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EXECUTIVE SUMMARY

The Land at Babraham offers an exemplar opportunity to deliver an integrated, sustainable and intergenerational community based on a commitment to deliver high quality contemporary homes, amenity spaces and facilities, designed to last for successive generations.

This document sets out the vision for a new intergenerational, sustainable neighbourhood at the Land at Babraham, in response to the Greater Cambridge Local Plan (GCLP) Issues and Options Consultation. The site will be referred to as "the site" throughout this vision document.

The site will be a residential-led development, supporting the existing science parks in the southern rural cluster, most notably the Babraham Research Campus (BRC) by improving the balance between employment and housing. It will include approximately 3000 homes, two primary schools and one secondary school, two local centres, a country park, and the potential for employment land and new research and development facilities.

The site will create a sustainable new community in a highly accessible location, with great walking, cycling and public transport links. With the evolving transport improvements led by the Greater Cambridge Partnership (GCP) as part of the Cambridge South East Transport Scheme (CSET), the site will be home to a new travel hub and bus and active travel route, providing direct connections to/from Cambridge.

The site offers the opportunity to reflect the best principles of sustainable design, following the Cambridge Quality Charter for Growth and responding to the Big Themes of the Issues and Options Consultation. This will ensure the highest quality of placemaking to meet contemporary sustainable living requirements and enable resilience for the future.

The site will provide affordable, healthy and inclusive homes, which vary in type and tenure, ensuring homes are multi-tenure, multi-generational and inclusive of all needs within the community.

Through respecting the rural Green Belt context, and retaining and enhancing areas of biodiversity value, the site presents significant ecological opportunities.







GREATER CAMBRIDGE LOCAL PLAN THEMES

The GCLP aims to provide a positive vision for the future, underpinned by the aim to ensure social, economic and environmental sustainable development. In order to achieve this vision, the GCLP have identified seven themes, each of which have an overarching aim. The GCLP aims to achieve the following:



Climate Change



Biodiversity and Green Spaces



Wellbeing and Social Inclusion



Great Places

"Help Greater Cambridge transition to net zero carbon by 2050, by ensuring that development is sited in places that help to limit carbon emissions, is designed to the highest achievable standards for energy and water use, and is resilient to current and future climate risks."

"Increase and improve our network of habitats for wildlife, and green spaces for people, ensuring that development leaves the natural environment better than it was before."

"Help people in Greater Cambridge to lead healthier and happier lives, ensuring that everyone benefits from the development of new homes and jobs" "Sustain the unique character of Cambridge and South Cambridgeshire, and complement it with beautiful and distinctive development, creating a place where people want to live, work and play."



Jobs



Homes



Infrastructure

"Encourage a flourishing and mixed economy in Greater Cambridge which includes a wide range of jobs, while maintaining our area's global reputation for innovation."

"Plan for enough housing to meet our needs, including significant quantities of housing that is affordable to rent and buy, and different kinds of homes to suit our diverse communities." "Plan for transport, water, energy and digital networks; and health, education and cultural facilities; in the right places and built at the right times to serve our growing communities."

GREATER CAMBRIDGE LOCAL PLAN THEMES

The proposals for the site set out a vision which will respond positively to the GCLP themes in the following ways:



Climate Change

- Provide attractive and convenient alternatives to car
- Facilitate low-carbon lifestyles, for example by providing land to support local food growing.
- Enhance existing trees and woodland contributing towards carbon offsetting.
- Build future-proofed, resilient and adaptable buildings and spaces to meet the needs of changing technologies, energy generation and household needs.
- Provide catchment resilience to climate change related rainfall and drought.



Biodiversity and Green Spaces

- River channel restoration of the Granta River to improve habitats and biodiversity.
- Deliver biodiversity net gain across the site through a mix of publicly accessible and dedicated wildlife areas, most importantly in the new Country Park.
- Retention of existing ecology: existing hedges and woodland will be enhanced with native planting and maintained for nature conservation.
- Connect to existing and new local open spaces and parks to promote a connection with nature and encourage active living.



Wellbeing and Social Inclusion



- Provide spaces for existing local businesses, trades and creatives to grow and share knowledge.
- Create a green active travel route through the site with areas for play, fitness, community growing, educational trails and spaces for relaxing.
- Create a neighbourhood which is welcoming and safe for people of all ages and abilities, ensuring dementia-friendly design principles are integrated through the design process.



Great Places

- Protect the rural character, historic setting and listed buildings within and around the Conservation
- Design distinctive architectural and landscape features to aid wayfinding, creating a unique community.
- Provide a wide variety and mix of sizes, types and tenure of homes, supporting a diverse range of people and groups.
- Provide a range of amenities and facilities which provide benefits to the wider community.



Jobs

- Provide direct and sustainable connectivity to jobs, most notably within the BRC and the rural southern cluster.
- Support the growth of the rural southern cluster by providing new homes and facilities.
- Employment opportunities within retail, education, health and fitness and light industrial.
- Provide a suit of housing typologies that promote working from home.



Homes

- Respond to growing demands to cater for changing family dynamics.
- Provide affordable, high quality homes.
- Provide range of house types to support intergenerational living, age-in place homes, apartments and large family homes.
- Design homes which support post-covid home working.
- Design homes with decent levels of private amenity.



Infrastructure

- Safe, direct and attract modes of sustainable transport
- Support the implementation of the CSET's transport infrastructure and improvements.
- Support smart and clean energy management.
- Providing the right types of spaces, homes and transport to support healthy low-carbon behaviours.
- Provide high quality education close to homes.

CAMBRIDGESHIRE QUALITY CHARTER FOR GROWTH

The emerging Local Plan is based on the Cambridgeshire Quality Charter for Growth which provides a clear basis for helping to secure a common expectation for new developments. Themes covering the four 'C's' of Community, Connectivity, Climate and Character are used to provide an understanding of what needs to be considered when creating and assessing high quality design. The Plan builds on the four 'C's' and the location of the site for new dwellings and employment opportunities builds on the adjacent employment sites and the need to locate homes near jobs. In addition to the four 'C's', proposals will seek to incorporate opportunities for **Commerce** and will be underpinned by a vision which puts **Consultation** at the forefront of place making.

Community



"Places where people live out of choice not necessity, creating healthy communities with a good quality of life"

Connectivity



"Places that are well-connected and enable easy access for all to jobs and services using sustainable modes"

Character



"Places with distinctive neighbourhoods and a sense of place that reflect local building traditions"

Climate



"Places that anticipate climate change in ways that enhance desirability of the development and minimise environmental impact"



Commerce



"Places that support new and existing communities through the provision of new jobs which are accessible to a diverse range of people"

Consultation



Seek to engage and inform all the community, residents and stakeholders throughout the design and development process with collaborative and inclusive methods of engagement













SUPPORTING CAMBRIDGESHIRE'S VISION FOR SUSTAINABLE GROWTH















Community

- Provide stimulating and active social spaces which encourage interaction and engagement.
- Provide a variety of amenities and facilities including retail, leisure, health care, restaurants and bars, to support the new and existing community.
- A range of housing types and tenures to support a diverse and varied community.
- Provide housing which is adaptable to people's changing circumstances and lifestyles as their needs change throughout their lifetime.
- Opportunities for education from primary to secondary school and further science and technology oriented learning within jobs in the rural southern cluster.
- Create a place where people feel safe, with an enhanced sense of wellbeing and ownership.

Connectivity

- Integrate the development with the existing Public Rights of Way (PRoW) and cycle paths.
- The site will accommodate the proposed CSET travel hub and route which will provide excellent connectivity to/from Cambridge Biomedical Campus. There are opportunities to connect walking/ cycling routes directly into this key sustainable travel corridor.
- Streets, footpaths and cycle routes to surrounding employment sites, villages and towns will be designed as ensuring legibility and wayfinding.
- The pedestrian and cycle network within the site will be integrated into the green and blue landscape to create pleasant spaces for the community to use and enjoy.
- Traffic calming measures along Babraham High Street to reduce traffic volumes, subsequently reducing impact on the character of the village.

Character

- The existing landforms and features of the site will be used to create varied and memorable townscape, which respects the past use of the site's context and character.
- Bring the surrounding countryside into the site to create a landscapeled sense of place.
- Create a variety of densities, massing and appropriate house types which reflect unique landscape and heritage settings.
- Reflect the local vernacular and characteristics of the area to create distinctiveness and identity.
- Enhance the sense of place and relationship to the greenbelt and historic assets surrounding the site, through the protection and creation of visual corridors and natural monuments.
- Use local materials to reflect context and reduce embodied carbon.

Climate

- Energy efficient built development, exploring on-site renewable energy.
- Reduction of car dependency for short commuting by supporting and facilitating sustainable modes of transport including safe and efficient pedestrian and cycle routes.
- Provide infrastructure for new transport technologies including electric vehicle charging points.
- Mutually supportive green and blue infrastructure including strategies to minimise effects of climate change throughout generations.
- A new country park with opportunities to improve biodiversity net gain through enhancing local wildlife and biodiversity
- Opportunities to integrate SUDs, swales and other water attenuation features into the landscape.
- Material selection to reduce embodied carbon.

Commerce

- Set clear goals to cover socioeconomical requirements specific to the community.
- Space should be made available for local shops and services to set up within the local centres – building a sense of community and supporting new and existing communities...
- Provide homes close to existing science and technology parks within the rural southern cluster, notably the BRC.
- Rationalise farm land within the site. whilst continuing to support the growth of Babraham's rural farming
- The CSET corridor will link the site to a number of existing, committed and future key employment development areas around Cambridge – including Eddington, West Cambridge, Cambridge Science Park, St John's Innovation Park, Cambridge Biomedical Campus, and Granta Park.

Consultation

- Understand the places and communities and who and what they're made of, in order to build trust and develop a common vision and a comprehensive engagement strategy.
- Ensuring existing and future residents are fully engaged and informed throughout the design and development process.
- Engage all the community, residents and stakeholders through numerous events to create an ongoing dialogue that gives everyone a voice.
- Record and document the consultation process, feedback and comments of the community and stakeholders to enable transparent and successful decision making.
- People should be encouraged to take active roles in the development and continuing management of their community.

SITE INTRODUCTION

Babraham Village is a civil parish located in the South Cambridgeshire district of Cambridgeshire, England, about 6.9 miles (11 km) southeast of Cambridge. The area is served by the A1307 and A11 strategic roads.

The parish of Babraham covers an area of 966 ha and is broadly rectangular in shape. The remaining boundaries with Stapleford, Sawston and Pampisford are formed by field boundaries and a small section of the River Granta, on which the village lies. A large area is occupied by the BRC, which includes a number of research and medical companies.

The site is approximately 613.9 hectares and is shown outlined on the plan in red. It is predominantly agricultural land and split across five land parcels. The site contains 16 residential dwellings and a number of commercial buildings dispersed predominantly along Babraham High Street.



Babraham Institute (right) within the



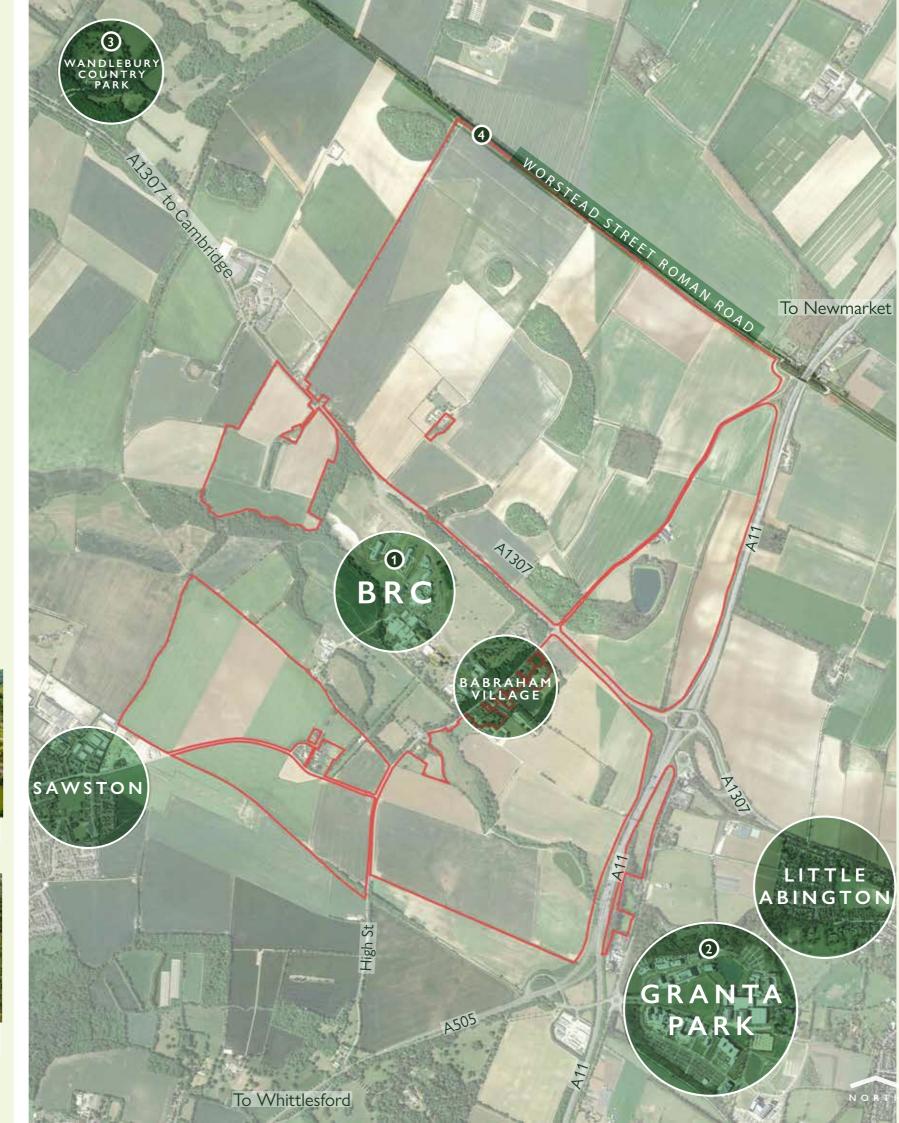
Granta Park - science technology and bio-pharmaceutical park





Wandlebury Country, located on the remains of a circular iron age hillfort

Worstead Street Roman Road, running in a straight line from Worts Causeway to the A11





34 minute cycle from Babraham to Cambridge Biomedical campus



30 minute bus from Babraham to Cambridge Biomedical Campus



17 minute cycle to Whittlesford Parkway station



43 minute walk from Babraham to Sawston Village centre

STRATEGIC CONTEXT

The adjacent map shows the site in the context of the wider key employment area and transport infrastructure.

