

Proposed Submission North East Cambridge Area Action Plan Regulation 19

November 2021



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1. Introduction

North East Cambridge is a 182 hectare brownfield site which is within a 15 minute cycle ride from Cambridge city centre. The area has experienced sustained growth over the past 50 years through a number of highly successful employment parks and development of Cambridge Regional College. The Cambridge North railway station and more recently confirmed funding from central government's Housing Infrastructure Fund to relocate the Cambridge Waste Water Treatment Plant, creates a once-in-a-generation opportunity to comprehensively transform the area and create a new city district for Cambridge. This Proposed Submission Area Action Plan is therefore based on the Waste Water Treatment Plant being relocated and establishes a clear vision of not only how North East Cambridge can grow physically, but also about supporting tangible social and environmental benefits that create a better overall quality of place and life for all.

The aim of preparing an Area Action Plan is to have a single, statutory document that provides clarity as to how this large, cross-boundary, site will be developed over the next 20 years and beyond. Development will take place over several phases by multiple landowners and developers and the Area Action Plan will ensure that development is both comprehensive and coordinated.

Once adopted the Area Action Plan will form a part of the development plan Greater Cambridge for Greater Cambridge (Cambridge City and South Cambridgeshire), Development Plan which planning applications will be assessed. In using the Area Action Plan, it is essential that its policies are read as a whole rather than in isolation and should also be read together with policies and proposals elsewhere in the Development Plan.

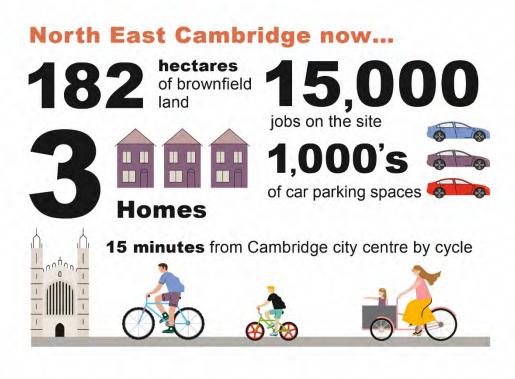
The Councils are still considering the medium and long-term implications of the COVID-19 pandemic. It is therefore appropriate that the Councils are maintaining a watching brief to address this issue within the Area Action Plan and will need to respond positively to any government guidance, best practice or changes to planning policy either whilst the plan remains in preparation, or after its adoption through monitoring its effectiveness.

2. Context

North East Cambridge is a complex area that is locally and strategically important. Its character and context have shaped the objectives of the Area Action Plan, and how the Plan achieves these objectives through the Spatial Framework and policies.

It is crucial that North East Cambridge makes the most of the opportunity to enhance the northern part of the city for existing communities, helps meet the development needs of greater Cambridge in a highly accessible location, and maximises the opportunities provided by this brownfield site.

Creating a critical mass of activity in the area will help support a self-sustaining new city district and can reduce social inequality locally through the range of jobs and homes that are created. It can also help our response to climate change, by locating jobs and homes together, and where there are opportunities for travel by walking, cycling and public transport. At the same time the development should deliver open space and biodiversity improvements, contributing to the councils aspirations to double nature in greater Cambridge. This will only be achieved through a comprehensive and coordinated approach to development across the whole of North East Cambridge.



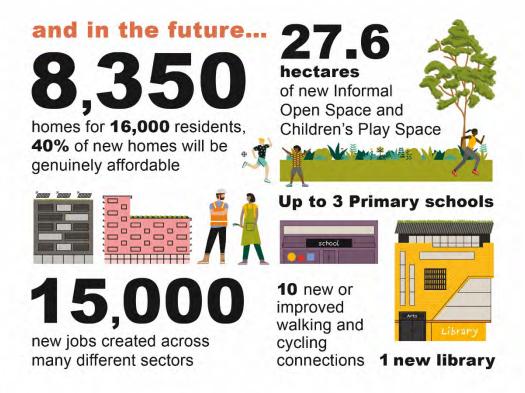


Figure 1: Infographic showing North East Cambridge now and in the future

2.1Location and strategic context

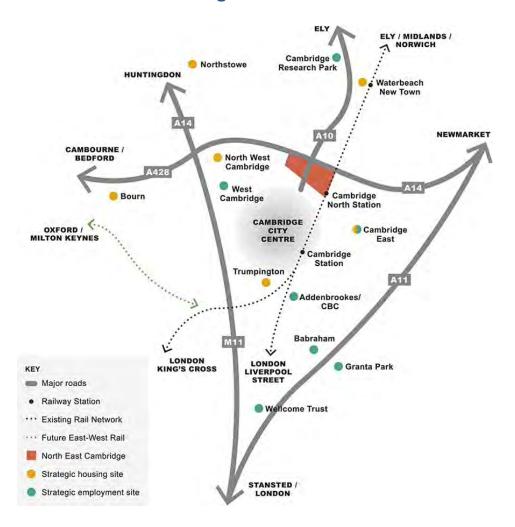


Figure 2: North East Cambridge in context

Cambridge has an international reputation based on its world-class university and economic success, which belies its small size. Surrounding the city lies the district of South Cambridgeshire which, although largely rural, has become home to several research and development clusters. This includes Cambridge Science Park which forms part of the Area Action Plan area and lies within South Cambridgeshire.

Cambridge is strategically located within a number of growth and transport corridors, including the London-Stansted-Cambridge UK Innovation Corridor, the Oxford-Cambridge Arc and the Cambridge-Norwich Tech Corridor. The Oxford-Cambridge Arc has been identified by the National Infrastructure Commission as being a national asset, and a focus for creating new homes, better connectivity and economic opportunities. To support this ambition, central government has committed to delivering the East-West Rail project, which on completion will connect with North

East Cambridge via Cambridge North Station to Milton Keynes and Oxford in the early 2030's via a new railway station at Cambridge South.

The North East Cambridge Area Action Plan will play an important role in bringing forward thousands of new homes and jobs along these nationally important corridors, as well as making a significant contribution towards meeting the housing and employment needs of Greater Cambridge.

2.2 The Area Action Plan site



Figure 3: The Area Action Plan site

The area designated for the North East Cambridge Area Action Plan is situated between the A14 to the north and west, the Cambridge-King's Lynn and Peterborough/Birmingham railway line to the east, and the residential areas of

Chesterton and King's Hedges to the south. The area falls within both Cambridge City and South Cambridgeshire District and the Area Action Plan has been developed jointly by both councils through the Greater Cambridge Shared Planning service.

Milton Road – a key arterial vehicle route – divides the area into eastern and western parts. Milton Road leads to the city centre to the south, and continues north as the A10 towards Waterbeach and Ely, and North East Cambridge therefore lies at a key gateway location into the city. The Cambridgeshire Guided Busway, which runs from Cambridge North Station towards St Ives, partly forms the southern boundary of the Area Action Plan.

Across the Area Action Plan area there has been a long history of industrial type uses on the site, including industrial manufacturing and processes and the Waste Water Treatment Plant. As a result, land contamination is another development constraint that will need to be comprehensively addressed in order for the site to be further developed.

To the north of the Area Action Plan site lies the village of Milton, Milton Country Park and the countryside beyond which forms part of the wider Fen landscape. While North East Cambridge currently feels disconnected from this wider landscape, important biodiversity and wildlife corridors from the city to the Fens, such as the First Public Drain, exist in the site area.

2.3 Connections

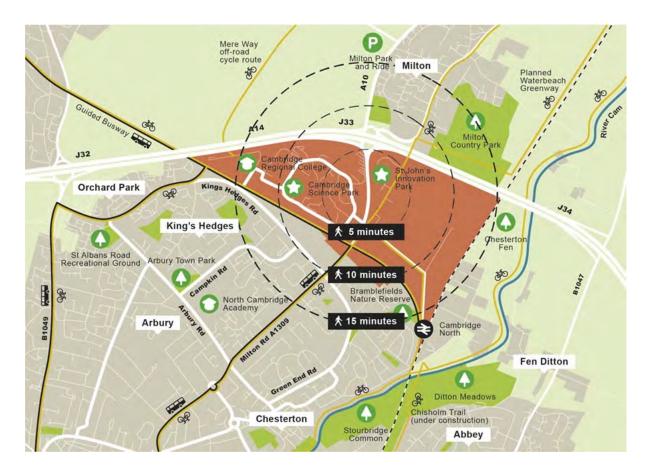


Figure 4: Public transport and strategic cycling infrastructure

The site is already very well-connected by public transport and strategic cycling routes. These include:

- Cambridge North station, which has direct trains to Cambridge, Stansted,
 London, Waterbeach, Ely, Kings Lynn and Norwich.
- Cambridgeshire Guided Busway, linking to the new town of Northstowe and beyond to St Ives, with two Park & Ride sites at Longstanton and St Ives. A strategic cycle route alongside the Cambridgeshire Guided Busway also links the site to the north west.
- Milton Park and Ride site, which is a short distance away from the site.

Alongside these existing public transport connections, the Cambridgeshire and Peterborough Combined Authority has prepared a new Local Transport Plan for Cambridgeshire and Peterborough, which provides the strategic transport planning framework within which North East Cambridge will be developed.

An important aim of this Plan is to connect the region through an extensive high quality bus network, including schemes being delivered by the Greater Cambridge Partnership (such as Waterbeach to Cambridge), which will also serve North East Cambridge and run alongside the existing local and Guided Busway services.

A strategic cycle link, the Chisholm Trail, is under construction linking Cambridge North station with Cambridge Station, Cambridge Biomedical Campus and the Trumpington Park & Ride site. Further strategic cycle links to Waterbeach new town are planned, including the Waterbeach Greenway and upgrades to the existing route along Mere Way Byway.

Through the A10 and North East Cambridge Transport Studies, it is clear that congestion is a major challenge for Cambridge's strategic road corridors. In particular for this site, the Milton Interchange (A14 and A10 roundabout) and Milton Road leading into the city are at maximum capacity, resulting in frequent congestion and delays to journeys. Whilst the A14 improvement works may help to alleviate some of congestion on the A14 and A10, long term improvements can only be achieved through significant investment in sustainable alternatives and careful management of future development in North East Cambridge.

2.4 Communities



Figure 5: Ward and Parish boundaries in North East Cambridge

North East Cambridge is a place of contrasts, within the Area Action Plan area and with the surrounding communities. Existing employment parks within the area form an important part of the Cambridge Cluster, one of the largest technology clusters in Europe, but the area also contains light and heavy industrial uses which are an important part of the city's local economy. The residential neighbourhoods surrounding North East Cambridge to the south and east include East Chesterton as well as King's Hedges, Arbury and Abbey, which are within the most deprived wards in Cambridgeshire according to the Index of Multiple Deprivation (2019). There is a large Traveller community to the east of the site between the railway line and the River Cam, and villages to the north and east.

In Greater Cambridge overall health and life expectancy are well above the national average, but within this there are marked geographical and socio-environmental health inequalities. There is a 10-year difference in life expectancy between the most and least deprived wards in the area. Index of Multiple Deprivation scores for North East Cambridge show that the area experiences lower levels of skills, income and greater health inequalities than the rest of the Greater Cambridge. This is also the case with specific vulnerable population groups in the city such as Travellers, older people, disabled people, people who are on low incomes or unemployed, and homeless people.

Whilst the existing major transport infrastructure routes within and surrounding the Area Action Plan area create an accessible site, they also present a number of environmental constraints to development, including noise and local air quality, which can have an adverse impact on the health and quality of life of both existing and future residents and workers.

2.5 Land ownership

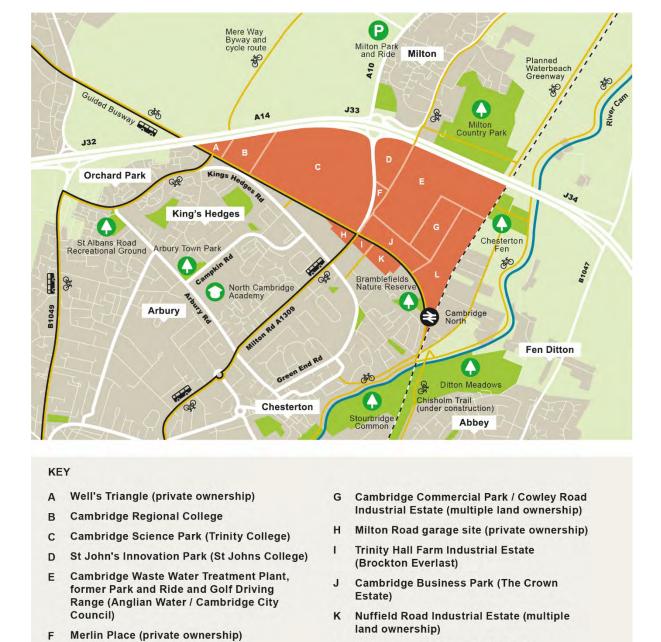


Figure 6: Land ownership within the Area Action Plan boundary

Land ownership within the Area Action Plan is fragmented but there are a handful of larger sites which are broadly in single ownership. This includes Cambridge Science Park (Trinity College) St John's Innovation Park (St John's College), Cambridge Business Park (The Crown Estate), Trinity Hall Farm Industrial Estate (Brockton Everlast) and Cambridge Regional College which is owned by the college themselves.

Chesterton Sidings (Network Rail)

The Waste Water Treatment Plant is owned by Anglian Water and, together with the Cowley Road golf driving range and former Park and Ride site (owned by Cambridge City Council), forms the site which is subject to the Housing Infrastructure Fund.

The land around Cambridge North Station and the former railway sidings are owned by Network Rail and a development consortium has been formed to bring forward this land for development. This is formed of Network Rail as landowner as well as Brookgate and DB Cargo.

The remaining sites within the plan area, including Nuffield Road and Cowley Road Industrial Estates are made up of a number of different landowners including Cambridge City Council and institutional investors.

2.6 Planning context



Figure 7: The Area Action Plan's place in the planning policy framework

The North East Cambridge area crosses the administrative boundary of Cambridge City Council and South Cambridgeshire District Council. The Councils have a shared planning service which covers the area known as Greater Cambridge. Through their respective adopted Local Plans (2018), the Councils have identified a number of major development sites across Greater Cambridge including North East Cambridge. As the Area Action Plan area crosses the administrative boundary of both Cambridge City Council and South Cambridgeshire District Council, the planning

policies of each council will apply within their district for those matters not covered with the Area Action Plan.

These adopted Local Plans will be superseded in due course by the Greater Cambridge Local Plan. In early 2020 the Councils undertook an Issues and Options consultation to explore the key themes that will influence how homes, jobs and infrastructure will be planned in the emerging Greater Cambridge Local Plan which has then informed the Preferred Options Local Plan which was published for consultation in November 2021 and includes North East Cambridge as a preferred site to deliver new homes and jobs. The Local Plan is based around four big themes; Climate Change, Biodiversity and Green Spaces, Wellbeing and Social Inclusion, and Great Places. The strategic objectives of this Area Action Plan align closely with these big themes, and its specific policies which set out how these big themes can be delivered at North East Cambridge.

The policies in the adopted Local Plans allocate the site for a high-quality mixed-use development with a range of supporting uses, where matters related to site capacity and the viability, phasing and timescales of development will be addressed in this Area Action Plan. It is anticipated that development at North East Cambridge will make a significant contribution to the housing and employment needs of Greater Cambridge both during this Plan period (up to 2041) and beyond.

Part of the eastern part of the Area Action Plan site is the Cambridge Waste Water Treatment Plant, which is an essential piece of infrastructure that serves Cambridge and surrounding areas.

In March 2019, the government announced that the Cambridgeshire and Peterborough Combined Authority and Cambridge City Council (as part landowner) had been successful in securing £227 million from the Housing Infrastructure Fund (HIF) to relocate the Waste Water Treatment Plant off-site, to enable the Area Action Plan area to be unlocked for comprehensive development. The relocation project will be led by Anglian Water who are consulting with the local community before submitting a Development Consent Order (DCO) application to the Planning Inspectorate. The Area Action Plan is predicated on the relocation of the Waste Water Treatment Plant, and the outcome of the DCO process will be important in terms of confirming site availability and deliverability.

Cambridgeshire County Council is the Minerals and Waste planning authority for the area. The county-wide planning policies that form the context for the Area Action Plan are set out in the adopted Cambridgeshire and Peterborough Minerals and Waste Local Plan and Policies Map (2021) and the Area Action Plan has been informed by this plan.

Parts of North East Cambridge and its immediate surroundings are the subject of several adopted County minerals, waste management and transport planning policies. The waste management designations and safeguarding areas relate to the protection of existing waste facilities (Anglian Water's Waste Water Treatment Plant and the Waste Transfer site, and the Milton Landfill site). These seek to ensure that the future operation of these essential facilities is not prejudiced by future development, which therefore must be compatible with the existing waste management uses. They also relate to finding replacement waste facilities in the area. The transport designations in the County's Minerals and Waste Plan focus on the retention and safeguarding of the strategic railheads and associated aggregates operations on the Chesterton Rail Sidings.

2.7 How we are developing the Area Action Plan

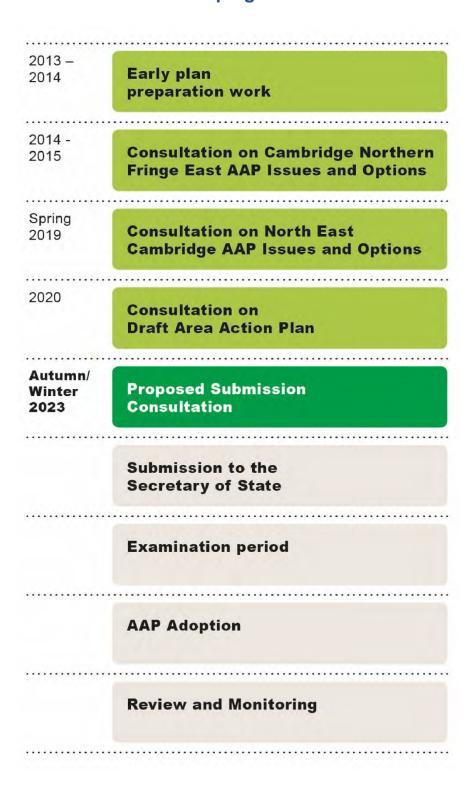


Figure 8: Timeline for the development of the Area Action Plan

The Proposed Submission Area Action Plan has been informed by three previous rounds of public consultation:

- Between December 2014 and February 2015, the Councils published an Issues and Options document which asked a series of questions about how best the Councils should plan for development on land to east of Milton Road.
 At this time the site was known as Cambridge Northern Fringe East.
- From February 2019 to March 2019, a second Issues and Options consultation was undertaken. The Councils did this to reflect the change in the site boundary, which was proposing to include Cambridge Science Park to the west of Milton Road, as well as the Housing Infrastructure Fund (HIF) bid to relocate the Waste Water Treatment Plant offsite, potentially opening up the area for more comprehensive regeneration. The 2019 Issues and Options consultation presented a new vision for North East Cambridge and identified a number of planning issues and options for the development of the area.
- Between July 2020 and October 2020, the Councils published the draft North East Cambridge Area Action Plan for public consultation. The draft Area Action Plan set out a number of overarching policies which would manage and facilitate development across the area in a planned and coordinated way. This was supported by the North East Cambridge Spatial Framework which outlined the key development parameters and wider infrastructure and spatial interventions needed to support the regeneration of the area. The consultation also invited comments on the draft Sustainability Appraisal and draft Habitats Regulation Assessment. In total, over 4,200 comments were made at the Draft Area Action Plan consultation stage. We have summarised the comments within the Consultation Statement and stated how each of the policies has changed since the draft plan stage.
- In total, over the course of three consultations to date on the Area Action
 Plan, the Councils have received around 6,900 comments which have helped shape and inform each stage of the plan.

 The proposed submission plan is accompanied by a statement of consultation, which provides a summary of the main issues raised by the representations made and how they have been taken into account.

The Councils have also established several forums which have informed the preparation of the Area Action Plan including the North East Cambridge Community Forum, which consists of local residents, business owners, and representatives from community groups and the Landowner and Developer Interest Liaison Forum, which consists of landowner and some leaseholder representatives.

These forums ensure that the diversity of local concerns, aspirations, challenges and ideas are constructively used to help prepare the Area Action Plan, and our approach to consultation and wider engagement.

The Councils are also engaging with the Duty to Cooperate with affected parties and statutory bodies as defined by planning regulations. This is an ongoing process, with the intention that such engagement and cooperation will involve consideration of both the Area Action Plan and the Greater Cambridgeshire Local Plan and will continue through the plan making process.

2.8 Status of this document

This document is a Development Plan Document (DPD) and is part of the Government's planning policy system introduced by the Planning and Compulsory Purchase Act 2004.

Part 6 of the Town and Country Planning (Local Planning) (England) Regulations 2012 sets out the procedure for the production of Development Plan Documents. This version of the North East Cambridge Area Action Plan constitutes the consultation required under Regulation 19.

Alongside the National Planning Policy Framework (NPPF), adopted Local Plan(s), any 'made' Neighbourhood Plans and adopted Supplementary Planning Documents (SPDs), the North East Cambridge Area Action Plan, on adoption, will be a key planning policy document against which planning applications within the AAP area will be assessed. The policies in this Area Action Plan are consistent with the NPPF (2021). In order to keep the Plan succinct and follow National Planning Practice

Guidance, this Area Action Plan does not seek to repeat policies already contained within the NPPF and adopted Local Plans except where such policies are particular to the area or type of development proposed or it is of particular important to reflect them.

The final adopted Area Action Plan will form part of the statutory development plan for both Councils. The Area Action Plan does not supersede any of the existing adopted Local Plan policies from the Cambridge or South Cambridgeshire Local Plans (both 2018) and instead the policies within the Plan supplement the Development Plan for the area through a series of site specific policies. Policy 1: A Comprehensive approach at North East Cambridge is a strategic policy (for the purposes of neighbourhood planning) as it sets out the mix and quantum of development for the Area Action Plan area over the Plan period.

At this stage of the Area Action Plan's preparation, this document can only carry limited weight in the determination of planning applications.

2.9 Next steps

Consultation on this version of the Area Action Plan will commence following the Development Consent Order process for the relocation of the Waste Water Treatment Plant. Following the consultation the plan, and representations received, will be submitted to the Planning Inspectorate for an independent public examination. The examination will consider whether the plan is sound and can proceed to adoption.

3. Vision and Strategic Objectives

3.1 Our vision for North East Cambridge



Figure 9: Illustration showing the placemaking vision for North East Cambridge

We want North East Cambridge to be a healthy, inclusive, walkable, lowcarbon new city district with a vibrant mix of high quality homes, workplaces, services and social spaces, fully integrated with surrounding neighbourhoods.

3.2 Our Strategic Objectives

Our five strategic objectives and their sub-objectives will guide redevelopment at North East Cambridge in order to deliver the vision for the area.

- 1. North East Cambridge will be a low environmental impact urban district, addressing both the climate and biodiversity emergencies.
 - Development will support and sustain the transition to renewables, zero carbon and embed the challenge of climate change resilience.
 - It will be inherently walkable and allow easy transitions between sustainable transport modes (walking, cycling & public transport) with density linked to accessibility.

- It will be a new model for low private car/vehicle use by maximising walking, cycling and public transport infrastructure, car club provision and EV/alternative fuel vehicle charging provision.
- A Green and blue infrastructure network will enable everyone to lead healthy lifestyles, will protect and enhance biodiversity and help mitigate the impact of development on climate change.
- Traditional green solutions will couple with smart city technology in achieving future-proofed and climate adaptable buildings and spaces.

2. North East Cambridge will be a vibrant mixed-use new district where all can live and work.

- There will be a range of new homes of different types and tenure, including 40% affordable housing, alongside the services and facilities new residents need.
- Mixed use, flexible and adaptable space for office, research and development and industrial businesses will create a wide range of job opportunities for people living across North East Cambridge and the surrounding areas.
- Beautifully designed and accessible places, spaces and buildings will improve wellbeing and quality of life for all through creating opportunities for social integration, community engagement and connecting people with nature.
- It will maximise opportunities for collaborative spaces which link educational and business uses reinforced by effective overall communication networks and supported by shops, community, sport, leisure, health, education and cultural facilities.

 It will make the best and most effective use of land through building to sustainable densities which also reflect, protect and enhance the unique heritage of the city.

3. North East Cambridge will help meet the strategic needs of Cambridge and the sub-region

- It will make a significant contribution to meeting the housing needs of the Greater Cambridge area and the wider Oxford-Cambridge growth corridor.
- It will create an integrated economy that meets the needs of people living and working within the area to create a self-sustaining place.
- It will help to unlock investment in infrastructure, innovation and economic growth in the Greater Cambridge area as well as the Oxford-Cambridge growth corridor.
- Phasing will allow the continued use of strategic site assets such as the Cambridge North East Aggregates Railheads and ensure timely delivery of high quality community, cultural and open space facilities and other infrastructure, and management of transport impacts.
- Development will deliver strong and competitive economic growth and prosperity that achieves social inclusion and equality for new residents and the surrounding neighbourhoods alike.

4. North East Cambridge will be a healthy and safe neighbourhood

- It will apply principles used by the NHS Healthy New Towns (Putting Health First) and Homes England 'Building for a Healthy Life'.
- The health and wellbeing of people will help structure new development and inform decision-making, to create a high quality of life for everyone.

- Healthy lifestyles will be enabled through a series of walkable neighbourhoods which include access to open spaces, sports and recreational facilities, public rights of way, local green spaces, food growing opportunities and active travel choices.
- North East Cambridge will have a clear urban structure with identifiable centres of activity and streets and spaces which enable social interaction and play.
- Human health will be at the forefront of design by ensuring that noise, air quality, lighting and odour are key factors in determining the layout and functionality of the area.

5. North East Cambridge will be physically and socially integrated with neighbouring communities

- It will be a welcoming, safe and inclusive place that integrates well with surrounding established neighbourhoods and existing environmental constraints.
- Development will be planned and designed to improve access to jobs, services and open spaces for existing residents of neighbouring areas, as well as new residents.
- The development will be physically well-connected to its local and wider context, through breaking down existing barriers to movement, and creating new routes for walking and cycling.
- Existing and planned public transport connections will be integrated into the planning of the area, enabling travel to and from the area without the use of the private car.

3.3 A spatial framework for North East Cambridge

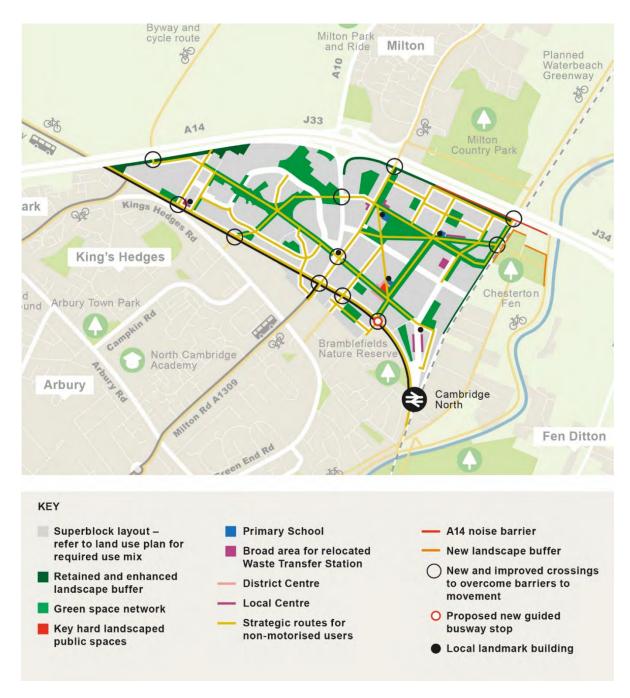


Figure 10: The Spatial Framework for the Area Action Plan

The regeneration of North East Cambridge has been a long-held ambition for the councils. The Area Action Plan area is one of the last remaining significant brownfield sites within the city and is physically well placed to create a thriving new city district. Cambridge North Station opened in May 2017 and has been a game changer for the area, with frequent services to Ely, Peterborough, the Midlands and Norwich to the north and Cambridge, Stanstead and London to the south. The

station now acts as a gateway to North Cambridge and the villages to the north of the city as well as significantly improving public transport accessibility in the area. Additionally, the opening of the Cambridgeshire Guided Busway and later extension to serve Cambridge North Station has further improved people's choice of high-quality sustainable transport modes.

