC to support individuals and business start ups.
30. Free public access to health and wellbeing benefits of green and river focussed open space.
31. Free bike servicing for employees.
32. Local sourcing policy at BRC designed to transfer wealth throughout the region.
33. Reducing barriers to work: site tours and STEM outreach activities, such as school's careers events, science fairs, employability skills sessions.

CONTRIBUTION TO LOCAL HEALTH POLICY OBJECTIVES

Healthy weight environment 11, 12, 13, 15, 16, 20, 21, 24, 25, 27, 30	**Safeguard Air quality** 9, 11, 17, 19, 26	**Empowerment** 4, 5, 7, 14, 23, 26, 29, 30, 33
Provide good start in life 6, 8, 13, 15, 18, 22, 28	**Prevent mental ill-health** 10, 12, 14, 15, 19, 20, 21, 34	**Active living** 11, 15, 16, 20, 21, 27, 30
Prevent social isolation 3, 4,6, 11,13, 15, 16, 21, 22	**Affordable well designed housing** 1, 2, 3, 8	**Aging well** All of above

7 Conclusions and Recommendations

7.1 Conclusions

7.1.1 The BRC continues to be the centre of R&D in the biotech sector for both Greater Cambridge and the UK. Its success means that it is seen as a key location to start-up and scale-up a life science business in the UK.

7.1.2 This rapid success however has now stalled with a lack of additional floorspace. The effects are already tangible with many existing businesses on the campus requesting additional space and with further enquiries from businesses that want to relocate to the BRC. The problem is such that two businesses are leaving the BRC due to the lack of floorspace, which has become such a significant barrier to growth that it outweighs the substantial benefits of being located at the BRC.

7.1.3 There are no realistic alternative locations for start-ups in the biotech sector in Greater Cambridge, or indeed the UK. The issues are many but can be grouped into the following three 'Cs':

- Commerciality: supporting start-up businesses, which often only want small areas of floorspace on short term leases, are a high risk prospect for science park owners compared to larger and more established businesses. However, these start-ups are exactly the types of business that the BRC caters for.
- Cost: many of the start-ups need access to expensive, and often unaffordable, equipment to undertake their research. For others, this equipment enables them to progress their research at a faster rate. There is no incentive for commercial science park operators to provide these communally, while these are central to the BRC offer.
- Collaboration: the clustering of such a high proportion of the scientists working in the field of biotech R&D in a single location means that formal and informal collaboration can happen easily, creating new avenues of inquiry and improving scientific outcomes. This is the predominant objective of the BRC, which cannot happen at other science parks where the biotech R&D community is substantially smaller and dispersed amongst other disciplines.

7.1.4 The proposed development is anticipated to support approximately 1,400 jobs and £50.7m in GVA to the national economy. While significant, these figures are simply based on the employment benefits and do not take into account other economic benefits from construction or the increase in business rates.

7.1.5 In addition, these figures do not address the objective of the proposed development – to create the space needed for start-up and grow-on businesses within the biotech cluster. As seen in this assessment, these businesses are often highly successful and go on to employ considerably more people in Greater Cambridge, thereby substantially increasing the indirect benefits of the proposed development. Without the ability to incubate these new businesses, it is highly likely that the growth of this cluster would effectively stall.

7.1.6 Fundamentally, these businesses are 'footloose' – they can relocate to anywhere in the world which provides them with the best prospects either scientifically or commercially. There is nowhere else in the UK that provides such good prospects for start-up biotech businesses and therefore there is a real likelihood that without the expansion of the BRC these businesses would be lost abroad. To compound matters further, there are few locations in Europe that compare well to the BRC, which means that these businesses would likely be lost to the US or emerging economies in the east, severely limiting the opportunities for any future collaboration.

7.1.7 Consequently, the expansion of the BRC, which is broadly supported by the thrust of local policy documents, including the evidence base for the emerging Greater Cambridge Local Plan, is best placed to meet the Government's objective for the UK to become the leading global hub for life sciences.

7.2 Recommendations

It is welcome that the emerging Greater Cambridge Local Plan has recognised the exceptional need to remove the BRC and its necessary expansion areas from the Green Belt and allocate it for employment uses. It is hoped that this document will further support and reinforce the importance of this decision.

BIDWELLS