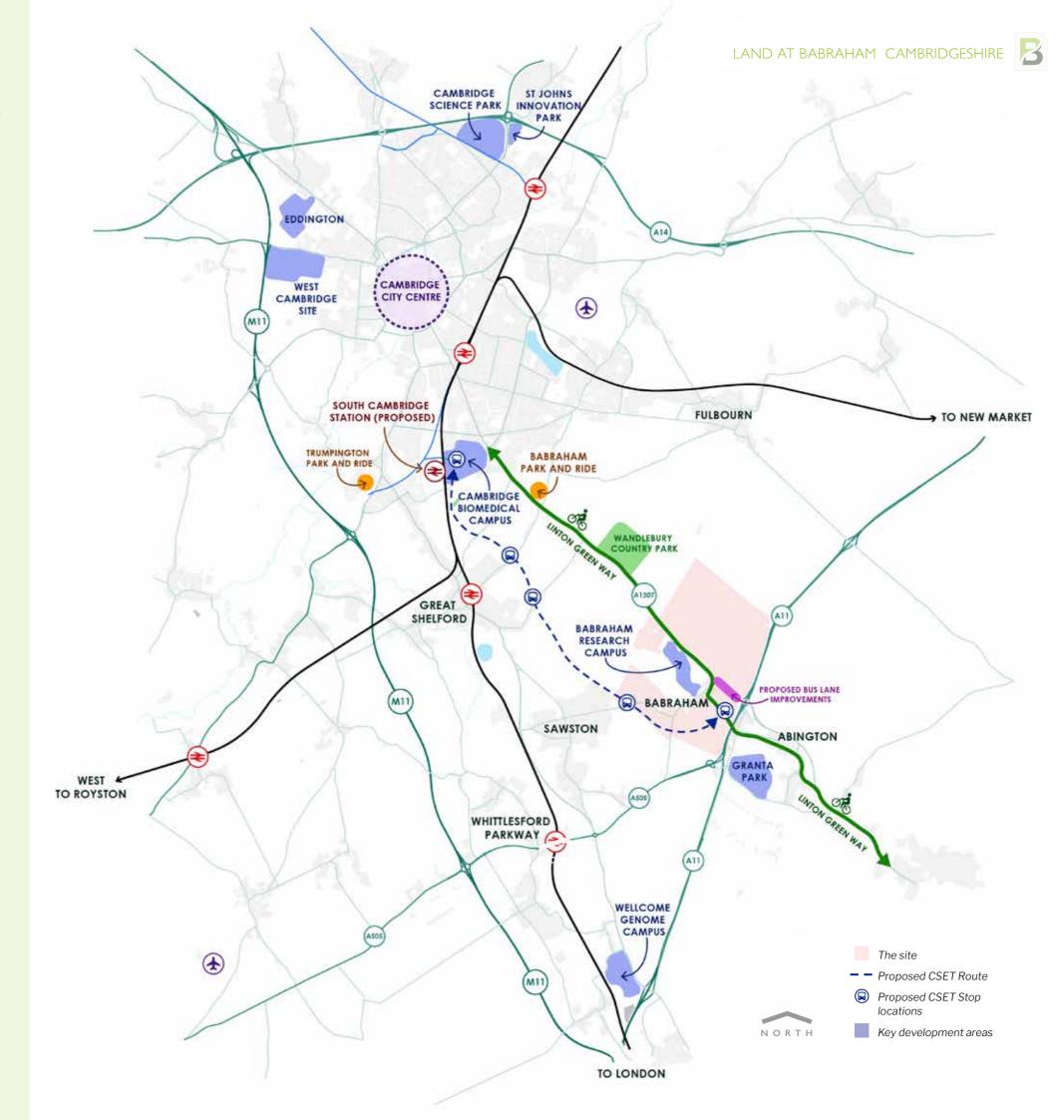
The Local Plan promotes growth in the 'southern cluster' a designated area within the Local Plan, identifying a number of preferred employment and housing sites on land in the vicinity of Sawston and Babraham. At Babraham, the Plan favours allocating an additional area for employment development (research and development) of 17.1 hectares within and adjoining the existing built area of the BRC and removing the site from the Green Belt. At the Genome Campus, the Plan supports development which relates to the campus and its role as a centre for genomics and associated bioinformatics industries. Economic growth in the southern cluster is supported by sites favoured for housing development. These includes sites in Great Shelford, Sawston and Duxford.

BRC is one of the UK's leading centres for bioscience innovation. Allocation of land in this location responds to a significant economic need in a location best able to respond to the specific needs of the life sciences cluster. The Campus has a distinct set of characteristics not available anywhere else at other research facilities in the subregion and the campus is important to the development of UK life sciences, in supporting start-up and scale-up bioscience companies.

The Local Plan supports additional development at BRC to promote economic benefit from the growing successful life science cluster and to act as a catalyst for wider economic growth. The expansion of this facility will provide at least 1,200 net additional jobs and will be a major economic draw within the region. This growth provides little additional housing and it is important to recognise the importance of co-locating housing and employment opportunities/jobs. The provision of additional housing at Babraham will ensure that co-location is effective and that new employees can access major employment hubs on foot or bicycle and where they can be in easy reach of Cambridge and local villages by public transport. The strategic masterplan for growth at Babraham will complement the Council's vision for the BRC and the wider Plan for the area and will provide a wide range of benefits to future residents and the economy of the wider region in the most sustainable way.

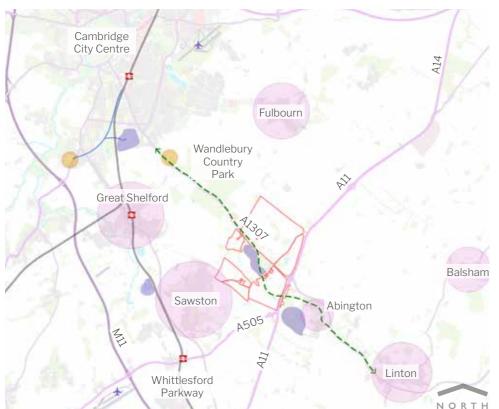
The GCP's CSET route will bring significant transport and connectivity improvements. Phase 1 of the scheme includes major improvements along the A1307 corridor, including improved crossing facilities, bus stop upgrades and a new Linton Greenway. Phase 2 of the scheme will include a dedicated public transport link between the A11 and the Cambridge Biomedical Campus, running immediately through the site, with a travel hub located in the south of the site.

There are additional improved transport connections with the probable east-west rail, which is anticipated to enter Cambridge from the south. This would likely mean that residents at the site could travel seamlessly to Oxford by public transport.

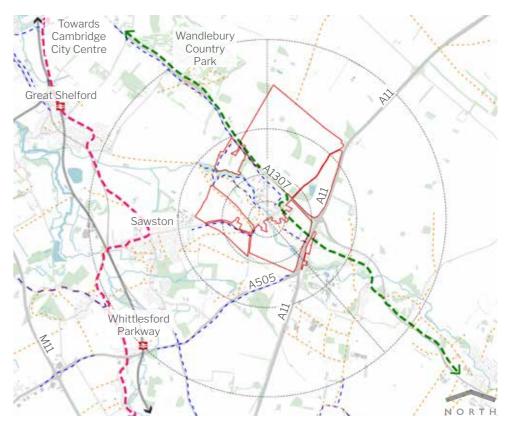




REGIONAL CONTEXT







Regional Location

The site is located in Babraham, a village approximately 6.9 miles south of Cambridge City Centre. Sawston, a larger village, is located to the west of the site, with Greater Abington and Little Abington located to the south of the site. Babraham park and ride is located just off the A1307.

The adjacent map shows the location of the site in the context of the wider Cambridge area.

Site BoundaryBabraham (map to right)



Vehicular and Public Transport

The site is located to the north of the A505, which provides access to the M11, A10 and the A1 (M). The A11 is situated to the east of Babraham, providing access to the A14. This provides excellent connectivity between Cambridge and London.

The closest train station to the site is Whittlesford Parkway station, which is situated 3 miles south west of Babraham, and provides direct train links to Cambridge in approximately 12 minutes, and London Liverpool Street in just over an hour. Shelford railway station, located 5 miles north west provides a service to Cambridge in approximately 8 minutes, and to London Kings Cross in 50 minutes.

Bus stops located along the A1307 connect Babraham to/from Cambridge City centre and many surrounding towns and villages. In addition, shuttle buses run between a number of local employment centres including the BRC, Granta Park and the Genome Campus.



Secondary road Bus stops Proposed Park and Ride Proposed travel hub (CSET Phase 2)

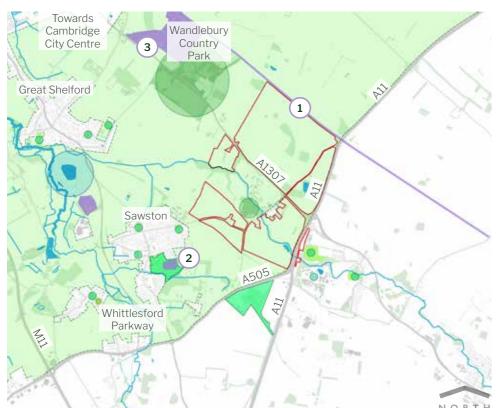
Pedestrian and Cycle Movement

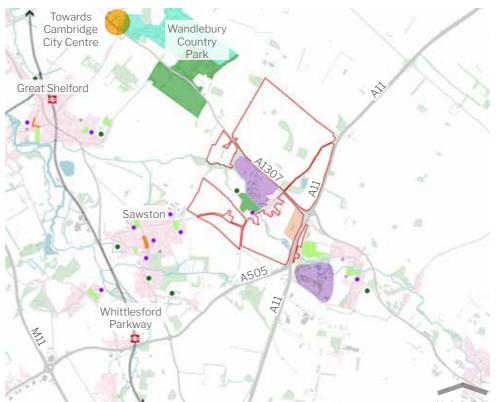
The site is well-connected to the local active transport network, with a number of walking and cycling paths connecting Babraham to Cambridge city centre and the surrounding towns and villages.

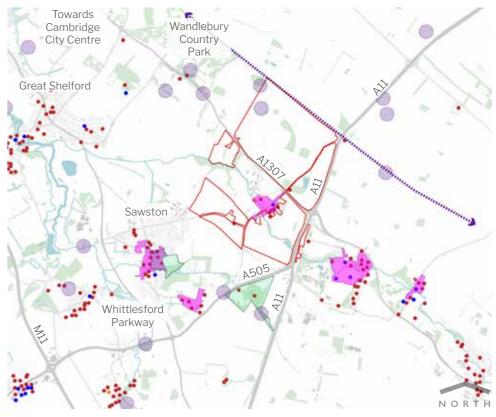
The proposed Linton Greenway will be an active travel route for walkers, cyclists and horse riders travelling between Linton and the Cambridge Biomedical Campus. The National cycle route 11 navigates through Sawston and connects Essex with Norfolk via Cambridge and Ely.

Numerous rural walking routes provide connections from Babraham to Cambridgeshire's rural countryside.









Landscape and Ecological designations

The majority of the countryside north of the A11 sits within the Green Belt. Settlements of Sawston, Whittlesford Parkway, and Great Shelford are excluded from the Green Belt, albeit they are enclosed by it.

Babraham is located in the valley of the River Granta, which flows for approximately 29km through Babraham, before joining the River Cam at Stapleford

The closest recreation ground to the site is located in Abington, and it is predominantly used by The Perse School. Pampisford Hall Grade II* listed parks and gardens lie to the south of Babraham, enclosed by the A505 Royston Road and A11.

The Roman Road Site of Special Scientific Interest (SSSI) (1) adjoins and runs the length of the Site's northern boundary. The next closest SSSI is Sawston Hall Meadows SSSI (2), which is located 1 km to the southwest at its closest point. The Gog Magog Golf Course SSSI adjoins the north of Wandlebury Country park.



Land use

Babraham is known as being home to BRC, which undertakes research into cell and molecular biology. Given its size, Babraham has relatively few local amenities, however it does benefit from its own nursery and primary school.

The neighbouring village of Sawston, 2.2 miles west of Babraham, offers a wider variety of local amenities including two primary schools, Sawston Village College, a variety of local shops, post office, library, public houses, restaurants, a sports centre, community pavilions and a medical centre.

To the south of Babraham are the villages of Great Abington and Little Abington, which have a primary school, village shop, public house and a large number of local businesses; most of which are located at Granta Park.

Heritage and Conservation

Babraham and its surrounding towns, villages and countryside have a rich heritage. Babraham, Sawston, Abington, Linton and Pampisford all have Conservation Areas, characterised by a number of listed buildings.

Within the surrounding landscape, there are a number of scheduled monuments, signifying the rich heritage of Cambridgeshire.

A Roman Road, known as Via Devana, is located to the north of Babraham and evidences Roman activity in Babraham.









Site features and views of the site

The adjacent map identifies the key features located within the site boundary and surrounding landscape.

The site is dominated by arable land of low biodiversity value, with pockets of remnant calcareous grass land and semi-nature broadleaved woodland. The Granta River Corridor runs through the site from southeast to north-west through the eastern part of the site. Two water bodies are located within the site boundary. Pockets of deciduous woodland are located predominantly in the northern parcel of the site. A gas line protection zone is located to the southeast part of the site, running adjacent to the A11. A scheduled monument is situated within the site, with several additional scheduled monuments located in the surrounding landscape to the north west of the site.

There is a significant variation in ground level across the site. Northern areas of the site fall in a direction towards the watercourse of the River Granta. High points are located in the north and southeastern corner of the site at approximately 50m to 60m AOD. From the south-eastern point the land falls in a northerly direction towards the River Granta. The lowest ground levels are along the watercourse valley and towards the western edge of the site at approximately 30m AOD.





(A) WORSTEAD STREET (VIA DEVANA)

A stretch of the Roman road known as Via Devana borders the northern boundary of the site with longer distance views predominantly to the north at this location. It runs below the ridge that the long barrow sits on.

(B) LONG BARROW AND STOCK ENCLOSURE

The buried remains of a long barrow and livestock handling enclosure sits within the arable farmland. The enclosure is triangular, and its significance relates to the below ground archaeology. The barrow's main setting is derived both from views south from the site of the monument and views south to it (for example from the later Via Devana) where the barrow would have stood out on the skyline.

(c) BOWL BARROW ON COPLEY HILL

Copley Hill, scheduled monument, is a barrow of Bronze age date. From this monument, the long barrow would have been visible, and is therefore part of a setting of prehistoric funeral monuments in the broader landscape. There are currently no views to or from the monument due to mature woodland.

(D) CROP MARK ENCLOSURE

A crop mark enclosure is located south of the River Granta. The form of the rectangular enclosure may suggest a Roman military marching camp or an installation to guard the crossing of the Granta.

(E) EXISTING WOODLAND

There are several pockets of mature woodland in the north of the site. Some of these woodlands limit view to the south of the site. These trees will be retained where possible.

(F) RIVER GRANTA

The River Grants is a chalk stream that flows for approximately 29km through Babraham, before joining the River Cam at Stapleford. Babraham is reported to contain the only floated water meadow system in Cambridgeshire, however very little of the layout remains due to a lowered water table. The River Grants faces a number of issues including low flows, poor physical habitat and poor fish diversity.

G EXISTING PROWS

There are a number of public rights of way that meet the site's boundary, with two PRoWs navigating through the site. The PRoW are to be retained and their rural character preserved.

(H) PEDESTRIAN FOOTBRIDGE

A pedestrian footbridge is located in the south of the site, crossing over the A11, and provides connectivity to Abington along a Public Right of way where possible.

1 ICE HOUSE

An ice house chalk pit is located within a pocket of dense woodland. The ice house is mid to late c.18 and is cut into the natural chalk.

J TREE LINED VISUAL CORRIDOR

A tree lined visual corridor provides a long distant view from Sawston road to the Babraham Hall.

LOCATED OUTSIDE OF THE SITE BOUNDARY

(K) WORMWOOD HILL TUMULUS

A tumulus, scheduled monument, set in the woodland, is located just north of the A1307 Cambridge Road.

(L) WANDLEBURY CAMP

Wandlebury Camp is one of the only three large multivallate hillforts known to survive in Cambridgeshire. A multivallate hillfort, earlier univallate hillfort, Iron Age cemetery and 17th century formal garden remains.

M GODOLPHIN ARABIAN GRAVE

The grave of the famous horse, Godolphin Arabian, one of the three stallions that founded the modern thoroughbred, is located under a stone slab just inside the archway of the Cupola stable block within the building complex inside Wandlebury Ring.

N GOG MAGOG HILLS

The Gog Magog Hills are a range of low chalk hills which extend for several miles, creating a rural backdrop for the site.

O BABRAHAM HALL

Babraham Hall is a Grade II listed building, constructed between 1833 and 1837, located north of Babraham High Street. Babraham Hall has been altered a number of times throughout the 20th and early 21st century.

(P) BRC

The BRC is located north of Babraham high street, is central to, but outside the boundary of the site. The proposed policy direction for the BRC is to remove the Green Belt and allocate an additional area for employment development, within and adjoining the existing built area of the campus.

GRANTA PARK

Granta park is located to the south of site boundary on the bank of the River Granta, in Great Abington. Granta Park is a business estate, and is home to leading companies such as AstraZeneca and Pfizer. The park spans 48 ha, and has a scientific population of over 3700 employees.