A number of other planned transport projects are already well advanced in and around North East Cambridge. The Chisholm Trail will connect North East Cambridge with central Cambridge and Cambridge Biomedical Campus whilst the planned Waterbeach Greenway Project and Waterbeach to Cambridge Public Transport Corridor both pass through the North East Cambridge area. The cycling enhancements on Milton Road will also improve cycling into central Cambridge. The Spatial Framework for the Area Action Plan connects up these new public transport routes by breaking down the existing physical barriers to people moving around the area, including the Guided Busway, Milton Road and the A14. Forming new pedestrian and cycling routes which are accessible to everyone into and across North East Cambridge will provide convenient, safe and direct routes for people to travel and help to integrate the regeneration area into the established neighbourhoods around North Cambridge.

The success of this area will to some extent be dependent on being able to ensure residents and workers in the area leave their cars at home and walk, cycle or use public transport for the majority of journeys. Through the combination of the 'trip budget', the existing and emerging transport options as well as redefining the way people store their cars on-site through 'car barns', the number of vehicle trips on Milton Road will reduce over time. North East Cambridge will be a new city district that is not dependent on private vehicles to undertake everyday journeys and by taking a different approach here, it allows us to think creatively about streets and public spaces as places for people rather than vehicles.

The Area Action Plan, and the Spatial Framework it contains, seek to create a mixed-use city district, where people have access to homes, a wide range of employment types, local services and facilities, public transport and open spaces. This mix of uses is particularly focused around the five new centres proposed for the area which are located at key walking, cycling and public transport intersections.

Their distribution across the area will ensure that all homes will be within a five-minute walk of a centre and the mix of uses within them will help encourage 'linked trips' where people can access different services and facilities as part of the same journey. It will also help tackle local inequality and deprivation by ensuring that existing surrounding communities will have convenient and safe access to these new centres, facilities, services as well as employment opportunities.

The Area Action Plan area is already home to a number of well-established employment parks that are a large part of the recent history of the area and the wider skills and technology based economy of the region. Through the Spatial Framework, the Area Action Plan supports the growth of these types of employment sectors whilst also ensuring that the existing amount of industrial provision is retained and re-provided as part of the redevelopment of the site. Light industrial uses are critical to the functioning of the city and wider area as well as local economy by providing employment opportunities for local people. Similarly, the Area Action Plan addresses the existing safeguarded Aggregates Railheads and Waste Transfer Station as part of the Spatial Framework and associated Land Use diagram. The Area Action Plan also highlights the importance of long term skills and training to ensure that the long term benefits of regeneration spread well beyond the Plan boundary and help to tackle several of the causes of local deprivation.

By building on the economic successes of the area, retaining the same amount of industrial uses and locating a substantial number of new homes close to jobs, the Area Action Plan is responding to the Climate Emergency by reducing the need for people to travel. Our evidence has shown that North East Cambridge is the most sustainable site to bring forward new homes and jobs across the whole of Greater Cambridge and it is therefore important that we optimise the development opportunity of the area. The ambition for both councils is that North East Cambridge is at the forefront of demonstrating how cities can reduce the effect of climate change through the design of development, the built environment and infrastructure provision. This new city district should also showcase innovation by embedding it into the design, construction and operation of buildings as well as the public realm, transport and other infrastructure as well as safeguarding opportunities for innovation in the future.

The area's high quality public transport access will provide significant opportunities to create higher density development, which will have benefits in terms of optimising the delivery of homes and jobs. However, if not appropriately designed and managed, high densities can present challenges in terms of potential impacts on the transport network, historic environment, local townscape, on climate change and the local environment, community services and on health and well-being. Therefore the Spatial Framework and wider Area Action Plan set out where higher and lower densities of development will be acceptable and how these should be translated in terms of building heights to ensure that development delivers the vision and objectives of the Plan whilst protecting the unique qualities of the city and wider Fen landscape. The edges of the Area Action Plan area, particularly the north and east, are the most sensitive in terms of impacts on the setting of the city, the historic environment and the landscape around the River Cam corridor. Therefore heights and densities have been carefully managed in this area and step down significantly from the peak of the nearby District Centre. The intensity of uses will also offer opportunities to capitalise on economies of scale and take innovative approaches to the provision of services and infrastructure such as shared buildings, spaces and services and designing buildings in more land efficient forms.

The area is capable of accommodating around 8,350 new homes, of which approximately 4,000 could be delivered in the next 20 years (up to 2041). It is important that these new homes meet the housing needs of local people and are provided over a range of tenures and housing types. The scale of North East Cambridge provides the opportunity to deliver a good mix of new homes which will create a well-balanced and mixed community.

These new homes will be set within a site-wide network of open spaces that are multi-user, multi-use, multi-seasonal and multi-generational. These spaces are not just parks but part of the movement network of the area, meaning they become integrated with people's everyday lives and form part of their daily journeys to work, school and other places. Based on the Spatial Framework, all homes at North East Cambridge will be within a five-minute walk of an open space within the AAP area, as well as within easy access of green spaces beyond North East Cambridge such as the River Cam and the various meadows along the river. In combination, the new open space network and high quality, people focused streets and spaces will support

active and healthy lifestyles. This new open space network will also form an important part of the biodiversity network across the site and beyond, protecting and enhancing the existing tree belts, biodiversity assets and habitat areas currently found on site.

The North East Cambridge area will in some respects continue to be shaped around the existing infrastructure on the site. The undergrounding of the overhead electricity power cables to the east of Milton Road and the legacy infrastructure from the Waste Water Treatment Plant has influenced the layout of the Spatial Framework whilst the proposed noise barrier alongside the A14 is also a key piece of new infrastructure that will need to be delivered early as part of the transformation of the area.

The Spatial Framework is a visual representation of several of the spatial policies of the Area Action Plan and forms the basis for this new city district. Its implementation through individual landowner and developer masterplans and planning applications will ensure that we optimise the Area Action Plan's location and good accessibility as well as spread the benefits of regeneration across North Cambridge and beyond.

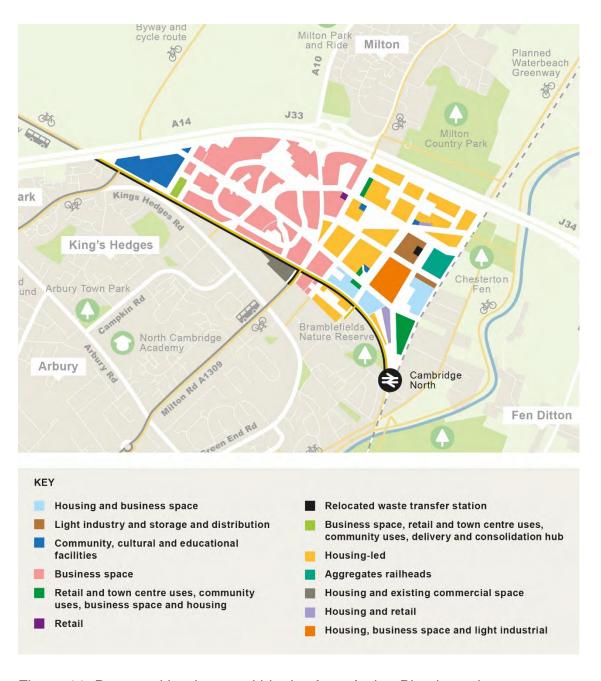


Figure 11: Proposed land uses within the Area Action Plan boundary

3.4A comprehensive approach at North East Cambridge

North East Cambridge will become a new city district, making provision for mixed use development including a wide range of new jobs, homes, community and cultural facilities and open spaces.

The challenge for the North East Cambridge Area Action Plan is to plan development in a sustainable and coherent manner and to ensure that each of its elements is well integrated functionally and physically to create a sustainable new community. The vision for North East Cambridge sets out the kind of sustainable community that is envisaged by 2040 and beyond. However, the path to achieve this vision rests with the strength of the underlying strategic and sub-objectives to deliver it. In this regard, the policies set out in the AAP provide a clear planning framework of how the strategic objectives and vision for the Area Action Plan will be delivered. The Councils have adopted a collaborative and open approach in developing the Area Action Plan and will continue to collaborate as the Area Action Plan moves to the delivery phase. We recognise that achieving a comprehensive strategy for North East Cambridge will require all parties – public, private and third sector – to work together.

Policy 1: A comprehensive approach at North East Cambridge

The Councils will work to secure the comprehensive regeneration of North East Cambridge in particular the creation of a new high quality mixed-use city district, providing approximately 8,350 new homes, 15,000 new jobs, and new physical, social and environmental infrastructure that meets the needs of new and existing residents and workers as well as delivering tangible benefits for surrounding communities.

Proposals that accord with the Area Action Plan's Spatial Framework and relevant policies, and that deliver upon the vision and strategic objectives for the place, will be approved without delay, subject to a full assessment of the particular impacts of the proposals and securing appropriate mitigation measures where necessary.

To avoid piecemeal development that could prejudice the delivery of the strategic objectives and Spatial Framework, proposals should be designed to secure coordinated and comprehensive development in accordance with Policy 23: Comprehensive and Coordinated Development.

In order to achieve a comprehensive approach, the Councils will work in collaboration with Cambridgeshire County Council, the Greater Cambridge Partnership, the Cambridgeshire and Peterborough Combined Authority other strategic partners, and landowners to:

a) Secure and deliver the interventions and infrastructure needed to deliver the vision and objectives for the area including: the required modal shift in accordance with the North East Cambridge Transport Study; district-wide networks and services; relocations and land assembly; environmental, amenity, and community health and wellbeing standards; a strategic site environmental noise barrier close to the A14; a network of functional and multi-use open spaces; and innovative approaches to community facilities provision;

b) Actively manage the timely delivery and phasing of homes and jobs alongside supporting infrastructure, taking action where necessary to address or overcome barriers to delivery.

c) Engage local residents, community groups, schools and colleges, and local enterprises in establishing ongoing partnerships and initiatives aimed at involving communities in shaping the places within North East Cambridge where they live and work, and to maximise job opportunities for local people in both the construction and post construction phases;

d) Implement measures to facilitate and administer a low car dependency culture; and

e) Create a cohesive, inclusive and strong community, including sustainable public sector service delivery in the area.

Details of how the strategic objectives and sub-objectives will be achieved are set out through the subsequent policies and their supporting figures in the Area Action Plan.

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

North East Cambridge is anticipated to deliver approximately 3,900 homes up to 2041, and in total 8,350 homes over the lifetime of the development of this major brownfield site. At the heart of the vision and overarching principles of the Area

Action Plan is the key objective to achieve sustainable development¹, which will create a community where people will choose to live, work and visit. Achieving this objective will require a clear strategy which is not only about the quantity of development that is planned, but also about where the developments are located and how the developments functionally relate with each other. Consequently, the need to ensure development is supported by the necessary facilities and services and are easily accessible by all relevant modes of travel such as walking, cycling and public transport is paramount. The basis for this has been established in the Strategic Objectives, sub-objectives and Area Action Plan Spatial Framework. The measures identified in these objectives will need to be delivered in order to achieve the overarching aim of sustainable development and as such, development proposals should identify how they positively contribute towards delivering the vision for North East Cambridge through achieving the objectives of the Plan.

The Spatial Framework is not a masterplan but rather a high-level strategic diagram which identifies key development requirements that will help inform and guide subsequent developer masterplans and future infrastructure projects which are brought forward within the Plan area. Policy 1 and the accompanying Spatial Framework seeks to ensure comprehensive delivery of the Area Action Plan area to fulfil the strategic objectives. The principal elements of the Spatial Framework have been derived from stakeholder engagement and evidence base documents. The Spatial Framework and supporting figures within this plan cover a range of strategic matters including open space provision, the location of the district's centres including community, cultural and education facilities, connectivity and other land uses across the plan area. All development proposals within the plan area should accord with the Spatial Framework, the policies of this plan and their supporting figures. In exceptional and justified circumstances, where a development proposal is contrary to the Spatial Framework, it should be clearly demonstrated that the proposal will work towards delivering the AAP Vision, Strategic and Sub Objectives as well as comply with Policy 23 to ensure that the development is coordinated alongside adjacent and wider development areas.

¹ National Planning Policy Framework (publishing.service.gov.uk)

In the areas identified in the land use plan (Figure 11), it is important that development provides a range of use including shops, community and cultural uses, homes and employment as part of horizontally or vertically mixed-use buildings. Similarly, the supporting figures within Chapter 7: Connectivity, identify how sustainable travel by walking, cycling and public transport will be improved across the plan area in a comprehensive and coherent way. They also set out how motorised vehicles will be managed to ensure pedestrians, cyclists and public transport are prioritised. The supporting figures within the Area Action Plan provide an illustrative representation of what is described within each of the relevant policies. Development proposals should therefore positively address these figures in combination with the relevant policies and overarching Spatial Framework.

The primary purpose of the Area Action Plan is to provide the necessary policy context for coordinating a large number of development proposals over multiple sites, along with investment in infrastructure, across the whole of North East Cambridge, over the life of the Plan, and across all partners involved. The Councils are committed to working with partners to secure the comprehensive redevelopment of the Area Action Plan area. The Area Action Plan also supports a range of crosscutting aims of both Councils and contributes towards the overarching corporate objectives.

Evidence supporting this policy

- North East Cambridge Landscape Character & Visual Impact Appraisal (2020)
- North East Cambridge Heritage Impact Assessment (2021)
- North East Cambridge Townscape Assessment (2021)
- North East Cambridge Townscape Strategy (2021)
- North East Cambridge Transport Assessment (2019)
- Cultural Placemaking Strategy (2020)
- Innovation District Paper (2020)
- Greater Cambridge Employment Land and Economic Development Evidence Study (2020)
- North East Cambridge Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

- North East Cambridge Strategy Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- North East Cambridge Stakeholder Design Workshops 1-6 event records (2019-2020)

Monitoring indicators

• Through the monitoring indicators of policies 2 - 30

Policy links to the adopted Local Plans

Cambridge Local Plan

 Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change

South Cambridgeshire Local Plan

 Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station

4. Climate change, energy, water and biodiversity

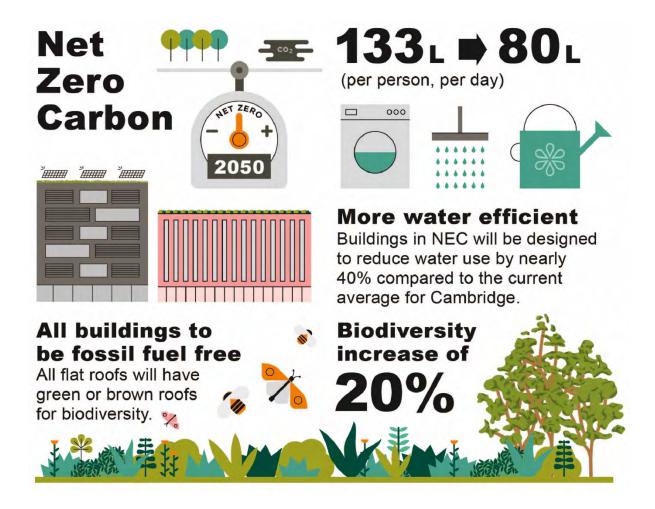


Figure 12: Infographic showing the Area Action Plan's approach to climate, water and biodiversity.

In May 2019, the UK government declared a climate emergency, and set a target for carbon emissions in the UK to reduce to net zero by 2050. Both Cambridge City and South Cambridgeshire District Councils also declared a climate emergency in 2019. The City Council's Climate Change Strategy 2021-26 shares a vision for Cambridge to be net zero carbon by 2030 and sets out six key objectives which include reducing emissions from its own buildings and vehicles, homes and buildings and transport, reducing consumption of resources, promoting sustainable food and supporting adaptation to the impacts of climate change. Achieving net zero carbon requires us to rethink all aspects of planning and placemaking; not just how buildings are designed and constructed, but also siting development where it will be well served by public transport, cycling and walking as well as renewable and low carbon energy.

Addressing the climate emergency is not just about carbon – it involves the sustainable use of all resources, and water is a particular local concern. Biodiversity is also a high priority, both at national and local levels. The North East Cambridge Area Action Plan therefore sets ambitious targets for net zero carbon buildings and driving placemaking and development to be a, low impact, biodiverse exemplar. This section sets out the policies that will ensure it has positive impacts on the environment, and is resilient and adaptable to the changing climate over its lifetime.

Policies in this section:

- Policy 2: Designing for the climate emergency
- Policy 3: Energy and associated infrastructure
- Policy 4a: Water efficiency
- Policy 4b: Water quality and ensuring supply
- Policy 4c: Flood Risk and Sustainable Drainage
- Policy 5: Biodiversity and Net Gain

4.1 Designing for the climate emergency



Figure 13: Design strategies for climate change adaptation and mitigation in North East Cambridge

This policy sets out the range of measures that should be an integral part of the design of all new development proposals, in order to ensure that it responds to the climate emergency. These measures will ensure that development in North East Cambridge addresses the twin challenges of climate change mitigation and adaptation, in a way that enhances the environmental and social sustainability of the development.

Policy 2: Designing for the climate emergency

The principles of sustainable design and construction must be clearly integrated into development proposals within North East Cambridge. All proposals shall be accompanied by a Sustainability Statement as part of the Design and Access Statement and an Energy Strategy, demonstrating how their proposal meets the following requirements:

a) Net zero carbon buildings

- All new development should achieve a specific space heating demand as follows:
 - All new dwellings should have a space heating demand of 15-20 kWh per meter squared per year
 - All non-domestic buildings should achieve a space heating demand of 15-20 kWh per meter squared per year
- II. All heating should be provided through low carbon fuels (not fossil fuels).
- III. No new developments should be connected to the gas grid.
- IV. Total Energy Use Intensity (EUI) targets are achieved as per building type (set out in kWh per m2 per year), as follows:
 - All residential accommodation should achieve an EUI of no more than 35 kWh per m2 per year.
 - Non-domestic buildings should achieve an EUI of no more than the following, where technically feasible, by building type:

1. Offices: 55 kWh per m2 per year

2. Schools: 65 kWh per m2 per year

3. Retail: 55 kWh per m2 per year

- 4. Leisure: 100 kWh per m2 per year
- 5. Research facility: 150 kWh per m2 per year
- Higher education teaching facilities: 55 kWh per
 m2 per year
- 7. Light industrial uses: 110 kWh per m2 per year
- 8. GP surgery: 55 kWh per m2 per year
- 9. Hotel: 55 kWh per m2 per year
- V. Proposals should generate at least the same amount of renewable energy (preferably on-plot) as they demand over the course of a year. This should include all energy use (regulated and unregulated), calculated using a methodology proven to accurately predict a building's actual energy performance. Where a development of multiple buildings is concerned, the renewable energy generation requirement should be calculated and demonstrated across the whole development so that buildings that are able to exceed the requirements do so in order to compensate for any buildings onsite that cannot meet the requirements.
- VI. Where it is demonstrated that a development is unable to fully meet the requirements set out above for renewable energy generation, a carbon offset payment will be required. This money will be used to invest in additional renewable energy.
- VII. All developments must demonstrate use of an assured performance method in order to ensure that the buildings' operational energy performance reflects design intentions and addresses the performance gap.

b) Adaptation to climate change

All Development, including infrastructure, must be climate-proofed to a range of climate risks, including flood risk (see Policy 4C and Policy 25: Environmental Protection), overheating and water availability. In order to minimise the risk of overheating, all development must apply the cooling hierarchy as follows:

- I. Reducing internal heat generation through energy-efficient design;
- II. Reducing the amount of heat entering a building in summer through measures such as orientation, natural shading from trees and other

vegetation, glare, fenestration, insulation, green roofs and cool materials. All flat roofs must contain an element of green roof provision;

- III. Managing heat within the building, e.g. through use of thermal mass and consideration of window sizes:
- IV. Passive ventilation;
- V. Mechanical ventilation;
- VI. Only then considering cooling systems (using low carbon options).

For residential development, initial overheating assessment should be undertaken early in the design process using the Good Homes Alliance Overheating Toolkit to ensure that mitigating the risk of overheating is an integral part of building design. Where required, detailed overheating analysis must be undertaken using the latest

CIBSE overheating standards (CIBSE TM52 and TM59 or successor documents) and include consideration of future climate scenarios using 2050 Prometheus weather data2. Consideration shall be given to external environmental constraints such as noise and local air quality which will influence the design of certain approaches such as natural ventilation. The interdependence of provisions for acoustics / noise, indoor air quality (ventilation) and controlling overheating is an important consideration when designing a building to provide suitable indoor environmental quality (IEQ).

c) Water management

Refer to Policy 4a: Water efficiency, Policy 4b: Water quality and ensuring supply, and Policy 4c: Flood Risk and Sustainable Drainage.

d) Site waste management

Development must be designed to reduce construction waste, integrate the principles of Design for Deconstruction, and address the requirements of the RECAP Waste Management Design Guide or successor documents.

² http://emps.exeter.ac.uk/engineering/research/cee/research/prometheus/

Provision should also be made for innovative approaches to the storage and collection of waste post-construction which integrate waste management into the development and support high levels of recycling.

e) Use of materials

Residential developments of 150 homes or more and non-residential development of 1,000m² or more should calculate whole life carbon emissions through a nationally recognised Whole Life Carbon Assessment and demonstrate actions to reduce life-cycle carbon emissions and prioritise materials with low embodied carbon where practicable (for example engineered timber). Development must be designed to maximise resource efficiency and identify, source and use environmentally and socially responsible materials, giving consideration to circular economy principles and design for deconstruction, which should be set out in a Circular Economy Strategy.

Why we are doing this

Relevant objectives: 1

Development at North East Cambridge will take place over 25 years, and as such will take place alongside the UK's transition to a net zero carbon society by 2050, in line with the requirements of the Climate Change Act 2008. For this to be achieved, a holistic approach to sustainable development and reducing the environmental impact of development must be embedded within all development proposals from the outset. This almost always leads to a better design and lower lifetime costs, as options are greater at an early stage and there is more scope to identify options that achieve multiple aims. The proposed policy is based on the findings of our Net Zero Carbon study, and also builds upon the requirements set out in the adopted Cambridge and South Cambridgeshire Local Plans. Further guidance on implementation will be provided in an updated Supplementary Planning Document.

Carbon reduction targets

With regards to standards for carbon reduction, footnote 48 of the NPPF requires planning policies to be in line with the objectives and provisions of the Climate Change Act 2008, which requires net zero carbon by 2050. For us to achieve this

legally binding target, urgent action is needed to address the carbon emissions associated with new development, and the planning system has a clear role to play in this, in line with the requirements of Section 182 of the Planning Act (2008). Government have confirmed, in their response to the Future Homes Standards
Consultation, that local planning authorities can continue to use Local Plans to set energy standards for new homes that go beyond Building Regulations.

Local Plans are required by planning and environmental legislation to contribute proactively to meeting national and international climate commitments, notably section 19(1A) of the Planning and Compulsory Purchase Act 2004 (PCPA). It is only by setting local carbon reduction targets by reference to wider national and international targets – and demonstrating proposed policies' consistency with local targets – that it is possible to establish and track an area's contribution to the mitigation of climate change (and for policies to be "designed to secure" that local land use and development mitigates climate change). In this sense, section 19(1A) makes emissions reduction a central, organising principle of plan-making.

Standards for sustainable design and construction

Sustainable design and construction is concerned with the implementation of sustainable development in individual sites and buildings. It takes account of the resources used in construction, and of the environmental, social and economic impacts of the construction process and how buildings are designed and used. While the choice of sustainability measures and how they are implemented may vary substantially between developments, the general principles of sustainable design and construction should be applied to all scales of development.

The standards set out above have been informed by our Net Zero Carbon evidence base and set out measures to reduce energy demand associated with new buildings before considering the role of renewable energy to meet the remaining energy demands of those buildings. In order to deliver net zero carbon buildings, these requirements consider all energy use in buildings, as well as the carbon associated with constructing buildings via the application of Whole Life Costing, using approaches such as the RICS Professional Statement: Whole life carbon assessment for the built environment, using BS 15978. The policy does not set requirements related to specific construction standards such as BREEAM or

Passivhaus, albeit the approach to reducing emissions set out in the policy is derived from the approach used to achieve Passivhaus. Developers may wish to utilise those standards to meet the Post Occupancy Evaluation elements of the policy. Wider policies contained within the AAP cover many of the other elements considered by construction standards such as BREEAM, such as policies related to water use and sustainable drainage, biodiversity and transport policies.

In addition to measures to reduce the carbon emissions associated with new development, the policy also sets requirements in relation to ensuring that new development is resilient to our changing climate, in line with our legal duty set out in the Planning Act. Even with the UK's net zero carbon target, our climate will still change as a result of past emissions. The key principle is to ensure that adaptability is designed into all new developments from the outset, so that residents and building occupiers do not have to rely on complex systems and technologies that are expensive to maintain. It is also important to look to measures beyond buildings themselves, seeking opportunities within the landscape setting of new developments for adaptation. This will often require a multidisciplinary approach to design in order to maximise benefits, recognising the role of all members of the design team in responding to climate change.

Sitting alongside the risks of flooding, heat in the built environment has been identified as one of the UK's top climate risks in the UK Climate Risk Assessment, and as such the policy seeks to address the issue of overheating through the application of the cooling hierarchy.

Site waste management

Effective on-site waste management is required at the demolition and construction phase of a development to ensure that the amount of waste generated is minimised. This can be achieved in various ways including the use of recycled and secondary materials, as well as treating waste, where practical and reasonable, to then be reused, recycled or processed to recover materials.

It is important that effective on-site management and collection of household and commercial waste is considered and addressed at the design stage of a development proposal. Within Greater Cambridge, there are currently a number of

innovative approaches to waste collection which include the HI-AB system (a large container sunk into the ground), a hydraulic system (a hydraulic powered platform on which a wheeled bin stands) as well as the ENVAC underground system which is successfully used across Europe and emerging in new higher density developments in London. Development proposals should refer to the most up to date Greater Cambridge Shared Waste policies on waste storage and collection and early engagement with the shared waste service is recommended.

Evidence supporting this policy

- Greater Cambridge Local Plan Net Zero Carbon Evidence Base (2021):
- North East Cambridge site wide energy and infrastructure study and energy masterplan (2021)

Topic Papers and other documents informing this policy

- Climate Change Topic Paper (2021)
- Health Facilities and Wellbeing Topic Paper (2021)
- Waste Management and Collections Topic Paper (2021)

Monitoring indicators

 Percentage of permissions meeting the net zero carbon building requirements.

Policy links to the adopted Local Plans

Cambridge Local Plan 2018

 Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use

South Cambridgeshire Local Plan 2018

- Policy CC/1: Mitigation and adaptation to climate change
- Policy CC/3: Renewable and low carbon energy generation in new developments

Policy CC/4: Water efficiency

Policy CC/6: Construction methods

4.2 Low carbon energy and associated infrastructure

To deliver a low carbon city district, an integrated approach to identifying the energy needs of the development, the appropriate technologies and opportunities for decentralised energy, and the infrastructure required to support rapid decarbonisation is needed. This policy ensures that this approach is embedded at an early stage, via the development of a site-wide energy and infrastructure study and energy masterplan, to support carbon reduction targets for the site.

Policy 3: Energy and associated infrastructure

In order to facilitate decarbonisation and the necessary grid upgrades required to support development at NEC, as well as making best use of grid infrastructure, the following approach must be taken:

- a) Expansion of the Milton Primary Sub-Station.
- b) Energy Strategies accompanying all new development proposals shall include a feasibility assessment for a range of renewable energy technologies to achieve the energy standards set out in policy 2. This should include consideration of more efficient heat pumps systems such as water source and ground source heat pumps, as well as the feasibility of developing fifth generation heat networks as part of individual development proposals and the role of energy storage solutions.
- c) All proposals should optimise the design of roof spaces to maximise the space for solar generation giving consideration to other uses including other plant requirements and provision of green/brown roofs and roof terraces.
- d) In order to help reduce peak demands on the electricity grid, all new development must:
 - Incorporate smart meters for all residential units and all non-residential floorspace and make provision to enable battery storage;

ii. Incorporate smart management of electric vehicle charge points within car barns in order to shift demand away from peak times and help to smooth demand profiles.

