Babraham Research Campus

Our Plan for Future Growth

A leading location for world-renowned research at the heart of the Cambridge Southern Research Cluster

The Babraham Research Campus is a key component of the Cambridge Southern Research Cluster, a world-leading life science research and development cluster. The Campus freehold is owned by the UKRI-Biotechnology and Biological Sciences Research Council (UKRI-BBSRC), which is a national funding agency that invests in research and innovation across the UK. The Campus is unique in its co-location of the world class research of the Babraham Institute, alongside 60 start-up and scale-up bioscience companies.

The Campus is recognised as an exciting and vibrant place to carry out world leading discovery research and start and grow bioscience companies. Excellent people and talent are attracted to work in these organisations to create our Campus community where research and business come together to promote innovation and strengthen links between academia and the commercial world.

The three partners of the Babraham Research Campus have an agreed vision for the future development of the Babraham Research Campus, and this document describes that vision in greater detail. We hope that the Babraham Research Campus will continue to develop as described herein, in order to continue to deliver the scientific, economic and societal benefit for which the Babraham Research Campus was established.

Prof. Melanie Welham
BBSRC Executive Chair

Ms Jo Parfrey MA Oxon
Chair Babraham Research Campus Ltd Board

Prof. Peter Rigby FMedSci FRS
Chairman BI Board of Trustees

The Babraham Research Campus Partners:

Babraham Research Campus

Babraham Research Campus Ltd (BRC Ltd) is responsible for the management and commercial development of the Babraham Research Campus on behalf of the BRC Ltd shareholders, UKRI-BBSRC and the Babraham Institute.

The aim of the Campus is to support UK bioscience through academic research, but also with facilities and capabilities for early-stage and growing commercial organisations. The Campus provides companies laboratory and office space, networking and collaboration opportunities, together with access to outstanding scientific facilities in an ideal geographical location at the core of the Cambridge cluster, providing connectivity into other sites such as The Cambridge Biomedical Campus and Granta Park.

www.babraham.com

Babraham Institute

The Babraham Institute undertakes world-class life sciences research to generate new knowledge of biological mechanisms underpinning ageing, development and the maintenance of health. Our research focuses on cellular signalling, gene regulation and the impact of epigenetic regulation at different stages of life. By determining how the body reacts to dietary and environmental stimuli and manages microbial and viral interactions, we aim to improve wellbeing and support healthier ageing. The Institute is strategically funded by the Biotechnology and Biological Sciences Research Council (BBSRC), part of UK Research and Innovation, through Institute Strategic Programme Grants and an Institute Core Capability Grant and also receives funding from other UK research councils, charitable foundations, the EU and medical charities.

www.babraham.ac.uk

UKRI Biotechnology and Biological Sciences Research Council

The UKRI-Biotechnology and Biological Sciences Research Council (BBSRC) is part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK government.

UKRI-BBSRC invests in world-class bioscience research and training on behalf of the UK public. Our aim is to further scientific knowledge, to promote economic growth, wealth and job creation and to improve quality of life in the UK and beyond.

Funded by government, UKRI-BBSRC invested £451 million in world-class bioscience in 2019-20. We support research and training in universities and strategically funded institutes. UKRI-BBSRC research and the people we fund are helping society to meet major challenges, including food security, green energy and healthier, longer lives. Our investments underpin important UK economic sectors, such as farming, food, industrial biotechnology and pharmaceuticals.

www.bbsrc.ukri.org

Our Vision

The Babraham Research Campus' vision is to be one of the best places in the world for discovery bioscience research and innovation and a leading sustainable ecosystem to start, nurture, scale and grow bioscience business.

The Campus enables world leading, ground breaking bioscience research and business to come together in a unique combination, through its co-location of bioscience companies with the world leading discovery research of the Babraham Institute. This distinct focus accelerates scientific discovery and helps to build and scale businesses. Our Campus enables an environment of concept to company and start-up to scale-up all underpinned by the bench to building capabilities that we provide. The result is a highly connected, sustainable and dynamic ecosystem, that creates new discoveries, therapeutics, jobs and growth to support the UK economy.

The most recent review of the Campus' economic impact, published in 2020, showed that overall companies estimated being located on the Campus had on average accelerated their fundraising by three months and increased the amount of funds raised to date by 10%. In addition, the number of employees is estimated to be around 20% larger than it otherwise may have been as a consequence of being located on Campus. The total market value of the largest fourteen companies on the Campus was calculated to be £4.1bn, which represents a 7.2 times return for investors, who have put in £636m in total.

Additional support for early-stage life science start-ups is provided by the Campus' Accelerate@Babraham bioincubator programme. Created out of a desire to support and nurture early-stage life science ventures, Accelerate@Babraham offers ventures the opportunity to experience life as part of one of the most successful locations for life science start-ups in Europe. Recognised by LaBiotech as one of the top 25 biotech incubators in Europe in 2021, the fourth cohort started the programme in September 2021. Since its launch in 2018, Accelerate@Babraham portfolio companies have raised over £12.5m.

Historically, our existing Campus, has always either been full or had very low void levels. We are fully occupied and continue to experience high demand for space from both existing and prospective occupiers, with demand significantly outstripping supply. Therefore, a key priority and opportunity for the Campus is to enhance support to enable companies to continue to start-up, scale-up, grow and be retained in the UK. For this to happen, further expansion is required, across all stages of the life science discovery and development lifecycle - from communal lab space to enable lone entrepreneurs and small ventures to test their science through to bespoke buildings to facilitate scale-up without the need to relocate.

The case for purposeful growth and opportunity for future development at the Babraham Research Campus is further outlined in the recent Strategic Review of the Campus undertaken by the Campus partners (The Babraham Institute, BBSRC, and BRC Ltd). The review sets out our ambitious plans focused in six strategic areas, which come together into a single vision used to direct the emerging masterplan:

Deliver Research & Innovation

Develop People & Talent

Grow Campus Capabilities

Nurture the Ecosystem

Seek investment & ensure Sustainability

Sustain and create new Partnerships

The Babraham Research Campus is proposed to be released from the Green Belt and allocated as a Special Policy Area in the 'First Proposals' version of the emerging Greater Cambridge Local Plan. This 'Plan for Growth' document supports the draft allocation and forms part of the submission for the promotion of the site through the emerging Greater Cambridge Local Plan, sets out our vision for an exemplar and highly sustainable new masterplan to support the future growth of the Babraham Research Campus over the next 20-year period. It is supported by a suite of technical reports.

Our Campus is a dynamic environment where discovery research and business come together with a shared scientific focus that accelerates innovation and strengthens links between academia and the commercial world. Home to over **60** companies, **2,000** employees and **300** academic researchers all set within **450** acres of parkland, six miles south of Cambridge.

Supporting the Cambridge Southern Research Cluster: Why here, why now?

The Babraham Research Campus brings together a distinct set of characteristics which are not available anywhere else in the sub-region.

The Campus provides a dynamic networked environment where discovery research and business come together with a scientific coherence that accelerates innovation and strengthens links between academia and the commercial world. Delivering a connected ecosystem where life science companies can develop their science, build and scale-up their business, and Babraham Institute researchers are able to deliver world leading bioscience in a highly networked and interactive community. This in turn drives significant investment in the Cambridge Southern Research Cluster and puts the Campus at the centre of research and development in the life science sector for both the Greater Cambridge area and the UK.

The Campus provides critical bio incubator capability and wider support to drive company creation and emergence. Strategic partnerships enable the provision of scale-up space for more established companies and provide links to high quality funding streams and other support to enhance science capability and boost company growth. Shared spaces, and science- led capabilities, support the research and innovation undertaken on the Campus and increase connectivity across the Campus community. Evidence shows that this distinct and coherent colocation of research and innovation on the Campus is helping to create jobs and economic growth, developing new products and therapeutics and maximising the impact of UK bioscience.

Our dynamic and highly connected Campus ecosystem creates a low risk environment in which people can share knowledge and skills, develop, and take risks. This contributes to an enterprising, and collaborative Campus culture that supports people and their development.