Connectivity

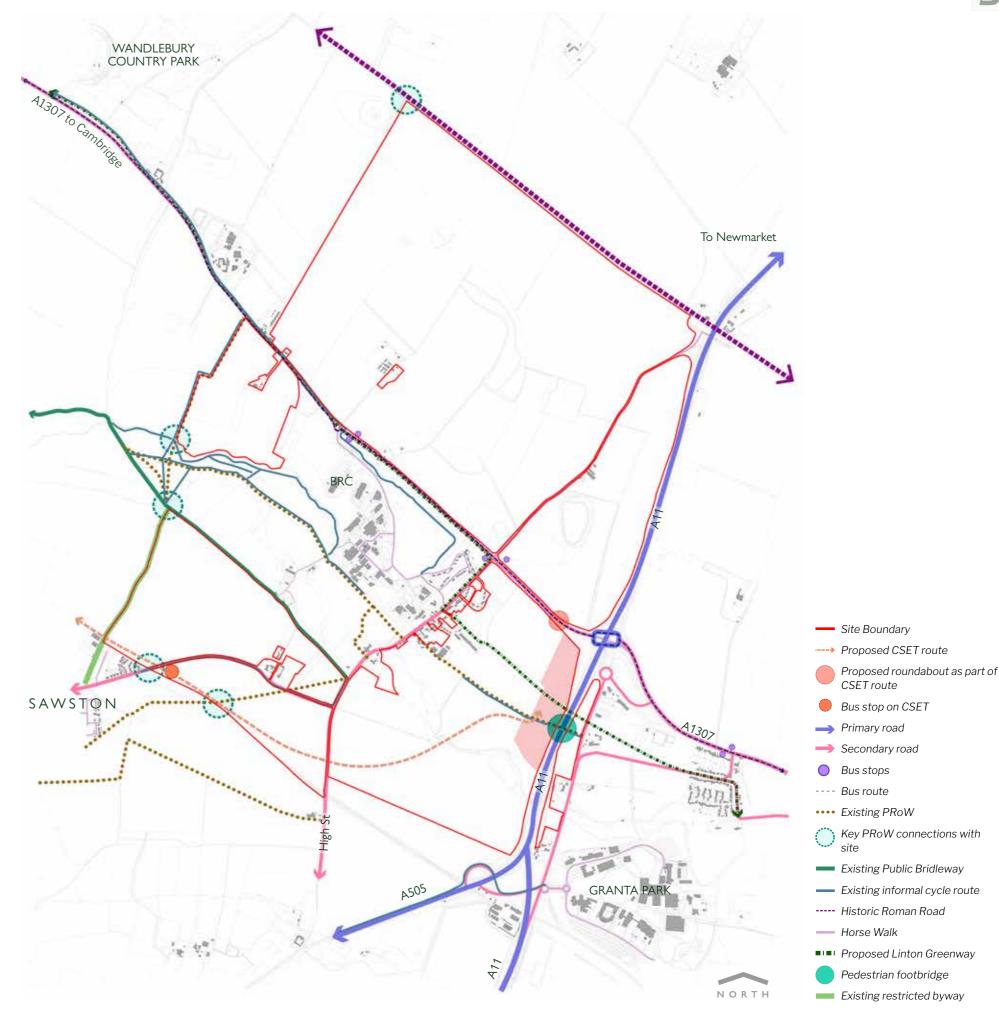
Babraham has excellent transport links. The A505 is situated to the south of the village providing access to the M11, A10 and A1(M) and the A11 is situated to the east of the village providing access to the A14. The A1307 provides access from Babraham to the Cambridge Biomedical campus in 12 minutes by car and 26 minutes by bike.

There are existing bus stops located along the A1307 (two adjacent to the High Street and two adjacent to the BRC roundabout access), which are served by the Stagecoach Number 13 / 13A / X13, which serves Cambridge City Centre, Addenbrooke's Hospital, BRC, Great Abington, Linton, and Haverhill. Further to these bus stops, the Citi 7 serves Sawston to the west of the site. The Citi 7 offers regular buses every 20 minutes to/from Saffron Walden, Ickleton, Duxford, Trumpington and Cambridge Railway Station.

A number of the local employment centres such as the BRC, Granta Park and the Genome Campus operate staff shuttle buses, providing connections between these key employment locations and Cambridge.

There are several Public Rights of Way (PRoW) which surround and navigate through the site. A public footbridge creates a connection between Little Abington along the PRoW to Babraham village. A restricted byway in the west of the site connects to the public right of way to the A1307 and up to Wandlebury Country Park.

A number of informal cycling routes surround the site. An existing cycle path is currently located along Sawston Road, and connects to the edge of Babraham village, as shown in the photograph below. The proposed Linton Greenway provides a new safe cycleway, navigating from Linton, through the site boundary and along the A1307 to Cambridge Biomedical Campus.



E B

SITE CONTEXT

Landscape and Ecological Designations

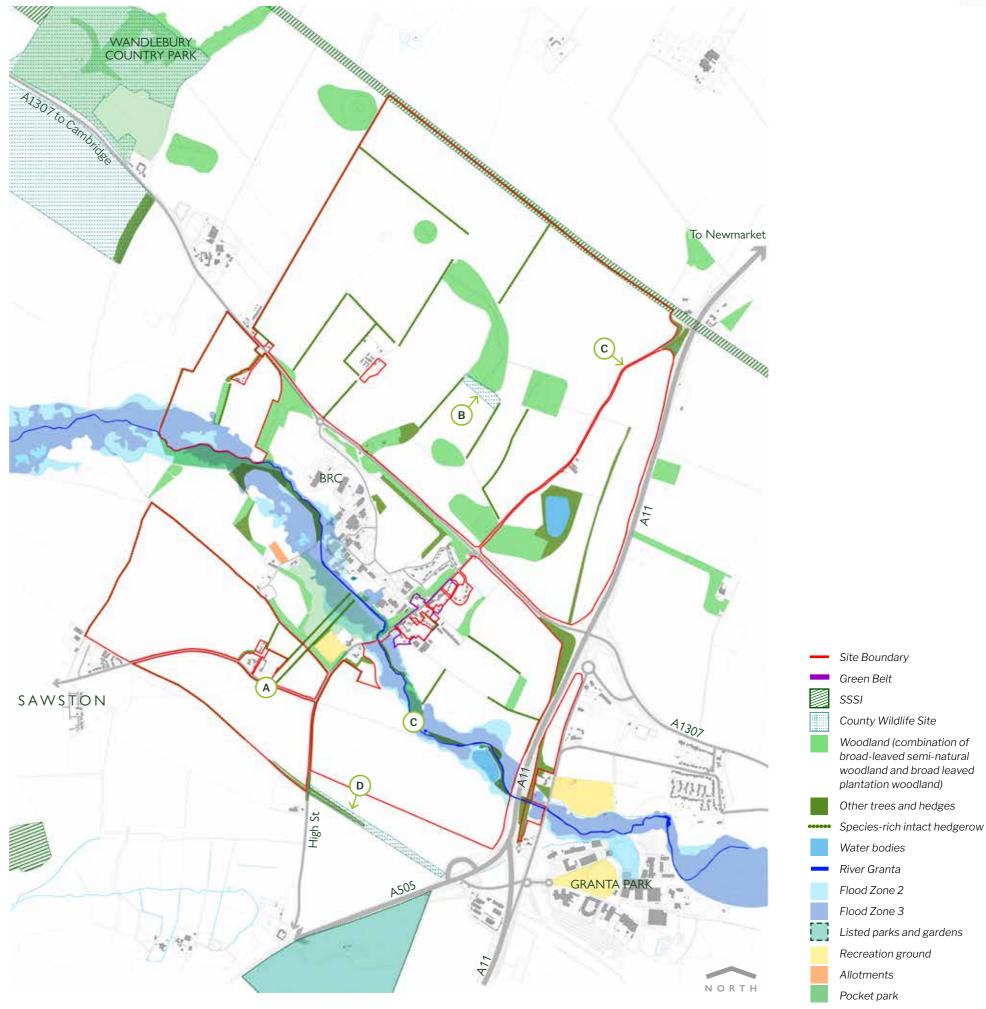
The natural rural environment in the southeast of Cambridgeshire is mainly influenced by its Green Belt context. The LVA provides a detailed understanding of the site context, which contributes to some critical Green Belt qualities. The prevailing rural character and sparse built form, which consists 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. Views are therefore often short and framed by mature vegetation.

There are a number of important hedgerows, predominantly in the northern parcel of the site. Trees and hedgerows are also present around much of the boundary, creating a natural landscape buffer which mitigates noise pollution from the A11 in the south. One of the key features within the site is a tree-lined vista towards Babraham Hall (A).

There are no statutory wildlife sites present within the site, however the Roman Road Site of Special Scientific Interest (SSSI) adjoins and runs the length of the site's northern boundary.

Two non-statutory wildlife sites are located within the site, namely Signal Hill Plantation Grassland County Wildlife Site (CWS) (B) and part of the River Granta CWS (C). Worsted Lodge, RSV CWS (D) and Shelford -Haverhill Disused Railway (Pampisford) CWS (E) adjoin the Site.

The site is located in the valley of the River Granta, which flows from south-east to north-west through the eastern part of the site. The majority of the site is located within Flood Zone 1 of 'Low Probability' flooding. However, there are areas of Flood Zones 2 'Medium Probability' and 3b 'Functional Floodplain' which are associated with the watercourse corridor of the River Granta. The risk of flooding from all other sources (surface water, reservoirs and groundwater) is considered to be either 'low' or 'very low'.

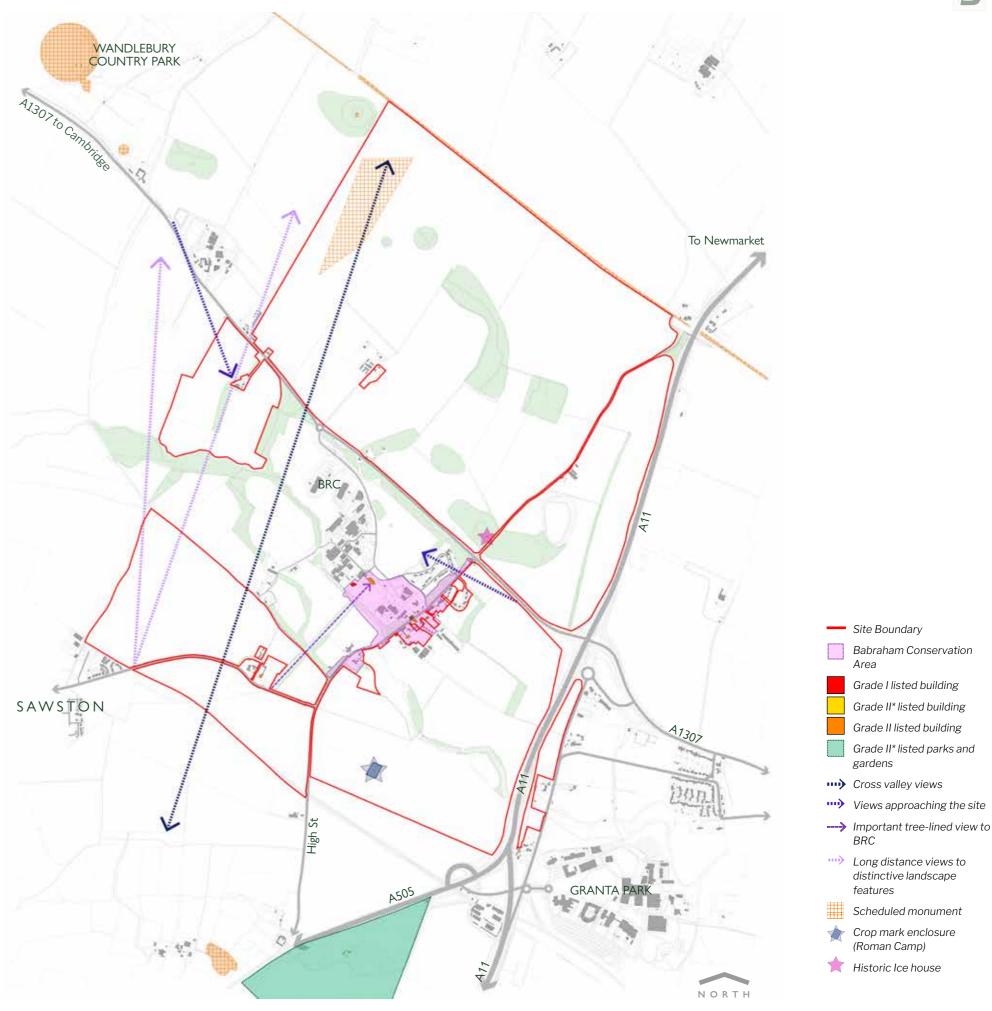


Site Heritage and Archaeology

The site forms part of the setting of a number of listed buildings, in particular those found within Babraham village itself. Although there are a number of assets within the local surrounding area, the location and significance of many of them result in them having no perceptible individual relationship with the proposed site.

When considering the proposed site within the context of the adjacent Conservation Area, it is important to consider the historic use and relationship of the site but also views in, out and through the site, and the contribution these make to the setting and significance of the Conservation Area.

The Long Barrow and Stock Enclosure Scheduled monument is located to the north of the site boundary. Worstead Road (Via Devana) spans the northern boundary of the site. A crop mark enclosure is located south of the River Granta which suggests a Roman military marching camp or an installation to guard the crossing of the Granta.



Historic Time line

Romans were present in Babraham from the 2-4th century. The proximity to Icknield Way and Via Devana implies that there was significant passing traffic. Archaeological remains date from the first century. These included pottery, metals and a cemetery suggesting a Roman settlement was here.

ROMAN BRITISH BABRAHAM 410 - EARLY SAXON
PERIOD GAVE THE
PLACE ITS NAME,
BABRA-HAM, HOME OF
BABRA, THE DAUGHTER
OF THE LOCAL CHIEF

In 1539, the land was surrendered to King Henry VIII. In 1576 the estate was then purchased and the first of three halls were built. This involved the relocation of the village to its current location.

16TH C BABRAHAM

Village Almshouses

The Babraham estate
was purchased from the
Adeanes and Daly was
appointed to create the
first National Institute
for Animal Physiology.

1948 NATIONAL INSTITUTE

Ivan de Burgh Daly FRS

built The Close, to provide housing for on site.

To help attract staff, Daly

The main hall was altered and a number of new research buildings were added in its grounds from the mid-20th century onwards.

In 1993 the Institute was renamed 'The Babraham Institute' and over the next five years the agricultural research was phased out.

1993 BABRAHAM INSTITUTE

Roman Remains

St Peter's Church

MEDIEVAL BABRAHAM

The Saxon village remained after Norman conquest, and records show it was a wealthy area. Until the 15th C the land was 'being held of the honour of Richmond'. The lands of the five manors passed through a series of different hands but as with many medieval manors in less crucial locations large parts of it were given to the church.

Robert Jones

Babraham Hall

1832-1837 THE SECOND AND THIRD HOUSES

The present Babraham Hall was built by Jones' son, Henry John Adean, in the Jacoberan style, designed by Phillip Hardwick.

IN 1655 AND 1749 THE RIVER GRANTA SEVERELY FLOODED

BABRAHAM INSTITUTE TODAY

Today the Institute undertakes world-leading research into understanding the biology of how our bodies work.

Site Land use

Within the village of Babraham there is a small primary school, a church and a pub. To the west of the school is a sports ground with a public park adjoining it to the north and east. Public open space provision in Babraham is relatively limited to a pocket park and cricket pitch, although it is also served by a network of public rights of way. However, due to the relatively small size of the village, the village had sufficient outdoor sports facilities. The site is not within the catchment area of the public space serving Sawston.

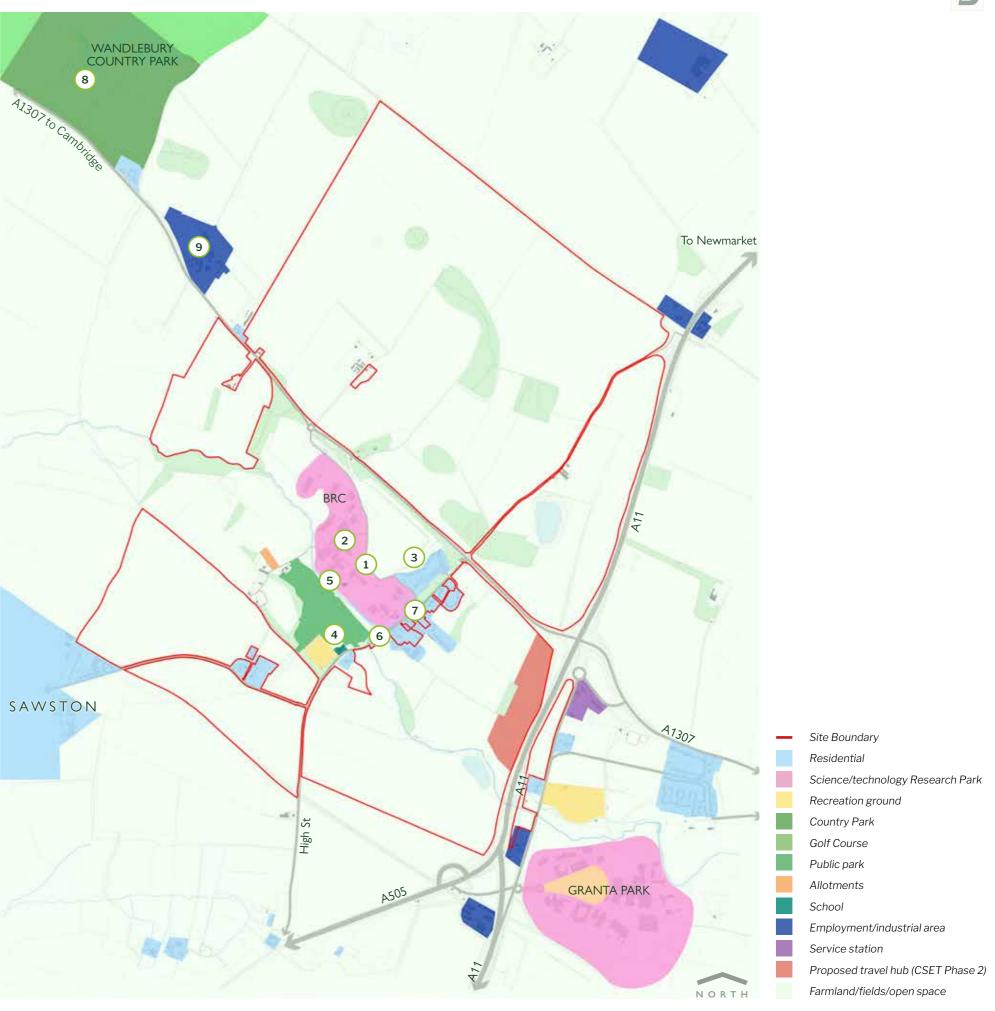
The BRC is the primary employment land-use in Babraham. The campus sits on a dynamic environment within 174 ha of parkland, and is home to over 60 companies, with 2,000 employees and 300 academic researchers. In addition to the research and development facilities, the BRC is a supportive community, providing accommodation, nursery, catering, flexible working, sports and social clubs and a gym.