Why we are doing this

Relevant Objective: 1

To support the role that North East Cambridge has to play in delivering a low environmental impact city district, a grid capacity study and energy masterplan for the site has been developed. The key finding of this document is that to support the development of North East Cambridge, alongside meeting targets for net zero carbon development and supporting the electrification of transport, the electricity grid serving the area will require reinforcement. Initial work suggests that two new transformers will be required at the Milton Road primary sub-station. The report recommends ensuring that the Area Action Plan helps to facilitate an extension to the Milton Road primary sub-station in order to provide the necessary upgrades needed to support development.

Alongside grid reinforcement, the energy masterplan had considered the potential for a site wide approach to energy across North East Cambridge. Due to the requirements of policy 2, which seek to drive down energy demand across the site, this limits the potential for approaches such as a site wide district heat network. There may, however, be potential for smaller fifth generation heat networks to be developed as part of individual development proposals, linking a smaller number of buildings. An assessment of the feasibility of such networks as part of planning proposals is therefore included in this policy. In the context of policy 2, it will also be important that all schemes are designed to maximise roof space for solar generation, whilst also giving consideration to the location of other plant, such as air source heat pumps, alongside the use of roofs for amenity space. Provided that careful consideration is given to the design of such spaces early in the design process, it is feasible for roofs to accommodate a number of uses.

Alongside the provision of additional grid capacity, it is also important for the Area Action Plan to promote an approach that delivers the more efficient use of available grid capacity, via the promotion of smart energy systems. The provision of smart meters and smart management is important element of this, which will help to reduce the costs associated with grid reinforcement and help to reduce peak energy demands on the electricity grid.

Evidence supporting this policy

- North East Cambridge Site wide energy and infrastructure study and energy masterplan (2021)
- Greater Cambridge Local Plan Net Zero Carbon Evidence Base (2021)
- North East Cambridge Infrastructure Delivery Study (2021)
- North East Cambridge Viability Study (2021)

Topic Papers and other documents informing this policy

- Climate Change Topic Paper (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2020)

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan 2018

- Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use
- Policy 29: Renewable and low carbon energy generation
- Policy 85: Infrastructure delivery, planning obligations and the Community Infrastructure Levy

South Cambridgeshire Local Plan 2018

- Policy CC/1: Mitigation and adaptation to climate change
- Policy CC/2: Renewable and low carbon energy generation

- Policy CC/3: Renewable and low carbon energy in new developments
- Policy TI/8: Infrastructure and new developments

4.3 Water

It is important that development at North East Cambridge responds to the climate emergency and local water resource issues through minimising water use as far as possible, ensuring that water and sewage infrastructure is adequate and maintains water quality in the area, and minimises flood risk now and in the future. The policies in this section set clear standards and expectations for development across all water related issues, including ensuring adequate water supply for all stages of development.

Policy 4a: Water efficiency

Proposals for new development shall make provision for the installation and management of measures for the efficient use of mains water, including consideration to rainwater harvesting and water recycling. Proposals for residential development must achieve mains water efficiency standards equivalent to 80 litres/person/day and non-residential development the maximum BREEAM credits for water use (Wat 01).

Policy 4b: Water quality and ensuring supply

Planning applications will be required to demonstrate that all proposed development will be served by an adequate supply of water that will not cause unacceptable environmental harm, that there is appropriate sewerage infrastructure, and that there is sufficient sewage treatment capacity to ensure that there is no deterioration of water quality. Where development is being phased, each phase must demonstrate sufficient water supply and waste water conveyance, treatment and discharge capacity. A planning condition or obligation may be secured to ensure all necessary works relating to water supply, quality and wastewater have been carried out prior to development being occupied.

All development proposals should include an assessment of the measures taken to protect and enhance water quality within the surrounding water environment,

including local surface water and groundwater, in particular, where there is known or potential land contamination; the proposal alters ground conditions; and in the consideration of the form(s) of sustainable drainage scheme to be incorporated.

Policy 4c: Flood Risk and Sustainable Drainage

Potential flood risk to the development

Proposals requiring a Site Specific Flood Risk Assessment (FRA), following the principles of the National Planning Policy Framework (2021), must demonstrate that the development, including any boundary treatment, will:

- a) be resistant and resilient to all relevant sources of flooding including surface water:
- b) be designed and positioned so that it does not increase flood risk elsewhere by either displacement of flood water or interruption of flood flow routes;
- c) wherever possible, reduce existing overall site flood risk; and
- d) provide a safe means of evacuation.

In addition, any development will only be supported where:

- e) floor levels are above the 1 in 100 year flood level plus an allowance for climate change from all sources of flooding and where appropriate and practicable also 300mm above adjacent highway levels.
- f) exceedance flood events either as a result of drainage system failure or return periods in excess of 1 in 100 year event are directed away from buildings.

Potential flood risk from the development

Development proposals will be required to demonstrate that:

- a) the peak rate of run-off over the lifetime of the development achieves
 greenfield run-off rates. If this cannot be technically achieved, then the limiting
 discharge should be 2 litres per second per hectare for all events up to and
 including the 100-year return period event, including an allowance for climate
 change;
- b) the development is designed so that the flooding of property in and adjacent to the development would not occur for a 1 in 100-year event, plus an

- allowance for climate change and in the event of local drainage system failure:
- the discharge locations have the capacity to receive all foul and surface water flows from the development, including discharge by infiltration, into water bodies and sewers;
- d) there is a management and maintenance plan for the lifetime of the development, which shall include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime; and
- e) where reasonably practical, the destination of the discharge complies with the following priority order:
 - 1. Water reuse and rain water harvesting;
 - 2. To ground via infiltration (where reasonable and practical);
 - 3. To a water body; and lastly
 - 4. To a surface water sewer

Discharge to a foul water or combined sewer will be unacceptable.

Sustainable Drainage Systems

Development will be required to implement a Sustainable Drainage System (SuDS) guided by the Cambridgeshire Flood and Water Supplementary Planning Document (or successor documents). Development will be permitted provided that:

- a) surface water is managed close to its source and on the surface where reasonably practicable to do so;
- b) priority is given to the use of environmental improvements, with SuDS naturalised to enhance green and blue infrastructure;
- c) water is seen as a resource and is re-used where practicable, offsetting
 potable water demand, and that a water sensitive approach including impacts
 of climate change are considered in the design of the development;
- d) the features that manage surface water are commensurate with the design of the development in terms of size, form and materials and make an active contribution to placemaking;
- e) Surface water management features are multi-functional where possible;
- f) Any flat roof provides an element of green or brown roof;

g) There is no discharge from the developed site for rainfall depths up to 5 mm of any rainfall event.

SuDS schemes will be discounted from formal open space calculations and within informal areas can only be included within the calculations if it can be demonstrated there is no detriment to the wider amenity, biodiversity or other key functions of the open space. The design of SuDS should take into account the possible presence of any buried archaeology and developers should undertake early discussions with Historic England and Cambridgeshire County Council's Historic Environment Team.

Why we are doing this

Relevant Objectives: 1, 4

Water efficiency and supply

North East Cambridge is located in one of the driest areas in the UK and has been identified as an area of serious water stress. The area has experienced lower than average rainfall over several years, leading to local concerns regarding environmental impact on watercourses, in particular chalk streams. Evidence has shown that existing abstraction is causing environmental problems. As a result, future development cannot be supplied with water by increased abstraction from the chalk aquifer, whether licenced or not, and must be met in other ways. A key issue identified in the Greater Cambridge Integrated Water Management Study (2021) is the need for new strategic water supply infrastructure to provide for longer term needs, and to protect the integrity of the chalk aquifer.

A Fens Reservoir was identified in Anglian Water's Water Resources Management Plan 2019 as a potential strategic water resource option. Similar winter storage options were explored by Cambridge Water. Given the challenges faced in the region, Anglian Water and Cambridge Water decided to accelerate the programme for a Fens Reservoir and made a joint submission for the development of the reservoir under the government's RAPID process in summer 2021.

As at Autumn 2021, Water Resources East is preparing its Water Management Plan for the region to cover the period to 2050. It is understood that this will include planning for significant new infrastructure including the new Fens Reservoir,

alongside other measures, to provide water supply that is designed to address both environmental and growth needs. However, on current timelines this will only be available to supply water from the mid 2030s.

Until such new strategic resources are delivered, there are short/medium term risks that ongoing growth will cause further deterioration to the chalk aquifer and habitats in the chalk streams which flow into Cambridge. The solutions could lie in measures such as sourcing more water from other locations that do not rely on the aquifer and seeking maximum efficiency in water use and further reducing wastage through leakage. This approach could have dual benefits in reducing pressures from existing development and meeting short/medium term risks until the mid 2030s.

Until more is known about the proposals for water supply that will be contained in the new regional Water Management Plan, there remains some uncertainty whether water supplies can be provided in a way that is sufficient for the early phases of North East Cambridge site to be delivered ahead of provision of the new reservoir. For this reason Policy 4b requires that any planning application will therefore need to demonstrate that there is sufficient water supply available to meet the demands generated by the development without putting additional pressure on the aquifer such as to give rise to environmental harm to the chalk streams and the River Cam in particular. It will not be sufficient to rely, in meeting this policy requirement, on the ability to statutorily requisition a supply from the water undertaker; evidence will be required to demonstrate that the anticipated water demand of the new development can be met without environmental harm that further abstraction from the aquifer will be likely to cause. However, once the new Water Management Plan for the region is completed, it is possible that this may provide the necessary evidence to meet the policy requirement. The local planning authority will consider the matter in relation to each planning application and the level of certainty that can be demonstrated at the time it is being determined.

In view of the early progress towards delivery of a new Fens Reservoir to provide additional strategic water supply, as well as the planned preparation of the WRE Water Management Plan, there is a reasonable prospect of delivery starting on the North East Cambridge site in the plan period to 2041 either on the trajectory contained in the plan, if suitable interim measures are identified, or on a delayed

trajectory with completions starting once the new reservoir is in place in the mid 2030s. Many of the potential solutions are outside the control of planning policy, but one way in which the plans can reduce the demand for water is by requiring high levels of water efficiency in all new developments. The Greater Cambridge Integrated Water Management Study (IWMS) has shown that 80 litres/person/day is achievable by making full use of water re-use measures on site including surface water and rainwater harvesting, and grey water recycling. The cost effectiveness improves with the scale of the project, and that a site-wide system is preferable to smaller installations.

Whilst this is a higher standard than the current optional building regulations standard, there is a strong case for greater water efficiency in Greater Cambridge. Increased standards of water efficiency for Greater Cambridge are also supported by Cambridge Water, Water Resources East, and the Environment Agency.

The <u>Shared regional principles for protecting, restoring and enhancing the</u> <u>environment in the Oxford-Cambridge Arc</u> are clear that they will encourage local partners to exceed minimum standards required by building regulations on issues such as water consumption, and that they will be working with Government on this issue.

Water quality

The maintenance and enhancement of water quality of both watercourses and groundwater within North East Cambridge is imperative. Not only can these be an important source for water supply, but they can also provide a valuable general amenity, biodiversity and recreational resource. The majority of North East Cambridge falls within a medium category for groundwater vulnerability. This means that the area could still easily transmit pollution to groundwater

The Environment Agency publication Policy and Practice for the Protection of Groundwater provides useful information and guidance on the risks to groundwater quality. It also explains the concepts of source and resource protection.

Any site which may be contaminated to some degree by virtue of its previous usage forms a potential risk to water quality. Developers should contact the Environment Agency at the earliest opportunity to discuss the need for historical information and

site investigations to determine the degree of contamination of both soil and groundwater.

The River Cam has been experiencing a very low flow rate, which is adversely impacting water quality in terms of nitrification, algal bloom, deoxygenation and greater siltation. The previous and current uses of the site indicate that ground contamination is likely to be an issue. Although this is not a flood risk issue, it could have an impact on the type of surface water management regime that should be utilised by any development proposal.

Adequate site investigations will need to be undertaken to determine the level of contamination, locations and level of risk. This will define appropriate surface water management solutions. Sustainable drainage systems (SuDS) can be used effectively in areas of contaminated land as they are not limited to infiltration devices. Features such as permeable paving, ponds, swales and rain gardens can be lined to prevent the mobilisation of contaminants and purification of diffuse pollution from the new developments can be attained through SuDS measures utilised close to the source of rainfall.

Flood risk

The general principle of assessing all forms of flood risk at every stage of development is a principle that is established within the National Planning Policy Framework and the National Planning Practice Guidance.

Flood risk is generally assessed against the type of flooding with fluvial (river), pluvial (surface water), groundwater, sewers and reservoirs being the main potential sources. Information on flood risk in Greater Cambridge is provided by the Greater Cambridge Strategic Flood Risk Assessment (2021), and the area has also been subject to an Area Flood Risk Assessment to accompany the AAP. As flood risk information is regularly updated, developers should consult the latest information available from the Environment Agency, the Lead Local Flood Authority or updates to the Strategic Flood Risk Assessment.

Development may increase the flood risk downstream unless an adequately designed surface water management scheme is incorporated into the proposals.

Redevelopment of older existing office and industrial sites within North East

Cambridge offers the potential to significantly improve on-site drainage management
and help to mitigate localised flooding.

Policy 4C seeks to minimise surface water runoff rates through the appropriate design and consideration to sustainable drainage in accordance with best practice.

SuDS have long been promoted by local authorities as a sustainable way of reducing run-off to greenfield rates, where workable. The Councils' preferred approach is to manage run-off through surface water attenuation, such as open swales which give an opportunity for flood attenuation by storing and slowly conveying runoff flow to downstream discharge points or infiltrating it into the ground, depending on soil and groundwater conditions, and can provide other benefits such as to biodiversity.

Evidence supporting this policy

- Greater Cambridge Integrated Water Management Study Outline Water Cycle Study (2021)
- Greater Cambridge Strategic Flood Risk Assessment Level 1 (2021)
- North East Cambridge Area Action Plan Area Flood Risk Assessment (2019)
- North East Cambridge Area Action Plan Surface Water Attenuation Report (2019)

Topic Papers and other documents informing this policy

Climate Change Topic Paper (2021)

Monitoring indicators

- Percentage of developments meeting water efficiency policy standards
- Percentage of permissions contrary to EA advice

Policy links to the adopted Local Plans

Cambridge Local Plan 2018

- Policy 28: Carbon reduction, community energy networks, sustainable design and construction and water use
- Policy 31: Integrated water management and the water cycle

South Cambridgeshire Local Plan 2018

Policy CC/4: Water efficiency

Policy CC/7: Water Quality

• Policy CC/8: Sustainable Drainage Systems

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire Flood and Water Supplementary Planning Policy Document (2016)
- Sustainable Design and Construction Supplementary Planning Document (2020)

4.4 Biodiversity



20% biodiversity increase from NEC

Figure 14: Infographic showing the principal elements of the biodiversity strategy for North East Cambridge

At a national and local level, biodiversity is a priority and emerging national legislation has set out that new development must achieve a minimum 10% 'net gain'. While the Area Action Plan area has no nationally or internationally designated biodiversity sites, it is close to a number of designated areas and there is also a locally designated Wildlife Site on Cowley Road. Development at North East Cambridge should protect and substantially enhance the network of green and blue habitats across the site itself and the wider area, including Chesterton Fen.

This policy sets out how new development will achieve biodiversity net gain and measurably improve the biodiversity network across the wider area.

Policy 5: Biodiversity and Net Gain

All new development is required to achieve a 20% net gain in biodiversity value.

The biodiversity net gain metric will be determined at the planning application stage and suitable planning obligations will need to be secured for the ongoing management and monitoring to ensure target habitat conditions are met. The creation of any new habitats should take into account the likely impact of climate change and be resilient to these effects.

Biodiversity net gain will be achieved through:

On-Site Biodiversity Protection and Enhancement

- The protection, enhancement and recovery of the most valuable existing
 habitats and species present within a development site or adjoining it, and the
 creation of new complimentary habitats;
- 2. The provision of measurable improvements in the size, quality, diversity and relationship of habitats in and around North East Cambridge, to deliver a coherent and high-quality ecological network. In the design of new proposals, consideration should be given to the New Habitat Creation Recommendations in the policy justification below;
- Securing appropriate habitat management and monitoring plans to restore existing habitats and establish and retain new features, through a S106 agreement;

Contribute to Wider Biodiversity Enhancements

- 4. Increasing opportunities for the movement and dispersal of species across

 North East Cambridge and into surrounding areas;
- Delivering coordinated habitat and water quality improvements to the First Public Drain, including outside of the Area Action Plan area, and, Chesterton Fen;

and

Providing accessible information for members of the public on the habitats within North East Cambridge, their management and the species they support.

In exceptional and justified circumstances, development proposals that cannot achieve the full 20% biodiversity net gain requirement on-site, they should seek to provide the highest proportion of net gain on-site in the first instance (at least 10%) and any residual net gain should be delivered elsewhere within the Area Action Plan area and subsequently off-site as a last resort. Net gains to be achieved outside of the development site boundary will need to be secured through appropriate planning obligations.

In addition to the above, all development shall avoid having any adverse impact on the nature conservation value of:

- The First Public Drain and other existing watercourses and waterbodies;
- · Local Nature Reserves including Bramblefields;
- City Wildlife Sites and Country Parks including Cowley Road Hedgerow,
- The River Cam County Wildlife Site,
- Any other areas of natural or semi-natural sites within or adjacent to North East Cambridge, and
- Any designated environmental or nature conservation sites and protected habitats

A Preliminary Ecological Appraisal should be undertaken to inform an Ecological Impact Assessment and Biodiversity Net Gain Assessment to ensure existing ecology is protected and enhanced.

Where an adverse impact on biodiversity is unavoidable then this shall be minimised as far as possible and appropriate measurable mitigation provided.

Mitigation of adverse impacts on biodiversity resources

Where mitigation is required to compensate for the reduction or loss of existing biodiversity resources then this shall be provided in liaison with the LPA and in accordance with the objective of contributing to the creation of a coherent on-site and off-site, high quality ecological network. This is to be secured through:

- 7. Identified projects to be agreed with the LPA for on-site habitat provision/enhancement and management wherever practicable. Where this is not practicable to be delivered on-site, this should be followed by identified improvement projects to be agreed with the LPA to Chesterton Fen, followed by sites within the wider local area, and then other sites elsewhere within Greater Cambridge;
- 8. The maintenance and, where possible, enhancement of the ability of plants and animals including pollinating insects to move, migrate and genetically disperse across the city; and
- The provision/enhancement of priority habitats identified at the national,
 Greater Cambridge or local level, having regard to the scarcity of that habitat within North East Cambridge.

Where mitigation is needed, an offsetting mechanism based on the Natural England biodiversity offsetting metric version 3.0 (or any future equivalent) will be used to calculate requirements. Temporary impacts to habitats, which can occur during ground works and construction, should seek to be mitigated through interim measures to promote biodiversity.

The amount of mitigation required will be determined having regard to:

- 10. The importance of the biodiversity resources that will be adversely affected, particularly in terms of whether they:
 - a. Include priority habitats identified at the national, Greater Cambridge or local levels; and/or
 - b. Are able to support protected or priority species
- 11. The range of biodiversity resources that will be adversely affected, with greater mitigation being required where a mosaic of habitats will be lost, or a large number of species affected;
- 12. The size and quality of biodiversity resources that will be adversely affected, and their function within wider ecological networks;

- 13. The impact of the development on the role and resilience of remaining biodiversity resources, for example in terms of the ability of individual species to maintain self-sustaining population levels and/or to adapt to climate change; and
- 14. Any other issues identified through ecological assessment of the site.

Why we are doing this

Relevant objectives: 1, 4

If development is to be genuinely sustainable then it will need to play a key role in protecting and enhancing Greater Cambridge's biodiversity resources. On-site biodiversity improvements will also be vital to enhancing the liveability and well-being of urban areas, and improving the connection of people to nature, particularly in higher density urban areas such as North East Cambridge.

Biodiversity net gain is an approach which aims to leave the natural environment in a measurably better condition than beforehand. The Environment Bill (2021) sets out how the environment will need to be at the centre of policy making. In particular, it introduces a minimum 10% biodiversity net gain requirement for new development to ensure new developments enhance biodiversity and create new green spaces for local communities to enjoy. The National Planning Policy Framework encourages measurable net gains for biodiversity to be sought through the plan making process. South Cambridgeshire District Council Doubling Nature Strategy (2021), the draft Cambridge City Council Biodiversity Strategy 2021 – 2030, and the Oxford-Cambridge Arc Environment Principles (2021) all set out that new development should seek to deliver a minimum of 20% biodiversity net gain. Locally there is a clear aspiration that development should be providing a biodiversity net gain which is in excess of national targets.

The North East Cambridge Ecology Study (2020) has assessed the feasibility of delivering a biodiversity net gain at North East Cambridge and has recommended that the policy seeks a maximum provision on-site and specifies a minimum provision of 10% on site due to the likely difficulties of achieving a higher target for all development sites across the Area Action Plan area due to the higher density nature of the proposals. However, the Ecology Study does not rule out the possibility of

achieving a higher on-site biodiversity net gain and it will be dependent on a range of factors including the location, nature, size and form of the development proposal, the site's existing biodiversity value as well as the amount of open space provided across the Area Action Plan area.

The North East Cambridge Ecology Study (2020) identifies the existing on-site biodiversity assets including the wide range of existing species and habitats. The existing habitats including woodland, scrub, hedgerows, ephemeral perennial vegetation, watercourses and ponds and they support a number of species such as Common Frog, Smooth Newt, Viviparous Lizard, House Sparrow, Common Swift, Soprano Pipistrelle bat and Water Vole.

At both a national and local level it is clear that biodiversity is a key priority and an important component of sustainable development. The Area Action Plan seeks to respond to this by ensuring that the existing biodiversity species and habitats in North East Cambridge are protected and enhanced. This will be a challenge given the scale of change and development proposed. Therefore, all development in the Area Action Plan area will have a significant role to play in this, and the cumulative benefit of small-scale improvements in biodiversity resources should be maximised.

All development proposals should be informed by a Preliminary Ecology Appraisal which identifies site constraints, opportunities and further survey requirements. This should then inform both an Ecological Impact Assessment and Biodiversity Net Gain Assessment to ensure existing ecology and habitats are protected and enhanced. Development proposals are also encouraged to use the Natural Cambridgeshire Local Nature Partnership Developing with Nature Toolkit (www.naturalcambridgeshire.org.uk/resources/) to demonstrate how development will achieve a net biodiversity gain in an area which is recognised as a gateway to The Fens. Regard should also be had to the NEC Ecology Study and the Biodiversity Supplementary Planning Document (or successor documents) when preparing development proposals.

Achieving Biodiversity Net Gain

Development within North East Cambridge will be required to deliver a minimum 20% biodiversity net gain (using The Biodiversity Metric 3.0, as published by Natural

England (2019) or any future equivalent). To achieve the required net gain, biodiversity should be considered and designed into proposals from inception through a comprehensive landscape led design proposal. The following table sets out how a biodiversity net gain could be achieved, in part, through new habitat creation within higher density development proposals. These recommendations are specifically in relation to birds, bats and hedgehogs and further habitat enhancements are likely to be required within areas of open spaces, public realm and other communal areas.

New habitat creation recommendations

Species: Swift and House Sparrow

Requirement: A minimum of one swift box for every new building. These should be integrated boxes and installed in groups in suitable locations across the site. Provision of swift boxes across other structures, such as bridges, should also be considered

Species: Starling

Requirement: A minimum of one starling box in every ten buildings and located close to areas of open grassland, including amenity grassland and installed in groups in suitable locations across the site.

Species: Black Redstart

Requirement: A minimum of one Black Redstart box in every new ten buildings situated on or close to living roof habitats and installed in groups in suitable locations across the site.

Species: Grey Wagtail

Requirement: At least five Grey Wagtail boxes should be provided around waterways in sheltered positions and installed in groups in suitable locations across the site.

Species: Peregrine Falcons

Requirement: On buildings greater than 20m, provision for Peregrine Falcons should be considered

Species: Bats

Requirement: Integrated bat features for crevice dwelling bats should be installed at a density of at least one for every two buildings. Features for bats which roost in roof voids, or require internal flight areas, should be installed at one for every 25 buildings.

Species: Hedgehogs

Requirement: Improve hedgehog permeability across development parcels.

The Spatial Framework for North East Cambridge offers the most significant opportunity to enhance on site biodiversity resources and provide a network of habitats, which includes a number of new or enhanced infrastructure features including the linear park, local and neighbourhood green spaces and the First Public Drain. The provision of extensive areas of biodiverse living roofs are necessary to replace the existing open mosaic habitats which are of significant value within the North East Cambridge area, particularly around the railway sidings and at the Waste Water Treatment Plant. These roofs can also provide vital greening in dense urban areas such as North East Cambridge.

It will be important to ensure that habitats and species both on and off-site are resilient to disturbance from human activity, including recreation, predation by pets, noise and light pollution. New buildings, in particular taller buildings, should have design features to avoid bird collision and minimise light pollution at night to avoid disturbance to bat migration patterns. Native plant species should be used wherever possible to promote biodiversity. Where non-native species are used, these should have demonstrable biodiversity value. The interrelationship between North East Cambridge and the Fens provides the opportunity for biodiversity enhancements and future development to have a strong identity, excellent resources management as well as link into innovation and learning. This reflects the work being undertaken through the Fen Biosphere Project by Cambridgeshire ACRE.

Mitigation of adverse impacts on biodiversity resources

There are no nationally or internationally designated biodiversity sites within the Area Action Plan area but a City Wildlife Site is located on Cowley Road, Milton Country Park is to the north of the AAP area and Bramblefields Local Nature Reserve borders to the south. Within the wider surrounding area, there are a number of European and local designated biodiversity sites including Devil's Dyke and Fenland SACs and Wicken Fen Ramsar. The North East Cambridge Habitats Regulation Assessment has identified that impacts from air pollution, recreation and water quantity and quality could result in 'likely significant effects' on these habitats and therefore development proposals should be considered against the relevant policies in the AAP which seek to mitigate these potential impacts.

Adverse environmental effects predicted prior to construction should be mitigated or prevented through a construction environmental management plan (CEMP) based on the latest British Standards.

Off-site mitigation

In justified circumstances, where biodiversity net gain cannot be achieved in full on site, land to the east of North East Cambridge known as Chesterton Fen, should be the focus for off-site biodiversity enhancements. This area is currently made up of species poor, open grassland situated between North East Cambridge and the River Cam. Through the provision of improved pedestrian and cycle access over the railway line into Chesterton Fen, there is an opportunity to create a new Local Nature Reserve in this area containing wetland characteristics and fenland habitats such as open water, wet grasslands, reedbeds and the restoration of drainage ditches. This would need to be carefully considered alongside the need to provide public amenity space to balance public recreation with habitat enhancements. A habitat creation project at Chesterton Fen should be developed to provide significant opportunities for biodiversity and people and funded by development within North East Cambridge through appropriate planning obligations.

Opportunities to enhance the biodiversity value of other sites adjacent to North East Cambridge and more widely across North Cambridge should also be explored as part of creating a comprehensive and diverse biodiversity network in and around this

area. The Greater Cambridge Green Infrastructure Opportunity Mapping report (2021), identifies that there is also the potential for a new strategic green space to the north of Cambridge which would link to existing green infrastructure networks, address existing deficiencies in this wider area and provide a new asset that would reduce recreational pressure on existing open spaces.