In practice, there are limited alternative locations for biotech R&D start-ups in Greater Cambridge, or indeed the UK.

The explanation for this is multi-faceted but it is largely associated with cost and commercial viability. The building of incubator facilities for start-up companies who often require much smaller or indeed communal facilities on short term leases is typically less commercially attractive compared to larger and more established businesses.

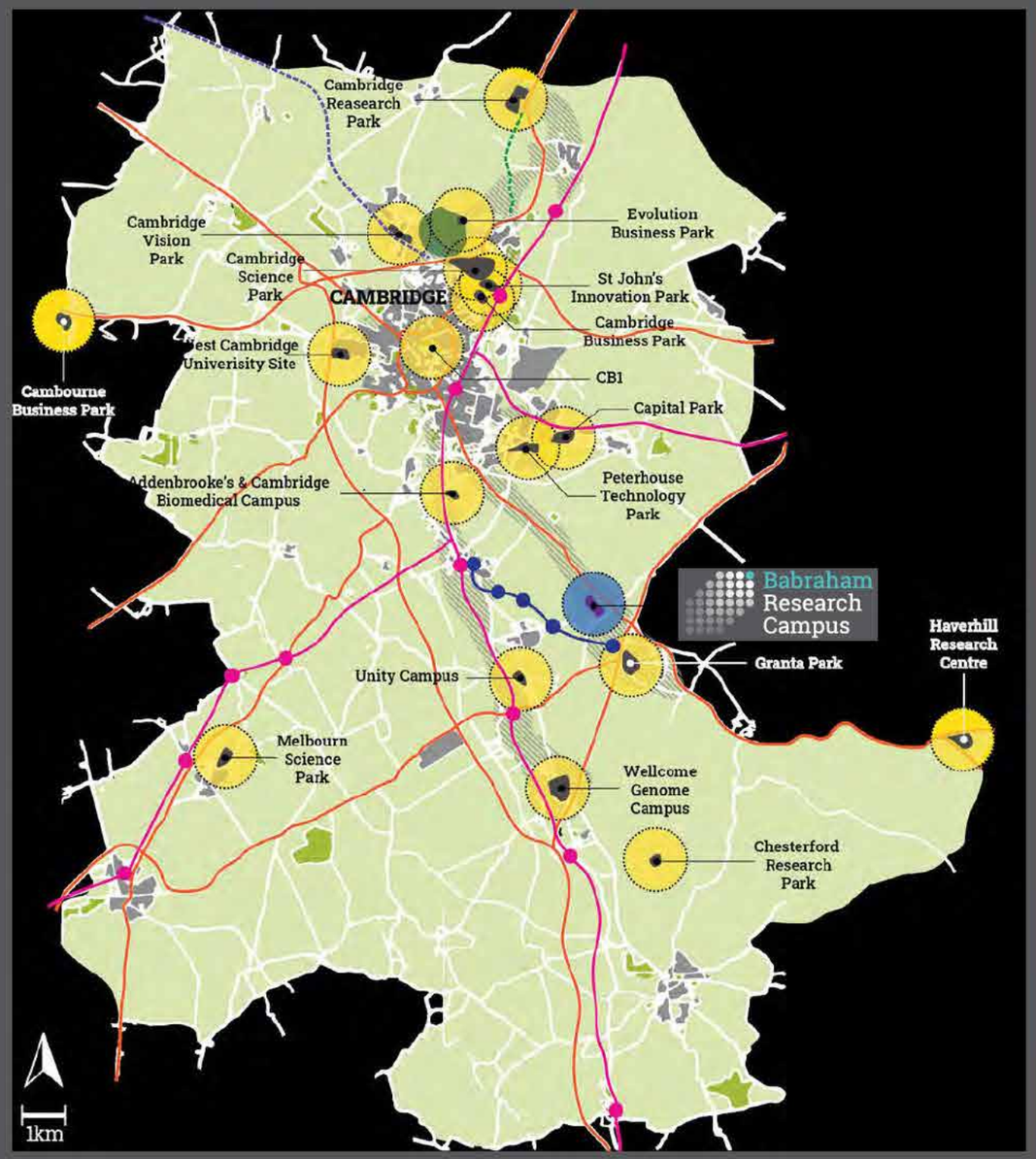
The Campus therefore has a role to play in stimulating, developing and sustaining local, regional and national economic growth. This is reflected in both our extremely high occupancy rate and the significant financial support that has been secured from the UK taxpayer via Central Government, through BBSRC.

If the valuable economic contribution offered by the Campus is to be sustained and enhanced, we must grow to accommodate the changing needs and increasing demand of the fast paced, competitive life science sector. Such an approach is entirely consistent with the objectives of both national and local planning policy to support economic growth and particularly clusters of knowledge-driven, creative and high technology industries.

The proposed Campus masterplan is crucial to satisfying existing identified demand and providing companies that are already located here with the flexibility to grow and develop on-site, without the need to look elsewhere.

The need and desire to grow the Campus comes at a time that is well-aligned with a review for how the Campus can embrace the important current agendas that include climate emergency, carbon, ecology and health and well-being. This is well-aligned with the emerging Local Plan process and for the ambition of the Campus to be recognised in the new Local Plan.

The expansion of the Campus brings with it a site wide masterplan approach so that decisions can be taken now with confidence as part of a move to a more sustainable Campus.



CAMBRIDGE CLUSTER DIAGRAM

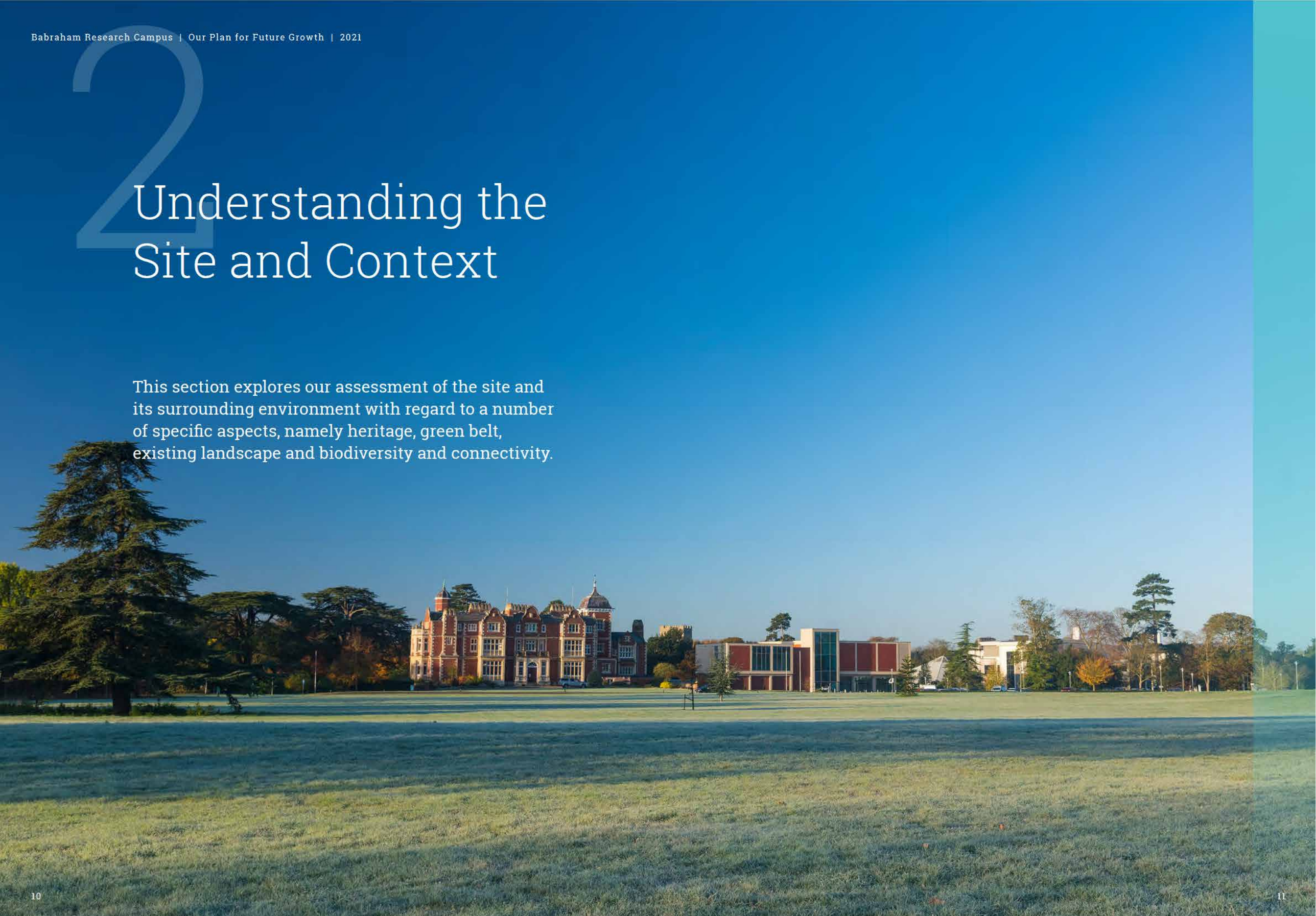
KEY:

- Existing road network
- Proposed busway route (indicative route)
- Guided busway /cycle and footpath
- Existing railway
- Existing railway stations
- 30 min cycle route
- Proposed cycle infrastructure
- Proposed development site
- Existing science / research or business park
- Existing Babraham Research Campus

2

Understanding the Site and Context

This section explores our assessment of the site and its surrounding environment with regard to a number of specific aspects, namely heritage, green belt, existing landscape and biodiversity and connectivity.



2 Understanding the Site and Context

The Heritage setting

Babraham Hall, a 19th century Grade II Listed Building and the Grade I Listed Church of St Peter are located within the Campus, north of the river. The setting of the Hall has changed considerably over time from its historic estate, through to the incorporation of the Institute of Animal Physiology in 1948 through to the Babraham Institute and development of the wider Babraham Research Campus around it. This has introduced built form into the former parkland in the north and south. However, areas of open lawn and parkland still exist to the west and east of the Hall. The southern part of the Campus grounds also lie within the Babraham Conservation Area.

The need and desire to respond to the presence of the heritage assets and the contribution made by their presence to the overall attractive aesthetic of the Campus is a key consideration in the preparation of the new Campus masterplan. The evolution of the masterplan has carefully considered its relationship with the historic environment to preserve the setting of important assets and has been developed to ensure it will continue to provide long-term protection and certainty to safeguard the more sensitive areas and identify the parts of the site that can more readily accommodate new development.

In terms of potential impacts on built heritage, there are 14 separate built heritage assets which have either a visual or physical connection with the allocation site or have a form of setting relationship with the surrounding landscape, of which the allocation site forms a part.

The Babraham Research Campus preserves evidence for over 7000 years of human history. As the Campus has grown over the last two decades, the Cambridge Archaeological Unit has carried out 25 archaeological investigations. There is potentially more preserved archaeology in the footprint of proposed buildings, carparks and landscapes. To mitigate its loss, the Campus anticipates further investigations and excavations, to reveal and record Babraham's past.

Detailed masterplanning will ensure the impacts on built heritage assets are avoided or minimised and it is likely that the proposals will have a limited or nil impact on the setting of the identified built heritage assets. Where potential harmful impacts may arise, these are likely to be 'less than substantial' in effect and mainly relate to impacts on the setting of the Grade II listed Babraham Hall and the Grade I listed Parish Church of St Peter, which abuts the campus boundary. In order to accord with the provisions of planning legislation, great weight will be attached to the objective of preserving the settings of listed buildings and other impacts arising would need to be clearly outweighed by public benefits arising from proposals.

An assessment of the current indicative masterplan in relation to the Heritage assets' significance and setting can be found within an accompanying Initial Built Heritage Appraisal.

SITE HERITAGE ASSETS

KEY:

- Potential development zones
- Conservation area
- Grade I listed building / monument
- m ownership boundary
- Grade II listed building / monument
- Grade II* listed building / monument

Green Belt

The Campus is currently located in the Cambridge Green Belt. However, the Greater Cambridge Green Belt Assessment (2021) concluded that the Campus land north of the River Granta would result in a low Green Belt harm should it be released.

Our wish to promote sustainable patterns of development sits at the heart of the proposals for the new Campus masterplan, as does our desire to continue to sympathetically manage and improve areas of retained Green Belt land. For example, the planting of additional woodland areas and hedgerows, the creation of conservation zones to increase biodiversity and thoughtful natural landscaping to ensure that any new buildings sit comfortably within the natural vista of the Campus.

A Landscape and Visual Appraisal (LVA) and Green Belt Study has been produced to consider the potential effects of development proposed within the site on the most critical landscape and visual sensitivities. This includes the consideration of the Green Belt constraint from a landscape and visual perspective. The full LVA and Green Belt Study is provided as a separate document.

The LVA provides a detailed understanding of the site context, which contributes to some critical Green Belt qualities. The prevailing rural character and sparse built form, which consists of nucleated villages and farmsteads, affords a widespread sense of openness. However, in visual terms, this is often constrained by the existing woodland blocks and tree belts. Particularly along the River Granta floodplain, where the site is located, the historical use of the fields for grazing and the existing landscape structure provides a strong sense of intimacy and enclosure. Views are therefore often short and framed by mature vegetation.

The existing built form within the site provides a substantial urban character. The scale of the offices/laboratory buildings affects the sense of openness in visual terms. The mature and wide tree belts provide a further sense of enclosure along most of the site's boundary, preventing long views towards a distant skyline. On the other hand, the vast open space of the historic parkland associated with Babraham Hall and the discrete green corridors between the buildings retain some local sense of openness.

Findings support the council GB study and opportunities for protection of remaining GB land.

Existing Landscape and Biodiversity

The Babraham Research Campus is semi-rural in character and contains a variety of landscape typologies.

Spread over 450 acres, less than a third of the land has buildings or other developments across it. The River Granta runs through the centre of the Campus, dividing the northern area of built development from the woodland, meadow and arable farmland located to the south of the river. Agricultural buildings associated with the maintenance of the wider Campus are also located in this area. The shallow chalk valleys slope towards the river in the centre of the Campus, providing views between and along the valley-sides which are filtered by the existing vegetation located along the river corridor. Chalk scrapes located to the north of the river have been created in recent years and provide areas into which the river can naturally flood. The Campus has planted extensive woodland areas both north and south of the river and trees across the woodlands on both sides of the river in the past 30 years. Continued planting of trees and hedgerows remains a priority.

The northern part of the Campus is heavily influenced by areas of modern development, with Babraham Hall and the Church of St Peter at its centre. Landscape associated with the historic built features is predominantly parkland in character with amenity grass and scattered mature trees. The landscape associated with the modern Campus development is predominantly ornamental in character providing amenity spaces for staff and local screening for built features and parking areas. The majority of the northern Campus area is surrounded by perimeter broadleaved woodland belts, providing good visual screening of the development area.

In this setting we have been able to both grow the built estate and increase the biodiversity of the land. The setting is treasured and we are committed to continuing to sustain and improve the landscape whilst sympathetically developing the Campus. Importantly, the land to the south of the river is open to the wider community who are encouraged to use and enjoy it. The proposals take the opportunity to deliver at least 20% Biodiversity Net Gain.

Above: River Granta
Left: Perimeter Woodland

Transport Connectivity

On Campus, existing Public Rights of Way, including footpaths, a bridleway, and a byway provide good connectivity within the landscape, connecting the Campus to the adjacent villages. Further pedestrian and cycle access to the Campus is available via the following links:

- The roundabout off the A1307.
- Babraham village High Street, to the east of the Campus.
- Rowley Lane bridleway from the farm entrance road at the south of the estate.

The Campus enjoys excellent connectivity, which is a huge positive for companies considering the Campus as their base, enabling them to attract and retain the very best talent from Cambridge and the surrounding area.