Granta park is located to the south of the site, and is an important business estate in one of the most recognised areas for science success globally. Granta Park has 21 buildings and sits within 48 ha of land, with open recreational space. The business estate provides a 45,000 sq ft purpose-built amenities centre, with a number of health, fitness and well-being facilities.

The neighbouring village of Sawston, 2.2 miles west of Babraham, offers a wider variety of local amenities including: two further primary schools; Sawston Village College; a variety of local shops; post office; library; public houses; restaurants; a sports centre; community pavilions; and a medical centre.

There are a number of business parks and industrial areas located around the site. Copley Hill Business park, located off the A1307, provides a mix of offices spaces and light industrial accommodation.

As part of the CSET phase 2 plans, a travel hub is proposed in the south east of the site, adjacent to the A11. A service station for the Fourwentways roundabout is located just off the A1307.









BRC accommodation, located north of the high street

6





Babraham Primary School

St Peters Church, Babraham

Homes located along Babraham High Street







Wandlebury Country Park, located to the north of the site off the A1307



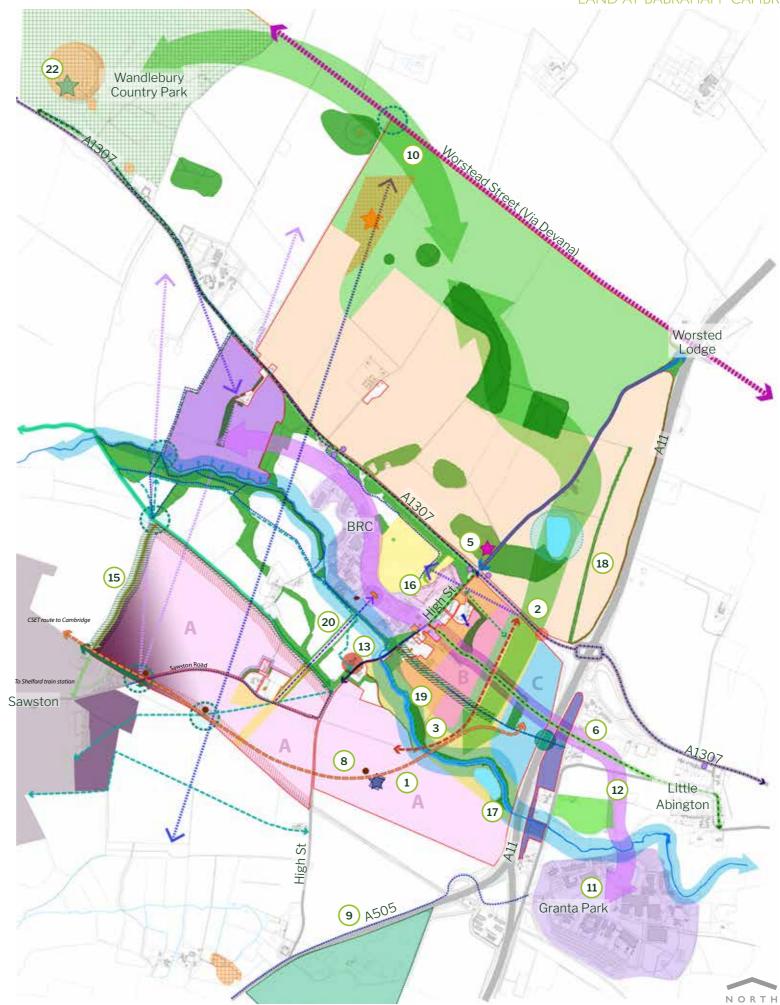
Copley Hill Business Park; a thriving business community with offices and light industrial space



SITE OPPORTUNITIES

The site offers a unique opportunity to provide, in a highly sustainable location, new homes, education facilities, Research and Development employment, retail and community facilities, set within a well-established and defined landscape setting.

Analysis of the site and surrounding area has enabled an understanding of the various opportunities which will influence the proposals for the site and protect Key Features. A diverse range of opportunities focus around transport and connectivity, existing and proposed land-uses, landscape and ecology and heritage and archaeology.



Site Boundary

Proposed Land uses

- Proposed residential development (A)
- Proposed local village housing (B)
- Proposed tree planting
- Proposed farm land
- Proposed travel Hub (C)
- Proposed Country Park
- Proposed Village cricket pitch, car park open space
- Proposed open space
- Proposed R&D facilities (BRC)
- Potential employment area
- Opportunity to re-provide new and additional homes
- Opportunity for water-front homes
- Areas of lower built form
- Restricted development/buffer areas protecting existing built heritage assets

Existing land uses and built form

- Existing R&D facilities
- Existing country park
- Local plan existing housing allocation
- Existing school
 - Abington Recreation ground

Transport and Connectivity

- Existing bus route

 Existing bus stops
- ----> Existing PRoW
- Existing Public Bridleway
- Existing informal cycle route
- High street with opportunity for Better Active Travel Links
- Key points where footpaths and cycle paths connect with the site
- Horse Walk permissive route for cyclists, pedestrians and horses
- Potential cycle connectivity linking the three R&D areas
- Proposed Linton Greenway
- • Proposed river pedestrian walk

---> Proposed CSET route

- Proposed CSET roundabout
- Potential additional stops along the CSET route
- Potential vehicular access through existing residential area
- Proposed vehicular route serving proposed residential area
- Potential to create new safe pedestrian link connecting existing restricted byway with Sawston road
- Existing pedestrian footbridge

Landscape and historic features

- River Granta
- (IIII) Historic Roman Road
- Existing woodland and tree planting
- Existing water bodies
- Historic crop enclosure (Roman camp)
- Historic ice house
- Grave of famous Godolphine
 Arabian horse
- Grade 2 listed statue
- Scheduled Monument
- Landscape buffers to protect setting of PRoW
- Consider responsive edge to existing settlement at edge of Sawston

Views

- ---> Cross valley views
- ---> Views approaching the site
- ≫ ^{In}
- Important tree-lined view to BRC
 Long distance views to distinctive
- landscape features

Transport and Connectivity

- 1. The development sits on the route of the Greater Cambridge Partnership's (GCP's) Cambridge South East Transport (CSET) CSET Phase 2 high quality public route, providing direct non-car connection between the site and the Cambridge Biomedical Campus and Cambridge City Centre, and thereafter to the other key employment areas of Cambridge at the Northern Fringe (via onward travel from Cambridge Station either via the train itself to Cambridge North or the Chisholm Trail for cyclists, or conventional bus services) and West Cambridge & North West Cambridge via the Cambourne to Cambridge Better Public Transport Scheme
- 2. Potential to combine the CSET travel hub access roundabout with Land at Babraham access, to form a 4-arm roundabout and avoid the risk of roundabout proximity constraint.
- 3. Potential to combine CSET bridge river with vehicle access link/ bridge to limit width of two bridges and ecology impact.
- 4. Opportunity to create direct pedestrian and cycle links onto and along CSET route from residential plots.
- 5. Opportunities for bus route improvements along A1307 as part of CSET Phase 1.
- 6. Opportunities to connect into the Linton Greenway that runs through Babraham Research Centre.
- 7. Improved bus and cycle connection from the site through Sawston, towards Shelford Train station as part of CSET Phase 2.
- 8. Potential additional bus stops on the CSET route located at key pedestrian intersections.
- 9. Opportunity for better permeability and connectivity supporting the proposed improvements of the A505 corridor.
- 10.Opportunity to create a green link along the historic Roman road, connecting Wandlebury Park with the proposed country park and through to the proposed open space adjacent to the River Granta. This will enhance biodiversity and could provide area for play, learning, a community orchard and walking trails.
- 11.The site is in close proximity to other key employment areas in the "Rural Southern Cluster" (i.e. Genome Campus, BRC and Granta Park), which in turn enables reduced travel distances to work and greater opportunities for non-car travel to these work locations.
- 12. Opportunity to connect the existing and proposed R&D areas and the proposed employment area through a green cycle network.
- 13. Opportunity to create Better Active Travel along and onto the High Street, creating safe routes to the school and the Linton Greenway.
- 14. Walking and cycling paths will create a legible network of routes through the site and provide connections to existing footpaths, cycleways and Public Rights of Way will integrate the site into its surroundings and encourage walking and cycling.

15.A restricted byway is currently located adjacent to the new development along Babraham road, east of Sawston. This route provides connectivity to the public right of way connecting to the A1307 and up to Wandlebury Country Park. The path currently feels unsafe and unwelcoming. There is an opportunity to provide a safe, new public footpath, connecting pedestrians to Sawston road.

Landscape and Ecology

- 16.Residential development located north-west of the high street in Babraham is of poor architectural quality. There could be an opportunity collaborate with the BRC and re provide housing in this location as part of a holistic masterplan approach.
- 17. Opportunity to create a strong blue corridor along the River Granta, providing enhanced wildlife and habitats, important open space and amenity spaces, and Sustainable Urban Drainage (SUDs). The River Granta also provides the opportunity to offer a pedestrian trail linking people to the river.
- 18. Woodland and key hedgerows and trees should be retained and enhanced where possible, to protect local ecology, create a strong rural character and provide appropriate screening to neighbouring houses and noise from the A11.

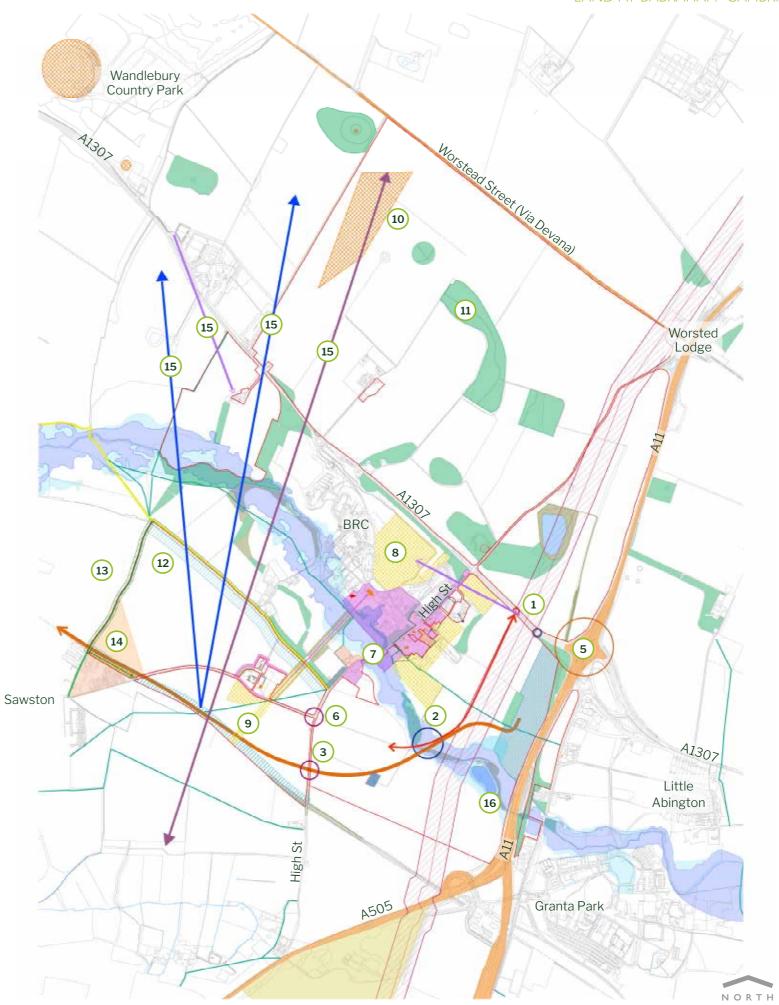
Heritage and Archaeology

- 19.Restricted development areas should be implemented to provide a buffer to built heritage assets. This is most prevalent around the village where the Conservation Area and a number of listed buildings are located. In addition, development directly in front of Babraham Hall should be restricted so as to protect its views and setting.
- 20. Tree lined view towards the Babraham Institute is to be protected and retained. Consider opportunities to create similar tree lined corridors to other existing and new site assets.
- 21. Opportunity to recognise the heritage of the site, by creating a new focal open space where the historic Roman camp is located.
- 22. Opportunities to create a heritage vision through a heritage trail linking together the historic monuments and landmarks. This includes the grave of the famous Arabian horse Godolphine Arabian (c.1724-1753), the Bowl Barrow on Copley Hill, the Long Barrow Enclosure ENE of Copley Farm, the Roman Road, The Ice House, and the historic Roman Camp.



SITE CONSTRAINTS

In undertaking a thorough analysis of the site, a number of considerations are apparent which will influence the proposed development for the site. The sites considerations focus on transport and movement, heritage and landscape and ecology.



Site Boundary

Transport and Connectivity

- A11 primary road consideration to noise
- Proposed CSET Route
- Proposed area for Travel Hub (C)
- Proposed roundabout as part of CSET Infrastructure
- Potential vehicular access through existing residential development
- Potential vehicular route into proposed residential development
- Potential roundabout or junction to serve proposed residential area
- Existing public rights of way
- Existing public bridleway
- Restricted byway
- Land in site boundary retained for pedestrian route

Utilities

- Gas main
- Development restricted area (gas main)
 - Heritage and Built Form
- Conservation Area
- Scheduled monument
- Historic crop enclosure (Roman Camp)
- Grade I listed building
 - Grade II* listed building
 - Grade II listed building
 - Grade II" listed parks and gardens
- Restricted development/buffer areas protecting existing built heritage assets
 - Development under construction
 - Buffer to existing private estate
- Areas of lower built form
- Consideration of responsive approach to edge of existing settlement
- 7 Existing school

Landscape and Ecology

- Priority Habitat low priority deciduous woodland
- Other woodland, hedgerows and trees
- Existing water bodies
- Flood Zone 3
- Flood Zone 2
- Landscape buffers to protect setting of PRoW
- Green Belt

Views

- > Views approaching the site
- Important tree-lined view to Babraham Institute
- Long distance views to distinctive landscape features

Transport and Connectivity

- 1. Consideration to the proximity of the A1307 site access roundabout with the Cambridge South Eat Transport (CSET) proposed access to its Travel Hub. Sufficient separation between two access points will be required.
- 2. Consideration of engineering and ecological requirements for vehicular crossing at the river both for proposed vehicular route and CSFT route.
- 3. Consideration of vehicular crossing across the CSET route within the site
- 4. Consideration to the A1307 capacity in the long term future.
- 5. Proximity of the site access to the A11/A1307 fourwentways Junction. Consideration to the capacity and dispersal of traffic.
- 6. Consideration to integration of the existing Sawston Road, High street and CSET route into the site.
- 7. Consideration to safe connections, particularly close to the existing school.