Evidence supporting this policy

North East Cambridge Ecology Study (Biodiversity Assessment) (2020)

Typologies and Development Capacity Assessment (2021)

- Greater Cambridge Green Infrastructure Opportunity Mapping Recommendations report (2021)
- Topic Papers and other documents informing this policy
- Health Facilities and Wellbeing Topic Paper (2021)

Monitoring indicators

 Percentage of permissions that set out how they will achieve 20% biodiversity net gain

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 59: Designing landscape and the public realm
- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats

South Cambridgeshire Local Plan

Policy NH/4: Biodiversity

Policy NH/6: Green Infrastructure

Other Council/County strategy and policy and other supporting guidance

• South Cambridgeshire Biodiversity Supplementary Planning Document (2009)

•	Draft Greater Cambridge Biodiversity Supplementary Planning Document
	(2021)
	(=== 1)

5. Design and built character



Figure 15: Illustration showing the placemaking vision for North East Cambridge

North East Cambridge will be a bustling new city district, well-integrated with surrounding communities and with a unique sense of place, taking cues for its urban form from the character of Cambridge. To achieve this requires the imaginative and holistic design of buildings, streets and spaces with trees, play space, public art and

landscape fully integrated into them. This should create a genuine mix of uses in buildings and across neighbourhoods, that creates a vibrant community and intensity of activity at key places in the district, whilst allowing for quieter and more restful places in others. The new district should feel like part of Cambridge – a place that future generations will be proud of.

Creating healthy, inclusive, high quality places with well-designed buildings, streets, spaces and landscape, will encourage cohesive communities to develop which will successfully integrate into their surroundings and relate well to them. Public and private spaces will be attractive and well-managed, be clearly defined in terms of ownership, have good natural surveillance, and reduce crime and the fear of crime along with antisocial behaviour. This will have a positive impact on the perceived safety and well-being of those living, working, and visiting North East Cambridge. Buildings adjacent to public spaces will engage these spaces through their layout, orientation, and ground floor uses that activate these spaces.

This section includes the following policies:

- Policy 6a: Distinctive design for North East Cambridge
- Policy 6b: Design of mixed-use buildings Policy 7: Creating high quality streets, spaces and landscape
- Policy 8: Open spaces for recreation and sport
- Policy 9: Density, heights, scale and massing
- Policy 10a: North East Cambridge Centres North East Cambridge Centres
- Policy 10b: District Centre
- Policy 10c: Science Park Local Centre
- Policy 10d: Station Approach
- Policy 10e: Cowley Road and Greenway Local Centres
- Policy 11: Housing design standards

5.1 Distinctive design for North East Cambridge

North East Cambridge should build on the legacy of Cambridge's distinctive heritage and characterful new developments which contribute to the unique identity of the city. The design of genuinely mixed-use buildings, streets and open spaces must

come together to create a place that is distinctive, and which is enduring, adaptable and functional. This policy sets out the expectations for the design of buildings and spaces in North East Cambridge, and the clear benchmark for quality that is expected.

Policy 6a: Distinctive design for North East Cambridge

Development at North East Cambridge will create distinctive, high-quality design and architecture that contributes positively to Cambridge's heritage, townscape and landscape qualities. Applications will need to demonstrate how development proposals have understood the unique characteristics of Cambridge, and have successfully resolved the particular challenges of securing this through higher density development. Proposals must:

- a. Provide a comprehensive design approach that achieves the successful integration of buildings, the routes and spaces between buildings, topography and landscape;
- b. Create buildings, streets and spaces that will have a positive impact on their setting in terms of location on the site, height, scale and form, materials and detailing, ground floor activity, wider townscape and landscape impacts and available views:
- c. Ensure that the design and location of any infrastructure or mitigation measures (such as bridges, under passes and noise barriers) considers integration into the Area Action Plan area and addresses landscape, heritage, ecology and visual impacts;
- d. Ensure that buildings are orientated to provide good natural surveillance and create active edges onto public space by locating appropriate uses, frequent entrances and windows into habitable rooms at ground floor level, to create activity and visual interest along the street;
- e. Create clearly defined public and private amenity spaces that are designed to be inclusive, usable, safe and enjoyable, and are designed to remove the threat or perceived threat of crime and improve community safety;
- f. Use high quality and well detailed materials for buildings, streets and spaces and other landscaped areas;

g. Create buildings and spaces that will contribute to creating a diverse, fine grain and human scale streetscape; and

h. Ensure that functional design elements (refuse storage, bicycle parking, etc.)

are resolved in well-designed and successfully integrated ways.

All major development proposals should align with the principles set out in the Cambridgeshire Quality Charter for Growth and engage with the Cambridgeshire

Quality Panel at the pre-application stage.

All development proposals should provide a balanced approach between security

and the design of maximising fire safety in alignment with the most up to date Fire

Regulations.

Policy 6b: Design of mixed-use buildings

The design and layout of vertically and horizontally mixed-use development proposals must:

a. Ensure that future adaptation and flexibility is considered in the design and

construction of new buildings, encouraging reuse and conversion of building

space over time;

b. Avoid mixing incompatible uses that could impact on amenity of residents and

occupiers in the same or adjacent buildings

c. Ensure that the form, architectural design and layout clearly resolve the

intended uses within buildings;

d. Ensure uses can function effectively and residents can live without

disturbance through well-resolved layout, access (including separate internal

access arrangements, where required, for the different uses), servicing

and delivery arrangements; and

e. Maximise opportunities to create active ground floor uses to diversify and

activate streets and spaces.

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

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North East Cambridge will create a new city district for Cambridge that includes a significant number of new homes with the facilities and other infrastructure needed to support them, alongside intensification of business and industrial uses. A design-led approach to placemaking is needed to maximise the opportunities of the site, and to successfully integrate it into the surrounding existing residential and business areas to create a cohesive community.

Well-planned buildings, streets and spaces are fundamental to the creation of high-quality development at North East Cambridge. Paragraph 126 of The NPPF (July 2021) sets out the Government's policy position on planning expectations with regards good design 'The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities.'

Given the projected build-out time at North East Cambridge, it is important that a clear set of design policies is put in place to ensure that the new district adds to the positive qualities associated with Cambridge as a city, and develops a coherent sense of identity with shared design values embedded in every phase.

This requires a holistic approach to be taken to the design of buildings, streets and landscape to ensure that these elements integrate well with each other to create a place that is distinctive, and which is enduring, adaptable and functional. The NPPF identifies that that local planning authorities 'should prepare design guides or codes consistent with the principles set out in the National Design Guide and National Model Design Code' (paragraph 128). Accordingly, the Council will lead on the production of a site wide design code for the North East Cambridge area that will require input from the various landowners and their design teams. The Design Code will be adopted as a Supplementary Planning Document (SPD). It is intended to encourage design innovation whilst ensuring that together all future developments across North East Cambridge contribute to a coherent sense of place, rich and subtle in variation. Paragraph 133 of The NPPF (2021) identifies that Local Planning Authorities should make sure that they have access to and make appropriate use of design advice and review arrangements. Accordingly, proposals will be expected to

align with the principles identified in the Cambridgeshire Quality Charter for Growth and be reviewed by the Cambridgeshire Quality Panel.

Understanding that development needs to be at a human scale is important in defining the kind of place the North East Cambridge should be. Well-articulated roof forms and fine grain plot-based architecture will be needed to provide flexibility of forms, accommodate a variety of uses and users and create a visually rich, more human scale and welcoming place.

Creating high quality places with well-designed buildings, streets and spaces will encourage more cohesive communities that reduce crime and the fear of crime along with antisocial behaviour. Public and private spaces should be clearly defined in terms of ownership, have good natural surveillance and be well managed. Such an approach will have a positive impact on the safety and well-being of those working, living and visiting the North East Cambridge. The creation of gated developments that limit social cohesion and integration will not be supported. Other aspects such as the appropriateness of materials and finishes, including their long-term resilience, attractiveness and ease of ongoing maintenance, will determine how attractive, well-used and successful places will be in the future.

Mixed use development

Mixed use development will strengthen the character of North East Cambridge and help make most efficient use of the land available, while supporting a varied range of businesses. They require creative approaches to the design, delivery, construction and future management to ensure the successful integration of uses.

Embedding mixed and compatible uses within individual buildings, ensuring that they incorporate flexibility and consider future reuse and adaptation, along with diversifying blocks will help to create a place that can sustainably change over time and which promotes activity beyond the traditional 9 to 5. It also means that more intensive use can be made of some facilities with 'extended use' models employed to allow community, creative and cultural uses. The mixing of uses can happen both horizontally (floor by floor) and vertically (adjacent buildings) as well as utilising flexible forms to allow change of activities throughout the day.

Higher density development creates challenges in how different uses can operate in close proximity to each other within buildings, adjacent plots or blocks. Innovative forms of building will be needed to make the best use of the land available and development proposals will need to demonstrate that the future amenity of residents, occupiers and other sensitive uses or spaces can be safeguarded (see Policy 23: Comprehensive and Coordinated Development and policy 25: Environmental Protection).

Evidence supporting this policy

- North East Cambridge Landscape Character & Visual Assessment (2020)
- North East Cambridge Transport Assessment (2020)
- Cultural Placemaking Strategy (2020)
- New Housing Developments and the Built Environment Joint Strategic Needs Assessment (2010)
- Greater Cambridge Creative Business and Cultural Production Workspace Study (2021)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

- Anti-Poverty and Inequality Topic Paper (2021)
- Community Safety Topic Paper (2021)
- North East Cambridge Stakeholder Design Workshops 1-6 event records 2019-2020)

Monitoring Indicators

Number of schemes reviewed by Greater Cambridge Design Review Panel

Policy links to the adopted Local Plans

Cambridge Local Plan

 Policy 15: Cambridge Northern Fringe East and new railway Station Area of major Change

- Policy 34: Light pollution control
- Policy 35: Protection of human health and quality of life from noise and vibration
- Policy 37: Cambridge Airport Public Safety Zone and Air Safeguarding Zones
- Policy 40: Development and expansion of business space
- Policy 50: Residential space standards
- Policy 51: Accessible homes
- Policy 55: Responding to context
- Policy 56: Creating successful places
- Policy 57: Designing new buildings
- Policy 59: Designing landscape and the public realm
- Policy 60: Tall buildings and the skyline of Cambridge
- Appendix F: Tall Buildings and the Skyline
- Policy 65: Visual pollution
- Policy 67: Protection of open space
- Policy 68: Open space and recreation provision through new development
- Appendix I: Open Spaces and Recreation Standards
- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 71: Trees
- Policy 80: Supporting sustainable access to development

South Cambridgeshire Local Plan

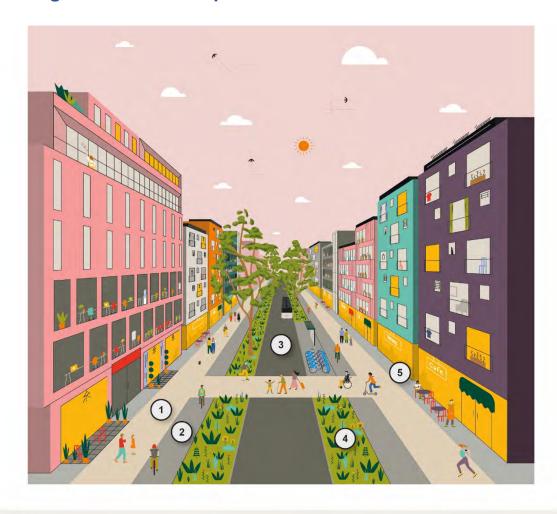
- SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- HQ/1: Design Principles
- NH/2: Protecting and Enhancing Landscape Character
- NH/4: Biodiversity
- NH/5: Sites of Biodiversity or Geological Importance
- NH/6: Green Infrastructure
- NH/8: Mitigating the Impact of Development in and adjoining the Green Belt
- NH/14: Heritage Assets
- H/8: Housing Density

- H/12: Residential Space Standards
- H/18: Working at Home
- SC/1: Allocation for Open Space
- TI/1: Chesterton Rail Station and Interchange
- TI/4: Rail Freight and Interchanges
- TI/6: Cambridge Airport Public Safety Zone
- TI/8: Infrastructure and New Developments
- TI/9: education facilities

Other Council/County strategy and policy and other supporting guidance

- Putting Health into Place, NHS Healthy New Town Principles (2019)
- Cambridgeshire Quality Charter

5.2 Legible streets and spaces



KEY

- 1 4m wide footway
- 2 2.5m wide (minimum) segregated cycle path
- 3 6.5m wide carriageway with a design speed below 20mph
- 4 3.5m wide soft landscaped strip including 'forest scale' trees and sustainable urban drainage swales
- 5 Minimum 2m public realm outside footway, where ground floor activities can spill out

Figure 16: Illustration of proposed design features for primary streets

The streets and open spaces within North East Cambridge will be the most enduring elements of the new city district. They will provide the structure for the area's layout, encouraging walking and cycling, and creating a vibrant, safe and healthy environment that nurtures community life. This policy ensures that new streets are designed as inclusive, public, welcoming and active spaces which are rich in biodiversity and resilient to climate change. In addition, new streets should also form part of a legible and functional movement network that prioritises pedestrians,

cyclists and other non-motorised users of all abilities.



KEY

- 1 Minimum 21m distance between building frontage
- 2 2m wide footway
- 3 Street design incorporates informal seating, planting, doorstep play areas, cycle and disabled parking, drop-off areas and accommodates vehicle access with a design speed below 20mph in a 'Woonerf' approach

Figure 17: Illustration of proposed design features for secondary streets in high density areas



KEY

- 1 Minimum 21m distance between building frontage
- 2 3m wide terrace gardens in front of ground floor homes
- 3 2m wide footway
- 4 Street design incorporates informal seating, planting, doorstep play areas, cycle and disabled parking, drop-off areas and accommodates vehicle access with a design speed below 20mph in a 'Woonerf' approach

Figure 18: Illustration of proposed design features for secondary streets in medium density areas

Policy 7: Creating high quality streets, spaces and landscape

Streets and spaces shall be designed to provide a safe, walkable district, with high quality and well-connected pedestrian, cycle and public transport routes that support healthy, active lifestyles whilst effectively allowing servicing and deliveries and as well as managing access by private motor vehicles. To achieve this, the primary and secondary streets and key public spaces must conform to the strategic layout for key pedestrian and cycle routes described in Policy 19: Safeguarding for Public

Transport Policy 16: Sustainable Connectivity, the street hierarchy described in Policy 21: Street hierarchy and the principles shown in Figure 17.

All development proposals within North East Cambridge should demonstrate how they will contribute towards the creation of high quality, inclusive and attractive streets and spaces that will:

- a. Be designed with active routes with good natural surveillance, incorporating
 Secured by Design principles, as an integral part of new development
 proposals and coordinated with adjacent sites and phases;
- Ensure the design of streets and other movement routes prioritises pedestrian and cycle movements, including the specific needs of disabled people, and relate to the character and intended function of spaces and surrounding buildings (see Land Use Plan (Figure 11) and supporting diagrams within Policy 10a-e);
- c. Create high quality connections to seamlessly link North East Cambridge with its surroundings and into existing established areas as shown on the Spatial Framework and described in Policy 17: Connecting to the wider network
- d. Understand microclimate and other environmental considerations and ensure that these are factored into design proposals so that public, communal and private spaces receive good sunlight throughout the year, shading from trees and vegetation on active travel routes, and have good air quality and low ambient noise levels:
- e. Take a coordinated approach to the design and siting of high-quality street furniture, boundary treatments, lighting, signage, trees and well-integrated public art which uses materials that are easily maintained;
- f. Accommodate trees and other planting of suitable species that are appropriate to the scale of adjacent buildings and public realm to ensure that adequate space and planting conditions are provided above and below ground for them to mature and flourish. A comprehensive planting, maintenance and management plan that shall be submitted in support of major development proposals;
- g. Ensure that trees and other planting are considered as an integral part of development proposals and relate well to the wider setting of the area and take account of the Cambridge Tree Strategy (or successor);

- h. Integrate Sustainable Drainage Systems (SuDS) as part of a comprehensive site-wide approach; and
- Ensure that the design of streets and spaces is inclusive and accessible, considering the needs of all users.

Why we are doing this

Relevant objectives: 1, 2, 4, 5

Cambridge, like many historic cities is characterised by a compact form that allows easy movement as a pedestrian or cyclist. This inherent character should underpin the approach to creating a new city district at North East Cambridge centred around walking and cycling to create a 'walkable neighbourhood' and capitalising on high quality public transport options underpinned by a comprehensive open and green space network creating a healthy and inclusive place.

The policy seeks to secure healthy, inclusive and safe streets and open spaces in accordance with paragraph 92 of the NPPF (2021) and best practice including guidance Manual for Streets (2007), Local Transport Note 1/20 (2020) and Public Health England's Healthy High Streets: Good Place-making in an urban setting (2018). In accordance with achieving the 'principles of inclusive design' streets within North East Cambridge are to have a significant 'place' as well as 'movement' function.

The quality of streets and spaces links with other policies in the Area Action Plan which together combine to clearly set out expectations for the quality of future development. An integrated approach to design is needed to help make the best use of the land available and to effectively respond to the challenges of creating a high-density new city district. For streets and spaces, this includes provision of informal and formal doorstep play spaces, high quality landscaping and surface water management which is integrated into the public realm achieving valued amenity and biodiversity enhancement.

With respect to its movement function, a street user hierarchy places pedestrians at the top followed by cyclists, public transport users, specialist service vehicles (emergency, services, waste etc.) with other motor traffic coming last, including car sharing and electric vehicles. This approach will ensure that the needs of people rather than motorised vehicles are considered and accommodated from an early stage in the design of a development proposal.

Beyond the immediacy of North East Cambridge, the connections formed physically and socially with the surrounding existing neighbourhoods and at a city and wider level will also be crucial to the sustainability of the area and the achievement of an inclusive district.

Landscape design and trees

High quality landscape proposals will be required as part of developments, ranging from housing, retail, commercial, industrial and mixed-use schemes. High quality landscape design can create usable spaces for occupier amenity as well as being functional - in respect of SuDS, microclimate and providing an attractive setting for buildings. Landscaping also plays a significant role in establishing an area's character, integration of a development into that character as well as mitigating the impact of development from sensitive heritage and landscape features. Landscaping proposals will be especially important within prominent locations, such as along street frontages, transport interchanges, and other public spaces.

While the details required for a landscape scheme will vary according to the type and location of a development, landscaping should be included as an integral part of the development proposal at an early stage. Careful consideration should be given to the existing character of a site, and how any features such as surface treatments, furniture, lighting, public art, boundary treatments and other structures are to be appropriately used and how planting and trees may mature over time. Poorly designed landscape schemes can compromise amenity, environmental value and use. Leaving insufficient space for trees to grow can lead to the blocking of natural sunlight, issues of overhanging, subsidence and damage to foundations, resulting in subsequent applications for tree removal.

The tree population of Cambridge and the wider Greater Cambridge area makes a significant contribution to the city's character, appearance and setting. Trees are fundamental to the management of temperatures, storm water, and the provision of cleaner air. They provide an essential habitat for wildlife and promote wellbeing,

providing opportunities for relaxation, exercise and meditation. Post construction and occupation, the management and protection of trees is a constant challenge and therefore a Planting, Maintenance and Management Plan will be required for major development proposals to set out an approach to address this.

Deciduous trees provide shade to buildings, helping to manage solar gain when needed in summer months. Trees, broadleaf and deciduous, also contribute to reducing 'heat islands' whereby the temperatures of built-up areas are significantly higher than areas outside them. Trees add biodiversity value to areas and as such provide habitats for many species. This policy will contribute towards achieving onsite biodiversity net gain as required by Policy 5.

The North East Cambridge area has relatively low tree canopy coverage when compared with surrounding areas, making it essential to ensure any new development retains trees of value and makes provision from the outset for the planting of new trees of appropriate species and size so as to ensure a sustainable increase in overall canopy cover. There are some localised areas of extensive tree coverage which will require further site investigation including along the First Public Drain and around Chesterton Sidings.

Cambridge City Council has a 'Cambridge City Tree Strategy 2016-2026 to protect, enhance and manage trees in the City. In the absence of a similar strategy for South Cambridgeshire, it is considered appropriate that the approach identified for the City will be used to inform all development proposals coming forward in the NEC AAP area.

The Council will seek to make provision for the protection of trees of value by serving TPOs on existing trees and those to be planted as part of new development.

Evidence supporting this policy

- North East Cambridge Landscape Character & Visual Assessment (2020)
- North East Cambridge Transport Assessment (2019)
- Cultural Placemaking Strategy (2020)
- Innovation District Paper (2019)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

- Community Safety Topic Paper (2021)
- Health and Well Being Topic Paper (2021)
- Climate Change, Energy and Sustainable Design and Construction Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- North East Cambridge Stakeholder Design Workshops 1-6 event records 2019-2020)

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 15: Cambridge Northern Fringe East and new railway Station Area of major Change
- Policy 35: Protection of human health and quality of life from noise and vibration
- Policy 36: Air quality, odour and dust
- Policy 37: Cambridge Airport Public Safety Zone and Air Safeguarding Zones
- Policy 40: Development and expansion of business space
- Policy 50: Residential space standards
- Policy 51: Accessible homes
- Policy 55: Responding to context
- Policy 56: Creating successful places
- Policy 57: Designing new buildings
- Policy 59: Designing landscape and the public realm
- Policy 60: Tall buildings and the skyline of Cambridge
- Appendix F: Tall Buildings and the Skyline
- Policy 65: Visual pollution
- Policy 67: Protection of open space

- Policy 68: Open space and recreation provision through new development
- Appendix I: Open Spaces and Recreation Standards
- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 71: Trees
- Policy 80: Supporting sustainable access to development

South Cambridgeshire Local Plan

- SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- HQ/1: Design Principles
- NH/2: Protecting and Enhancing Landscape Character
- NH/4: Biodiversity
- NH/5: Sites of Biodiversity or Geological Importance
- NH/6: Green Infrastructure
- Policy NH/7: Ancient Woodlands and Veteran Trees,
- NH/8: Mitigating the Impact of Development in and adjoining the Green Belt
- NH/14: Heritage Assets
- H/8: Housing Density
- H/12: Residential Space Standards
- H/18: Working at Home
- Policy HQ/1: Design Principles
- SC/1: Allocation for Open Space
- TI/1: Chesterton Rail Station and Interchange
- TI/4: Rail Freight and Interchanges
- TI/6: Cambridge Airport Public Safety Zone
- TI/8: Infrastructure and New Developments
- TI/9: Education Facilities

Other Council/County strategy and policy and other supporting guidance

- Cambridge City Wide Tree Strategy 2016-2026 (approved 2015)
- South Cambridgeshire Trees and development sites Supplementary Planning Document (2009)

- Manual for Streets (2007)
- NHS 'Putting Health into Place (2019)'
- Public Health England Healthy High Streets: good place making in an urban setting (2018)
- Draft Making Space for People Supplementary Planning Document (2019)

5.3 Open spaces

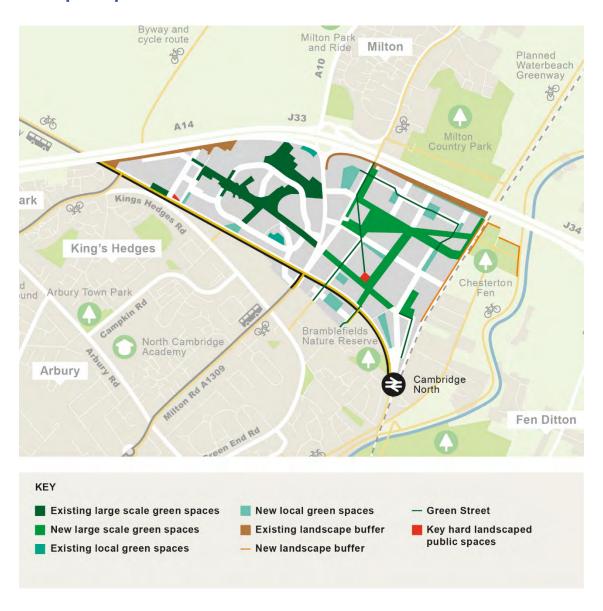


Figure 19: Open space network to be created by the Area Action Plan

Open space, green infrastructure, sports and recreation areas and facilities are highly valued by local people and play a key role in the landscape setting and local identity of Greater Cambridge. There are several green open spaces adjacent to the

Area Action Plan area, as well as important mature landscaped spaces within it, such as within Cambridge Science Park. This policy sets out how we will create a functional and beautiful open space network, including improving existing open spaces and making the most of assets such as the First Public Drain.

Policy 8: Open spaces for recreation and sport

North East Cambridge open space requirements

Development proposals must make provision for new or enhanced open space and recreation sites, which meet the health and wellbeing needs of existing and future users of the area. The successful integration of open space into a proposed development must be considered early in the design process through a masterplan led process considering the relationship with the wider Area Action Plan area.

Delivery and Maintenance

Where any form of new open space is proposed, the Councils will enter into a Section 106 agreement with the developer to deliver the open space and to secure it in perpetuity, including appropriate arrangements for its future management and maintenance.

Quantitative

Provision will be made in accordance with Cambridge City local standards of provision of all relevant types of open space (see Cambridge Local Plan 2018, Appendix I or any future replacement) and the Councils' open space and sports strategies, where applicable.

It is expected that all informal open and children's play space requirements will be met within the Area Action Plan area as identified on the Spatial Framework. Table x below sets out the informal open space and children's play space requirement (based on the Cambridge Local Plan standards (2018)) to be met within each of the development areas shown at Figure x.

Provision of outdoor sports facilities will be met through a combination of on-site provision, and funding towards new or improved off-site facilities. This will help meet

the sporting needs of the site and the wider area to be delivered in the most efficient and effective manner.

For any development where open space provision cannot be met in full on-site, funding will be sought towards quantitative and qualitive off-site improvements which will be secured through a planning obligation. Similarly, a new pedestrian/cycle bridge over the railway should be provided to improve recreational access to the River Cam and wider countryside as part of the wider green infrastructure network and have a positive impact on health and well-being.

Opportunities to provide food growing spaces for residents on-site are also expected and should be delivered in innovative ways that are easily accessible to residents and the wider community. Development proposals should demonstrate how opportunities for food growing have been considered and incorporated into the design of both buildings and their surrounding public realm and open spaces.

NEC Landowner Parcel	Minimum net additional informal open space (hectares)	Minimum net additional provision for children and teenagers play space (hectares)
Chesterton Sidings	3.25	0.74
Cowley Road Ind Estate	0.95	0.22
Anglian Water /		
Cambridge City Council		
site	15.31	3.46
St Johns Innovation Park	0	0
Merlin Place	0.05	0
Cambridge Business		
Park	1.40	0.31

Nuffield Road Industrial		
Estate	1.17	0.26
Trinity Hall Farm		
Industrial Estate	0	0
Milton Road Car		
Garages	0.19	0.05
Cambridge Science Park	0.22	0
Cambridge Coloride Fank	0.22	
Cambridge Regional		
College	0	0
Net additional informal		
open space and		
children's play space	00.54	
provision	22.54	5.04

The table above is based on the housing provision identified in Policy 13a: Housing and the assumed housing mix set out in Appendix 1. Any development proposals which diverge from these figures will need to consider their implications for open space provision. Proposals for individual land parcels will need to demonstrate how they support delivery of North East Cambridge open space network identified in Figure 20 and the Spatial Framework.

For open space requirements, where there are deficiencies in certain types of open space provision in the area surrounding a proposed development, the Councils will seek to prioritise those open spaces deficient in the area.

Qualitative

The Councils will require all open spaces to be:

- High quality
- Low maintenance
- Water efficient and climate change resilient

- Publicly accessible with a multi-use functionality
- Accessible and usable throughout the year to ensure unrestricted access for new and existing residents and visitors to the area.

These spaces may include innovative forms and layouts allowing for a variety of activities that promote health and well-being. Proposals will need to demonstrate how existing and new open spaces within North East Cambridge connect to form a coherent and legible network with further connections to open spaces within and beyond the Area Action Plan area.

Protection of existing open space

There will be a presumption against any development proposals that result in the loss of a sport, open space, recreation or play facility except where it can be demonstrated that there is an excess of provision, or where alternative facilities of equal or better quality will be provided as part of the development or provided off-site with enhanced accessibility by foot and cycle.

The Councils will only consider the reconfiguration of existing open spaces where the space is re-provided on-site to an equal size, and where this will achieve enhancements to address identified deficiencies in the capacity, quality and accessibility of open space.