The Campus is also in a location set to be enhanced by a range of significant public transport measures planned as part of the Greater Cambridge Partnership's Cambridge South East Transport Scheme (CSET).

Vehicular access to the Campus is via the roundabout off the A1307. There are existing bus stops within 0.1km of the Campus on the A1307 Cambridge Road. These provide services to Cambridge City, Haverhill and the surrounding villages.

Below: Campus footpath

3 Delivering the Vision

How we intend to fulfil our vision for purposeful growth across an increasingly more sustainable Campus.

3 Delivering the Vision

Further to in-depth analysis of the site, we have created a Campus Strategy Plan see pages 22/23 across a number of key zones, which together fulfil our vision for purposeful growth across an increasingly more sustainable Campus:

R&D Development Zone

Circa 23,440sqm of new, life science research and development facilities on undeveloped land to the immediate edge of the Campus. The new facilities will meet the significant and pressing need for further research and development space within the cluster, enabling both new and scaling life science ventures to position themselves at the heart of our existing innovative and supportive ecosystem, rather than have to consider a base elsewhere – potentially outside the UK.

R&D Redevelopment Zone

Circa 12,050sqm of new academic and commercial life science research and development facilities and amenity space on previously developed land within the existing Campus. Through the redevelopment of old building stock, we will provide first-class, modern and energy efficient accommodation to support and facilitate companies with innovative and breakthrough research to scale rapidly, optimising the potential for innovation and spearheading R&D in the UK.

Housing, Amenity and Community (The Close)

Low density redevelopment of previously developed land within the Campus, comprising existing housing and supporting nursery provision. We anticipate the low-density redevelopment to consist of new, energy efficient dwellings and student apartments to ensure we can accommodate existing and anticipated future housing requirements for those who have a direct link with the Campus. The incorporation of suitable housing provision responds to the critical importance to recruit and retain staff in an increasingly competitive global market. It will also enable us to support staff in finding accommodation and reduce travel associated with the Campus for those living within walking distance. Amenity provision is also a priority for the future development of the Campus. We are committed to providing amenity which responds to the needs of both the Campus and local communities, and our plans include a small new retail provision (which would be located to the east side of the Campus to provide the shortest walking route for village residents) and up to 930sqm of new nursery provision. Circa 3.5 hectares of land within the south-eastern corner of the Campus, which currently comprises the Babraham Cricket Club Cricket Field, together with an additional piece of land for community activity (an expansion of existing provision) is also proposed to be retained as amenity land for the use of the Campus and the local community.

In addition:

- A **community meeting point** or 'plaza' is provided for within the residential development, connected to the Campus cycleway.

- A **new local play area** is proposed within the residential development area, to provide an active space for children from the development or local village to play and socialise.

- A **community orchard** and **'Common' area** is proposed within the south of the Campus, adjacent to the community planting area (Forest Garden), local school and cricket pitch. Additional permissive paths will be provided to allow access into the area for local residents, staff and visitors.

Supporting Infrastructure and Renewable Energy Zone

The Campus currently has in-house estates and facilities support teams whose roles are to manage and maintain the Campus buildings and grounds. The facilities teams provides essential support to ensure that the Campus runs smoothly and enables Campus companies to undertake their business without the need to employ individual facilities support, which can be unsustainable for smaller enterprises. The estates team is essential to the management of the 450 acres of the Campus, including the extensive areas of parkland landscape, which they take great pride in maintaining to very high standards for all to enjoy.

As the Campus grows, the demands for facilities and estate support will also grow.

For reasons of operational efficiency and to make use of existing yard areas we propose to redevelop the land and buildings within the existing complex to the south of the River Granta, which currently accommodates the estate team facilities and recycling/waste disposal and estate machinery compound. Circa 2,950 sqm of new estate facilities accommodation is proposed to support the future management and maintenance of the Campus. This will include workshops, offices, staff facilities and storage barns.

This zone also includes an opportunity to allocate circa 3.5 ha of land as a potential location for renewable infrastructure to support the existing and future low energy and net zero carbon Campus operations.

Historic Parkland and Estate

Circa 39 hectares of land in the north of the Campus is proposed to be retained and protected as open space in order to preserve the setting of the Babraham Conservation Area, Babraham Hall and the Church of St Peter. Existing landscape features such as the mown amenity grass, scattered trees and lime tree avenue are much enjoyed and important features within the landscape. Built development is therefore excluded from this area.

Circa 60 hectares of land has already been planted with woodland or set aside as conservation areas on field and river margins. These areas are proposed to be retained and managed as woodland. We have also identified circa 17.1 hectares of land within which we could create additional woodland for carbon offsetting and increasing biodiversity.

Circa 150 hectares of land that comprises arable farmland or pasture for livestock grazing are proposed to be retained as farmland and managed landscape. The existing retained arable land will provide an important habitat for threatened and declining bird species such as Skylark and Corn Bunting.

Campus perimeter woodland

Arable land

R&D development zone

R&D redevelopment zone

Historic parkland retained

River Granta corridor and wet woodland

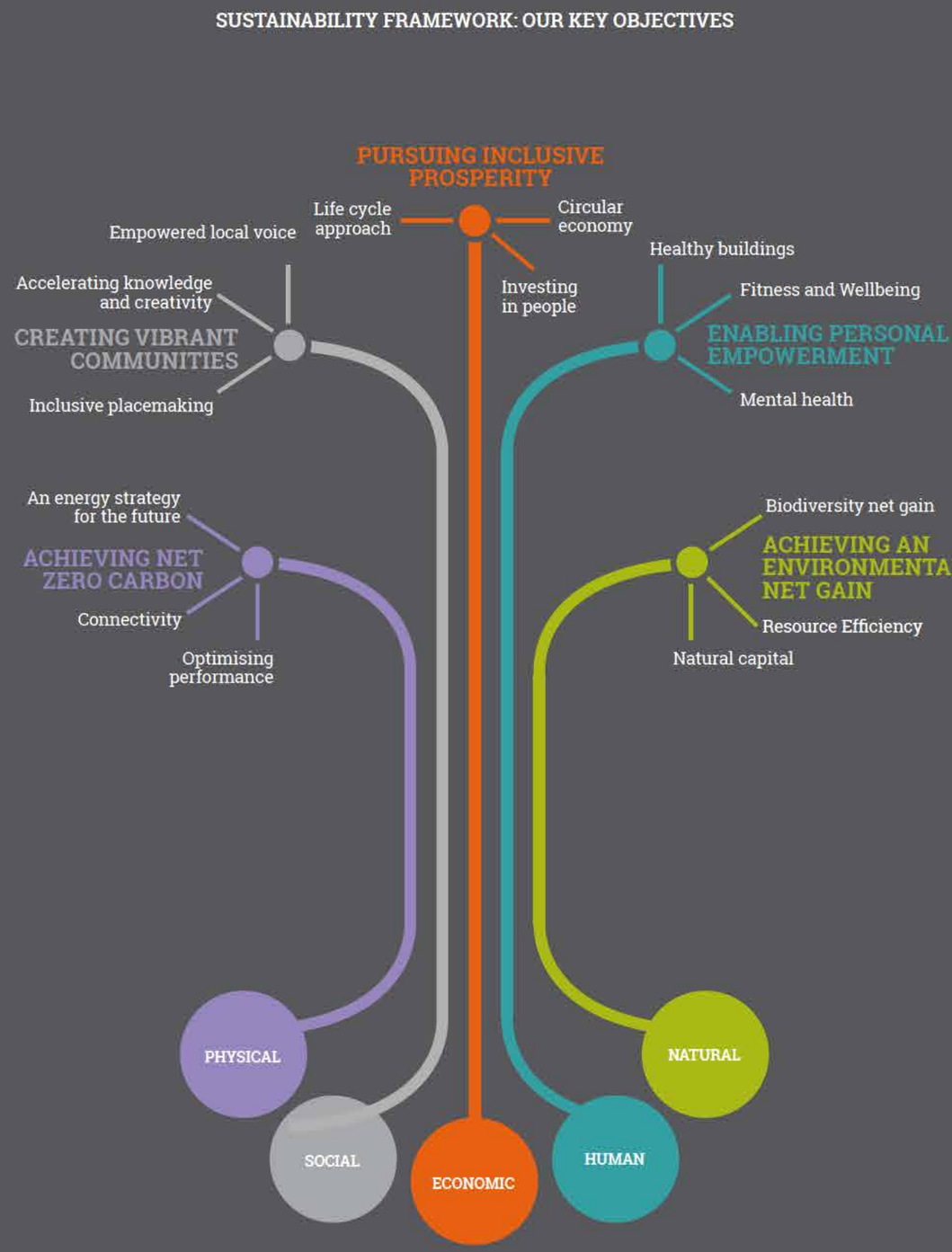
Arable land

Housing and amenity zone

Renewable energy and support infrastructure

Community land

Meadow land



Delivering Sustainable Growth

The following Sustainability Framework sets out the ambition and commitments that complement the BRC in fulfilling its purpose of developing and facilitating world leading science and research.