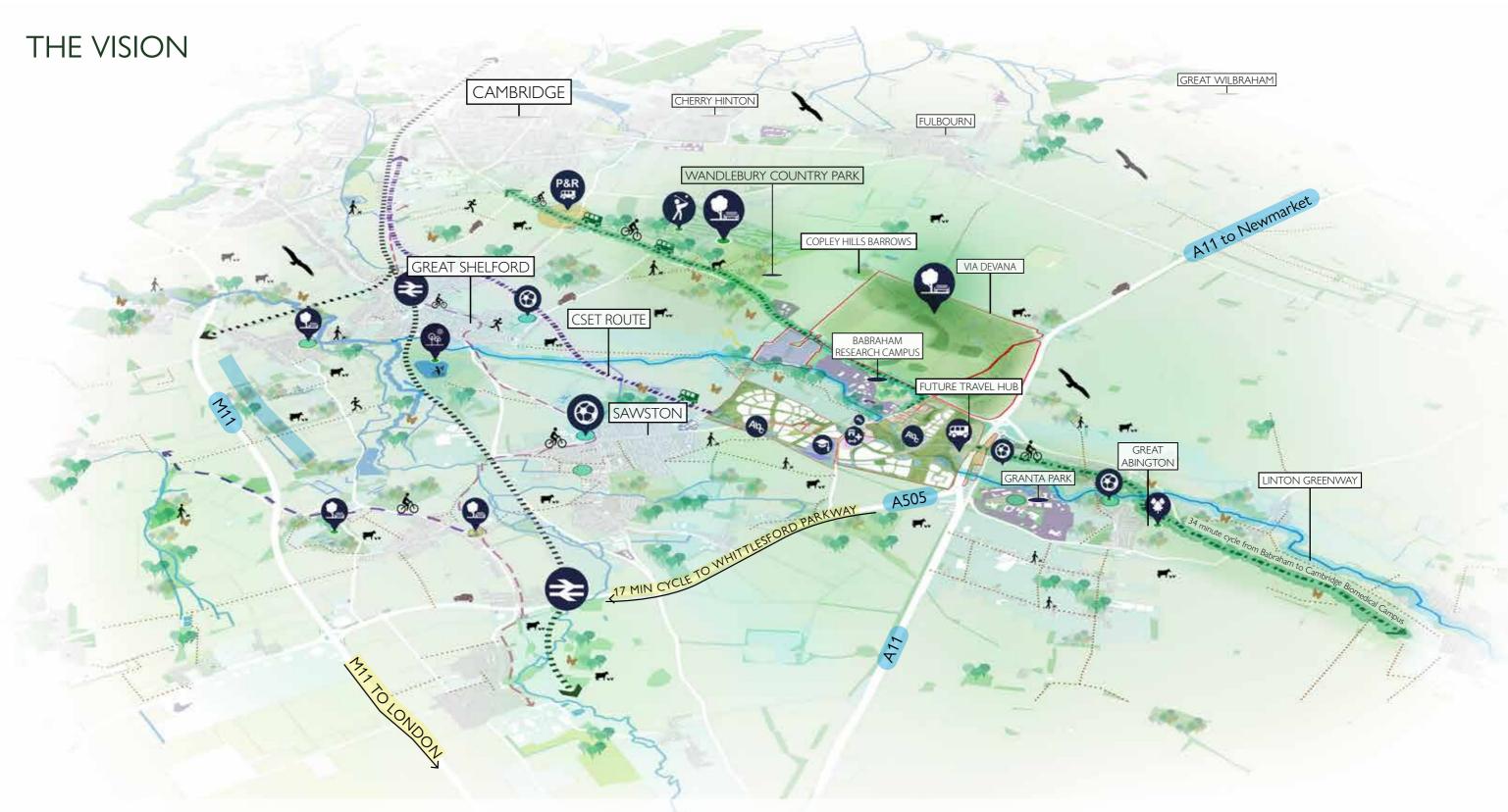
Heritage and Archaeology

- 8. Areas of restricted development provide buffers to the built heritage assets. This is most prevalent around the Conservation Area. Consideration to the settings, views in and out and access listed buildings should be considered in this area.
- 9. A buffer zone is also located on the land directly in front of the Babraham Hall in order to protect its setting and views. The buffer zone is intended to protect the continuation of the line of site to the Babraham Institute.
- 10. The Scheduled monument of long barrow enclosure is no longer visible as an earthwork but contains a range of archaeological evidence. This is to be taken out of cultivation.
- 11. Low priority deciduous woodland should be protected and enhanced, providing screening, habitats and amenity space.
- 12. Landscape buffers should be considered to mitigate the effects on the setting of the Public Rights of Way (PRoW) route.

Landscape and Ecology

- 13. Consideration to areas of lower built form to mitigate the visual impacts on the PRoWs to the north and south of the site.
- 14. Ensure a responsive approach to the visual and physical coalescence of the existing settlement edge at Sawston.
- 15. Consideration to long distant views to distinctive landscape features, cross valley views and views into the site
- 16. There are areas of Flood Zones 2 'Medium Probability' and 3b 'Functional Floodplain' which are associated with the watercourse corridor of the River Granta. No development will occur within the floodplain of the River Granta





The site will provide a sustainable new community, which will help to support the existing science parks in the southern rural cluster. It will support the CSET's improved transport network which will be a key strategic feature in unlocking the future development of the site. Such sustainable modes of transport and great walking and cycling routes make the site a highly connected and attractive place to live.

The site offers the opportunity to reflect the best principles of sustainable design, ensuring the highest quality of place-making to meet contemporary sustainable living requirements and enable climate change resilience for the future, all following the CQC for Growth and respond to the Big Themes of the Issues and Options Consultation.

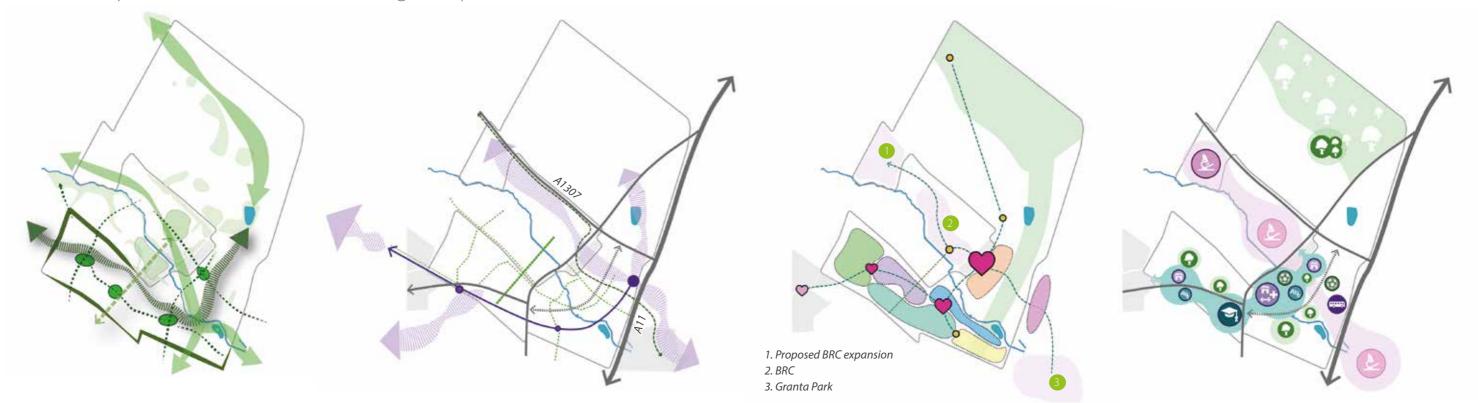
The masterplan vision will provide a variety of affordable, healthy and distinctive homes, set within walkable and vibrant neighbourhoods encouraging residents to connect to their community, streets and homes. Through respecting the heritage and landscape assets, the masterplan will become seamlessly intertwined with its rural context.

The community will be supported through the provision of new education facilities, leisure, retail and amenity facilities. This will have far reaching benefits for surrounding communities.

B

DESIGN PRINCIPLES

We envisage this new community as a strong, cohesive and inclusive community. Recognising the green, ecological and historic context, this community is tightly integrated into the landscape and neighbouring villages of Babraham and Sawston, maximising the quality of life offered to existing and new residents through a mix of community uses, educational facilities and green spaces.



Enhancing nature and promoting its growth
 Creating a legible and permeable community
 Conserving heritage and defining character
 Creating a vibrant, healthy and social community

Protecting key natural elements of the site and its rural character is central to developing the site.

A linear green north-south corridor navigating through from the proposed country park providing natural spaces, walking routes and cycle paths will link to the southern development. Additional linear greens and the central green route, will interweave with several other linear greens providing long distance views and creating a separation between the proposed residential areas. Smaller green spaces, play areas and parks will be integrated and dispersed into the community, providing areas for sports, play and leisure. The existing River Granta blue corridor will be enhanced, attracting wildlife and biodiversity and creating a strong rural green backdrop to compliment the setting of the Green Belt.

A network of vehicular, pedestrian and cycle routes will connect the new community to the surrounding neighbourhoods and rural context. Primary movement through the site will be provided by a spinal road accessed from the A1307 and connecting through to the high street. North of the high street, a primary road will be accessed off Sawston road. Pedestrian and cycle routes will connect onto the proposed CSET route, providing a safe and direct route to the Cambridge Biomedical Campus. Quiet quintessential lanes will provide access to homes around the site enhancing the rural village character of the site.

The extension of the Babraham community will promote the conservation and enhancement of its heritage assets by integrating them into the built and natural context. This includes a careful approach to the extension of the Babraham village and also includes the revitalisation of the 'Roman Camp' to the southeast. Key consideration will be given to the BRC and its heritage assets which are closely link to Babraham.

As a residential-led community this vision includes the provision of homes that will improve the balance

of existing and new employment and housing.

A wide range of facilities will support the new and

A wide range of facilities will support the new and existing communities including schools, local centres and community facilities.

Natural spaces will feature sport pitches and open space for all to enjoy. A series of green spaces, including the country park in the north of the site will provide an expansive network of amenity and recreation space.

Employment opportunities will be generated within the site but predominantly from the science parks within the rural southern cluster.

FRAMEWORK MASTERPLAN

The vision for the masterplan has been informed by a sensitive approach to the site's heritage and landscape assets, rural Green Belt context and its existing and proposed movement network.

The masterplan promotes a particular importance to the creation of a characterful place, which lasts for successive generations. It will provide much needed housing, amenities and open space to support surrounding employment sites including the rural southern cluster.

The development site is approximately 613 hectares. Residential and associated land uses are situated within the southern site boundary of the masterplan. The northern part of the site will become a large country park, contributing greatly to biodiversity and ecology of the area.

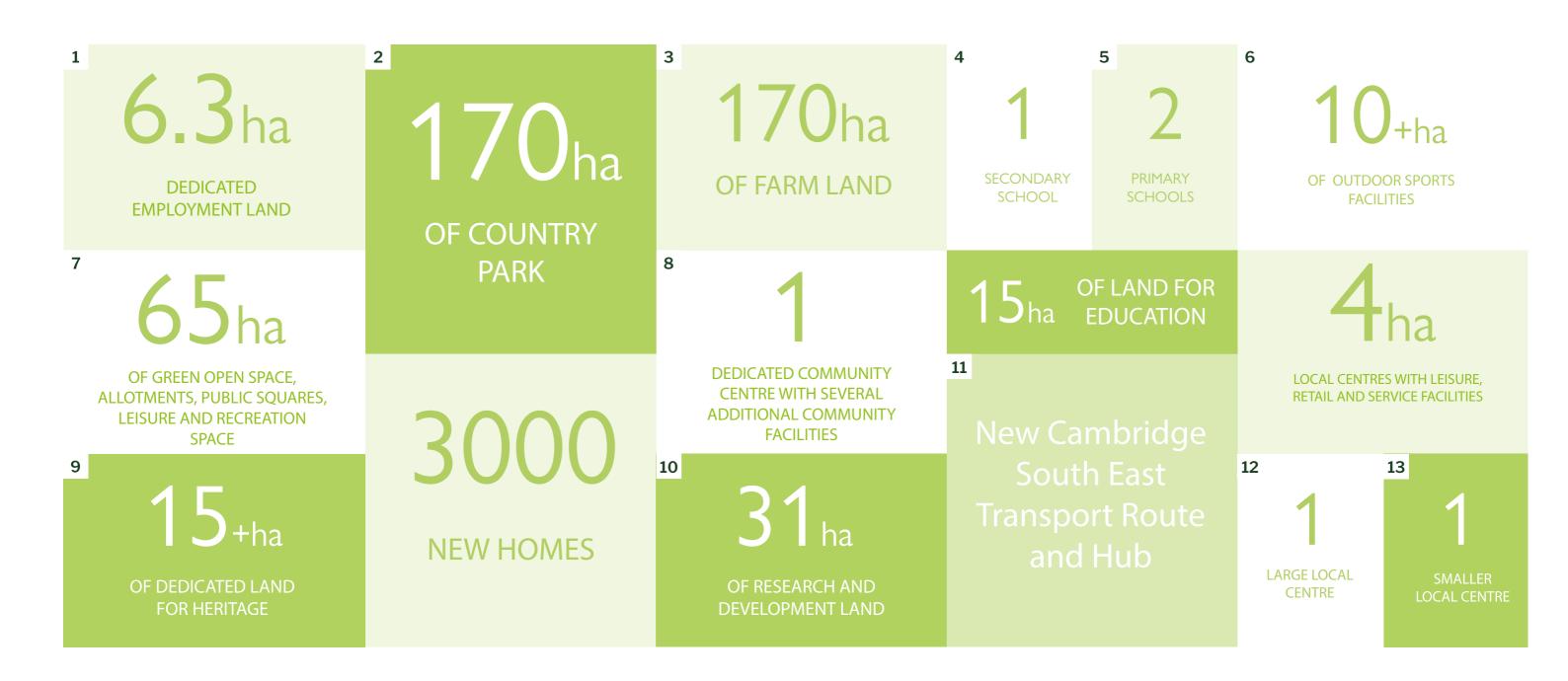
The evolution of the masterplan will ensure that the character and massing prioritise improvement of the natural setting and the conservation of its heritage.

The key objectives of the masterplan include:

- Provide homes that meet the needs of a diverse range of households, which support the existing science parks in the southern rural cluster by improving the balance between employment and housing.
- Provide local centres and community facilities to support new and existing communities both in and around the site.
- Create a central green route which will navigate through the community, offering a range of parks, playgrounds and spaces where people can gather and socialise.
- Create a number of accessible neighbourhood greens, providing valuable amenity space and giving distinctive identity to the community.
- Provide one secondary school and two primary schools to serve the existing and new communities, and any off sets from neighbouring villages
- Create a movement strategy which connects with the existing network and the planned CSET route and hub.
- Create a new country park with nature routes and enhanced ecology and habitats.
- The architectural design will aim to respect and build on the vernacular elements and local scale, while providing sustainable and robust buildings.
- Provide 'village style' character areas, which respond to the unique environments within the site and reflect the diversity present in Southeast Cambridge.
- Opportunities to safeguard land for the potential expansion of the BRC, thus supporting the growth of the rural southern cluster. Opportunities for light industrial employment south of the A11.
- Retain land for farming south of the country park, which will support the farming industry whilst helping to maintain the rural character of the site.



THE SITE WILL DELIVER:



LANDSCAPE STRATEGY

Careful consideration to the potential effects of the proposals on the Green Belt and rural character of the area has been given on the most critical landscape and visual sensitivities. The strategy aims to retain and reinforce the landscape character and features providing a framework for the development of a sustainable community close to nature.

The proposed masterplan includes mitigation measures that intend to lessen the perceived adverse effects on the environment. The key objectives of the landscape strategy are to:

- Improve and integrate the existing and new blue infrastructure.
- Strengthen the landscape edges to create a buffer to the surrounding countryside and provide protection and improvements to local habitats.
- Strategic open spaces have been designed and located to retain a sense of openness and local key views.
- Connect green routes with the surrounding settlements, footpaths and PRoW's.
- Provide 170 hectares of country park to enhance the natural connectivity and variety of the Green Belt and network of green features in the rural landscape.
- Reinforce green links generally; this include edge, hedgerows and cluster of trees and plants.
- Create a central green route comprising of a strong network of neighbourhood greens close and accessible to all.
- Create a network of streets, neighbourhood streets and lanes that also work as nature links incorporating trees and planting.
- Provide sports facilities to support a healthy and active life in the community.
- The transformation of a vast area of land into agricultural production will reinforce the rural character of the area.
- The site is located within the Cambridge Green Belt. The masterplan has been designed to promote sustainable patterns of development and to ensure that built development does not have any adverse impact on the Green Belt. A detailed description of the masterplan setting and potential effects on the Green Belt is found in the Landscape Visual Assessment/Green Belt report.