For the purpose of environmental amenity and landscaping, the linear planting and open space along North East Cambridge's boundary formed with the A14 and roadside noise barrier, railway line and Cambridge Guided Busway will be protected from development.

Ancillary development on open space

Proposals for ancillary development on open space within North East Cambridge will be supported where:

- a) It is necessary to/or would facilitate the proper functioning of the open space;
- b) Is appropriate in scale;
- c) It would contribute positively to the use and quality of the open space.

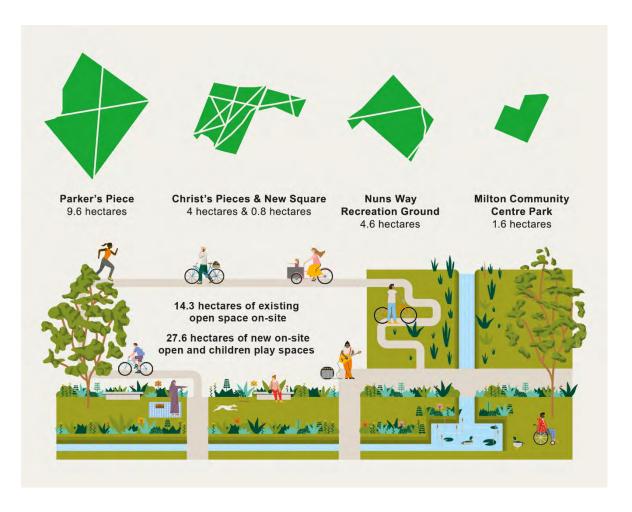


Figure 20: Scale comparison of existing open spaces in Cambridge, and the major proposed new open spaces within North East Cambridge

Why we are doing this

Relevant objectives: 1, 2, 4, 5

An essential part of the character of Cambridge stems from its many green spaces, trees and other landscape features, including the River Cam. These not only play an important role in promoting both active and passive sport and recreational activities but also provide valuable amenity space and support for biodiversity.

Open space, green infrastructure, sports and recreation areas and facilities are highly valued by local people and play a key role in the landscape setting and local identity of Greater Cambridge. They also provide important habitats for wildlife and allow people to have daily encounters with the natural environment including through sensory attractions. Open spaces not only help support the health, social and

cultural well-being of local communities but also help support strategies to mitigate the adverse effects of climate change.

All new development should make provision for new or enhanced open space and recreation sites/facilities on-site. The successful integration of open space into a proposed development should be considered early in the design process as part of a placemaking led approach, including the provision of footpaths, running trails and cycle routes.

North East Cambridge straddles two local planning authorities each currently with their own open space standards for new residential development. These are based upon each area's general characteristics and needs; standards in South Cambridgeshire reflect its rural nature while those in Cambridge relate to its more urban environment. Reflecting the location and urban environment of North East Cambridge the current adopted open space standards detailed in the Cambridge Local Plan 2018 have been applied.

Development proposals which are required to contribute towards the open space provision must provide this in accordance with the North East Cambridge Spatial Framework and Figure 21 to ensure that open space is provided in a coordinated and comprehensive form which forms parts of a coherent green network.

Responding to issues raised during consultation on the draft plan, the spatial framework was amended to including larger amounts of onsite open space. Informal open space and children's play standards are met in full. This will ensure that all new homes at North East Cambridge will be within a 5 minute walk of an open space. And whilst not formally part of planning standards, the open space network and provision will also be in line with the Accessible Natural Greenspace Standard (ANGSt) developed by Natural England, where all homes will also be within 300m of an open space of at least 2ha in size.

Provision of formal sports will be met through a combination of onsite provision, and funding towards new or improved off site facilities. This will help the sporting needs of the site and the wider area to be delivered in the most efficient and effective manner. Due to the potential for flooding, the Chesterton Fen area will not be considered as part of any calculation for formal recreational or sports provision.

Specific off-site contributions will be sought towards a new pedestrian/cycle bridge over the railway to improve recreational access to the River Cam and wider countryside as part of the wider green infrastructure network.

The provision of informal open space and children's play space can be successfully integrated into the development and associated public realm through a variety of ways such as door-step play spaces, pocket parks, trim trails and walking and running routes. The North East Cambridge Open Space Topic Paper (2021) and Typology Study and Development Capacity Assessment (2021) provides further examples of how these features can be successfully integrated into public spaces and located at key pedestrian and cycling intersections. Provision should also respond to the wider context around North East Cambridge. It is also essential that any existing open space deficiencies in neighbouring residential areas, such as equipped children play spaces (as set out in part in the Cambridge's Outdoor Play Investment Strategy) are identified. These could provide opportunities for new offsite provision in order to meet the need of both new and existing communities.

Existing facilities within North East Cambridge and the wider local area, including Cambridge Science Park and in North East Cambridge and nearby at North Cambridge Academy, play a large role in providing open space, sport and recreation provision for existing residents and businesses employees. and Cambridge Regional College. These are an important element to the overall sport and recreation mix in North East Cambridge and however, opportunities to extend or make these existing facilities publicly available at certain times of the day and week will add capacity to sports provision within the area and negate, at least in part, the need to make similar services available elsewhere.

Access to food growing opportunities is an important component of living within higher density neighbourhoods where the provision of traditional allotment pitches can be challenging to deliver or where access to existing allotments is difficult due to high demand. The type of development proposed for North East Cambridge presents the opportunity to deliver innovative forms of food growing opportunities including on private balconies, within communal spaces such as internal courtyards and rooftops within development blocks and within public spaces such as parks and the wider public realm. Whilst these forms of food growing do not replicate a traditional

allotment pitch, they do allow people to grow their own food, connect with the natural environment and offer wider health and well-being benefits. They can also help foster a sense of community and therefore can form an important part of the meanwhile uses (see Policy 28) that come forward ahead or alongside of development at North East Cambridge.

Open spaces will need to be high quality, inclusive, low maintenance, climate change resilient and multi-functional to maximise their utility value, as well as being both available and functional throughout the year, this will include consideration of drainage (see policy 4c: Flood Risk and Sustainable Drainage), and shading (see policy 7: creating high quality streets, spaces and landscape).

Open spaces should contain such facilities and equipment as appropriate to the functions and purposes of the open space being provided. Spaces should also allow for a range of 'occasional' events that will help support community activities and sporting events. The provision of small scale ancillary facilities that are appropriate to and support the functions, uses and enjoyment of the open space will be supported. Where the open space accommodates a number of user groups, the provision of shared facilities can overcome the need for several smaller buildings thereby making more efficient use of both land and buildings. The sharing of facilities can also encourage greater community involvement including community volunteering initiatives with tool sheds and other shared facilities. The siting of ancillary facilities needs to be carefully planned to ensure these do not detract from the character of the space, are detrimental to its functions, or give rise to any conflicts with other uses of the open space or surrounding uses.

North East Cambridge will take a number of decades to fully build out, and over this time open space, sport and recreation provision within Greater Cambridge will change. The councils will continue to update their sport and recreation strategies and evidence over this period, and planning applications should have regard to the latest information available.

The requirements for the different types of open space should be applied in a cumulative way. However, the Council may seek variations in the composition of the open space in order to secure the best outcome for the development and the

surrounding area, in particular on smaller, more constrained sites where it is not physically possible to deliver several different types of open spaces on-site.

Planning obligations (section 106 agreements) or conditions will be applied to ensure the delivery of on and off-site provision is linked and effectively phased to the delivery of new homes. Arrangements for effective on-going maintenance of open space and facilities will also be required.

Evidence supporting this policy

- Greater Cambridge Green Infrastructure Opportunity Mapping Recommendations report (2021)
- Ecology Study (Biodiversity Study) (2020)
- Habitat Regulations Assessment (2021)
- Cultural Placemaking Strategy (2020)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

- Open Space Topic Paper (2021)
- Health Facilities and Wellbeing Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)

Monitoring indicators

Amount of new open spaces permitted (hectares)

Policy links to adopted Local Plans

Cambridge Local Plan

- Policy 15 Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 59 Designing landscape and the public realm
- Policy 67 Protection of open space
- Policy 68 Open space and recreation provision through new development
- Policy 73 Community, sports and leisure facilities

South Cambridgeshire Local Plan

- Policy SS/4 Cambridge Northern Fringe East and Cambridge North railway
- Station
- Policy NH/6 Green Infrastructure
- Policy SC/2 Health Impact Assessment
- Policy SC/8 Protection of Existing Recreation Areas, Allotments and Community Orchards

5.4 Density, heights, scale and massing

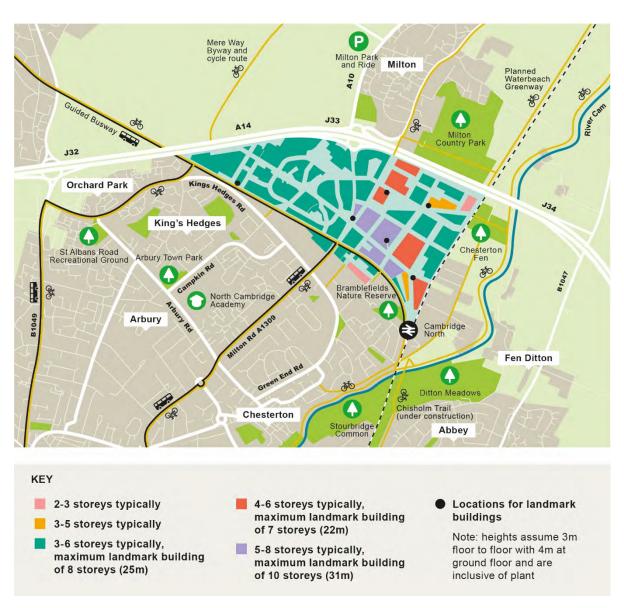


Figure 21: Building heights considered suitable for North East Cambridge

North East Cambridge should be a place which enables people to live, work and relax within walking distance of everything they need. Building to a higher density means land can be used more efficiently and it makes community services, shops and other facilities more viable. The Councils have undertaken evidence which shows that it is possible to build taller in some parts of the area without a negative impact on the historic environment, local townscape and wider landscape. This policy sets out expected building heights and densities across the area and how the scale and massing (shape) of buildings should consider its impact on the local and wider context.

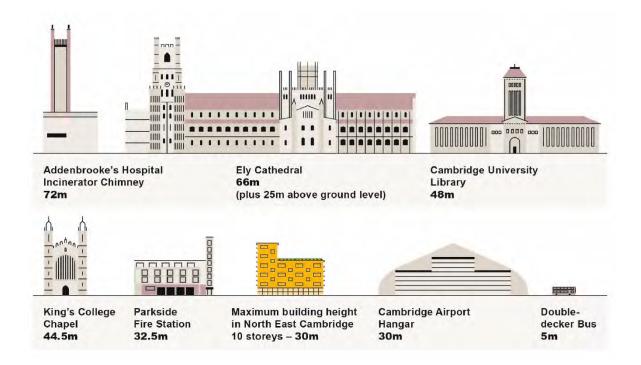


Figure 22: Comparison of proposed building heights within North East Cambridge, and existing taller buildings in the area.

Policy 9: Density, heights, scale and massing

Development proposals should be of an appropriate height, scale and massing in order to create distinctive high-quality buildings which make a positive contribution to the existing and emerging context when considered from immediate, mid-range and long-range views. Taller buildings, and those in prominent locations, should respond appropriately and sensitively to the local setting, add to the attractiveness and

interest of the skyline and landscape, and be responsive to the historic wider setting of the City and related heritage assets.

Development proposals should adhere to the maximum building heights identified on Figure 22. The identified heights allow for localised increases in height in specific locations across North East Cambridge to help define key centres of activity within the area and help with wayfinding. Any proposals that seek to create tall buildings (as defined below) by virtue of overall height or massing or a combination of will need to follow the assessment criteria and process identified in the Cambridge Local Plan (2018) Appendix F or successor.

Where applicable, the net residential development densities shown on Figure 24 should be used to inform schemes coming forward. Broadly, densities will increase around highly accessible parts of the Area Action Plan area, such as the District Centre, through the intensification of appropriate uses and well-designed building forms.

All proposals will be assessed against Appendix F of the Cambridge Local Plan (or successor) as well as the following criteria:

- a) Location, setting and context applicants will need to assess the impact of their development proposals on the historic environment (heritage assets or other sensitive receptors), key views and landscape setting as well as existing and emerging townscape at North East Cambridge and its surroundings. Development proposals must clearly demonstrate that they do not negatively impact on the character of Cambridge, as a city of spires and towers emerging above the established tree line.
- b) Exemplary design using scaled drawings, sections, accurate visual representations and models, applicants will need to demonstrate that the scale, massing, architectural quality, detailing and materials of proposals create elegant and well-proportioned buildings that create well-articulated, finer grain and human scale development forms. In the case of taller structures, proposals should also ensure good separation between adjacent buildings, to create well-articulated additions to the Cambridge skyline.

- c) Amenity and microclimate applicants will need to demonstrate that there are no adverse impacts created by their proposals, including cumulative impacts, on neighbouring buildings and open spaces in terms of the diversion of wind, overlooking or overshadowing, glare and that there is adequate sunlight and daylight within and around the proposals.
- d) Public realm applicants will need to show how the space around buildings will be detailed, including how a human scale is created at street level.
- e) Airport Safeguarding Assessment where required, this assessment will be needed to understand the implications of buildings over 15m) on the operational requirements of Cambridge Airport.

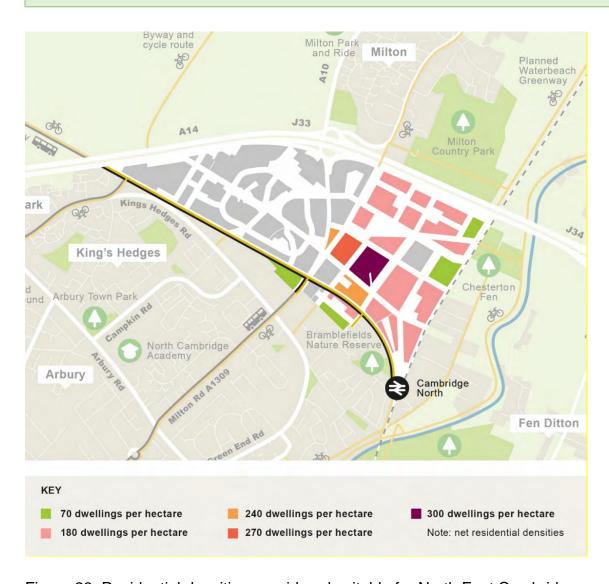


Figure 23: Residential densities considered suitable for North East Cambridge

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

North East Cambridge presents the opportunity to create a self-sustaining new city district that can accommodate a significant number of new homes and jobs, alongside open spaces, retail, leisure and other activities. The densities promoted through the Plan reflect the area's accessibility to Cambridge North Station, the guided busway and planned public transport enhancements as well as ensuring efficient use is made of brownfield land within Cambridge. Nevertheless, the councils recognise that a balance needs to be struck between safeguarding the setting of Cambridge, key approaches to the city and historic core and providing sufficient development potential to create a strong a vibrant district.

Therefore, the Area Action Plan takes a managed approach to density and building heights. With respect to building heights, these have been tested through a Landscape Character and Visual Impact Appraisal (2020), Heritage Impact Assessment (2021) and Townscape Assessment (2021). These studies have informed a Townscape Strategy (2021) that draws together the recommendations and conclusions to help define an approach to building heights.

These assessments have tested building heights across the Area Action Plan area and concluded that there is capacity to accommodate some taller buildings in the District Centre without causing harm to the setting of Cambridge, its Historic core, the wider Fen landscape or other nearby heritage assets including backdrops, and important local views, prospects and panoramas. The North East Cambridge Spatial Framework and Figure 22 set out the maximum building heights at North East Cambridge based on these assessments as well as the councils wider placemaking aspirations for the area. Development proposals which exceed the building heights identified in Figure 22 will generally not be supported.

The approach to building heights across North East Cambridge, whilst taller than the prevailing local context, is typical of the range of heights being brought forward on other development sites in and around Cambridge. The policy wording identifies the need for elegant and well-proportioned buildings that create well-articulated, finer grain and human scale development forms which reflects the prevailing character of

central Cambridge. The prevailing building height of development in the city is currently between 2 and 5 storeys with other taller structures in prominent locations. In the Cambridge context, a tall building is broadly defined as 'any structure that breaks the existing skyline and/or is significantly taller than the surrounding built form'. This approach is derived from Historic England guidance note 4, that identifies how 'what might be considered a tall building will vary according to the nature of the local area. Applied to a North East Cambridge context, taller buildings are defined as anything in excess of five residential storeys (15m). Such proposals require closer scrutiny to ensure any adverse effects (visual, functional or environmental) are avoided and beneficial impacts (placemaking) are realised.

Taller buildings at North East Cambridge can help people navigate through this new city district by providing reference points and emphasising the hierarchy of place. At North East Cambridge, the taller buildings are located within the District Centre whilst Landmark Buildings are at important street intersections. Taller and landmark buildings that are of exemplary architectural quality, in the right locations, can make a positive contribution to Cambridge's townscape, and many tall buildings, both historic and more modern editions, have become a valued part of the city's identity. Landmark buildings also need to stand out through their exceptional architectural approach and quality, not only through their greater height. In exceptional circumstances and demonstrated where justified, a landmark building may exhibit an increased massing and/or a different material palette than the current or emerging prevailing character.

Nevertheless, taller buildings can have detrimental visual, functional and environmental impacts if they are inappropriate located and/or of poor-quality design. Therefore, taller buildings within North East Cambridge will need to be carefully managed as set out in Policy 9.

In the case of taller buildings, proposals will need to ensure good separation between adjacent buildings, to create well-articulated additions to the Cambridge skyline where taller buildings read as incidents and where each considers its impact on the immediate and wider context. Proposals for taller buildings or buildings of increased scale and massing, will need to demonstrate that they do not harm the amenity of their surroundings, the setting of the City and the wider landscape

character. Site specific landscape and heritage assessments should include the key viewpoints identified within the North East Cambridge Heritage Impact Assessment and Landscape Character and Visual Impact Assessment. The North East Cambridge area lies approximately 2.5 miles (4kms) north east of the historic core of Cambridge and so the impact on the Historic Core needs to be considered in terms of the potential to impact on the setting of the City from approach routes and from the various vantage points that allows the historic core in relation to the outlying areas to be understood.

Figure 21 is based on an assumed floor to floor height for residential use of 3m and overall indicated heights are inclusive of plant and lift overruns. It is expected that ground floors will be 4m floor to floor to accommodate non-residential uses. While the plan shows typical height ranges, lower forms will also be acceptable and it is expected that a design led approach will be taken to achieve a human scale, plot-based approach to development.

Density, scale and massing

Densities can form part of a plan-led approach to managing future growth, including making optimal use of a site such as North East Cambridge which is well connected by public transport and will have good access to new services and facilities.

The size of the North East Cambridge area means that a managed approach to scale, massing and the location of buildings is needed to help safeguard the setting of the City. A clear strategy is set out within the Area Action Plan area to tie in with a placemaking led approach that requires high quality streets and spaces along with great architecture. To help create human scaled streets and places, finer grain, plot-based architecture is needed that in turn will create a greater variety of architectural responses and help to deliver a well-articulated skyline. Larger format commercial and R&D buildings create inherent challenges in trying to reconcile the required flexible floorplates with the need to avoid bulky building forms. The use of setbacks, integration of flues and promoting mixed use building forms are all ways in which scale and massing can be successfully managed whilst accommodating flexibility of floorplate.

The density of development will play a significant role in determining the kind of place created. It helps to define the character of development through the urban form, building types utilised and the quality of open spaces and streets that form the structure of urban places.

In line with NPPF (2021) Paragraph 141 and the MHCLG National Design Guide (2019), which advocate the uplifting of density 'in city and town centres and other locations well served by public transport', development at North East Cambridge will be expected to make efficient and effective use of brownfield land available to achieve a critical mass of population required to create a self-supporting new city district that internalises trips and takes advantage of existing and planned public transport that provides good accessibility on foot and by bicycle.

The Area Action Plan will facilitate the delivery of a compact, higher density new city district that maximises walking and cycling connectivity and will deliver a radically different form of development based on density and mixed-use, high-quality design that responds to the established character of Cambridge.

A range of development typologies and densities have been considered within the Typology and Development Capacity Study that have informed the understanding of site capacity and how different land uses can be compatible and land efficient. Buildings will need to be innovative to provide a range of uses to deliver an appropriately dense predominantly mid-rise, attractive street based new city district in accordance with Figure 24.

North East Cambridge falls within the Cambridge Airport Safeguarding Zone and therefore where taller buildings are proposed may have implications on the airport's operational requirements. Development proposals over 15m AOD will be required to prepare an Airport Safeguarding Assessment to demonstrate that it will not impact on Cambridge Airport in terms of aircraft and airport operational safety.

Evidence supporting this policy

- North East Cambridge Landscape Character & Visual Appraisal (2020)
- Innovation District Paper (2019)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

 North East Cambridge Stakeholder Design Workshops 1-6 – event records 2019-2020)

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 15: Cambridge Northern Fringe East and new railway Station Area of major Change
- Policy 37: Cambridge Airport Public Safety Zone and Air Safeguarding Zones
- Policy 40: Development and expansion of business space
- Policy 50: Residential space standards
- Policy 51: Accessible homes
- Policy 55: Responding to context
- Policy 56: Creating successful places
- Policy 57: Designing new buildings
- Policy 59: Designing landscape and the public realm
- Policy 60: Tall buildings and the skyline of Cambridge
- Appendix F: Tall Buildings and the Skyline
- Policy 65: Visual pollution
- Policy 67: Protection of open space
- Policy 68: Open space and recreation provision through new development
- Appendix I: Open Spaces and Recreation Standards
- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 71: Trees
- Policy 80: Supporting sustainable access to development

South Cambridgeshire Local Plan

- SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- HQ/1: Design Principles
- NH/2: Protecting and Enhancing Landscape Character
- NH/4: Biodiversity
- NH/5: Sites of Biodiversity or Geological Importance
- NH/6: Green Infrastructure
- NH/8: Mitigating the Impact of Development in and adjoining the Green Belt
- NH/14: Heritage Assets
- H/8: Housing Density
- H/12: Residential Space Standards
- H/18: Working at Home
- SC/1: Allocation for Open Space
- TI/1: Chesterton Rail Station and Interchange
- TI/4: Rail Freight and Interchanges
- TI/6: Cambridge Airport Public Safety Zone
- TI/8: Infrastructure and New Developments
- TI/9: Education Facilities

5.5 North East Cambridge Centres

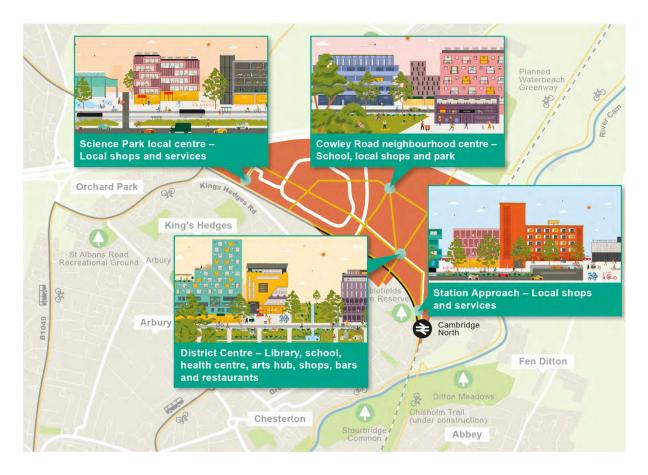


Figure 24: Location of new centres in North East Cambridge

Five new centres for community services, retail, leisure and cultural activity will be created within the North East Cambridge Area Action Plan area: District Centre, Science Park local centre, Station Approach local centre, Cowley Road local centre and Greenway local centre. This section sets out the mix of uses that are envisaged in each centre, and principles for their design. It is also illustrated how this could be achieved in practice to make lively, welcoming and characterful places for people living, working and visiting this new city district.

Policy 10a: North East Cambridge Centres

The centres within North East Cambridge must be designed to create multifunctional, vibrant activity hubs that supports community development and encourages a diversity of people to interact and dwell. Proposals must be designed to create safe and active public spaces which meet the needs of all parts of the community. Development proposals within the identified centres (see Policy 10b to 10e) will be permitted where they are in accordance with the other policies of the Area Action Plan and address the following criteria.

- A mix of residential and employment (Class E(g)) uses should be provided above ground floor level, in accordance with Policy 12a: Business and Policy 13a: Housing;
- The provision of a range of retail units, varying in size between 50m2 and 150m2 gross which will serve the day to day needs of people living and working in this area, in accordance with Policy 15: Shops and local services;
- Community and cultural facilities such as community centres, indoor and rooftop sports and leisure, health facilities, libraries and multi-use cultural venues should be provided within the identified centres as part of mixed-use buildings to make efficient use of land.
- Development should create a well-designed, high quality and inclusive public realm, providing spaces for movement, interaction, circulation, seating and biodiversity to enable public life to thrive. Streets and spaces should be designed to be multi-user, multi-generational, flexible, adaptable and climate change resilient.
- The storage of waste and recyclable materials, bicycles and utilities infrastructure for residential and commercial uses should be integrated into the design of buildings to avoid having a negative effect on the public realm.
- Proportionate on-site measures to support the creation, protection, enhancement and management of local biodiversity and Green Infrastructure and to bring people closer to nature;
- Due to the built-up nature of the centres, surface water flooding should be mitigated in the design of the development and public realm;
- Servicing should be accommodated 'on street'.



Figure 25: Illustration of the design vision for the District Centre

Policy 10b: District Centre

A new District Centre should be provided in accordance with the Spatial Framework to provide the following:

Current / previous land use

- Safeguarded Waste Transfer Station
- Golf Driving Range
- Former Park and Ride facility
- Office buildings

Acceptable land uses

- Residential (see Policy 13a)
- Employment (see Policy 12a)
- Town Centre uses (see Policy 15)
- Community and cultural including primary school and Sport and Leisure (see Policy 14)
- Health facilities (see Policy 14)

Indicative Development Capacity

Residential units (Class C2 and C3)	Employment (Class E(g)	Retail (Class E(a) and Class E(b)	Community and Cultural Uses (Class E(d), Class E(e) and Class E(f), F1, F2)
c. 800 units	c. 20,000m ²	7,800m ²	7,100m² (plus primary school)

Ownership

- North Cambridge City Council
- South The Crown Estate

Phasing

2025-2030	2030-2035	2035-2040	Beyond Plan period
-	x	X	x

Development Requirements

Key enabling moves required to facilitate development include:

- The relocation of the Waste Transfer Station, in accordance with Policy 26 and the Cambridgeshire and Peterborough Minerals and Waste Local Plan and Policies Map, for developments which contain sensitive uses; and
- The closure of the Golf Driving range, and its relocation if required in accordance with paragraph 99 of the NPPF (2021).

Appropriate uses

- A mix of retail, community, indoor and rooftop sports and leisure, health, cultural and education provision to support the day to day needs of people living and working within and adjacent to North East Cambridge;
- Employment and residential development above ground floor level;
- Open space and amenity provision as part of the First Public Drain, District Square and Linear Park.

Design requirements

- Development should improve the arrival experience to the District Centre from the surrounding areas;
- Due to the District Centre falling within multiple ownerships, proposals will be required to reflect the grain, scale and form of development on both sides to create a coherent and legible place;
- The First Public Drain is a key asset that should be protected and enhanced as a biodiversity corridor and safe amenity space which is integrated into the District Centre. An Arboricultural Survey and Biodiversity Action Plan will be needed to demonstrate how enhancements to this corridor will protect the most valuable trees, habitats and other natural assets while also delivering a biodiversity net gain in accordance with Policy 5: Biodiversity Net Gain;
- The public realm within the District Centre should provide spaces which are available for everyone to enjoy all year round, during the day and evening and that are safe. These spaces should invite people to spend time there to help foster social interaction and a vibrant community;
- A new District Square should be created at the intersection of the District Centre, diagonal link and Linear Park. The design of the District Square should have regard to Policy 7: Legible Streets and Space, and:
 - a) Be of a size and layout appropriate to accommodate public gatherings, informal and formal uses and larger one-off events.
 - b) Support use by a range of creative local businesses through the provision of flexible space for market stalls to operate;
 - c) Is activated by a mix of surrounding uses to create a distinctive and vibrant urban space throughout the day;

- d) Comprehensively address management issues at the design stage such as providing appropriate space for market and other event storage within adjacent public buildings or facilities;
- e) Provide the necessary infrastructure to support a range of activities including electricity for pitches and designated loading and unloading spaces; and
- f) Be designed to complement rather than conflict with the neighbouring uses in terms of quality of life / amenity issues such as noise, odour and servicing.