Physical Capital

The Campus stakeholders have a target of net zero by 2040 in line with the UK's obligations to decarbonise.

Sustainable buildings lay the foundations upon which a community is built. Future development of the Campus must enable value creation by building transport infrastructure, workplaces, and high-quality homes that are balanced to the context of the site and surrounding areas. This physical capital unlocks the creation of value in other capitals, enabling us all to thrive within a diverse natural environment. This includes:

- Adopting passive design.
- Reducing energy requirements.
- Using clean (electric) energy and adopting an all-electric servicing strategy.
- Supporting sustainable transport.
- Optimising building performance post development.

Social Capital

The proposed expansion of the Campus is critical for enhancing the social capital on site, strengthening existing networks and facilitating the creation of new ones. The Campus will continue to seek to create a sociable and vibrant place - through the delivery, within the site, of social infrastructure and amenities that are accessible to all - where early career scientists and entrepreneurs can also connect on a personal level, thereby supporting community creation and mental wellbeing.

Future development will enable knowledge growth and creativity to be generated through the interaction and relationships between companies in this specialised, fast-moving life science sector, with higher levels of collaboration leading to the upskilling of more people in the process. For example, attracting additional world leading researchers, innovators and entrepreneurs to the Campus, as well retaining global talent and encouraging the development of skills and expertise across the Campus community. Specifically, we have the opportunity to expand the PhD and Postdoctoral research community on the Campus, and, through apprenticeships, to build technical capabilities. Further benefits are also possible by encouraging greater fluidity in the movement of talent between organisations on the Campus, and into the wider Cambridge cluster and broader UK economy.

Effective community engagement with tenants and the wider community will also continue to be a priority, establishing stronger bonds of trust and collaboration both on and off Campus.

Economic Capital

Realising economic value unlocks value creation across all capitals, enabling positive, sustainable, and equitable growth and prosperity. We seek to create economic value as a Campus and for all those who will live and work here.

Circular economy and life cycle approach will be adapted where ever possible - the key principles of disassembly, re-use and adaptability will be adopted to enable the efficient use of natural resources during the whole lifecycle of our assets.

The Campus will also enable sustainable growth in Cambridgeshire through the creation of new full-time equivalent jobs during construction and will unlock additional opportunities to harness local talent.

Human Capital

Understanding the impact of the built environment on the health and wellbeing of occupants is increasingly well documented and people expect to live and work in an environment that facilitates high levels of mental and physical wellbeing. We will seek to focus on:

- Environmental factors: Employing best practice through all phases of future development to minimise detrimental impacts on staff, occupants and local residents.
- Safety and security: Of our community both on and off Campus.
- Daylight: Ensuring all new spaces maximise natural daylight.
- Green space: Providing high quality, permeable, well connected and accessible green spaces that benefit both the local community and wildlife.
- Mental health: Delivering healthy buildings which facilitate high levels of mental and physical wellbeing.

Natural Capital

The Campus presents an opportunity to integrate with nature, making use of the benefits it can provide. In tandem - to ensure resource efficiency - sustainable, responsibly sourced materials that are reused, recycled or locally sourced will be used wherever possible. We will be mindful of resource efficiency and maximise the creation of environmental, social and economic value which supports the investment and long-term integration of biodiversity in master planning using the services nature-based solutions provide, including:

- Building on initiatives already in place to mitigate flood risk using additional flood plains and flood scrapes.
- Integrating the natural cooling of buildings and surrounding areas through green roofs, walls and tree planting.
- Continuing to recycle waste, including food waste. (The compost created from food waste is already used to support onsite planning and this will continue).
- Proactively taking the opportunity to buy and sell materials and products for reuse to prevent materials losing value and depreciating; adopting appropriate technologies to underpin the efficient use of process materials where possible.

Enhancing the Natural Landsacpe

There are significant opportunities to enhance the ecological value and biodiversity of the Campus and deliver Natural Cambridgeshire's vision of doubling the nature conservation value of the area.

Despite extensive development the Campus retains a parkland aesthetic with areas of open grassland, woodland and scattered trees, which are managed to maintain and enhance their nature conservation value. Where modern development has been undertaken it has included sympathetic landscape planting and open public realm design, plus ecological enhancements including the creation of species rich calcareous grassland and artificial habitats for bats and birds. Extensive woodland planting has been carried out in recent years on arable land away from the main Campus areas, augmenting and connecting areas of established woodland, and which is approaching early maturity.

An ecology and landscape-led approach has been taken within the masterplan with health and well-being also playing an important role within the design process. The masterplan responds to the existing strong landscape structure and important ecological features found within the Campus and wider area. The masterplan also illustrates the diverse landscape typologies proposed within the vision, enhances screening to the existing and proposed built form and incorporates biodiversity enhancements.
The masterplan is supported by a Leisure and Circulation Strategy Plan (pages 36-37) and a Landscape Character Areas Plan (pages 30-31), to assist with strengthening accessibility to and within the Campus to create a strong sense of place.

The Campus is committed to delivering a biodiversity Net Gain which will be demonstrated using the Natural England Biodiversity Metric and also plan to achieve the "doubling nature" ambition set out by Natural Cambridgeshire and supported by South Cambridgeshire District Council.

The ambition is to deliver at least 20% Biodiversity Net Gain.

The concept masterplan represents a carefully considered and sensitive response to the landscape, visual and heritage contexts of the site.

Right: View of River Granta
Left: View of the wet woodland

LANDSCAPE CHARACTER AREAS

KEY:

- River Granta Corridor and Wet Woodland
- Arable Land
- Campus Perimeter Woodland
- Campus Development
- Residential Development
- Meadow Land
- Arable Land Community Land
- Historic Parkland

The River Granta and Flood Management

Above: View of the river scrapes

Right: Aerial view of the river scrapes and River Granta wetland

Flood Risk and Ground Water: The existing Babraham Research Campus is largely located in Flood Zone 1, land that has a low risk of flooding. In addition, ground water within the site is at depth and therefore flood risks due to groundwater issues are low.

The River Granta runs within the site and the land immediately bordering the river encroaches into the Flood Zone of the river. This river is maintained by the Environment Agency and as such requires a 9m maintenance strip to be left each side of the river where no development can occur. The current site development adopts a strategy where development is located outside of the maintenance strip of the river and outside any areas prone to flood risk.

Site investigations carried out within the Campus indicate that the underlying soil comprises topsoil over sand with underlying bedrock being chalk at shallow depth. The underlying soil is suitable for infiltration drainage techniques such as soakaways. These techniques are the preferred method of dealing with surface water run off as they minimise any flood risk issues.

Surface Water Strategy: Surface water at the site currently discharges via local piped networks and these typically terminate at soakaways, however there are isolated instances where the surface water discharges directly to the river under controlled conditions.

New development at the Campus will be planned to avoid increased vulnerability to the range of impacts arising from climate change. It will also take into account advice from the Environment Agency (EA) and other relevant flood risk management bodies, such as the lead local flood authority and internal drainage board. This requires drainage design to consider infiltration first, then watercourses with connection to sewers as the least preferred option. For the Campus, the use of infiltration drainage techniques is feasible. However wider benefits in adopting other sustainable drainage features will also be included in any design to improve diversity and control groundwater pollution.