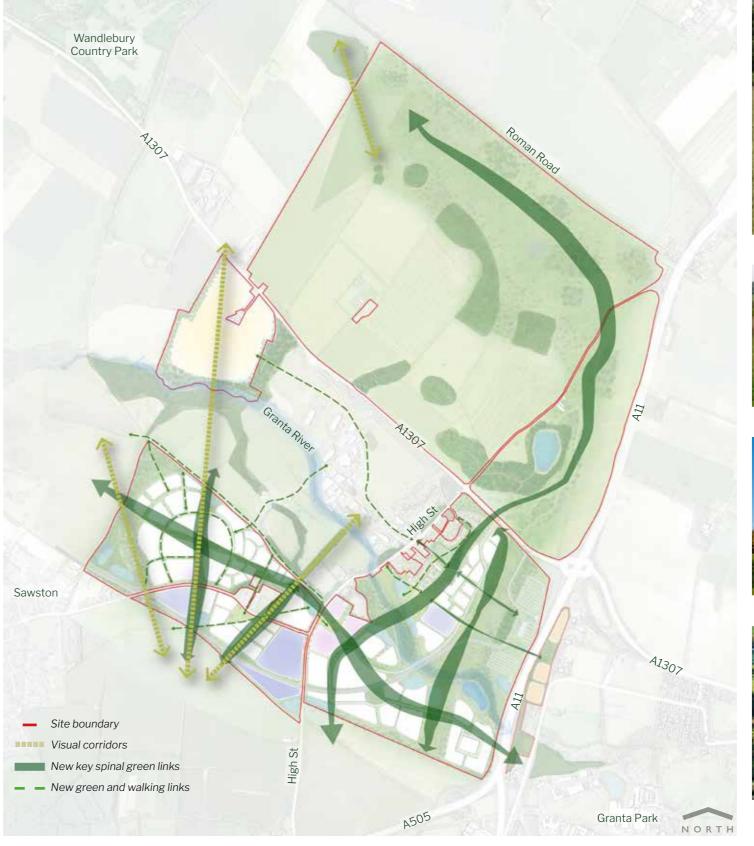


Green Routes, Streets and Visual Corridors

The site currently includes a number of green routes, paths and informal cycling routes, key long distance cross valley views and the attractive visual corridor towards Babraham Hall, as well as a number of PRoWs and bridleways towards the north of Sawston Road.

Key elements of this strategic approach to green routes and visual corridors include:

- Protect and maintain long-distance views to distinctive landscape features such as the Gog Magog and tree hangers to the north.
- The key vista towards Babraham Hall will be maintained, extended and improved across the south of the site helping protect this key visual asset while adding to the green amenity of the site. Informal natural paths will be added for residents and visitors to enjoy this beautiful corridor.
- Enhance, integrate and protect the different key paths in and around the site, including the PRoWs crossing the southern part of the site connecting to Sawston.
- Protect and enhance pedestrian paths and cycle routes and integrate with the rest of the proposed network.
- Streets, neighbourhood streets and lanes will feature tree planting and soft planting, helping to create a system of corridors of green and natural spaces across the site.





Protect nature desire lines

LAND AT BABRAHAM CAMBRIDGESHIRE



Protect views to Gog Magog Hills



Retained trees and woodland where possible



Retain and develop new tree lined corridors



LANDSCAPE STRATEGY

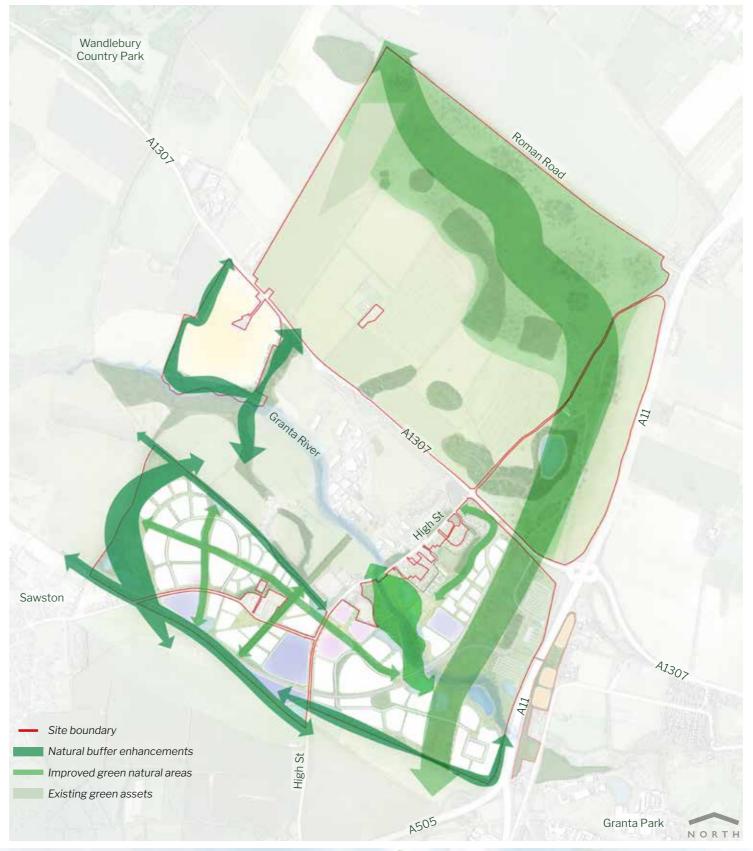
Ecological Enhancement

The masterplan aims to retain key ecological features, provide ecological mitigation and enhance habitats by creating a coherent and robust green infrastructure strategy. It will aim to protect ecological and wildlife sites in the local area by providing improvements to site boundaries close to them.

Ecological enhancement measures within the landscape strategy include:

- Creation of a 170 hectares country park to the north of the site.
- Strengthen and extend green corridors. A nature corridor linking the proposed country park and the southern of the site to be enhanced with local species of plants and trees. This corridor will run along an existing gas main protection zone.
- Existing woodland and hedgerows will be improved through management works and planting using native species enhancing habitats and biodiversity.
- Improvement of buffer areas, especially close to edges of fields and farmland. Planting of native species, creating natural corridors. An extensive natural buffer near Sawston will prevent coalescence between settlements.
- Careful consideration to the natural backdrop of the Babraham village. Measure will be taken to protect and reinforce its boundaries.
- The improvement of the River Granta blue corridor and its banks will be essential in the maintenance of the ecosystems in the area.
- Woodland, key hedgerows and trees will be retained and in most cases enhanced protecting the local ecology, reinforcing the rural character and providing appropriate screening to neighbouring settlements.

It is important to note that initial studies of this masterplan determine an overall biodiversity net gain. The masterplan proposals achieve at least 10% above the require 20% biodiversity net gain.





SUD's acting as landscape buffers

LAND AT BABRAHAM CAMBRIDGESHIRE



Homes with views of greenery and trees



SUDs incorporating contextual barriers



Provide a variety of native planting for species and habitats to flourish



LANDSCAPE STRATEGY

Amenity Greens, Green Routes, Natural and Semi-Natural spaces, Outdoor Sports

The masterplan will aim to exceed the minimum requirements of formal and informal open spaces required for this scale of development.

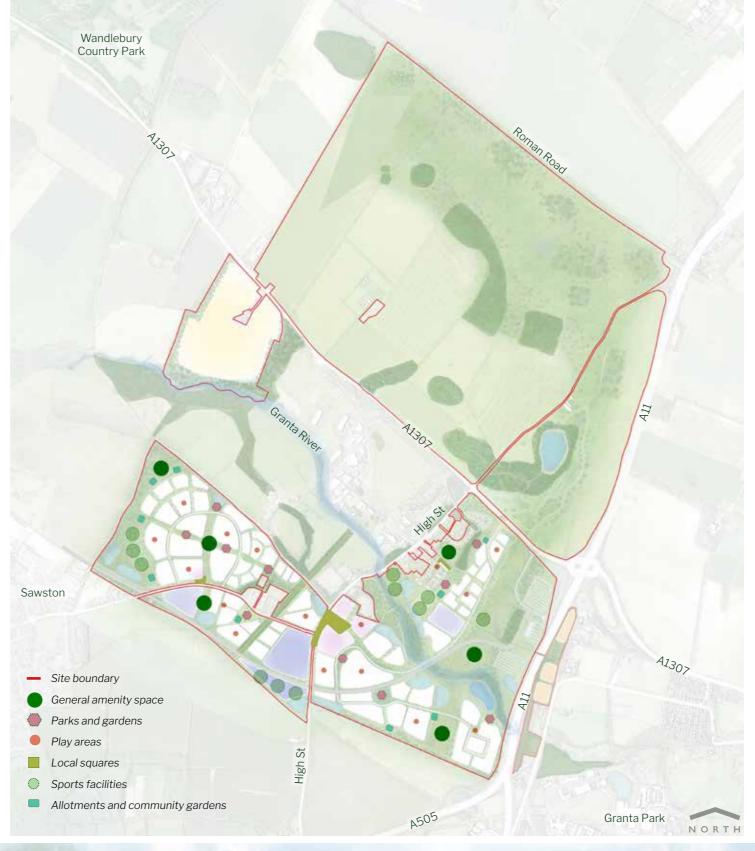
Amenity spaces will be placed strategically at various locations throughout the site, generally following the central green route, in order to make them easily accessible from all parts of the existing and new community.

A network of multifunctional and interconnected streets, green spaces environmental features and sports pitches are distributed across the southern part of the development near homes. Areas close to local centres, namely squares, are also part of this network creating a close knit relation between landscape and hardscape public spaces.

Formal and informal spaces aim to create a strong infrastructure of high quality green spaces for a variety of users and accessible to the wider community. These spaces are intended to both improve people's quality of life and connect to the wider network of open spaces.

The provision of play areas and pitches will aim to comply with the latest Field in Trust (FIT) standards for all ages and within easy walking reach from homes. There is enough open space for the provision of more than the minimum requirement for outdoor sports and pitches.

Allotments will be placed across the development and at the interface between the built parcels and woodland, for example, to act as a buffer and encourage community interaction.





Wildflower and native planting to be used in amenity areas



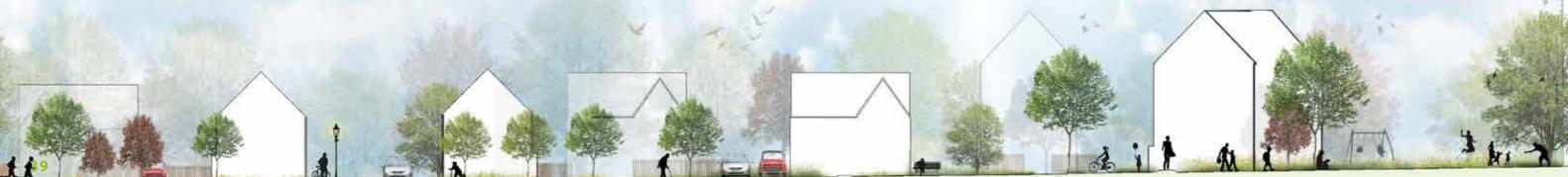
Children's play areas are safely overlooked



Character of the country park to support Wandlebury Park



Natural green spaces responding to the rural context of Babraham



LANDSCAPE STRATEGY

Natural Water Management

The existing blue infrastructure elements within the site include the River Granta and two reservoirs. Some water management measures that form part of this vision are:

Attenuation Basins: will be incorporated in the masterplan (dependant on final studies). These are designed to hold back storm water to prolong the event and reduce peak flows, then slowly release flows into the system. They are multifunctional features that can additionally be used for community spaces and increase amenity and biological value.

SUDs: These systems will allow to manage run-off water from the development in accordance to national and regional policy requirements and best practice. In addition to their function, SUDs will be used to create bio-diversity opportunities, ecological enhancement for example. Accessible Sustainable Drainage (ASUD's) could also be incorporated within the network of natural spaces and plays.

Swales: Open swales / rills, that can be effectively integrated into the development and be wet, dry, or for storage purposes.

Wetland planting and ponds: ideally incorporated as part of the green/blue corridors within the development and surrounding areas of the attenuation basins.

The River Granta, is a key asset within the site and a destination for walkers. Its banks and natural environment will be protected with measures like: infill with woodland planting to provide a stronger green corridor, dense edge planting such as hawthorn to deter recreational walkers along its habitats. There will be no development within the floodplain of the River Granta.



Rain gardens create relatively small depressions

which act as infiltration

Permeable paving as a source control measure

Holistic water management to improve wildlife

and biodiversity in the River Granta

SUDs close to homes and protective barriers



Swales creating wider and greener streets



SUDs incorporating contextual barriers



Shallow swales using edge treatment, absorbing energy from runoff



LAND AT BABRAHAM CAMBRIDGESHIRE

Electric vehicle charging ports

Dedicated bus route with cycle path

MOVEMENT STRATEGY

Vehicular and Public transport

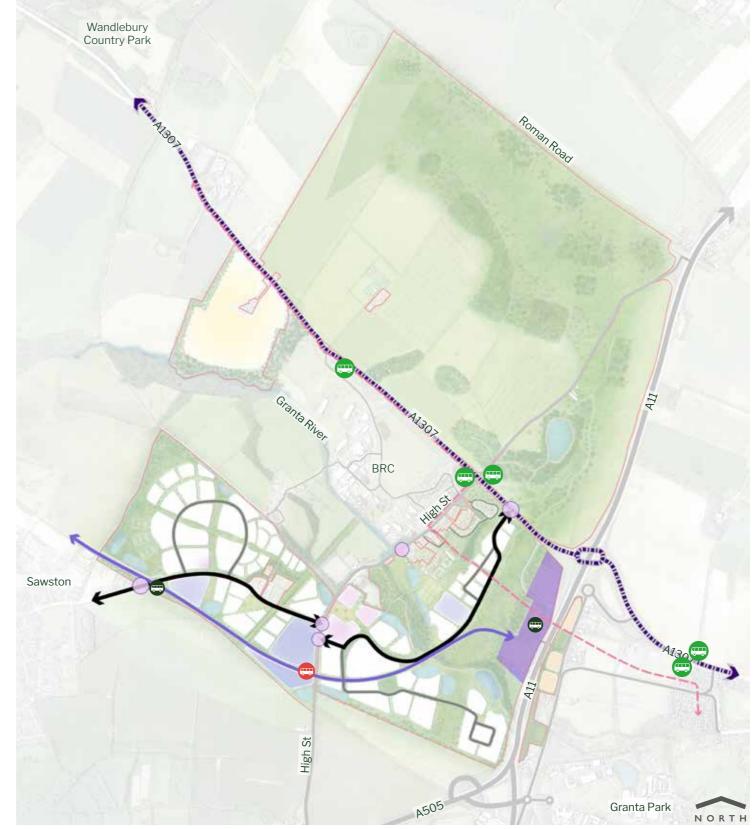
The main proposed vehicular access to the development will be a primary route connecting the development to the A1307. The access will be provided through a junction incorporating controlled pedestrian crossing facilities. The existing route through Sawston Road, will generate the other main access point to the development to the southwest. There is an existing minor access from the A505 through Babraham High Street which will expect some increment in traffic. However, calming measures will be put in place to prevent overuse of this access to the new development. The section of Babraham High Street between the bridge over river Granta and its junction with the A1307 will also be limited only to local traffic through calming measures and/or restricted access. The CSET phase 2 travel hub and route will sit along the site and provide direct non-car connections between the site and the Cambridge Biomedical Campus and Cambridge City Centre, and thereafter to the other key employment areas of Cambridge at the Northern Fringe, which will help minimise private vehicular trips generation through Babraham High Street

The street network will aim to discourage rat running through the site by avoiding straight roads, allowing for walk/cycle cut throughs, breaks in motor vehicle routes, and introducing natural traffic calming measures to reduce vehicle speeds.

Opportunities for EV charging bays and car club sharing will help to make car use sustainable, where journeys can not be made by non-car modes Car parking provision will be balanced at a level which recognises likely demand, but also seeks to deter habitual car use for journeys.

A key part of the site's transport strategy is therefore to maximise the use of non-car modes of travel to access the site. This means accommodating and maximising the committed CSET sustainable infrastructure. The CSET scheme will comprise a new public transport route which would link the Cambridge Biomedical Campus via Great Shelford, Stapleford and Sawston to a new travel hub within the site, which has connections to the BRC and Granta Park. The route would be an extension to the guided bus way and would be 'off road' for the entirety of its length with a pedestrian/ cycle route alongside it. The proposals for the CSET phase 2 have been developed to ensure that stops are as close to villages as possible whilst trying to limit the impact on the environment.

The emerging Local Plan is providing this excellent accessibility to key employment sites, because transport planning guidance advises that jobs should have accessibility by non-car modes of travel and close to homes. It is good land use and transport planning practice to have employment, housing, leisure and other activities in close proximity, meaning journey lengths are minimised and therefore providing excellent opportunities for these journeys to be made by non-car modes.





Existing bus stops

Site boundary

Existing roads

Primary vehicular route

Vehicular access points

Secondary vehicular route

Proposed CSET route (Phase 2)

Proposed travel hub (CSET phase 2)

Bus stop proposed as part of CSET Phase 2 route

Potential additional CSET bus route, proposed as part of the masterplan

Shared surface parking

MOVEMENT STRATEGY

Promoting walking and cycling

The masterplan strategy for walking and cycling aims to create a vibrant, healthy and sociable community, generating legible and permeable routes connecting to the local and wider and local community. High quality walking and cycling connections have been considered from the inception of the vision for this site and place particular emphasis on sustainable modes of transport.