Figure 26: Illustration of the design vision for the Science Park Local Centre

Policy 10c: Science Park Local Centre

A new Local Centre should be provided in accordance with the Spatial Framework to include the following:

Current / previous land use

Vacant land – extant planning permission for office building

Acceptable land uses

- Residential (see Policy 13a)
- Employment (see Policy 12a)
- Town Centre uses including retail (see Policy 15)
- Community and cultural (see Policy 14)
- Delivery and consolidation Hub (see Policy 12b and Policy 20)
- Car Barn (see Policy 22)

Indicative Development Capacity

Residential units (Class C2 and C3)	Employment (Class E(g))	Retail (Class E(a) and Class E(b)	Community and Cultural Uses (Class E(d), Class E(e) and Class E(f), F1, F2)
0	c. 3,500m ² Delivery and consolidation Hub: 1,150m2 (Class B8)	1,200m ²	150m ²

Ownership

• Trinity College

Phasing

2025-2030	2030-2035	2035-2040	Beyond Plan period
-	-	x	-

Development Requirements

Appropriate uses

- Retail and community floorspace appropriate to the role and size of the Local Centre with residential and/or employment floorspace above ground floor level;
- A delivery and consolidation hub to be located within the Local Centre to consolidate last mile deliveries in accordance with Policy 20.

Design requirements

- Development should improve the arrival experience to the Local Centre and Cambridge Science Park from Cambridge Regional College, the Cambridgeshire Guided Busway and the surrounding areas;
- Provide an open space of high amenity and biodiversity quality to the east of the Local Centre which is available for public use;
- New public spaces should be designed to encourage street activity and opportunities for people to dwell within the Local Centre;
- Development should address King's Hedges Road/Cambridgeshire Guided
 Busway through active frontages where possible and by bringing the building
 line forward to create a strong urban character;
- Enhance the junction with the Cambridgeshire Guided Busway and King's Hedges Road through significant public realm improvements including tree planting and pedestrian and cycling crossings whilst minimising opportunities for people to visit the Local Centre by private vehicle to ensure consistency with the NEC AAP Trip Budget and to create a safe and comfortable environment for pedestrians and cyclists Proposals should be designed to encourage the through movement of people from the Guided Busway bus stop to Cambridge Regional College. These improvements would need to be carried out in partnership between the Greater Cambridge Partnership, Cambridgeshire County Council, Cambridge Science Park and Cambridge Regional College.



Figure 27: Illustration of the design vision for Station Approach local centre

Policy 10d: Station Approach

A new Local Centre should be provided in accordance with the Spatial Framework to include the following:

Current/previous land use

- Railway car park
- Former railway sidings
- Vacant land

Acceptable land uses

- Residential (see Policy 13a)
- Employment (see Policy 12a)
- Town Centre uses including retail (see Policy 15)
- Community and Cultural Uses (see Policy 14)
- Car Barn (see Policy 22)

Indicative Development Capacity

Res	sidential	Employment	Retail	Community and Cultural Uses
units	(Class	(Class E(g)	(Class E(a)	(Class E(d), Class E(e) and
C2 a	and C3)		and Class	Class E(f), F1, F2)
			E(b)	

<u></u>			
c. 500 units	c 12 000m2	1,200m2	150m2
C. 500 driits	C. 12,0001112	1,2001112	1301112

Ownership

Chesterton Partnership (Formed of Network Rail / DB Cargo / Brookgate)

Phasing

2025-2030	2030-2035	2035-2040	Beyond Plan period
Х	Х	-	-

Development Requirements

- Appropriate uses
- Retail and community floorspace appropriate to the role and size of the Local
 Centre with employment floorspace and residential above ground floor level.
- Car barn to consolidate existing Cambridge North Station car parking.

Design Requirements

- The existing station car park should be re-provided in a more efficient multistorey car barn as part of a mixed-use development proposal;
- Development should improve the arrival experience from Cambridge North
 Station including from the adjacent residential community of North Chesterton;
- Development should mitigate adverse impacts on residential amenity and public open spaces from the adjacent railway line, station, Cambridgeshire Guided Busway and any future transport interchange;
- This area contains land with potential high biodiversity value, therefore a
 detailed ecological assessment should be undertaken to identify the
 biodiversity value present and recommend a strategy for minimising loss and
 maximising biodiversity gain (see Policy 5: Biodiversity and Net Gain)
- Safeguard land to accommodate a transport interchange adjacent to
 Cambridge North Station to facilitate a seamless transfer between sustainable

- modes and allow for bus standing (in accordance with Policy 19: Safeguarding for Public Transport);
- Station Approach should provide attractive, safe and generous pedestrian and cycling provision linking the Waterbeach Greenway and the Chisholm Trail;
- The Local Centre should provide legible and adequate linkages to adjacent areas of open space;
- The public realm should offer opportunities for people to dwell and interact;
 and
- Due to wider landscape, heritage and townscape sensitivities, major development in this location should be informed by a Landscape Visual Impact Assessment, Heritage Impact Assessment and a Townscape Assessment/Appraisal.



Figure 28: Illustration of the design vision for Cowley Road local centre



Figure 29: Illustration of the design vision for Greenway local centre

Policy 10e: Cowley Road and Greenway Local Centres

A new Local Centre should be provided in accordance with the Spatial Framework to include the following:

Current/previous land use

- St Johns Innovation Park (Offices/R&D)
- Anglian Water Waste Water Treatment Plant

Acceptable land uses

- Residential (see Policy 13a)
- Employment (see Policy 12a)
- Town Centre uses including retail (see Policy 15)
- Primary Schools (see Policy 14)

Indicative Development Capacity

Residential units	Employment	Retail (Class	Community and Cultural Use
(Class C2 and C3)	(Class E(g))	E(a) and	(Class E(d), Class E(e) and
		Class E(b)	Class E(f), F1, F2)
Cowley Road Local	c. 7,000m2	1,200m2	500m2 (plus primary school)
Centre: c. 300 units			
Greenway Local	0m2	1,200m2	500m2 (plus safeguarded site
Centre: c. 400 units			for a primary school)

Ownership

West of Cowley Road: St Johns College

East of Cowley Road: Anglian Water

Phasing

2025-2030	2030-2035	2035-2040	Beyond Plan period
-	Х	Х	Х

Development Requirements

Appropriate uses:

- A Primary School at Cowley Road Local Centre and land safeguarded for a
 Primary School at Greenway Local Centre (if required) to form the anchor of
 the two Local Centres as part of mixed use and integrated developments;
- Retail and community floorspace appropriate to the role and size of the Local Centres with residential above ground floor level as well as commercial floorspace above Cowley Road Local Centre;

Overarching design requirements

 Development will be required to mitigate adverse impacts on residential amenity, education facilities and public open spaces from sources of environmental pollution including the A14, railway line and Milton Road;

- To allow for easy movement through the centres, circulation space should be provided outside of the schools;
- Opportunities for schools to be delivered as part of mixed-use buildings/developments should be explored.

Design requirements: Cowley Road Local Centre

- The Cowley Road Hedgerow, a City Wildlife Site, should be protected and enhanced as part of development and public realm proposals;
- Enhanced public realm should be created at the intersection of the Cowley Road Local Centre, the diagonal link and new connection to Cambridge Science Park;
- Development should address the public realm and open spaces along Cowley Road and by moving the building line closer to the street to introduce a new urban character.

Design requirements: Greenway Local Centre

 Greenway Local Centre should have an active and positive outlook onto the adjacent Strategic Open Space, which should form an integral part of the character and design of the Local Centre.

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

There are a number of overarching principles which will apply to all development proposals within each of the proposed North East Cambridge centres, as well as bespoke requirements and design guidance applicable to specific centres across the new city district. These policies set out how these new centres will create vibrant, multi-functional, community spaces for new and existing residents, workers, visitors and students.

The centres should be thought of as more than just transport or movement corridors. They should be considered and planned as the foundation for public life, public health, for social and cultural exchange and for the promotion of sustainable and liveable lifestyles. A multi-user and multi-generational approach to their design,

programme and management will create the conditions for public life to thrive throughout the day and evening. This should include opportunities to dwell, meet family and friends, play, and exercise.

District Centre

The North East Cambridge District Centre will be the focus of this new city district. It will provide a mix of land uses that will support the day to day needs of the people living, working and visiting North East Cambridge and the adjacent neighbourhoods. The District Centre will contain residential units in the form of apartments, some of which should sit above business floorspace. Ground floors will be activated through retail, business, community, health and cultural uses.

The District Centre will also prioritise pedestrians and cyclists, with limited and well managed servicing and delivery vehicle access. Located between the primary access route towards Cambridge North railway station and the Cambridgeshire Guided Busway the district centre will be easily accessible by public transport.

The District Centre will be the key link between Cambridge North Station and Cambridge Science Park in terms of land use and activity. It will provide a significant amount of retail floorspace comprising of a mixture of 'town centre uses' including comparison and convenience shopping as well as food and beverage. The retail offer in the District Centre will encourage independent retailers as much as possible, although high street chains could be accommodated within smaller units as typically found on local high streets. Larger retail stores, including supermarkets, will not be supported to reflect the finer grain urban character established in the AAP as well as to ensure a mixed and diverse retail offer as set out in Policy 15: Shops and Local Services.

The area will also be the community, health and cultural hub for the area, the location for much of the community spaces, venues and events space. Outdoor community events should be primarily located within the new District Square which lies at the intersection between key local and strategic pedestrian and cycle routes. This new District Square will also be anchored by a new primary school and community and cultural uses.

The First Public Drain is a key biodiversity asset of the site and will need to be enhanced and integrated within the new District Centre. Development either side of the watercourse should identify opportunities to enhance the First Public Drain's natural features and biodiversity assets, help to foster a unique sense of place, and maximise the amenity benefits of the watercourse for users and occupiers of adjacent buildings. Policy 23: Comprehensive and Coordinated Development sets out how this is expected to be delivered between different landowners.

The District Centre will be the heart of this new community and the streets and public spaces should be designed around the needs of all, from the young to the old, residents, workers and visitors. Buildings should have a positive relationship with the street and open spaces to create a place where public life can thrive. Servicing areas and building equipment will need to be carefully designed in and managed from an early stage to minimise any inactive building frontages.

Beyond the District Centre, a new pedestrian and cycling bridge will connect over Milton Road to Cambridge Science Park. There will need to be a strong visual relationship between the district centre and the new bridge to create a seamless link that is well used by people and helps bring the two sides of Milton Road together as part of this new city district. The structure will be an integral part of the site's identity and it is therefore important that the bridge is of high architectural quality. The Council will support an innovative, site specific and bespoke design.

Taking inspiration from Cambridge's Market Square, the District Square should be the centre point of the District Centre. It will need to be designed and managed to accommodate a variety of functions and events to take place on a regular basis, from informal community events to public markets. The design of the square will therefore need to consider utility provision, service arrangements as well as the necessary amenities to support a well-functioning, active and multiuser space.

Due to the existing operational requirements and impact on future uses, the Waste Transfer Station will be required to relocate in order to facilitate development of the District Centre. This would need to be in accordance with Policy 26: Aggregates and waste sites. The existing Golf Driving Range will also be required close to bring forward the District Centre and this process would need to be in accordance with paragraph 99 of the NPPF (2021).

Science Park Local Centre

The Cambridge Science Park Local Centre is positioned at the southwestern corner of Cambridge Science Park and is adjacent to Cambridge Regional College and King's Hedges Road. The site has good existing accessibility to the Cambridgeshire Guided Busway and by foot and cycle to the adjacent residential areas of Kings Hedges, Arbury and Orchard Park.

Development in this location should address King's Hedges Road to create a welcoming entrance into Cambridge Science Park. The provision of community and cultural space and retail units delivered as part of an employment led mixed-use development will also serve local residents, employees and students in this area.

To further enhance this entrance into Cambridge Science Park, there is an opportunity to create a new public open space to the east of the local centre which can form part of both the local amenity offer in this part of Cambridge Science Park but also connect into the wider green network. This space should be accessible and welcoming to all and encourage social interaction. This open space will also assist in this local centre achieving biodiversity and water management requirements.

The creation of this new centre provides the opportunity to enhance the existing junction of Cambridge Regional College and King's Hedges Road which will further improve the areas accessibility by foot and cycle from the surrounding residential areas. It will be important that the redesign of this junction promotes sustainable travel options through improvements to walking and cycling crossings, public realm and bus stop facilities. On-street car parking should be avoided to minimise any potential impacts on the NEC AAP Trip Budget and antisocial opportunistic car parking should be designed out as much as possible.

A small delivery and consolidation hub (see Policy 20: Last Mile Deliveries) has been identified for this site to facilitate last mile deliveries for Cambridge Regional College and Cambridge Science Park and potentially some of the wider North East Cambridge area.

Station Approach

Station Approach will be a key transition place between Cambridge North Station and the District Centre. It will therefore be crucial that development is planned in a comprehensive manner to ensure that key issues such as land uses, active frontages and street activity are addressed whilst delivering well designed streets, spaces, and wayfinding to create a place that is easy to navigate.

This area is identified for mixed-use development, primarily comprising of business space and apartments brought forward alongside ground floor retail provision and some community and cultural uses. Development in this area will need to respond to the constraints of the nearby railway, station and transport interchange in order to protect residential amenity.

Redevelopment of the long-stay Cambridge North station surface car park will need to ensure that this car parking is re-provided as part of a mixed-use development to maximise the efficient use of land. There should not be an uplift in car parking provision to serve the station and the exact amount of re-provision will need to consider, future improvements to accessibility, by walking, cycling and public transport, as well as the wider constraints on highway capacity. The current primary access route along the east-west section of Cowley Road to Cambridge North Station will be realigned further north as to avoid HGV, bus and other vehicle movements through the District Centre (see Chapter 5 and Area Action Plan Spatial Framework).

The area around the bend in Cowley Road, known as 'The Knuckle', is a key point along the district spine and development in this location should be of exceptional design quality which aids legibility along this key route. Nevertheless, the Landscape Character Visual Impact Appraisal, Heritage Impact Assessment and Townscape Strategy notes that development in this area will be highly visible from the sensitive wider Fen landscape and from the River Cam, as set out in Policy 9, and therefore a landmark building in this location should comply with Figure 10 and Figure 21.

Cowley Road and Greenway Local Centres

The two Local Centres are positioned on the intersection of a number of key pedestrian and cycling routes within the North East Cambridge area. Both centres are to be anchored by new primary school provision, as well as a number of small retail units and community/cultural facilities that will serve the day to day needs of people living and working locally. The Cowley Road Local Centre would also contain some commercial floorspace that would front Cowley Road and compliment the adjacent St Johns Innovation Park.

The Cowley Road Local Centre also extends into St John's Innovation Park, where a small amount of ancillary retail space would extend the local centre over Cowley Road and form part of the new underpass link to Cambridge Science Park.

Evidence supporting this policy

- North East Cambridge Landscape Character and Visual Impact Appraisal (2020)
- Innovation District Paper (2019)
- North East Cambridge Ecology Study (2020)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

- Community Safety Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- North East Cambridge Stakeholder Design Workshops 1-6 event records 2019-2020)

Monitoring indicators

Development in line with spatial framework

Policy links to adopted Local Plans

Cambridge Local Plan 2018

- Policy 15: Cambridge Northern Fringe East and new railway Station Area of major Change
- Policy 37: Cambridge Airport Public Safety Zone and Air Safeguarding Zones
- Policy 40: Development and expansion of business space

- Policy 55: Responding to context
- Policy 56: Creating successful places
- Policy 57: Designing new buildings
- Policy 59: Designing landscape and the public realm
- Policy 60: Tall buildings and the skyline of Cambridge
- Appendix F: Tall Buildings and the Skyline
- Policy 65: Visual pollution
- Policy 67: Protection of open space
- Policy 68: Open space and recreation provision through new development
- Appendix I: Open Spaces and Recreation Standards
- Policy 69: Protection of sites of biodiversity and geodiversity importance
- Policy 70: Protection of priority species and habitats
- Policy 71: Trees
- Policy 80: Supporting sustainable access to development

South Cambridgeshire Local Plan

- SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- HQ/1: Design Principles
- NH/2: Protecting and Enhancing Landscape Character
- NH/4: Biodiversity
- NH/5: Sites of Biodiversity or Geological Importance
- NH/6: Green Infrastructure
- H/8: Housing Density
- SC/1: Allocation for Open Space
- TI/1: Chesterton Rail Station and Interchange
- TI/4: Rail Freight and Interchanges
- TI/6: Cambridge Airport Public Safety Zone
- TI/8: Infrastructure and New Developments
- TI/9: Education Facilities

5.6 Housing design standards

New homes should be great places to live which meet the changing needs of their residents over time. Good internal spaces, and private outdoor spaces, are fundamental for wellbeing and health, and help to ensure that development creates liveable places that help foster stable, neighbourly communities. This policy sets out the space standards that we require both internally and externally and layout considerations, to create high quality, higher density housing in North East Cambridge.

Policy 11: Housing design standards

All residential development proposals, including those for Built to Rent and other forms of residential accommodation, are required to meet, as a minimum, the Government's Technical Housing Standards (March 2015) (or any future equivalent) as well as:

- a) Ensure that a minimum of 5m2 of usable private outdoor space is provided for a 1-2 person (bedspace) dwelling and an extra 1m2 is provided for each additional person (bedspace). This can be provided as private amenity spaces in the form of balconies, terraces, roof terraces, gardens or winter gardens (having regard to Policy 7: Creating high quality streets, spaces and landscape). A minimum usable depth of 1500mm and minimum usable width of 3000mm must be provided for all balconies and other private external spaces to ensure adequate circulation space. Private outdoor space must be designed to provide good outlook, orientation and privacy, receive good sunlight, and be of practical shape and utility;
- b) The layout and siting achieves a good relationship to adjoining properties avoiding significant harmful impact in terms of loss of privacy, daylight or sunlight, or an overbearing effect due to bulk, proximity or outlook;
- c) Maximise the provision of dual aspect dwellings and avoid the provision of single aspect north facing dwellings or those that have a poor outlook, or experience high levels of noise pollution or would be at high risk of overheating due to orientation;

- d) In flatted developments, ensure the arrangement of rooms secures the separation of bedrooms and other habitable rooms between homes within the building and between neighbouring uses, having regard to the adequacy of any measures to prevent noise transference;
- e) Ensure that all habitable rooms receive good natural daylight and sunlight. All homes should provide for direct sunlight to enter at least one habitable room for part of the day and living areas and kitchen/dining spaces should preferably receive direct sunlight. Communal areas within flatted developments should be configured to maximise the amount of natural daylight and ventilation they receive;
- f) 5% of all new homes should meet Building Regulation requirement M4(3) 'Wheelchair User Dwellings' (i.e. will be designed to be either wheelchair accessible at the point of completion or easily adaptable to meet the needs of residents who are wheelchair users), and all remaining homes should meet Building Regulation requirement M4(2) 'Accessible and Adaptable Dwellings'.

Why are we doing this

Relevant objectives: 3, 4

Along with the other policies of the Area Action Plan that establish an expectation for high quality design, residential development within North East Cambridge is expected to achieve a satisfactory standard of accommodation (having regard to circulation, storage spaces, room size and shape), high levels of amenity, and contribute positively to their surroundings. Potential issues with respect to conflicts between units within the same block or adjacent dwellings should be well thought through and resolved at the design stage through the appropriate consideration of siting, layout, internal configuration, and other forms of mitigation where necessary. Environmental factors that affect usability of buildings and spaces such as daylight, sunlight and shade, noise, odour and other types of pollution need to be assessed as part of a 'design led' approach as set out in Policy 25: Environmental Protection.

Amenity, privacy and other development factors will also need to be considered and mitigated to avoid significant harmful effects on residents. Well-designed private and communal amenity spaces in the form of balconies, terraces and winter gardens

along with more conventional gardens will allow people access to outside space as well as offer opportunities for food growing.

Ensuring that new homes are well lit through natural daylight and sunlight is an important design requirement. The amount of daylight and sunlight received has a significant effect on the general amenity of dwellings, the mental health of occupants, the appearance and enjoyment of private and communal open spaces, and the energy efficiency of all buildings and therefore proposals should seek to maximise the amount of daylight and sunlight entering into a habitable room. Well-designed buildings should also allow for internal communal areas to be naturally lit and ventilated. When designing for well-lit new homes, careful consideration should be given to adjacent balconies which can significantly reduce light entering windows below them.

Population projections for Greater Cambridge anticipate that there will be a significant increase in the over 65s with mobility problems by 2040. It is therefore important that all new homes are designed to be accessible and adaptable to ensure that they are future-proofed and can accommodate changes in residents personal circumstances over time. This allows for people to stay within their homes for longer, which helps create a socially diverse, inclusive and stable community, and also reduces demand for purpose-built specialist accommodation.

There is also a need for homes suitable for wheelchair users in Greater Cambridge, and this means that some dwellings at North East Cambridge should be specifically designed to meet the needs of wheelchair users. The Building Regulations M4(3) standard for wheelchair user dwellings distinguishes between (a) 'wheelchair adaptable homes' – a home that can be easily adapted to meet the needs of residents who are wheelchair users and (b) 'wheelchair accessible homes' – a home that is designed to be wheelchair accessible at the point of completion. Following national planning guidance, 'wheelchair accessible homes' (M4(3)(b)) will only be sought on those dwellings where the local authorities are responsible for allocating or nominating a person to live in that dwelling. For all other dwellings being provided to meet this requirement, 'wheelchair adaptable homes' (M4(3)(a)) will be sought.

Evidence supporting this policy

Greater Cambridge Housing Strategy 2019-2023 and Annexes

Topic Papers and other documents informing this policy

- Housing Topic Paper (2021)
- Health Facilities and Wellbeing Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)

Monitoring indicators

Percentage of wheelchair accessible homes

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 50: Residential space standards
- Policy 51: Accessible homes
- Policy 52: Protecting garden land and the subdivision of existing dwelling plots
- Policy 55: Responding to context
- Policy 56: Creating successful places
- Policy 57: Designing new buildings

South Cambridgeshire Local Plan

- SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- HQ/1: Design Principles
- H/8: Housing Density
- H/9: Housing Mix
- SC/4: Meeting Community Needs

Other Council/County strategy and policy and other supporting guidance

- Department for Communities and Local Government (2015) standard
 Technical housing standards nationally described space standard
- Ministry of Housing, Communities & Local Government (2015) Approved
 Document M: access to and use of buildings, volume 1: dwellings
- Ministry of Housing, Communities & Local Government (2016) Corrections to Approved Document M 2015 edition with 2016 amendments, volume 1: dwellings

6. Jobs, homes and services

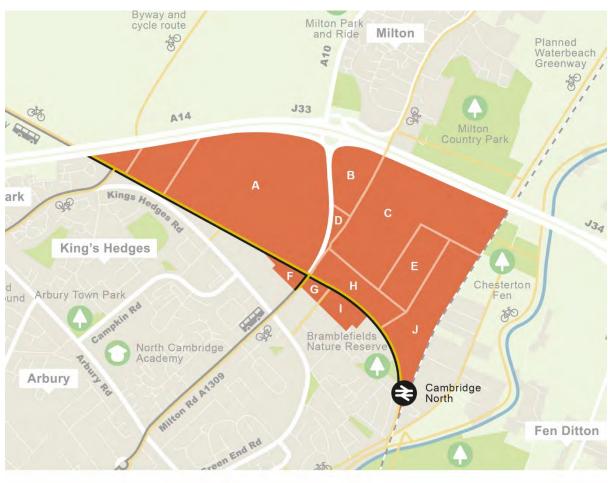




Figure 30: Map graphic showing broad locations and quantities of business space, homes and other land uses envisaged for North East Cambridge

North East Cambridge is a strategically important economic driver for Greater Cambridge and further afield, and there is a huge demand for more business space and homes as a result. The Councils want to ensure that new growth is good growth – bringing genuinely affordable homes and workspace; space for a range of businesses and industries that create jobs for local people; and the public spaces, community services and cultural facilities that are needed.

This section sets out the amount and types of development that we propose, and how this will be distributed across the area. Mixed use development is at the core of this, and we have developed the Area Action Plan so that business, industry, homes and other uses can successfully coexist alongside, above and below each other to make best use of land.

This section includes the following policies:

Jobs

Policy 12a: Business

• Policy 12b: Industry, storage and distribution

Homes

Policy 13a: Housing

Policy 13b: Affordable housing

Policy 13c: Build to Rent

Policy 13d: Housing for local workers

Policy 13e: Custom

Policy 13f: Short term/corporate lets and visitor accommodation

6.1 Jobs

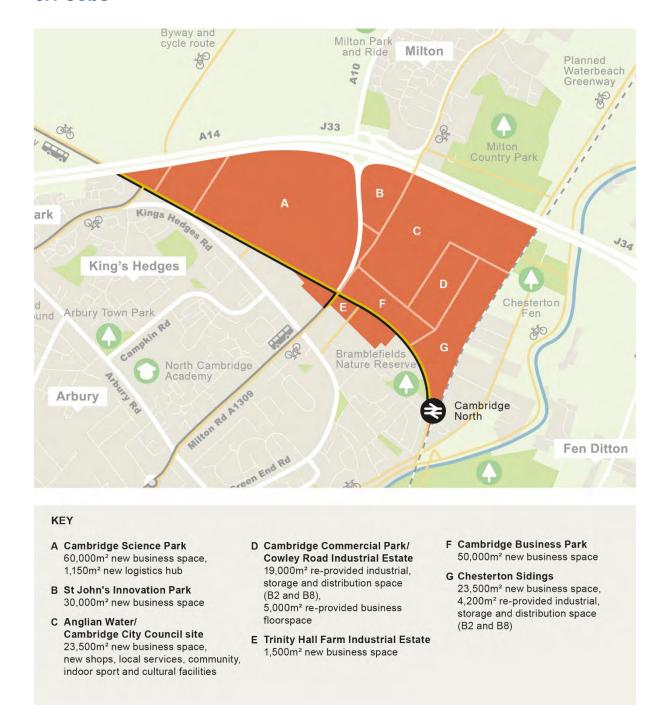


Figure 31: Map graphic showing broad locations and quantum of employment space envisaged for North East Cambridge

North East Cambridge already plays a significant economic role locally and nationally. With its easy access to a skilled workforce and its transport links via walking, cycling, public transport, road and air, the area is an attractive business location, and we would like this to continue. Industry is a key component of Greater

Cambridge's economy and North East Cambridge is also a strategic site in this regard given its proximity to the city centre as well as strategic highway and railway network.

We are planning for a range of spaces supporting jobs across all forms of business and industry, and our studies show that this could create up to 15,000 new jobs in the area. We believe there is space to intensify the existing employment parks, which are relatively low-density and car-dominated, as well as creating new workspace on the east side of Milton Road. We also want the current amount of industrial floorspace to be retained and consolidated within Cowley Road Industrial Estate and around the existing Aggregates Yard, and this will be achieved through using land more efficiently, reducing vehicle movements and provide better quality, more flexible buildings.

Policy 12a: Business

Proposals which create new employment floorspace and promote increased jobs and job densities in the Area Action Plan area will be supported where they are consistent with the other policies of the Area Action Plan and adopted Local Development Plan.