Recently, we have been working with the Wild Trout Trust (WWT) who, in partnership with the EA, have completed works to improve the River Granta where it runs through the Campus. These and future works are intended help mitigate future flood risk and enhance the River Granta as an ecology asset.

Health & Wellbeing

The following section sets out ways in which the emerging Campus masterplan will create a health-promoting environment for people of all ages. The masterplan will contribute to local health policy objectives and help to promote health and wellbeing as a whole for the Campus.

Healthy Living

- Homes built to Cambridge healthy homes standard and resilient to climate change.
- Low environmental impact design.
- Job creation promotes economic security which enables healthier living.
- Jobs are well located in terms of access by public transport, and cycling, and adjacent to a potential new public transport hub.
- More homes within walking distance of jobs: less stressful journey to work and less pollution.
- Facilities already in place to support the new residents.
- Open space links with existing network of green spaces to extend circular routes.
- Electric charging points in car parks and homes promotes less polluting local traffic.

Healthy Working

- Commitment to modern building design meeting BREEAM 'Excellent' credits to ensure healthy air, thermal control and natural light.
- Biophilic design connecting people to nature and natural processes.
- Well maintained, extensive range of high-quality outdoor environments offers diverse activities, restorative, active and therapeutic environments.
- Staff access to onsite amenities including nursery, gym, restaurant, allotments, and new shop.
- Amenities, open space and healthy buildings empower individuals to manage their health, reducing reliance on company culture or policy to improve health.
- Access to healthy food and sociable eating provided through onsite restaurant and allotment.
- Active travel encouraged by high quality, practical cycle facilities and safe and attractive walking environments provided through the site with links to surrounding networks.

Reducing Inequalities

Reducing inequalities is encouraged by diverse and good work opportunities, early years childcare, business support services, free access to open space, local sourcing and reducing barriers to work:

- Diverse employment opportunities - not just scientists.
- On-site childcare for children from 6-months facilitates returning to work after parental leave.
- Services provided by the Campus supporting business viability and start-ups.
- Free public access to health and wellbeing benefits of green and river focussed open space.
- Cost saving support for employees, for example, free bike servicing.
- Reducing barriers to work via site tours and STEM outreach activities, such as school's careers events, science fairs and employability skills sessions.

These features of living and working at Babraham help deliver local and national policy priories of the Cambridge and Peterborough Health and Wellbeing Board, NHS, Public Health England, Sport England and South Cambridgeshire District Council Quality Growth Charter:

- Good work for all.
- Healthy weight environment.
- Prevent mental ill-health.
- Safeguard air quality.
- Empowerment.
- Provide good start in life.
- Active living.
- Prevent social isolation.
- Affordable well-designed housing
- Aging well.

Inclusive Growth

- Low energy costs in residences.
- Accessible homes and workspaces.
- Community engagement: Public events, temporary and meanwhile uses (arts, retail, bike servicing) for the business community.
- Building and site design embraces key principles of inclusive design.
- New facilities available for public use (play areas, selected open spaces, nursery).
- Long term stewardship of the site with opportunities for local community engagement.

LEISURE AND CIRCULATION STRATEGY PLAN

KEY:

- Existing Public Right of Way - Footpath
- Existing Public Right of Way - Bridleway
- Existing Public Right of Way - Restricted Byway
- Existing Cycleway
- Existing permissive footpath
- Proposed permissive footpath
- FB Proposed footbridge
- 1 Proposed Local Area of Play - Within woodland setting
- 2 Proposed community meeting point
- 3 Proposed bird hide
- 4 Proposed community space, with forest planting scheme, orchard and grassed recreation space
- Existing Bus Stops

Enhancing Connectivity

Sustainable transport plays a key role in the future of the Campus and maximising the opportunities available for employees and visitors to arrive by sustainable modes of travel is a high priority.

The Campus is located at the heart of the Southern Research Cluster, but it also sits within a strategic transport corridor (A1307-A11-A505) and benefits from a number of planned public transport initiatives, most notably the Cambridge South East Transport scheme (CSET). Phase 1 of the CSET scheme is being delivered by the Greater Cambridge Partnership (GCP), and involves the Linton Greenway project which delivers a series of on-route improvements along the A1307 between Cambridge and Haverhill, running past the Campus, for pedestrians, cyclists and public transport users, and to improve road safety for all users.

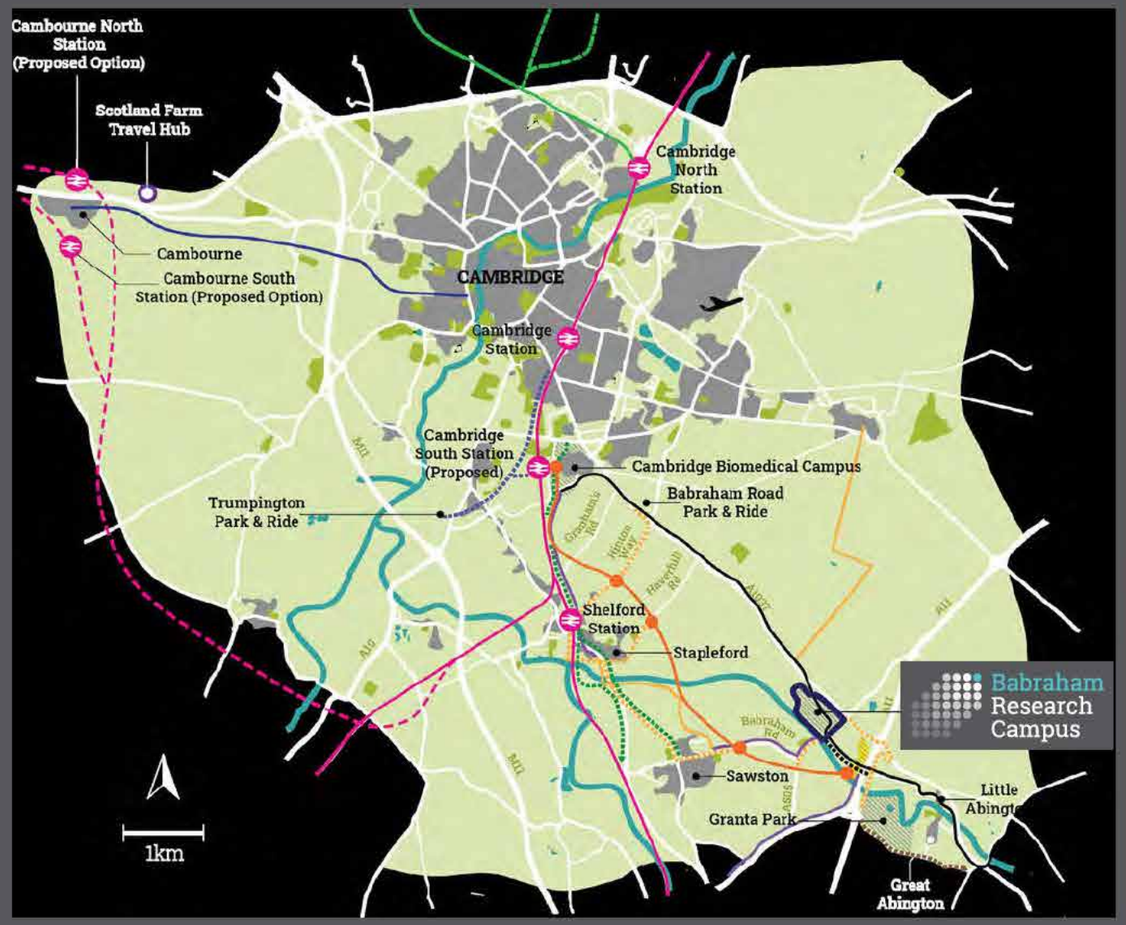
Phase 2 of the CSET scheme is a major public transport, walking and cycling infrastructure scheme. It is made up of the following three key elements:

1. A dedicated public transport link between the A11 and the Cambridge Biomedical Campus, running immediately to the south of the Babraham Research Campus, with potential connections into the Campus itself;
2. A new Travel Hub facility near the A11/A1307 junction; and
3. New cycling, walking and equestrian facilities running alongside the public transport link.