The creation of a clear natural corridor, the 'central green route', along the length of development will work as the spinal route of this strategy. This will comprise of natural paths and cycling routes, with provision of abundant trees and planting, and a network of casual play, playgrounds and spaces for relaxation. This main spine will be interweaved with a system of secondary routes, primarily natural routes, highlighting key vistas and links to the existing natural network surrounding the site. This route will form part of natural network of corridors that will connect the site to the network of natural spaces across the area.

Residents will therefore have the opportunity to walk/cycle east-west through the site and then onto local employment sites such as Granta Park and BRC. This will include internal footways and cycleways connecting to the new shared footway/cycleway that forms part of the Linton Greenway, on the A1307 and the walk/cycle corridor that will be included as part of the CSET Phase 2 bus corridor.

Established cycling routes like the one along Sawston Road and connecting Sawston and Babraham Village, will be integrated and improved as part of this vision.



Planned route of the Linton Greenway which navigates through the site



- Site boundary
- - Existing pedestrian rights of way
- --- Proposed primary active travel route
- --- Secondary pedestrian footpaths
- --- River Granta proposed footpath
- O Pedestrian and cycle access points
- --- Linton Greenway
- CSET Cycle route



HOUSING TYPOLOGIES AND AFFORDABLE HOMES

The masterplan and vision for the site will be developed to provide a framework of key design principles to guide the development as it comes forward. The framework will be designed with sufficient flexibility in order to enable the new community to evolve and respond to changing conditions, enabling adaptation across the life cycle of the community. This can be considered at a number of levels:

Context: Planning for the future should look beyond the site itself. New communities sit within the context of the "Rural Southern" Cluster" of key employment areas including the Granta Park and the BRC, for which expansion of this residential-led development will support.

Community: Creating a holistic community is central to the ethos of the site. Communities should be allowed to grow and adapt as a result of active participation. Flexibility will be granted within the vision to correspond and respond to changing demographics, socioeconomics and life circumstances of residents.

Neighbourhood: Individual neighbourhoods within the community will be people-focussed, sustainable and designed to anticipate change. Neighbourhoods are expected to provide facilities and infrastructure to meet the basic day-to-day needs of residents and will need to be robust and resilient to cope with changing demands of their inhabitants as numbers fluctuate.

Home: In addition to environmental changes, future-proofing homes requires consideration to changing demographics, household composition and life circumstances.

Affordable Homes

The emerging Plan requires at least 40% of new homes to be affordable. The affordable housing tenures require that the first at least 25% of the affordable homes to be First Homes, with at least 10% to be provided as affordable home ownership products. The Plan sets out the proportion of the different affordable housing tenures and the proportion of dwellings to be provided, by size across a new development. For South Cambridgeshire, the larger proportion of affordable housing will be for one and two bedroom dwellings. The emerging Plan requires specialist housing to form part of the housing mix of new developments in order to create balanced and mixed communities and to meet the identified need for specialist housing. The draft policy supports the development of housing for older people and other groups in need of specialist housing. New specialist housing should be provided where there is a need, in suitably accessible locations, and without resulting in an excessive concentration of such housing. Any specialist accommodation for older people will contribute towards delivering the overall housing requirement for Greater Cambridge. The provision of some forms of specialist housing, such as general housing for older people, will be delivered through the requirements for all new homes to be accessible and adaptable homes as set out in Building Regulations M4(2) standard.

Embedding inclusive design within the masterplan requires consideration of the different needs of the future community

A New Family or PhD students with their family



Functional and accessible homes to cater for the changing needs of a family at different stages of life.

Single People, young professionals

Looking for an affordable first home, potentially looking to live close to employment and transport links.



Single people or students looking to live together



Looking to live together, possibly as university friends or work colleagues. Close to transport links, cycle ways and employment sites.

Older People

Looking for right size or downsizing, or to be located close to amenities and potential support and care.

Young Couples

first steps into their future

Looking for a new home or wishing to rent so they can build on their



A Family with a wheelchair user

A family caring for a disabled or an older family member, or a family member with special needs. The family needs easy access to the home, from the home to the garden and to the care, potentially an extra room for an external carer as well as storage space.



Family with Teenagers

Families with older children who are potentially off to university.



Person living with a physical or mental disability

A person, family or couple living with a disability including dementia, who might need supported living and homes that are adaptable to their specific needs.



Groups of singles and families

Looking to set up a co-housing community in which individuals and families have smaller homes and share community spaces, working together as a collective.



Multi-generational Family

Large, flexible and adaptable houses or stacked maisonette units with shared access and sharing a private garden.



Inter-generational homes in Oakfield, Swindon (PRP)



Large family homes in Ninewells (PRP)

INCLUSIVE DESIGN

The design and quality of buildings and spaces has a huge influence on the quality of people's lives. Inclusive design requires thinking laterally about as many people as possible, acknowledging diversity and difference. Where a single design solution cannot accommodate all users, a choice must be provided, empowering people's independence in flexible and adaptable environments.

When considering designing for people with neurodiversities for example, people with ASD and IDD are often more sensitive to their physical surroundings due to sensory processing deficits, which as a result can affect eyesight and hearing, making the built environment distracting and sometimes frightening. It is pertinent to implement good environmental, evidence-based design methods from the inception of the masterplan's design to positively influence the behaviours of individuals.

Within the site, we also seek to normalise dementia and help people live fulfilling lives for as long as possible. Dementia friendly design not only helps meet the physical and mental health needs of a person with dementia, but can also support that person to achieve the best quality of life possible. Such design is aimed at reducing the stigma of dementia and empowering people with dementia by recognising their rights.

As the development concept becomes more defined we will:

- Engage with everyone in the community, particularly those with physical and mental disabilities including dementia, to ensure full understanding of needs, challenges and solutions`
- Design to ensure transport, way-finding, safety, keeping fit and carers' needs allow participation in everyday life
- Design a variety of homes adaptable to different needs throughout the lifetime of someone living with a disability
- Provide amenities that enable people with disabilities and their carers to meet together socially
- As well as providing resources and building places that support people with dementia, we are committed to learning more about and helping people support dementia communities and establishing networks
- Provide a positive social space within the farmland to create a care farm, providing learning, training opportunities and fun activities for those with disabilities

As a land promoter we will:

- Connect with organisations to promote the understanding different types of disabilities.
- Connect with partners to deliver health care and social initiatives.
- Work to raise dementia and disability awareness among all residents businesses and services in the development.

Wide streets, with a clear view of the end location, such as a school, bus stop or shop, which will provide a smooth passage enabling people to access places independently, with minimal transitions which can cause confusion

customers and

employee care giving

Provide a range of

house types to

accommodate for

different types of

supported living

Clearly**delineate** areas for specific activities.

Residential settings that offer memory loss services and support

Ensure **play spaces** and equipments is safe for all ages and abilities.

Ensure that all community facilities and amenities are accessible to all, allowing all people to take part in community events and activity, creating a greater sense of community and inclusion through the whole neighbourhood.

Welcoming and supportive faith communities



Dementia-aware government **services**, planning and emergency response

Ensure areas are safelyoverlooked by homes

Ensure homes and community spaces have good levels of natural light and ventilation

Use material palettes on buildings and within the environment which are **recognisable** to ensure safe wayfinding and legibility within the community.

for independent living

and meaningful

community

engagement



CHARACTER

The strategy to develop seven character areas has been informed by their particular geographical setting in the site, intended uses and characteristic features with the aim to create unique and distinctive communities. Character areas include:

- North Fields: Located in the north-west of the site. It is characterised by its openness, long distance views and relationship to farmland edges and Sawston town. North Fields will be a mixture of vernacular and modern rural architecture incorporating generous distance between homes, integrating the community into the landscape. Areas towards the centre may increase in density, creating suburban clusters while keeping nature as backdrop.
- South Fields: Key views to the south of the site looking particularly into the distant fields will be a characteristic of this area. It will comprise of predominantly residential development close to fields and amenity areas.
- New Centre: This area will be particularly important because of its location along the Hight Street and its relation to the new main route coming from the A1307, making it a convergence point for existing and new routes. A comfortable physical separation provided by the River Granta will help maintain a respectful gap with Babraham village.
- Babraham Farm Village: The scale and street layout of this character area will be informed by a sympathetic approach to the scale of the existing residential farm-style settlement and natural backdrop.
- Granta River Homes: The close relationship with the River Granta, existing reservoir and the natural edges of the site will define the outlook of this character area. The design of the layout of streets and buildings will seek to provide views to the surrounding natural assets.
- Homes on the Green: This area located between the Babraham village extension and the proposed CSET hub and will be defined by its relationship with the vast green open space to the east and the generous open space buffer, south of the Babraham village. The frontage along the primary route into the site, will be articulated with a variety of scales and a mix of distinctive architectural façades.
- Babraham Village Extension: The sensitive extension to Babraham village will be strongly informed by its key heritage assets, key views and natural setting. This area will require a particular approach considerate to its scale, vernacular features and layout of existing lanes, paths and spaces, helping strengthen its rich character and identity.



CHARACTER: PRECEDENTS



















DENSITY STRATEGY

The site will have different bands of densities that will be used strategically to reflect and respect the character of the surrounding area, ensuring good place making with lower densities along the edges and sensitive areas, while gradually increasing towards the local centres. Density has been measured as dwellings per hectare (dph). The range of densities include:

Low Density

Low density areas will be situated in more sensitive locations – adjacent to existing neighbouring settlements and designated features, such as the Babraham Village or the existing farm land settlement along Sawston Road. A finer grain of development will enable the site to integrate with its surroundings seamlessly. Ample back gardens, detached homes and mews rows amalgamate with the fields and landscape.

Medium Density

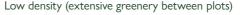
Located principally in transition areas, medium density will feature a mix of detached, semi detached, terraced houses and apartment blocks, including homes above the local commercial hub creating a natural gradient to the lower density areas.

Higher Density

High density areas will be predominantly located in strategic central areas of the new development including areas close to the local centres, the area central to the Northfields, and the key frontage facing the CSET station. This could form tighter nests of development that could include terraced houses, semi-detached homes and apartment blocks.









Low to medium density



Medium density - Great Kneighton (PRP)



Higher density - around local centres

HEIGHTS STRATEGY

The height strategy has been designed in close relation with the density and character strategies. Areas of low density will comprise smaller buildings and more rural-suburban characteristics, while higher buildings will be located towards areas of greater activity such as the local centre. The height strategy takes into consideration the Cambridge Local Plan policies in relation to building heights. The range of heights is very sensitive to the special character of the southeast of Cambridge.

The approach to heights will be studied in more detail as the masterplan and project evolves. To develop this high level strategy we have given careful consideration to the natural, heritage and physical qualities the site and its surrounding context. The range of heights include:

1 to 2 Storeys

A selection of building typologies may be allocated in these areas including bungalows, one storey houses, one to two storey detached and semi-detached homes. This group may be located close to Babraham village and the existing farm buildings close to Sawston Road.

2 to 3 Storeys

Areas within this designation will comprise of detached, semi detached and terraced homes with a mix of small blocks of flats in strategic position (marking corners and end of terraces, for example).

3 to 4 Storeys

Building types may include three storey houses or blocks of apartments. These will be located close to local centres and above retail in some cases.



1 to 2 storeys in a characterful setting like Babraham Village









2 to 3 storeys could include houses and flats



2 to 4 storeys block of flats and above retail



Up to 4 storeys near local centres

HERITAGE APPROACH

Babraham village extension

Babraham Village consists of a number of listed and rustic characterful buildings. The proposal for the village extension aims to produce a permeable community and create a useful link between the existing village and proposed CSET hub. Although part of the existing village is reasonably influenced by the historical assets it contains, sensitive development of the village the area will allow for village to integrate better with the site as a whole.

The design approach will be meticulous to fit in with the rural grain of the village by producing smaller parcels, permeable routes, vistas and generous separation between buildings, helping to integrate it with the existing grain while keeping its identity. Whilst it is apparent that development within the site may result in a change to the setting of a number of identified built heritage assets, it is not necessarily the case that the whole site forms a significant unit of the identified assets' settings. Brownfield sites which are of limited value and/or actively detract from the setting of the Conservation Area form a large focus for proposed development in this location which contributes least to the setting of the Conservation Area. The degree to which a sense of openness and existing character can be maintained within the site will relate directly to the extent to which the integrity of the setting can be preserved.

A number of measures have been considered to minimise effects on the setting of the Conservation Area and the setting of the built assets within that designated area:

- A Opportunities to provide homes and community spaces of higher quality than are present on existing Brownfield sites. For example, the masterplan proposes removing an existing chicken barn which is in a poor state, and replacing it with a community centre, replicating the barns footprint and character.
- B A significant landscape corridor has been retained to the southeast of the village in order to maintain a sense of agricultural landscape setting and connectivity between the asset and wider countryside.
- © A low-density approach to development surrounding the village will ensure the character of the village is respected.
- D The open and green approach into Babraham village from the A1307 is carefully maintained through providing a set back behind a significant buffer of trees.
- A key view from the A1307 south of the High Street looking towards the BRC is protected by providing a large open green space.
- E Locate new homes in areas which cover the exposed rear fences of private gardens to create a safer and more attractive frontage for the village.









Re-purposing of existing farm buildings



Maintain character and identity of the village



MIXED USED COMMUNITY

The masterplan offers a balanced community, with opportunities to live, work and play within a diverse and healthy environment. The masterplan proposes a range of uses to support the community including education facilities, retail and leisure, community centres. This new community will provide homes, facilities and amenities to complement the existing workforce and future growth of the rural southern cluster and additional employment sectors.

This masterplan aims to provide one small local centre located off Sawston Road, and one larger centre located off Babraham High Street. The local centres will be strategically located close to key routes and modes of transport, and also within a walking distance from residential areas.

Two new 2 form entry (2FE) primary schools are proposed to serve the development and potentially serving shortages in other local villages. The area will be strategically located close to homes, walking routes and sustainable traffic means.



- Two new primary schools (2FE) supporting the new community and existing surrounding towns and villages
- A 6FE secondary school and potentially covering overflows from nearby areas
- Larger local centre comprising shops, health care facilities, leisure and fitness and community facilities.
- Smaller local centre, with small scale retail

- Potential future research and development land
- Sports and recreation areas
- Green spaces for play, leisure, relaxation and fitness.
- Historic Roman camp market square
- New community Hall



Local Centres

The local centres are envisioned to serve the local community. The smaller of the two centres will comprise a 'metro' scale food store and a small parade of retail and/or services units. The larger centre could include shops, healthcare, retailing, food and beverages, offices, and leisure uses. Both centres could incorporate medium to higher density housing.

The design approach for the local centres areas will aim to:

- Encourage local activities and create opportunities for local trade and interaction while strategically maximising land use.
- Provide a referential built form and space generating activity close to key footpaths and links
- Be highly accessible, close to public transport, walking and cycling routes.
- Provide a diversity of amenities and that will help complement the existing village and become a central space for community activity.

Education

The masterplan proposes two new 2 form entry (2FE) primary schools. The area allowed for these 2FE schools is 2.3 ha each and will be strategically located closed to homes, public transport, walking and cycling routes. These schools could potentially support both the community and the surrounding villages.

One of the schools will be located south of the Babraham village with green open areas to the north and south. The other primary school will be located adjacent to the smaller local centre and proposed CSET bus stop.

The proposed 6FE secondary school will cover approximately 9ha, which includes sports facilities with capacity to cover the proposed communities needs and potential surpluses in neighbouring villages.

Community Centre

It is proposed that a new community hall is located within the Babraham village extension, with a larger multi-function facility located within the larger centre.

The community centres will be open to the new community and surrounding towns and villages, providing wider benefits to all.

There would be safe and exciting spaces for children to play and open space for all ages to hold group activities, fitness classes and exhibitions, for example.

The community hall would be located in a highly accessible location, close to the main vehicular access point off the A1307, adjacent to the Linton Greenway, walkways, bridleways and in close walking distance to the Babraham High Street. The larger community centre can be accessed directly off the Babraham High Street and along the central green route.

Employment

The Local Plan supports additional development at BRC to promote economic benefit from the growing successful life science cluster and to act as a catalyst for wider economic growth. At Babraham, the Plan favours allocating an additional area for employment development (research and development) of 17.1 hectares within and adjoining the existing built area of the campus and removing the site from the Green Belt.

In addition to this land, some 31ha is safeguarded for the future expansion of the BRC. However, this land will only come forward once the land already being allocated is fully built out and found to be required.