Development proposals will be required to demonstrate how they will support:

- Intensification of business Class E(g)) floorspace (gross internal area) on site and the introduction of higher density development that increases employment opportunities;
- Opportunities for start-up and small and medium-sized enterprises;
- A mix of new high quality and flexible workspace to facilitate new business formation and growth of existing businesses seeking 'move on' space;
- Flexible and adaptable buildings that can respond to future business needs;
- Innovation and collaboration through the provision of co-working spaces;
- Affordable workspace;
- Quality public realm and physical environment which is publicly accessible;
- The increased use of sustainable modes of travel and reduction in private car
 use in accordance with the Trip Budget (see Policy 19: Safeguarding for

- Public Transport Policy 16: Sustainable Connectivity and Policy 22: Managing motorised vehicles); and
- A mix of uses including housing, retail and/or community and cultural uses, unless such a mix would demonstrably conflict with the other policies of this plan (including Policy 25: Environmental Protection).

Specifically, by land parcel:

- a. Anglian Water/Cambridge City Council site: This area will be transformed into a residential led mixed-use area which will include an element of new business floorspace primarily located within and in close proximity to the District Centre and Cowley Road Local Centre.
- b. Cambridge Business Park: This area will undergo significant change through the introduction of an employment led mixed-use development. This will be achieved through the intensification of business floorspace brought forward alongside retail, community and cultural uses and new homes.
- c. Cambridge Science Park: The principal source of business space development in North East Cambridge will be the intensification of employment floorspace within this area. This will include the redevelopment of existing under-utilised premises including associated car parks and the introduction of other supporting uses.
- d. Chesterton Sidings: New business space will be created in this area alongside homes and other employment, retail and community floorspace to create a mixed-use area, based around Cambridge North Station and the Station Approach Local Centre. This area will be a key gateway to both the site and wider area.
- e. Cowley Road Industrial Estate: Business space in this location should form part of the long-term replacement of employment business floorspace from Nuffield Road Industrial Estate to support industrial uses in this area. Redevelopment in this area should also not result in the net loss of business floorspace from Cowley Road Industrial Estate.
- f. Nuffield Road Industrial Estate: In order to minimise the number of commuter and commercial delivery trips along Nuffield Road, this area is identified for

residential uses only (see Policy 13a). Therefore, proposals for new business floorspace within this area will not be supported. Proposals for the loss of business floorspace in this area will need to firstly demonstrate that equivalent floorspace be re-provided within Cowley Road Industrial Estate in the first instance and secondly within the wider Area Action Plan area if this is not feasible.

- g. St Johns Innovation Park: This area will be redeveloped to support existing and future business needs through business intensification. This will include the redevelopment of existing under-utilised premises including associated car parks and the introduction of other supporting uses.
- h. Trinity Hall Farm Industrial Estate: There are opportunities in this area for a small uplift in business floorspace through the comprehensive redevelopment of the site. This will need to consider how the site sits in relation to the Area Action Plan Spatial Framework as well as existing and future adjacent land uses.
- i. All other areas: Additional business floorspace in all other areas will generally not be supported unless the site can be brought forward as part of a mixeduse residential led scheme and will not have an adverse impact on the trip budget (see Policy 19: Safeguarding for Public Transport Policy 16: Sustainable Connectivity and Policy 22: Managing motorised vehicles).

The Area Action Plan makes provision for up to 188,500m2 net additional business (Class E(g)) floorspace in accordance with the distribution set out in the table below. These will need to be considered alongside the other policies of the Area Action Plan, Spatial Framework and other supporting diagrams as well as the adopted local development plans. Particular reference is drawn to Policy 22: Managing motorised vehicles, to ensure that future business development does not compromise the trip budget for the area and Policy 25: Environmental Protection.

Development parcel	Additional commercial floorspace (Class E(g))
Anglian Water / Cambridge	Up to 23,500m2
City Council site	

Cambridge Business Park	Up to 50,000m2
Cambridge Science Park	Up to 60,000m2
Chesterton Sidings	Up to 23,500m2
Cowley Road Industrial	Re-provision of existing amount of commercial
Estate	floorspace within Cowley Road and from Nuffield
	Road Industrial Estates
Nuffield Road Industrial	None. Existing amount of commercial floorspace
Estate	should be re-provided to Cowley Road Industrial
	Estate
St Johns Innovation Park	Up to 30,000m2
Trinity Hall Farm Industrial	Up to 1,500m2
Estate	
Total	Up to 188,500m2

Proposals which exceed these figures will need to be justified in terms of the Greater Cambridge Employment Land and Economic Development Evidence Study (2020) (through an Employment Impact Assessment) and any impact on the AAP trip budget, Area Action Plan wide infrastructure and whether the character, role and function of an area could be compromised.

Policy 12b: Industry, storage and distribution

Development should ensure there is no net loss of B2 (general industrial) and B8 (storage or distribution) floorspace within the North East Cambridge Area Action Plan area. Proposals for redevelopment of existing industrial floorspace (B2/B8) are required to re-provide the equivalent amount of floorspace (Gross Internal Area) within the plan area in line with the 'Industrial Development Areas' set out below. Whilst the AAP does not provide any protection for existing occupiers, the Councils

as corporate bodies will look to work with affected occupiers to help identify suitable alternative sites either within the NEC area or elsewhere.

Industrial Development Areas

The following areas are expected to accommodate industrial intensification providing for:

B2 – General Industrial (minimum floorspace – Gross Internal Area)

- Cowley Road Industrial Estate (11,500 m2)
- Chesterton Sidings (700 m2)

B8 – Storage and distribution (minimum floorspace – Gross Internal Area)

- Cowley Road Industrial Estate (7,500 m2)
- Chesterton Sidings (3,500 m2)

Small delivery and consolidation hubs that are under 1,500 m2, will be supported outside of the identified industrial areas provided they are in accordance with Policy 20: Last mile deliveries and Policy 25: Environmental Protection.

To support this, development proposals:

- a) within Cowley Road Industrial Estate should, as a minimum, retain the equivalent amount of existing industrial (B2 and B8) floorspace on site and, where feasible, intensify the industrial use of sites
- b) within Nuffield Road Industrial Estate should re-provide the equivalent amount of industrial (B2 and B8) floorspace existing on site (Gross Internal Area) to Cowley Road Industrial Estate through the redevelopment of existing plots and / or through new development at land at the northern end of Chesterton Sidings adjacent to the Cambridge North East Aggregates Railheads (as shown in Figure 11)
- c) Should relocate the existing bus depot on Cowley Road to an off-site location to facilitate the proposed redevelopment of Cowley Road Industrial Estate.

Principles for industrial development

Developments should:

- Ensure that industrial floorspace is flexible and adaptable to meet current and future business needs;
- Ensure that industrial development proposals are designed to mitigate any environmental impacts in accordance with Policy 25: Environmental Protection and Policy 26: Aggregates and waste sites;
- Where over 1,000 m2 net additional floorspace, provide 10% of the new floorspace to be affordable industrial workspace, subject to scheme viability. This should be secured for a minimum of 30 years at rents that are appropriate to the viability of the business;
- Ensure that design and siting of development provides an appropriate mitigation buffer around the Aggregates Railheads and relocated Waste Transfer Station to create satisfactory levels of amenity for adjacent uses and spaces.

Consolidation and mixed use

- Where industrial uses are provided or retained, developments should proactively intensify B2 and B8 uses through more efficient use of land than the existing industrial premises within North East Cambridge. Intensification can be achieved by:
- Horizontal or vertical extensions;
- Infill development;
- Comprehensive development of existing sites;
- achieving higher plot ratios (a minimum of 65%);
- the development of mezzanines;
- the introduction of flexible units;
- multi-storey proposals for mixed-use development schemes through vertical stacking that include other uses including employment and residential uses.

Why we are doing this

Relevant objectives: 3, 5

North East Cambridge already plays a significant economic role locally and nationally. The city's future economic prosperity, and its contribution to the economic growth of Greater Cambridge, will be dependent on how successfully it can take advantage of its international reputation as a high technology and innovation cluster. Nevertheless, it is crucial that this is done in a careful and sensitive way, so that short term economic growth does not undermine the quality and character of the city and the wider area, and the quality of life for its citizens.

The amount of employment floorspace identified for North East Cambridge has the potential to provide a significant increase in the number of new jobs in the area to meet future business needs. The adopted Local Plans support economic development in this location as well as the councils' latest employment land review. The Greater Cambridge Employment Land and Economic Development Evidence Study November 2020, considers that the North East Cambridge Area Action Plan is important in providing employment floorspace and job growth in Cambridge as a whole. This is to be achieved within North East Cambridge through the intensification of existing, under-utilised employment sites and through mixed use development. The amount of employment floorspace set out within the policies will support economic growth in this area beyond the Plan period, and will be supported by the necessary district wide social, cultural and physical infrastructure including high quality communications via the latest generation of high-speed broadband.

As well as ensuring a sufficient supply of affordable business space, affordable workspaces can support sectors that have cultural or social value such as artists, designer-makers, charities, voluntary and community organisations and social enterprises for which low-cost space can be important.

For Greater Cambridge, the creative sector has been identified as a sector that has a significant economic role in the area and a role in supporting wider community well-being, for example through place-making. However, it has also been identified as having a particular need for affordable space which could fall within business or industrial types of employment

Whilst it is important to bring forward jobs across North East Cambridge, evidence demonstrates that office development currently draws more traffic into the North East Cambridge area than any other form of development. Therefore, the amount of additional employment floorspace and its distribution across the site, set out in this policy, has been carefully considered against the need to create a more balanced mix of uses and wider community at North East Cambridge as well as the requirements set out in Policy 22: Managing motorised vehicles.

Business space (Class E(g))

The area currently contains several employment parks, including Cambridge Science Park, St Johns Innovation Park and Cambridge Business Park. These sites contain high quality office and Research and Development (R&D) premises which include a combination of successful businesses and start-up companies. There are a number of smaller business premises located within Trinity Hall Farm, Cowley Road and Nuffield Road Industrial Estates. Planning permission has also been granted for a new business development adjacent to Cambridge North Station.

Cambridge Science Park and St Johns Innovation Park benefit from an excellent location adjacent to strategic transport infrastructure and close links to the University of Cambridge and associated Colleges. However, there are opportunities to maximise their potential, including increasing the scale and range of activities within them. In particular, the area has further potential to support business start-ups and small and medium-sized enterprises (SMEs) looking to capitalise on the high-quality research undertaken by the university and colleges as well as the established businesses already in this area. There are also opportunities to build a relationship between these employment parks and Cambridge Regional College. This would support the underlying principles of innovation districts and the interrelationship between education, industry and innovation.

Cambridge Business Park is a successful and economically thriving business location. It is a key location within the Area Action Plan area, and currently forms a barrier between the existing communities in East Chesterton and the proposed District Centre. In order to respond to business needs over the plan period, there are landowner and council aspirations to redevelop the site as an employment led mixed-use area that will also form part of the District Centre.

Within areas to the north of Cowley Road, new jobs will support the continued growth of North East Cambridge, and strengthen other key sectors such as business, financial, professional services and creative industries. There is also evidence that SMEs in this area are planning for growth, but most cite space availability and/or affordability as a key constraint in achieving this aspiration. Therefore in these areas, new business floorspace should provide a diverse range of jobs and business opportunities including spaces to support SMEs which are vital to both this new city district and the wider local economy. These include co-working, start-up and grow-on spaces as well as serviced offices located within existing office buildings or new mixed-use developments. The existing business floorspace at Nuffield Road and Cowley Road Industrial Estates should be re-provided as part of the comprehensive redevelopment of Cowley Road Industrial Estate to support the proposed industrial (B2 and B8) uses within this area as well as support a mix of uses in a more intensified format. Due to affordability issues for business space within this area and wider Greater Cambridge, an element of affordable workspace is required, including for example to support the incubation of SMEs and creative businesses. New space, including grow on spaces, will also support business growth in this area whilst new jobs created in this area are retained locally.

The level of business floorspace provision provided for through the Area Action Plan recognises the role and function of the Greater Cambridge Local Plan in allocating employment growth spatially across Greater Cambridge. Proposals which seek to exceed the business floorspace allocations for sites within North East Cambridge therefore could have potentially unacceptable consequences on economic growth expected in other locations and will need to be justified through robust evidence having regard to supply and demand across the Local Plan area.

Industry (B2/B8)

Industrial uses in North East Cambridge are currently clustered at Cowley Road and Nuffield Road Industrial Estates. There is around 12,750m2 of storage and distribution (B8) across these two sites and 14,770m2 of general industrial (B2) uses. The unit sizes are typically smaller compared to more rural sites in South Cambridgeshire, with 71% of units being smaller than 500m2, around 12% being between 500-1,000m2, and 17% between 1,000-5,000m2. There is a very low

industrial vacancy in North East Cambridge, highlighting the demand for industrial use in this area.

Retaining industrial uses is key to the functioning of the local economy. The Greater Cambridge Employment Land and Economic Needs Study (November 2020) identifies that Cambridge has lost around 35% of its industrial floorspace over the past 20 years. Given the importance of industrial uses to both the needs of the Greater Cambridge's economy and local jobs, the Area Action Plan seeks to protect industrial floorspace. Consolidation of industrial uses provides opportunities to increase the number of new homes within North East Cambridge without reducing the level of industrial floorspace currently on site.

Of the two existing industrial estates (Nuffield Road and Cowley Road), Cowley Road has been identified as the most appropriate location to consolidate industrial uses. Expanding the current Nuffield Road industrial estate would not complement North East Cambridge's aims for good growth as there is increased potential for conflict between industrial uses and the neighbouring existing residential areas, in particular the mixing of residential and industrial traffic on Nuffield Road as well as around Shirley Community Primary School. The location of Cowley Road Industrial Estate means that new development in this area can minimise conflict between industrial traffic and residential areas (see Policy 21: Street hierarchy), provide a suitable industrial buffer to the Aggregates Railheads and also serve neighbouring residential areas through the enhanced pedestrian and cycle routes identified on the Spatial Framework.

The existing bus depot on Cowley Road will need to be relocated off-site to achieve comprehensive redevelopment of this area. The existing bus depot is an inefficient use of land due to the low density nature of the site and is positioned within a central location within the industrial area. The trips generated to serve the wider Cambridge area are also not compatible with the trip budget required to enable delivery of regeneration of North East Cambridge. Additionally, the number of buses anticipated to serve the city and wider area is expected to double over the next decade. The existing Cowley Road depot does not have the capacity to accommodate this number of additional buses and relocation presents the opportunity to find a long term solution to this issue via the Local Transport and Connectivity Plan and Bus

Strategy being prepared by the Cambridgeshire and Peterborough Combined Authority and the Cambridge City Access Project being prepared by the Greater Cambridge Partnership. The continued operation of the bus depot in the interim period will trial opportunities to electrify the bus fleet.

The quantum for industrial floorspace are minimums. Site capacity testing undertaken by the councils set out within the Typologies Study and Development Capacity Assessment (2021) shows the Cowley Road Industrial Estate and the northern portion of Chesterton Sidings could accommodate up to 60,000m2 of gross industrial floorspace. Proposals which exceed the floorspace amounts specified in the Policy will generally be supported where it can be demonstrated they meet local industrial floorspace needs or secures an appropriate buffer around the Aggregates Yard and the relocated Waste Transfer Station. Proposals will need to be designed and laid out to meet the operational needs of industrial use, to manage movement within the trip budget in accordance with Policy 22: Managing Motorised Vehicles and address any amenity and health impacts as required by Policy 26: Aggregates and waste sites.

The Mixed-Use Development Paper (2020) highlights that industrial development at North East Cambridge is both feasible and deliverable using a higher plot ratio, potentially up to 65% (the ratio of a building's total floor area, as a proportion of the total plot upon which it is built). In order to accommodate the amount of industrial floorspace identified in the policy, development proposals significantly lower than a 65% plot ratio will need to demonstrate that they will not compromise the delivery of the overall floorspace identified in the policy. Intensification also seeks to increase servicing efficiency to minimise trips and the impact on the transport network. All developments must demonstrate how their operational impacts will comply with the trip budget (see Policy 22: Managing motorised vehicles).

Mixed use development is intended to maximise the potential for North East Cambridge to deliver housing and industrial floorspace simultaneously. Developers should therefore consider the potential to relocate businesses in creative, space-efficient development forms which could include vertical stacking and include residential dwellings above, where shown on the Land Use Plan (see figure 11). Some occupiers may be better suited to consolidation depending on their

requirements, for example, a group of businesses all operating as trade counters, could be better suited to sharing certain services compared to others.

A key consideration for industrial proposals including within mixed-use development is that it meets high design quality by contributing to the public realm and minimising impact on residential and public amenity. Developments will also be required to demonstrate that operational vibration, noise, air quality, odour and other emissions do not have unacceptable adverse impacts on neighbouring uses, as set out in Policy 25: Environmental Protection and Policy 26: Aggregates and waste sites.

Whilst affordability in Greater Cambridge is most acute for residential uses, it also affects other uses including industrial floorspace. Following the continued decrease of industrial premises within Cambridge over the past 20 years, vacancy levels are very low and there is continued strong demand for industrial sites in close proximity to the city. This has continued to push industrial rents up and is a constraint for companies seeking to establish, grow or remain in this area. The policy requires 10% of new industrial floorspace in schemes over 1,000 m2 to be at an affordable rate. The rent per square foot/meter or per workstation that would be considered affordable will vary according to a range of factors such as location, type, quality etc, and the level of discount to be applied will therefore need to be secured on a proposal-by-proposal basis, having regard to overall scheme viability.

Where workspace has been specified as affordable, the Councils Economic Development Teams will work with developers to agree the appropriate terms of affordability. If on-site provision is not possible, a financial contributions for equivalent off-site provision will be sought. Affordable industrial workspace and / or a financial contribution will be secured through a legal agreement between the developer and the local planning authority.

The reprovision of industrial floorspace may result in some occupants being relocated off site. A Relocation Assistance Strategy will be formulated by the Councils to support existing in situ businesses.

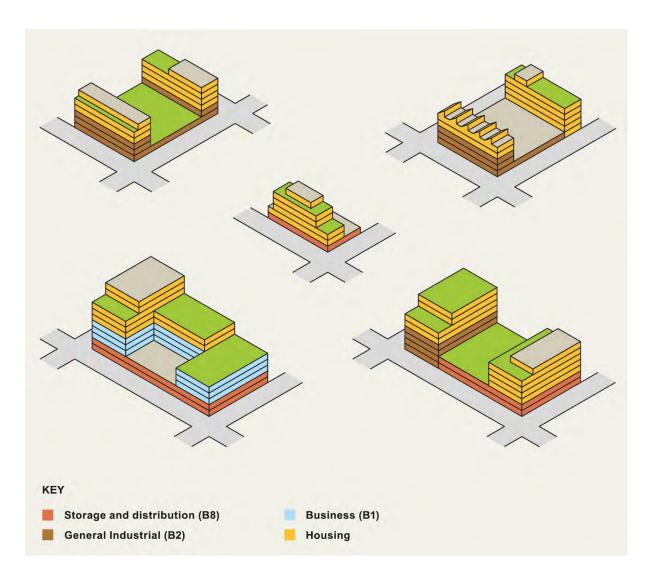


Figure 32: Examples of industrial mixed-use building typologies

Evidence supporting this policy

- Economic Development Evidence Study (2020)
- Innovation Districts Paper (2019)
- Mixed Use Development: Overcoming barriers to delivery at North East Cambridge (2020)
- Greater Cambridge Creative Business and Cultural Production Workspace Study (2021)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

Employment Topic Paper (2021)

- Smart Infrastructure Topic Paper: Digital Infrastructure (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Skills, Training and Employment Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)

Monitoring indicators

- Availability of industrial land measured through no overall net loss of industrial and warehouse floorspace (B2 and B8).
- Amount of new employment floorspace permitted and completed by type (gross and net)

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 2: Spatial strategy for the location of employment development
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 33: Contaminated land
- Policy 34: Light pollution control
- Policy 35: Protection of human health and quality of life from noise and vibration
- Policy 36: Air quality, odour and dust
- Policy 37: Cambridge Airport Public Safety Zone and Air Safeguarding Zones
- Policy 40: Development and expansion of business space
- Policy 41: Protection of business space
- Policy 42: Connecting new developments to digital infrastructure

South Cambridgeshire Local Plan

- Policy E/9: Promotion of Clusters Policy
- Policy E/11: Large Scale Warehousing and Distribution Centres Policy
- Policy E/12: New Employment Development in Villages New Employment Development on the Edges of Villages Policy
- E/14: Loss of Employment Land to Non-Employment Uses Policy

- E/15: Established Employment Areas
- S/5: Provision of New Jobs and Homes
- SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- E/1: New Employment Provision near Cambridge Cambridge Science Park
- E/9: Promotion of Cluster
- E/10: Shared Social Spaces in Employment Areas

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire and Peterborough Local Industrial Strategy (2019)
- Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (2020)

6.2 Homes



Figure 33: Map graphic showing broad locations and quantities of new homes envisaged in North East Cambridge

There is significant housing demand in Greater Cambridge due to a range of factors including affordability issues, population growth and the area's strong local economy and its sub-regional significance. Within this context the key strand of sustainable development is securing mixed communities that are inclusive to everyone and appropriately mixed in terms of demographics, household types and tenures. Through mixed use development, we want to see the Area Action Plan area

developed so that it provides households with a genuine range of housing that meets our forecast needs – enabling people who work in the area to live locally, reducing the need to commute or own a car, and ensuring we create mixed balanced communities.

Policy 13a: Housing Provision

The Area Action Plan makes provision for approximately 8,350 dwellings. In accordance with the Area Action Plan Spatial Framework and the Land Use Figure (Figure 11), the distribution and indicative capacity of new housing is as set out in the table below.

Development Parcel	Homes (net additional dwellings)
Anglian Water / Cambridge City Council site	5,500
Cambridge Business Park	500
Cambridge Science Park	0
Chesterton Sidings	1,250
Cowley Road Industrial Estate	450
Merlin Place	125
Milton Road Garage Site	75
Nuffield Road Industrial Estate	450
St Johns Innovation Park	0
Trinity Hall Farm Industrial Estate	0
Cambridge Regional College	0
Total	8,350

The number of homes granted planning permission on each of the development parcels may be higher or lower than the indicative capacity set out in the table above. This should be determined by a design-led approach while taking account of all relevant policies within the Area Action Plan and adopted local development plan, in particular, Policy 22: Managing motorised vehicles to ensure that future development does not compromise the trip budget for the area, and Policy 23: Comprehensive and Coordinated Development to ensure that the necessary infrastructure across the Area Action Plan area can be secured.

Proposals that secure an appropriate mix of housing on site and contribute to the creation of inclusive, mixed and balanced communities will be supported. All proposals for residential development will need to have regard to:

- a) the latest evidence on housing need as set out in the <u>Greater Cambridge</u> <u>Housing Strategy 2019-2023 and Annexes</u> (or any future updates), the Housing Needs of Specific Groups study (2021), or any other evidence of housing need published or endorsed by the Councils.
- b) Delivering high quality higher density homes (see Policy 9: Density, heights, scale and massing and Policy 11: Housing design standards) that contain a balanced mix of type, size, tenure and affordability, including family sized accommodation (2+ bedroom);
- c) Ensuring all homes of different types and tenures are integrated with each other and tenures are visually indistinguishable from one another;
- d) Delivering 40% of all new homes as affordable housing (see Policy 13b: Affordable housing and Policy 27: Planning Contributions);
- e) Ensuring that appropriate provision is made in suitable locations for a broad range of specialist housing reflecting local needs, such as accommodation for older people, disabled people, or other groups needing specialist housing.

Policy 13b: Affordable housing

The Area Action Plan requires at least 40% of all new homes within the area to be delivered as affordable housing. To achieve this, all housing developments that

provide 10 or more dwellings should deliver genuinely affordable housing that meets the following requirements:

- a) Within the affordable housing secured, the following proportions of each affordable housing tenure should be provided:
 - i. 25% First Homes.
 - ii. 55% affordable rent homes,
 - iii. 5% social rent homes, and
 - iv. 15% shared ownership homes or other forms of affordable home ownership as appropriate.

Affordable Private Rent homes should be provided within Build to Rent developments, as set out in Policy 13c: Build to Rent.

Variations to the above affordable housing tenure proportions will need to be agreed with the Councils' Housing Services, having regard to such matters as site specific circumstances, affordable housing demand on the Councils' housing registers, existing housing mix in the surrounding area, affordability and viability.

- b) The homes are affordable in the context of local rent levels, house prices and local incomes, having regard to the <u>Greater Cambridge Housing Strategy</u> <u>Annexe 11: Setting of Affordable Rents</u> (2021) or a successor document, and in terms of living costs having regard to their location and design as set out in Policy 16: Sustainable Connectivity and Policy 3: Energy and associated infrastructure;
- c) The size and type of any affordable housing to be informed by the latest evidence of needs (see Policy 13a: Housing), including the need identified on the Councils' housing registers and in other relevant data published or endorsed by the Councils;
- d) The layout of affordable housing provision should be well integrated and distributed across the site in groups of affordable homes and not be confined to less prominent parts of the site as a whole or any individual location, in accordance with the guidance provided in the <u>Greater Cambridge Housing</u> <u>Strategy Annexe 10: Clustering and Distribution of Affordable Housing</u> (2021) or a successor document, and

e) Be provided on site to create a mixed and balanced community, unless offsite provision or an appropriate financial contribution in lieu can be robustly justified.

Where an applicant raises concerns with the financial viability of a proposed scheme the onus will be on them to demonstrate particular site circumstances to justify the need for a viability assessment, in line with paragraph 58 of the NPPF (2021).

Policy 13c: Build to Rent

Build to Rent should be provided in a balanced way across North East Cambridge without it being the dominant typology of homes in any location, to ensure that specific areas contain mixed housing types and tenures, in line with Policy 1: A comprehensive approach at North East Cambridge and Policy 13a: Housing. To achieve this schemes that prioritise the distribution of Build to Rent across developments will be preferred. No more than 10% of the total homes permitted across the Area Action Plan area as identified in Policy 13a: Housing should be Build to Rent.

Any Build to Rent developments should meet the requirements as set out in the Greater Cambridge Housing Strategy Annexe 9: Build to Rent (2021) (or successor documents), and comply with the following:

- a) individual schemes to be under common ownership and management control for the long term, with both the Affordable Private Rent homes and the market Build to Rent homes under the same management;
- b) dwellings to be retained as Build to Rent under a covenant for at least 15
 years with a clawback mechanism and compensation mechanism if the
 covenant is broken;
- c) include a minimum of 20% Affordable Private Rent homes (which will form part of the overall 40% affordable housing requirement across the Area Action Plan area) and these shall be maintained as affordable in perpetuity;
- d) the Affordable Private Rent homes must have a minimum rent discount of 20% compared to equivalent local private rent homes, inclusive of service

- charges and taking into account up to date evidence on local rent levels and incomes;
- e) the Affordable Private Rent homes to be evenly distributed throughout the development and reflect the overall mix of unit sizes being delivered through the Build to Rent provision;
- f) ensure all units are self-contained and as new homes they must meet the accessibility and internal and external space standards set out in Policy 11: Housing design standards;
- g) offer rent certainty for the period of the tenancy. Any rent review provisions are to be made clear to the tenant before a tenancy agreement is signed, including any annual increases which should always be formula-linked;
- h) offer tenancies of three years or more for all tenants who want them, and break clauses for tenants, which would allow a tenant to end the tenancy with a month's notice any time after the first six months;
- i) have on-site management. This does not necessarily mean full-time dedicated on-site staff, but all schemes need to have systems for prompt resolution of issues and some daily on-site presence; and
- j) ensure providers have a complaints procedure in place.

The Section 106 Agreement should establish rent setting, review, monitoring, and clawback arrangements as well as the eligibility criteria for the Affordable Private Rent.

Policy 13d: Housing for local workers

Due to the significant affordability challenges for many local workers that serve the residents and businesses of Greater Cambridge, it is expected that an element of the affordable housing provided within the North East Cambridge Area Action Plan area will be targeted to meet local worker need.

Development proposals for purpose built Private Rented Sector homes, such as Build to Rent, which are offered to employers within and adjacent to North East Cambridge on a block-lease basis will be supported. These schemes still need to meet the requirements of Policy 13a: Housing, Policy 13b: Affordable housing and Policy 13c: Build to Rent.