The CSET Phase 2 scheme will transform the accessibility of the existing Campus by non-car modes. It will provide a high-quality public transport link with Sawston, Stapleford and South Cambridge, including the proposed Cambridge South railway station at the Cambridge Biomedical Campus. The public transport services would be unaffected by congestion, enabling more reliable journey times and allowing public transport to compete more effectively with the private car.

The 2019/20 Babraham Research Campus annual travel survey asked the question whether staff would use "an off-road public transport route as currently under review by Greater Cambridge Partnership for the A1307 South East corridor". Of the responses, 52.1% of staff said they would use the GCP public transport scheme, which provides confidence that existing and future staff at the Campus would reduce their dependence on the private car by uptake of the CSET public transport scheme.

The Campus recognises the importance of sustainable growth and continues to support efforts to introduce sustainable transport options. With strategic transport interventions due to be delivered in the Cambridge area, the Campus will have excellent connectivity with other key areas of R&D and residential growth across Cambridge.



WIDER CONNECTIVITY

KEY

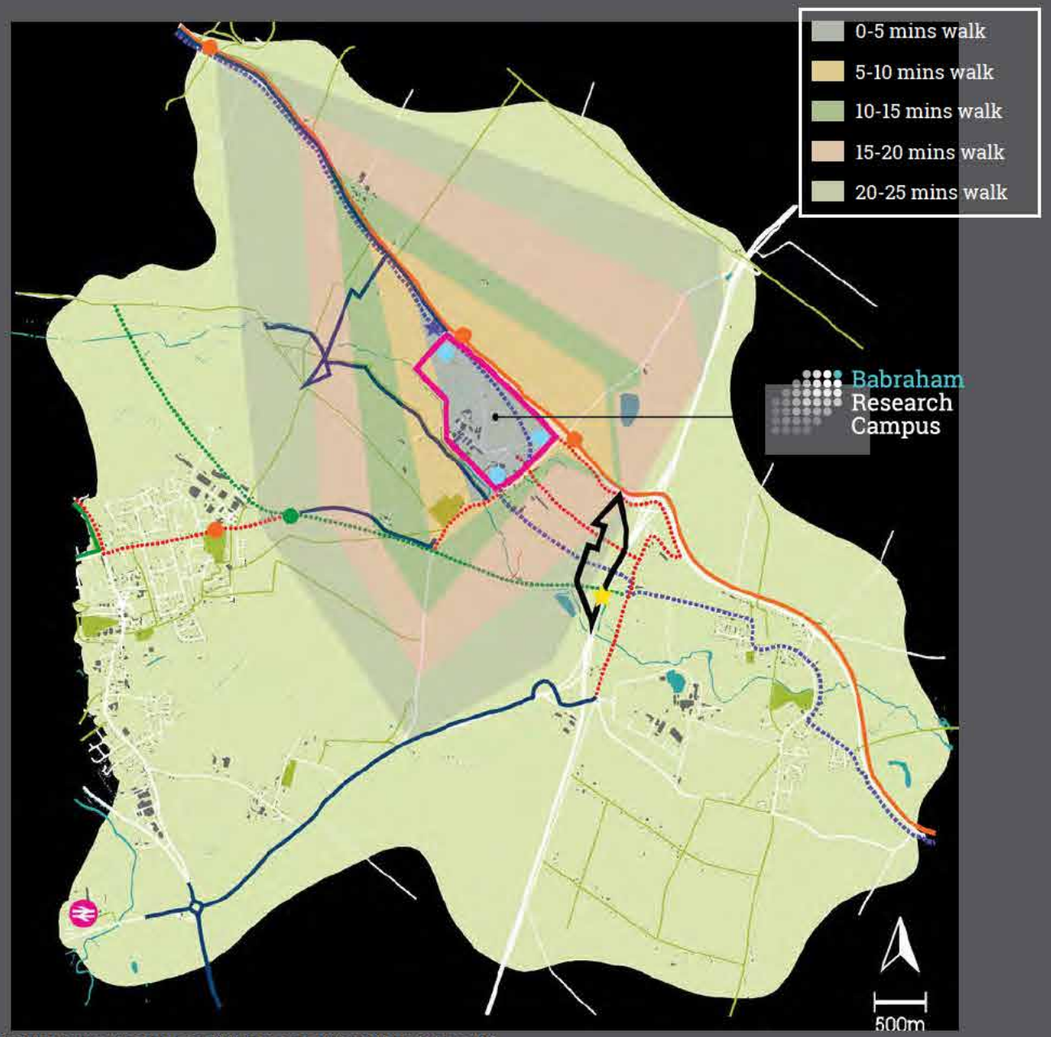
- Existing railway
- Proposed Route of the GCP's Cambridge South East Transport Scheme
- Proposed Sawston Greenway
- Potential connecting bus services
- Possible future extension to new public transport route
- Potential upgraded public right of way
- Proposed options for East West Rail route
- Existing Linton Greenway Links
- Potential Linton Greenway Links
- Existing Cambridge Guided Busway
- Proposed GCP Waterbeach to Cambridge route
- Existing busway
- Proposed GCP Camborne to Cambridge Route
- Proposed Linton Greenway
- Railway station
- Proposed stop locations
- Local plan housing allocation
- Proposed travel hub site
- Travel Hub
- Airport

Our vision for the purposeful growth of the Campus is to continue to offer and expand on a healthy, socially inclusive and well-connected place, where residents and staff can travel easily within, around and beyond the Campus by sustainable modes of travel.

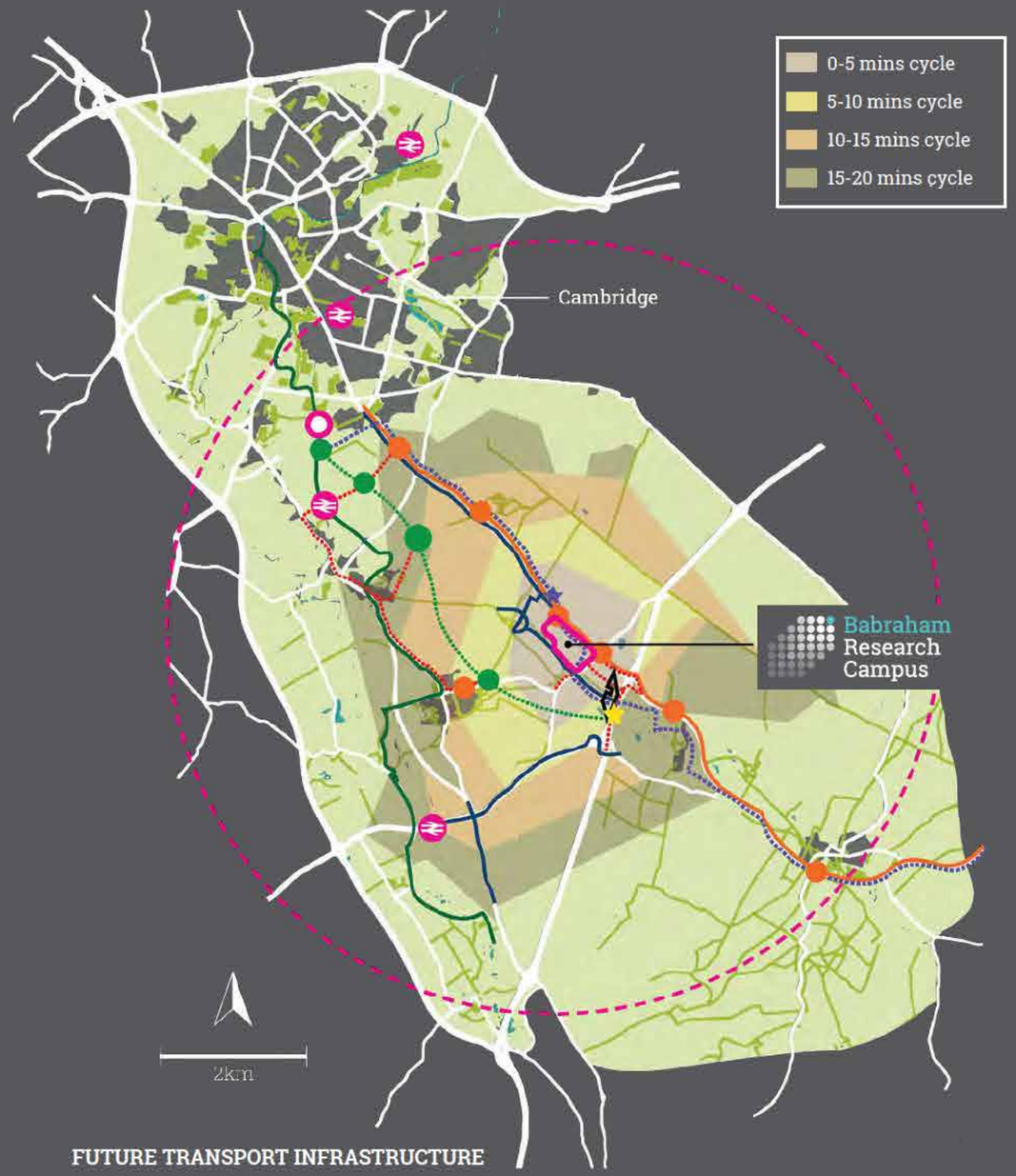
The strategy for the site will deliver sustainable development of the existing Campus, which will continue to reduce the need to travel by car.