Overall, It is anticipated that the resident population of 7,300 people will include around 3,800 people in employment. These will likely find approximately 1,500 jobs on-site within a dedicated employment areas, the local centres, schools, as well as those that choose to work at or from home. This is anticipated to create a 'surplus' of 2,250 people in employment that could make use of the opportunities at the surrounding science parks.

Open Space & Sports

This vision provides approximately 200 ha. of green space, which exceeds the demand generated by the proposals. This vision will provide:

- Considerable biodiversity net gain.
- Outdoor sport facilities for new and surrounding communities to benefit from.
- Equipped play areas that will be safely overlooked from homes and will have modern equipment considerate to the rural and natural context.
- A series of pocket parks, amenity and natural green spaces, for leisure, fitness and relaxation.
- Allotment spaces offering opportunities for community growing and positive social interaction
- A country park which will provide 170ha of natural land, including new woodland, tree groups, hedgerows, using local species and plants to enhance habitats and biodiversity.



8

PHASING STRATEGY

The masterplan will be split into five strategic phases of development. Each one would provide varying levels of development at the site over time, and could be developed in parallel depending on the final strategy. Significant enhancements to the north in terms of provision of a Country Park within the Green Belt with significant enhancements to the landscape and linkages to/from Babraham and the Country Park could be delivered strategically along the length of all phases. This will ensure that there are opportunities for recreation associated with the masterplan at key stages of the development The development of the designated farmland will also be delivered within the strategic delivery plan and timeframe.

The delivery of phase A, which includes the extension to Babraham Village, will follow a careful approach widely informed by the significance and setting of the built heritage and landscape assets in the area, and the views out and across them. Within this phase a primary school, community centre, landscaped and green open areas and a variety of home types will be provided, both as part of the Babraham Village Extension and Homes on the Green.

Phases B and C, located towards the middle of the southern part of the site, are of key importance as they deliver elements of the masterplan including a larger local centre and a secondary school, in addition to a variety of home types, landscape and public spaces. Phase B could also see the incorporation of the designated employment land east of the A11. Phase D is planned to incorporate a variety of homes, a local centre and a primary school.

Aforementioned, the development of the Country Park, farmland and some of the wider landscape/open space improvements will be developed in parallel with all phases of the development. The delivery and phasing of this masterplan will also be informed by the construction of the CSET route and travel hub. Phase E includes the land safeguarded for the future expansion of the BRC.





CONCLUSIONS

This vision provides a sustainable new settlement within the Southern Rural Cluster of science parks. It will deliver considerable environmental benefits through the creation of a substantial country park and implementing significant areas of green and blue infrastructure that can be enjoyed by existing and future residential and work communities.

The proposed vision will provide 3000 new high quality homes, within a highly sustainable and connected community. It is anticipated to support a population of approximately 7300 people. Through its excellent location and non-car transport links, the community will reduce the habitual use of the private car, and provide a high quality place for people to live their lives in a healthy and safe environment.

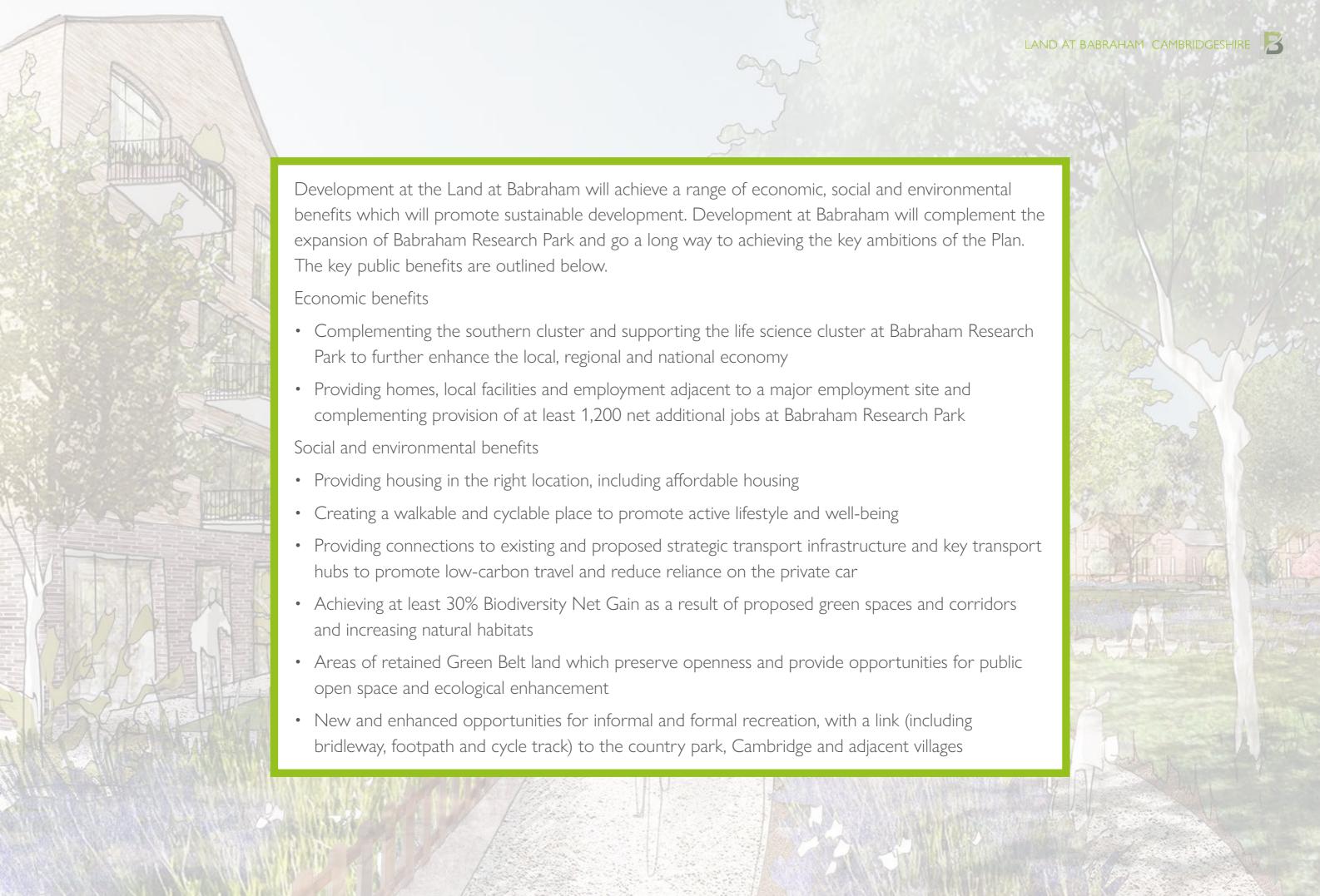
It will include two 2-form entry primary schools and one 6-form entry secondary school. This covers the anticipated needs of the proposed development plus a degree of flexibility to accommodate a younger population initially.

The proposals comprises of a wide variety of community facilities and amenities to support the population and surrounding towns and villages. The proposed local centres will be designed to ensure that they remain flexible spaces providing for a range of uses to meet the needs of the resident population.

It is estimated that the proposed masterplan will provide approximately 1,500 jobs on site within dedicated employment areas, the local centres, schools and those who chose to work from home. The expansion of the BRC will provide additional employment opportunities close to the communities.

This residential-led proposal will therefore reduce the amount of commuting relating to the expansion of the Southern Rural Cluster employment plans.







SUMMARY OF TECHNICAL STUDIES

Transport and Access

The site's location is paramount to why developing a community here will meet sustainable transport objectives of maximising non-car travel modes, whereby future residents of the Greater Cambridge area can live their lives without the need to rely on the private car, and meaning we can deliver a new residential development where the private car does not dominate. It is next to or very near to important employment centres, including the BRC, the Genome Campus and Granta Park.

The development will integrate with existing and proposed walking, cycling and public transport networks, namely the GCP's Cambridge South East Transport scheme (CSETs), providing direct non-car connection between the site and the Cambridge Biomedical Campus and Cambridge City Centre, and thereafter to the other key employment areas of Cambridge at the Northern Fringe via onward travel from Cambridge Station either via the train itself to Cambridge North or the Chisholm Trail for cyclists, or conventional bus services, and West Cambridge and North West Cambridge via the Cambourne to Cambridge Better Public Transport Scheme.

The site will therefore have excellent non-car connectivity with surrounding areas. It is in close proximity to other key employment areas in the "Rural Southern Cluster" (i.e. Genome Campus, BRC and Granta Park), meaning reduced travel distances to work and greater opportunities for non-car travel to these work locations. And the development itself is mixed use, therefore a number of trips will remain within the site, and not impact on surrounding transport networks.

Through its excellent location and non-car transport links, the community will address the habitual use of the private car and provide a high quality place for people to live their lives in a healthy and safe environment.

Utilities

Following a review the utility infrastructure, a range of existing utility infrastructure including high voltage electric network and water network, in proximity of the site, which could supply electric and water to the buildings. Babraham is supplied by UK Power Network is in the vicinity of the Sawston Primary Substation with a high voltage network in the area

Whilst there is presence of a gas main in the vicinity of the site may seem to be constraint, it provides an excellent opportunity to develop green spaces within the site.

There is a range of telecom infrastructure in the area with Openreach (BT) and Virgin Media networks in the area with the ability to provide Ultrafast Broadband reaching speeds of over 1GBs.

As the masterplan develops, we shall make applications to utility companies to secure electric, water and telecom supply for the new development.

Surface Water, Drainage and Flood Risk

The site is located in the valley of the River Granta, designated as a 'main river' flowing from southeast to northwest through the eastern part of the site. The majority of the site is located within Flood Zone 1, 'Low Probability'. However, there are areas of Flood Zones 2 'Medium Probability' and 3b 'Functional Floodplain' which are associated with the watercourse corridor of the River Granta. The risk of flooding from all other sources (surface water, reservoirs and groundwater) is considered to be either 'low' or 'very low'.

No development will occur within the floodplain of the River Granta and the proposals will include a strong emphasis on blue-green infrastructure, being used for recreation, amenity, and environmental purposes, allowing preservation of flow routes and flood storage, and at the same time providing valuable social and environmental benefits.

A sustainable drainage management strategy is essential to manage surface water runoff from the proposed site, ensuring that the development does not increase flood risk by mimicking the site's natural drainage regime. Surface water drainage should follow a hierarchy, firstly aiming to discharge to the ground via infiltration, then to a surface waterbody or course, and lastly to the sewer network. Due to the presence of terrace deposits and underlying chalk bedrock, aspects of infiltration drainage may be feasible for the site but should be confirmed through future site investigations.

The surface water drainage strategy will be designed so SuDS are dispersed and integrated within the wider landscape. The proposed SuDS will seek to deliver long term mitigation by attenuating and treating the surface water runoff through a mixture of on-plot solutions and strategic attenuation features.

The surface water strategy that should be considered for the site, consisting of, and not limited to; open swales/rills, attenuation basins, ponds, wetlands, infiltration SuDS, porous paving, bio-retention areas, green roofs and rainwater harvesting. In addition to providing a drainage function, the SuDS will be utilised to create amenity benefits, ecological enhancement, water quality treatment and bio-diversity opportunities.

Green Belt

A Landscape and Visual Appraisal (LVA) and Green Belt Study have 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 are appended to the submission for reference.

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 whole site is constrained by the Green Belt designation. The areas proposed for development are identified in the recently-published Greater Cambridge Green Belt Assessment (LUC, August 2021) with the following parcels and levels of harm:

Parcel BA5, BA7, OA6 – Very high level of harm

Parcel SA2 – High level of harm

Parcel BA6 – Moderate level of harm

Parcel BA4 – Low level of harm

The LVA has concluded that the proposed development will result in some adverse effects associated with the change of land use. The introduction of new urban areas within a largely rural landscape will be detrimental to the distinctive qualities of the Cambridge Green Belt and result in a substantial alteration of the visual and landscape baseline.

However, the proposed masterplan includes mitigation measurements that intend to lessen the perceived adverse effects. Strategic open spaces are designed to break the urban fabric and retain some discrete sense of openness and local key views. A generous landscape buffer is proposed adjacent to Sawston settlement to prevent visual coalescence of the proposed and existing villages. Green corridors mitigate effects on the setting of the existing public rights of way and define independent character areas, which aim to replicate a system of nucleated villages akin to the contextual landscape character.

Lastly, it is noted that the proposed master plan includes two school sites along the southern boundary. The careful detailing of these sites, particularly the siting of playing fields and outdoor recreational space, will also contribute to the retention of some visual Green Belt qualities. Similarly, detailed landscape plans for the proposed open spaces will benefit the mitigation of visual impact.

SUMMARY OF TECHNICAL STUDIES

Heritage

A number of built heritage assets have been identified (Bidwells 2021 Initial Heritage Appraisal) which either have a visual or physical connection with the allocation site or have a form of setting relationship with the surrounding landscape.

Development within the site will result in an apparent change to the setting of a number of identified built heritage assets. This may result in a reduction in the ability to appreciate the arable character of the site and may result in a reduction in the ability to appreciate the assets in a setting which supports their significance. However, it is not necessarily the case that the whole site forms an equally significant part of the identified assets' settings. Therefore, the degree to which a sense of openness and existing character can be maintained as part of the masterplan will relate directly to the extent to which the integrity of the settings can be preserved.

A site sensitivity plan, relating to built heritage only, provides a guide for the potential approach to the location of zones of development. This takes into account the significance and setting of the identified built heritage assets as well as views in, out and across them. These identified zones will need to be further refined and assessed as the detailed design of the proposals are brought forward in order to further mitigate or remove elements of harm. They also need to be considered alongside below-ground heritage and landscape considerations.

As a result of the initial assessment of the site, parameters have been set out from which the design team has developed a response within the Concept Masterplan for the site. This response takes account of the contribution which the site makes to the setting of the various built heritage assets.

It is likely that development on certain areas of the site will result in a degree of harm to the significance of heritage assets, and great care will be required to mitigate such impacts through the location, form, scale and design of the proposals as they emerge. In order to accord with the provisions of the 1990 Act, 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.

At this early stage, if masterplanning is developed to ensure impacts on built heritage assets are mitigated or removed altogether, these impacts are likely to be at the level of "less than substantial" harm in terms of the policies of the National Planning Policy Framework – although it is not possible to define any more precisely the levels of impact at this stage until more detail is available

Ecology

This report details the results of a Preliminary Ecological Appraisal (PEA) and biodiversity net gain assessment used to help inform the design of a Concept Masterplan of development within the site,, Cambridgeshire.

The PEA confirms that the Site was dominated by arable land of low relative biodiversity value, with pockets of remnant calcareous grassland and seminatural broadleaved woodland of elevated ecological interest.

The faunal interests are likely to be varied and could include the presence of an assemblage of specialist farmland birds, badgers, a range of aquatic species associated with standing and flowing water habitats, bats associated with woodland, hedgerows and aquatic habitats, and specialist invertebrate species associated with dead wood, calcareous grassland, and wetland habitats.

The Concept Masterplan has responded to the findings of the habitat survey with areas of greatest biodiversity value to be retained and enhanced where possible, and development focusing on arable land and other low value habitats. A large area of the site would be used to create a new Country Park, with significant ecological opportunities relating to this proposal.

The high-level biodiversity net gain assessment based on the current Concept Masterplan and several working assumptions shows an overall net gain of +882.31 habitat area units, equivalent to a biodiversity net gain of +53.08%.

Archaeology

The PDA lies within an area of high archaeological interest and potential. The vast majority of the PDA is under arable cultivation and will have experienced truncation of archaeology where soils are not deep. That which survives will be represented by cut features such as ditches and pits, and this is reflected in the Historic Environment Record by cropmarks.

One scheduled monument, a cropmark site of a long barrow and enclosure, is situated within the north west corner of the PDA on arable land. Further to the north west, but outside the PDA, is a second barrow on Copley Hill. These were identified early in the design process as a significant influence upon the layout and future management of the proposed development.

During the archaeological assessment a cropmark rectangular enclosure, possibly a Roman military marching camp or installation guarding the crossing of the Granta, was identified from a 2020 Google Earth image.

Even at this outline stage, the Concept Masterplan has taken known constraints into account and has been designed to:

- Protect the setting of scheduled monuments
- Protect the scheduled long barrow and stock enclosure by taking the land within its boundary permanently out of arable cultivation
- Preserve in situ the possible Roman military cropmark site
- Allow flexibility in the layout so that should significant archaeology be identified during field-based evaluation (that would be required prior to a planning application), it can be preserved in situ through detailed design.

On the basis of currently available information, and taking into account both incorporated mitigation and the flexibility that the layout can provide, there are no over-riding constraints to the allocation of this land for development.