Key Opportunities:

- Planning for the Transport Mobility needs of the future, not the past.
- Reducing the need to travel by car and build in healthy lifestyles.
- Maximising opportunities for new types of mobility, including electric vehicles.
- Prioritising walking and cycling for local trips.
- Maximising the use of public transport.
- Private car strategy - car parking will be balanced at a level which recognises likely demand but also seeks to deter habitual car use for journeys that could be made by non-car modes.



FUTURE TRANSPORT INFRASTRUCTURE (LOCAL)



FUTURE TRANSPORT INFRASTRUCTURE

COMBINED KEY:

- Babraham Research Campus
- Bus improvements
- National cycle route
- Linton Greenway
- Potential connecting bus
- Cycle path
- Footpath
- Proposed travel hub site
- Vehicle, pedestrian and cycle access
- Improved footbridge and underpass
- New signalised crossing at roundabout
- Bus stop
- Proposed stop location
- Existing railway station
- Proposed Cambridge South rail station

4 Illustrative Masterplan

Exploring the long-term requirements of the Campus.

4 Illustrative Masterplan

The suite of technical reports have informed the Illustrative Masterplan for the Campus.

The development of the masterplan considers the long-term requirements of the Campus - putting at its heart the landscape and community in which it sits and the life science research and innovation it supports - to ensure the purposeful growth of the site for the benefit of those that work here, the local community, the wider regional life science cluster and the UK research base as a whole.

ILLUSTRATIVE MASTERPLAN

KEY:

- Existing woodland
- Existing historic parkland
- Existing amenity grassland and areas of ornamental planting
- Existing arable field with introduced skylark plots
- Existing or recently planted scrub planting
- Existing chalk scrapes
- Proposed chalk scrapes
- Proposed woodland planting
- Proposed woodland copse planting
- Proposed individual trees
- Proposed orchard trees
- Proposed scrub planting
- Proposed species rich grassland with wildflowers
- Proposed amenity grassland and areas of ornamental planting
- Proposed wetland
- Proposed or restored pond
- Proposed arable field margins with strengthened hedgerows
- Proposed building locations
- Proposed roads/cycleways/parking areas

5 Summary of Public Benefits

Exploring the public benefits of the Masterplan and site wide strategy.

5 Summary of Public Benefits

The proposed Campus development will deliver a number of benefits across the objectives of sustainable development:

Economic Benefits

- Supporting the Life Science Cluster as an important part of the local, regional and national economy.
- Bringing economic benefit from the growing successful Cambridge Life Science Cluster into the Babraham Research Campus.
- Ensure the continued growth and success of the world renowned Babraham Institute.
- Supporting major infrastructure investments proposed for the area, acting as a catalyst for wider opportunities for economic growth.
- Facilitate circa 1200 net additional jobs.
- Create wide ranging career development opportunities both in and beyond STEM.
- Provide STEM career pathways, through to academic PhD Studentships.

Social and Environmental Benefits

- Delivering new Campus linked housing provision.
- Delivering new on-site Campus facilities including new retail and nursery provision.
- Creating an eminently walkable place to promote active lifestyle and well-being.
- Providing convenient connections to existing and proposed strategic transport infrastructure and key transport hubs to promote sustainable, low carbon travel and reduce reliance on private car journeys.
- Achieving at least 20% Biodiversity Net Gain as a result of the extensive network of retained green spaces providing opportunities for an increase in natural habitat and ecological features.
- Mitigating flood risk through the creation of additional flood plains and flood scrapes.
- Enriching landscape and providing an array of new publicly accessible green open spaces.
- An embedded net zero carbon strategy from the outset to ensure a positive, local response to climate change.
- Areas of retained Green Belt land with the opportunity for compensatory improvements as per national planning policy guidance.
- New and enhanced opportunities for informal and formal recreation, with links connecting to local towns and villages to help promote health and wellbeing.

Summary

The boundaries of the existing Campus has limited expansion potential for buildings capable of serving future demand for space from existing and prospective occupiers.

If the valuable contribution offered by the Campus is to be sustained and enhanced, it must grow to accommodate the changing needs and increasing demand of the fast paced life science sector. Lack of future development on Campus will inevitably result in companies seeking alternative accommodation elsewhere, possibly outside of Cambridgeshire and the UK.

This submission supports the draft allocation. The development of the masterplan considers the long-term requirements of the Campus - putting at its heart the landscape and community in which it sits and the life science research and innovation it supports - to ensure the purposeful growth of the site for the benefit of those that work here, the local community, the wider regional life science cluster and the UK research base as a whole.

This submission demonstrates that the masterplan can deliver across the three objectives of sustainable development:

1. An economic role: Providing employment opportunities and being well located to support the growth and innovation of the Life Science Sector. The boundaries of the existing Campus has limited expansion potential for buildings capable of serving future demand for space from existing and prospective occupiers.

2. A social role: Providing new Campus housing and amenities that reflect the Campus and local community's needs and support its health and social well-being.

3. An environmental role: Assimilating the development into the existing landscape along with structural planting, protecting and enhancing existing ecologically valuable habitats, preserving the function of the wider Green Belt and creating robust new Green Belt boundaries and delivering net biodiversity gains and sensitive design to ensure minimal impacts on heritage assets.

To support the development of the Campus a Site Wide Strategy Plan has been formed to direct with confidence the future development of the Campus, whilst also providing an up-to-date coordinated plan for the future of the Campus as it seeks to embrace the priorities around climate emergency, carbon, ecology and health-and-well-being. It also denotes which parts of the Campus should be protected for the long-term, most notably for heritage protection and ecological enhancement. The Site Wide Strategy Plan also provides the confidence to redevelop the on-Campus housing area to provide more low-density homes for Campus workers and visitors in a highly energy-efficient and attractive setting. The inclusion of proposed amenity would further benefit the local community.

The Babraham Research Campus is proposed to be released from the Green Belt and allocated as a Special Policy Area in the 'First Proposals' version of the emerging Greater Cambridge Local Plan.

The Babraham Research Campus is proud to be part of the Cambridge Southern Research Cluster and heavily shares the values and emerging priorities underpinning the emerging Greater Cambridge Local Plan. An expanded Campus set within a Site Wide Strategy would help the Local Plan meet its aims around responding to climate change, increasing biodiversity and green spaces, promoting wellbeing and equality, and delivering quality places.

The Campus is an established site, with investment in infrastructure to sustain future growth. There is space to continue to grow and as a place of scientific excellence since 1948 any growth is bound to an existing, vibrant working community.

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