Policy 13e: Self and custom build housing

On residential developments of 20 dwellings or more, 5% of all new homes should be brought forward as self or custom build homes.

Given the high-density nature of North East Cambridge, it is expected that these self or custom build homes will be provided as custom finish units in the form of houses or apartments built to a shell finish where occupiers determine the final layout and internal finish. This could include the location of internal walls, doors and fittings.

All self and custom build homes need to meet the accessibility and space standards set out in Policy 11: Housing design standards.

Where self or custom build unit(s) have been made available and appropriately marketed for at least 12 months and have not been sold, the unit(s) may be built out without the custom finish requirement.

Applicants should clearly set out how the need for self and custom build homes has been considered and addressed within their development proposals.

Community led self or custom build projects will be permitted where the community has formed an organisation as required by the national self and custom build legislation and their proposed development is compliant with the policies within the Area Action Plan.

Policy 13f: Short term/corporate lets and visitor accommodation

New visitor accommodation

Proposals for new purpose-built visitor accommodation will be supported subject to:

- a) there being a proven need for visitor accommodation to serve the area;
- b) the development will not result in the loss of existing housing;
- c) it being located in a district or local centres or within a business or science park;
- d) the accommodation provided should be of high-quality with wheelchair accessible units/rooms and communal spaces;

e) Proposals should minimise need to travel by private vehicle and should promote sustainable modes of transport.

Serviced apartments, if approved, will be conditioned so that they cannot be used for permanent residential use.

Conversion of existing visitor accommodation to residential use

Where planning permission is required, proposals to change purpose-built serviced apartment units (excluding apart-hotels) to residential use will only be supported in circumstances where the whole block of units are converted and not sub-divided, including the application of the relevant housing policies and relevant affordable housing provision.

Conversion of existing residential uses to visitor accommodation

Proposals to change residential units or land in residential use to visitor accommodation will only be supported in exceptional circumstances where it can be proven that the conversion will:

- a) not adversely affect residential amenity and sense of security;
- not adversely affect the local area's character or community cohesion either individually or cumulatively;
- c) for proposals involving the whole block of units, include a service management plan, agreed by the local planning authority and conditioned as appropriate which will cover all planning related aspects of the use of the site that will facilitate and minimise planning enforcement of the site

Why we are doing this

Relevant Objective: 1, 2, 3, 4, 5

The adopted Local Plans for Cambridge City and South Cambridgeshire District Councils identify the need for 33,500 new homes across Greater Cambridge between 2011 and 2031. Both plans identify North East Cambridge as a key location for future growth, with the total amount to be determined through the preparation of

this Area Action Plan. However, the delivery of housing within this area is not included within the housing supply that the Councils are relying upon to achieve the housing requirements in the adopted Local Plans. The Greater Cambridge Local Plan: First Proposals (2021) identifies the new homes at North East Cambridge as being an important contribution towards meeting the preferred housing requirement for the new Greater Cambridge Local Plan.

Higher density mixed-use development at North East Cambridge will make efficient use of previously developed brownfield land and maximise the benefits to the local area (see Policy 9: Density, heights, scale and massing). Comprehensive development within the Area Action Plan area will ensure that development will make a significant contribution towards meeting the housing needs of the community.

Development at North East Cambridge should provide a range of housing sizes, types and tenures to meet local housing need for potential residents including single person households, families, older people, people who require specialist housing and people wishing to customise their own homes at the construction stage. Such provision will help support housing diversity and sustainable growth across Greater Cambridge. Proposals promoting mono-tenure development are not likely to be supported.

Our evidence has identified a need for new specialist housing within Greater Cambridge, and therefore it is expected that North East Cambridge, alongside other sites across Cambridge and South Cambridgeshire, will contribute towards delivering specialist housing schemes to meet this need. Those in need of specialist housing are not a homogeneous group and therefore new developments will need to provide a broad range of specialist housing reflecting both local needs and the nature and design of North East Cambridge. Specialist housing, including accommodation for older persons and disabled people, should be located within close walking distance to local facilities and services.

It is recognised that housing needs may change during the long build out of North East Cambridge. Therefore, residential development proposals should respond to the latest evidence on housing need published or endorsed by the Councils. Early involvement of the Greater Cambridge Shared Planning Service, the Councils' Housing Services, Registered Providers, and Cambridgeshire County Council in site

discussions and design is strongly encouraged, in order to ensure that the housing, particularly affordable housing and specialist housing, provided will meet relevant standards, respond to the latest evidence of need, and achieve planning and site management requirements.

The Councils, along with other neighbouring local authorities, have commissioned an Accommodation Needs Assessment of Gypsies, Travellers, Travelling Showmen and Bargee Travellers and other Caravan and Houseboat Dwellers in the Cambridge Sub-Region Housing Market Area. The coronavirus pandemic has delayed the completion of the face-to-face survey elements of this assessment, such that it is not expected until the end of 2021. Low density housing, such as accommodation for Gypsy and Travellers, Travelling Showpeople, and those who choose to reside in caravans, is unlikely to optimise the development potential of North East Cambridge. It is therefore not consistent with the National Planning Policy Framework which requires development to make efficient use of land, in particular brownfield sites in close proximity to public transport hubs.

Affordable housing

Greater Cambridge is an expensive place to live. High demand and limited supply, combined with a strong local economy, contribute to the high cost of renting or owning a home in the area. Housing options for households on low and medium incomes are limited and make many of these households reliant on social or affordable rents or other forms of affordable housing. As identified in the Greater Cambridge Housing Strategy 2019-2023, 'affordable rent' (up to 80% of market rents) is unaffordable to many, especially those on low incomes. There is also a growing 'affordability gap' where middle income households are being squeezed out of the market; with limited housing options for low cost home ownership or within the private rented sector. The demand for housing for these groups far outstrips the current supply.

The provision of genuinely affordable housing is a priority for both Councils. All residents in Greater Cambridge should be able to access affordable housing that meets their needs to ensure that the area can meet its housing needs in a sustainable way and to address poverty and inequality. In order to support this

objective at least 40% of all new homes delivered at North East Cambridge will be required to be provided as affordable housing. The policy seeks to maximise the supply of new affordable housing without constraining overall housing delivery, and this has been demonstrated to be deliverable at North East Cambridge through whole plan viability testing.

The policy seeks an affordable housing tenure mix that will deliver homes to meet a wide range of housing needs and create a mixed and balanced community, therefore providing for different households and household incomes. A high proportion of social and affordable rent homes are sought to recognise that Cambridge and South Cambridgeshire are areas of high affordability pressure. Other affordable housing tenures, such as First Homes, shared ownership, and other affordable home ownership products, are sought to provide opportunities for households who would struggle to buy or rent on the open market.

Affordable Housing Allocations and Local Lettings Plans will be secured through a legal agreement to achieve the delivery of mixed and balanced communities and where appropriate will be used to prioritise housing such as for local workers or for specific groups of people.

This policy recognises that for homes to be 'genuinely' affordable, tenure and rent levels alone do not achieve affordability, and as such this policy is intended to be considered alongside those that contribute to the living costs associated with the location and design of someone's home. Homes that are highly energy efficient (see Policy 3: Energy and associated infrastructure) can lead to reduced utility costs, making homes more affordable to live in, and homes located near employment centres, active travel facilities and public transport links (see Policy 16: Sustainable Connectivity) reduce the cost of living for households, particularly benefiting those on lower to middle incomes.

Build to Rent

As part of the plan making process, the National Planning Policy Framework requires local planning authorities to take into account the need for a range of housing types and tenures in their area including provisions for those who wish to rent. In Greater Cambridge, there is significant rental demand to live in Cambridge and our evidence

shows that North East Cambridge provides an opportunity for Build to Rent developments to meet some of this demand. Build to Rent schemes will provide housing choice within North East Cambridge, as well as contributing to increasing local housing supply and accelerating delivery on individual sites.

The policy seeks to manage the number and clustering of Build to Rent schemes across the Area Action Plan area. North East Cambridge is anticipated to deliver approximately 8,350 homes and therefore the cap of 10% as set out in Policy 13c: Build to Rent will limit Build to Rent homes to around 835 homes. This cap will ensure that across the Area Action Plan area together all new development can make provision for the necessary social and physical infrastructure, meet the requirement for at least 40% affordable housing, and not undermine the placemaking principles of creating balanced and mixed communities.

Build to Rent developments at North East Cambridge will need to meet all relevant housing standards, be of a high design quality, offer longer-term tenancies than normally available in the private rented sector, and are expected to be under single ownership. These requirements secure a commitment to, and investment in, placemaking commensurate to other forms of housing. The policy reflects the current requirements as set out in the <u>Greater Cambridge Housing Strategy Annexe 9: Build to Rent</u> (2021).

The mechanism for providing the Affordable Private Rent homes within these developments should be agreed with the Councils but is likely to be secured through a legal agreement.

Housing for local workers

Both Councils signalled an ambition in the Greater Cambridge Housing Strategy 2019-2023 to work with local employers to provide accommodation that can support local workers. North East Cambridge has the potential to provide some housing for local workers, both through specific targeting of affordable homes to local workers and by including some block-leased Private Rented Sector homes that are tethered to specific employers within or adjacent to the Area Action Plan area for the purposes of meeting the housing needs of their employees. This will help ensure that

housing on the site is suitable and sufficiently affordable for local workers on a range of incomes.

Such an approach will also help deliver upon the Area Action Plan's ambitions of low car ownership and creating a cohesive inclusive community. In establishing the link between employment and residential uses, and by integrating homes and workplaces, not only are trips taken off the road, but the operational cost of living is reduced, thereby contributing to the commitment of genuinely affordable homes outlined in Policy 13a: Housing and Policy 13b: Affordable housing.

The eligibility criteria for the local workers will be agreed with the Councils through a legal agreement and/or Local Lettings Plan.

Self and custom build housing

The Councils have a duty to identify supply for enough suitable self and/or custom build units to meet the identified demand of those registered on the Greater Cambridge Self and Custom Build Register. To address some of this demand and to diversify the types of homes within the Area Action Plan area, North East Cambridge should make provision for self and custom build homes.

Due to the high-density nature of proposed housing within North East Cambridge, it is anticipated that the provision of self and custom build housing will take the form of custom finish units, where future occupiers are able to decide internal layouts and finishes. Additionally, following the successful provision of a community led self build development at Marmalade Lane, within Orchard Park, there is similar opportunity within North East Cambridge.

Given likely changes in the level of demand over time for self and custom build units within North East Cambridge, where provision of self or custom build units is not taken up, it is reasonable for the unit to be delivered without the self or custom build requirement provided that 12 months of appropriate marketing has been undertaken.

Visitor accommodation including corporate and short term lets

Other than traditional hotels, visitor accommodation such as apart-hotels and serviced apartments can take various forms. Some accommodation offered at apart-

hotels and serviced apartments display characteristics associated with permanent, self-contained housing. Some is more akin to hotels, as a result of the type of services they provide, and, as such, may consequently result in different impacts to permanent housing. Apart-hotels and serviced apartments may therefore fall within the C1 Use Class or be a sui generis use, depending on their characteristics, such as (amongst others):

- presence of on-site staff/management
- presence of reception, bar and/or restaurant
- provision of cleaning and administrative services
- ownership or other tenure of units and/or ability to sell or lease on the open market
- minimum/maximum lease lengths.

Developers will be required to provide full details of the nature of the accommodation to be provided and the proposed terms of occupation when submitting a planning application for an Airbnb type use, new apart-hotels and serviced apartments.

Where proposals for apart-hotels or serviced apartments are considered to fall within C3 use class or comprise sui generis uses which have the characteristics of a C3 use, such proposals will be conditioned accordingly, to ensure that these are not used as permanent residential units.

The Area Action Plan makes the provision for a significant amount of new homes and jobs. Visitor accommodation will contribute towards the functioning of the area and it is therefore appropriate that the Area Action Plan supports the principle of visitor accommodation. To minimise the impact of visitor accommodation on residential amenity and the use of private cars, visitor accommodation should be directed towards areas with good public transport with appropriate amenities, including the District and Local Centres, or within the business and science parks they are intended to serve.

All visitor accommodation buildings should achieve and maintain high-quality standards in terms of their environmental building standard/rating (see Policies 2 to 4) as well as the facilities and services they offer their occupiers.

The Councils will take steps to ensure that apart-hotel and serviced apartment units approved for use as visitor accommodation will not be used for any other purpose. This may include the imposition of conditions to ensure minimum and maximum lengths of stay (typically 90 days) and a restriction on return visits. Extensions to the 90-day maximum length of stay for serviced apartments, will only be considered on a case-by-case basis for a specific employer operating in the Area Action Plan area. This will ensure the area is able to cater for its own needs and not become a destination location for other hotel users. These will also be secured by condition or via a Section 106 agreement. If the business were to subsequently move away from the Area Action Plan area the extension would be terminated. Extended stays beyond 90 days is proposed to avoid putting additional pressure on the local housing market by discouraging the occupation of residential units by corporate lettings, for businesses operating within the Area Action Plan area.

Conversion of existing visitor accommodation to residential use

The conversion of existing visitor accommodation to residential use will be supported where the overall block or development is proposed to be changed. This will protect residential amenity and ensure effective management of the development.

Applications to convert existing visitor accommodation to residential use will be subject to the housing requirements set out in Policy 13a: Housing and Policy 13b: Affordable housing.

Conversion of existing residential uses to visitor accommodation

The change in use of a residential property to informal online rental or a services apartment, has the potential to undermine the character of the local area. The cumulative impact is a loss of housing supply and potential impacts to residential amenity and on community cohesion – both very important aspects of sustainable communities - by increasing the transitory nature of the community. It is important that residential units are not subsequently lost to informal rental use or used as serviced apartments on a permanent basis to maintain the supply of housing and residential amenity.

In recent years, the use of online platforms such as Airbnb to rent out either whole or parts of a residential unit as temporary accommodation for a variety of occupiers has become quite prevalent in popular tourist locations and areas close to large employment centres. Although these services provide opportunity to support good growth in cities, the widespread and concentrated prevalence of this activity involving the whole (including part use) of the residential unit has many negative effects on surrounding local residents. These include:

- Loss of amenity space, privacy and enjoyment of their home resulting from patterns of behaviour of short-term tenants.
- Continual disruption caused by visitors moving in and out of the premises, disruptive occupants and associated servicing of the unit(s).
- Frequent rotation of unknown, neighbouring occupiers undermines residents' sense of security of living in their own homes.

In addition to those above, it also removes much needed housing from the existing local housing stock.

The Councils will only support the conversion of existing homes to visitor accommodation where impacts can be adequately addressed. Where a proposal involves the conversion of a whole block of units, a service management plan will need to be agreed by the local planning authority and conditioned, as appropriate covering all planning related aspects of the use of the site. This will ensure the site is properly managed to protect local amenity as well as facilitate and minimise planning enforcement of the site.

Evidence supporting this policy

- Greater Cambridge Housing Strategy 2019-2023 and Annexes
- Greater Cambridge Housing Strategy Annex 9: Build to Rent (2021)
- Greater Cambridge Housing Strategy Annex 10: Clustering and Distribution of Affordable Housing (2021)
- Greater Cambridge Housing Strategy Annex 11: Setting of Affordable Rents
 (2021)
- Cambridgeshire and West Suffolk Housing Needs of Specific Groups Study (GL Hearn, 2021)

- Housing Needs of Specific Groups Study Addendum for Greater Cambridge (GL Hearn, 2021)
- <u>Build to Rent Market in Greater Cambridge and West Suffolk</u> (Savills, June 2020)
- Build to Rent Market Strategic Overview and Summary of Site-Specific
 Appraisals (Arc4, March 2021)
- North East Cambridge Market Demand Appraisal Build to Rent (Arc4, March 2021)

Topic Papers and other documents informing this policy

- Housing Topic Paper (2021)
- Health Facilities and Wellbeing Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)

Monitoring Indicators

- Net additional homes permitted and completed
- Number of affordable homes permitted and completed
- Percentage of affordable homes by tenure permitted and completed
- Monitor housing mix by number of bedrooms
- Net additional Build to Rent dwellings permitted and completed
- Proportion of Build to Rent dwellings permitted and completed that are classified as affordable rent
- Number of self and custom build homes permitted on-site
- Monitoring C1 (Hotels)

Policy links to the adopted Local Plans

- Cambridge Local Plan
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 45: Affordable housing and dwelling mix
- Policy 47: Specialist housing
- Policy 48: Housing in multiple occupation

- Policy 50: Residential space standards
- Policy 51: Accessible homes
- Policy 52: Protecting garden land and the subdivision of existing dwelling plots
- Policy 55: Responding to context
- Policy 56: Creating successful places
- Policy 57: Designing new buildings
- Policy 77: Development and expansion of visitor accommodation

South Cambridgeshire Local Plan

- Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- Policy E/20: Tourist Accommodation
- Policy H/8: Housing Density
- Policy H/9: Housing Mix
- Policy H/10: Affordable Housing
- Policy SC/4: Meeting Community Needs
- Policy TI/2: Planning for Sustainable Travel

6.3 Social, community and cultural facilities



Figure 34: Locations for anticipated new social, community and cultural facilities within North East Cambridge

Social and community facilities are a vital part of ensuring that communities' day to day needs are met, as well as fostering wellbeing, social interaction, lifelong learning and cultural exchange. New social infrastructure in North East Cambridge should meet the needs of existing and new communities without duplicating what is already accessible to the area.

We expect development to deliver a range of identified facilities. that should be multi-functional, accessible to all, and well-integrated with other uses. This policy sets out what facilities we expect to be built and how this is to be achieved.

Policy 14: Social, community and cultural infrastructure

Development proposals should be supported by the necessary and timely delivery of community, cultural and leisure facilities to support the needs of the development.

Proposals should demonstrate how they will deliver high-quality, multi-functional spaces for different ages and abilities which encourage inclusivity and social cohesion. They should seek to take full advantage of opportunities to maximise flexible spaces that are accessible not just in terms of physical distance and location but also in terms of availability. Proposals should ensure early provision of operational facilities in the development process, allowing for a range of uses and users (including workers not just residents). Facilities should be available throughout the day and outside of normal working hours, year-round. This will be subject to addressing any potential health and quality of life / amenity issues (see Policy 25). Individual proposals providing community, cultural, sports or leisure facilities that broaden the choice of these uses will be supported, maximising the long-term economic sustainability of multi-use facilities. Proposals for new social, community and cultural infrastructure should make provision for community access.

The minimum required on-site social, community and cultural infrastructure provision has been identified as the following:

- 2 primary schools (inclusive of nursery provision), plus one safeguarded at Greenway Local Centre if needed to meet future needs
- Visual and performing arts hub (including production studios, gallery/museum and theatre/community conference space)
- Community garden and food growing spaces
- Library and community centre
- Health hub

Formal outdoor sports courts and a Five Court Indoor Sports Hall Opportunities to co-locate complementary social facilities such as health centres, libraries, day care and nurseries which provide flexible floorspaces should be maximised, as well as communal rooms and spaces within individual developments. These should ensure all buildings make the best use land and reduce the need for people to have to travel to access a variety of different but related services and help foster a sense of community within residential buildings. Early engagement with infrastructure providers, partners and community organisations should be undertaken at an early stage of the development proposal.

Opportunities should be explored and taken to make sure these new facilities are affordable and accessible for existing and new residents and employees.

Development proposals including residential development should provide 0.1 ha of outdoor formal sports courts per 1,000 people as part of the development. Proposals for all formal sports facilities should conform with any relevant sports strategies for the Councils. Ancillary uses for sports or leisure facilities provided within an employment development will be supported, subject to any relevant amenity issues being addressed. The size of these facilities should be commensurate to the demand generated by the employment development to avoid undermining the long-term economic sustainability of equivalent public facilities. Such spaces should also explore the opportunity to offer these spaces to other users within and outside of normal working hours.

Development proposals should provide a Sports Strategy (also known as a Facilities Development Plan) setting out the details of specific facilities to be developed, the rationale and need for these.

Sports facilities that should be retained on-site include:

- Cambridge Regional College (Sports Hall & Centre including Badminton Club and outdoor 3G pitch)
- Revolution Health & Fitness Club (or any future equivalent)
- The Trinity Centre exhibition and event complex (or any future equivalent)

Proposals for the redevelopment of existing social, community and cultural facilities will be supported where this secures enhanced re-provision on-site or on an alternative site which improves accessibility and the facilities long term financial viability.

The loss of a facility or site that was last in use as a community, sports or leisure facility will only be permitted if it is demonstrated that:

- There is no longer a need for that facility;
- There are adequate similar facilities within walking distance that offer equivalent provision; or

 The activities are incompatible and cannot be made consistent with acceptable living conditions for nearby residents.

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

It is essential that the growth in population at North East Cambridge is supported by adequate social, community and cultural infrastructure including schools, community spaces, libraries, sports and leisure facilities, faith provision and cultural venues, for example. These types of facilities help to create anchors for the community and allow for residents to develop a sense of identity as well as have a positive outcome on people's health and well-being. Provision can be multi-functional indoor and outdoor space supporting a range of activities for different users and groups and the councils will encourage facilities that are capable of accommodating a mix of uses which will serve more sections of the community rather than traditional single-use buildings. Community groups can often use buildings at different times of day or on different days of the week to enable the most efficient use of facilities. Temporary new facilities can also support new communities and could be delivered on sites not expected to come forward for development in the short term (see Policy 28: Meanwhile Uses).

The provision of new social, community and cultural facilities will also create the opportunity to develop a socially and economically inclusive place to live and should assist in reducing inequalities in some of the surrounding areas of North Cambridge. To address the social exclusion of low-income groups, new development should consider how existing and new residents can be supported and encouraged to access new facilities, through their location and design as well as their co-location with other local services. The North East Cambridge Anti-Poverty and Inequality Topic Paper identifies that the provision of accessible amenity spaces will facilitate and encourage social activity, community cohesion and subsequently reduce a range of inequalities and prevent loneliness and isolation.

New facilities should be located in close proximity to the communities they serve to reduce the need to travel and help engender a sense of ownership of the facilities by the local community. New provision should also take account of access, in terms of

availability and affordability to the population it is intended to serve. To maximise the use of new facilities, they need to be very high quality requiring minimal maintenance, to allow them to be readily throughout the day, all year-round. Consequently, these facilities need to be designed to not cause amenity issues for surrounding occupants when in use. Early engagement with infrastructure providers, partners and community groups should be undertaken to ensure a coordinated approach to infrastructure provision at North East Cambridge.

Education facilities

The education authority for the area have stated in the Education Topic Paper (2021) that based on the anticipated housing types, tenures and sizes likely to be delivered at North East Cambridge, the development would generate the need for initially two but potentially up to three primary schools. This provision should be located on-site to ensure good accessibility to new residents within North East Cambridge and minimise the need to travel, particularly by private vehicle. Their exact size and format will need to ensure they do not adversely affect neighbouring schools and they should be delivered to ensure provision is provided as new residential units are occupied. Based on the anticipated phasing of development, the proposed primary school site located at Greenway Local Centre is to be safeguarded to meet future educational needs if required.

The Education Topic Paper also indicates that the assumed housing mix, at North East Cambridge does not generate sufficient numbers of pupils to warrant the need for a secondary school on-site. The existing Local secondary school provision in the surrounding area of North East Cambridge is also found to be suitable in supporting the needs of both the new and existing community.

Community facilities

A range of facilities should be delivered to support the needs of the emerging and existing communities. A variety of flexible spaces that can include a community hub, space for community conferences, galleries, performance and arts space will contribute to the sense of community in the area.

The Cultural Placemaking Strategy (2020) and Infrastructure Delivery Plan (2021) are key documents which assess capacity and need in and around North East

Cambridge and set out the different types of facilities needed to support development in this area. Identified community and cultural facilities that should be provided comprise a library and community centre, community rooms that could facilitate several uses including youth clubs, worship groups as well as spaces to enable community events to take place. It should also include spaces which allow for cultural activities and events to take place which form part of the meanwhile strategy for the area. As outlined in Policy 8, new development will be expected to deliver new open spaces such as community gardens to allow space for food growing and for residents to live active lifestyles and improve their health and well-being.

Health hub

Provision of health facilities is important in ensuring access to health and social care services to support health and wellbeing in the North East Cambridge. The health authority for the area, the Cambridge and Peterborough NHS Trust and the local Clinical Commissioning Group, have identified the need for a health hub to support the new and existing community. The health hub should be flexible, adaptable and designed for long-term use. It will need to consider a range of primary, secondary and other social service needs of the wider community. The early phasing of health services will allow for community development and social cohesion as well as engagement with residents to determine their mental and physical needs.

Sport and leisure

Larger scale sports and recreational leisure facilities should be considered in appropriate areas of major development as set out in Policy 8: Open spaces for recreation and sport. Additionally, a Health Impact Assessment should be provided (as set out in Policy 23) to set out both formal and informal provision of social infrastructure to allow for residents to live active lifestyles and improve health and wellbeing. A Sports Strategy (also known as a Facilities Development Plan) will be required for proposals involving the provision of new sports and leisure facilities to confirm how these facilities will be developed, their timely phasing to support residential development as well as confirming how they will address local needs.

It is important that individual sport and leisure uses will only be permitted where they will not undermine the long-term viability of a multi-use schemes providing a similar

activity. Corporate users will be allowed to provide some ancillary sports facilities on their own premises where it will not have an adverse impact on equivalent local community provision.

As outlined in Policy 8, new development will be expected to deliver new open spaces and contribute to formal sports provision to support residential development. Additionally, it is important that new residential development delivers smaller scale formal outdoor sports courts such as tennis and basketball. Innovative solutions for the delivery of on-site formal sports provision, to support health and well being and physical activity will be encouraged. These could be delivered as integrated spaces within buildings such as at ground floor level or as part of podium and roof top spaces. Appropriate access and management arrangements of these spaces should be set out in the Sports Strategy/Facilities Development Plan to enable both resident and wider community use. Where it is demonstrated that provision cannot feasibly be accommodated on-site, then a financial contribution will be secured through planning obligations towards off-site provision.

It is recognised that, due to the higher density nature of North East Cambridge it may be more feasible to take a more strategic approach for the delivery of large, formal sports facilities. In terms of formal indoor sports provision, a 4-5, court size sports hall should be provided on-site. However, swimming pool provision will be delivered off-site to take advantage of opportunities provided in alternative locations for areawide facilities.

Cambridge City and South Cambridgeshire Councils will complete a Swimming Pool Delivery Strategy for Greater Cambridge. The study will analyse demand and supply for swimming pools and advise on how best to deliver swimming pool provision across Greater Cambridge including North East Cambridge. It is anticipated that residential development at North East Cambridge will contribute to off-site swimming pool provision which will be accessible to North East Cambridge residents. Open space requirements within North East Cambridge are specifically set out within Policy 8: Open spaces for recreation and sport.

As well as providing for new development it is important that existing facilities are retained to support and enable community activity. These facilities make a significant contribution to a communities' mental and physical well-being and sense of place.

The Councils therefore place great emphasis on their retention. There is currently a golf driving range on-site. Given the low-density nature of the use and the proposed housing densities, it is unlikely that this facility can be realistically re-provided on-site therefore, it will need to be considered whether it should be replaced off-site in accordance with paragraph 99 of the NPPF (2021). If reprovision is required, this will be secured by a planning condition or obligation attached to any new development on its current site. This is addressed in Policy 10b.

Evidence supporting this policy

- Community and Cultural Facilities Audit Provision (2020)
- Cultural Placemaking Strategy (2020)
- Greater Cambridge Creative Business and Cultural Production Workspace study (2021)

Topic Papers and other documents informing this policy

- Community Safety Topic Paper (2021)
- Education Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- Health Facilities and Wellbeing Topic Paper (2021)
- Open Space Topic Paper (2021)

Monitoring indicators

 Amount of net floorspace for D1 and sui generis uses permitted and completed that fulfil a community or leisure use

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 1: The presumption in favour of sustainable development
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 56: Creating successful places

- Policy 59: Designing landscape and the public realm
- Policy 68: Open space and recreation provision through new development
- Policy 74: Education facilities
- Policy 75: Healthcare facilities
- Appendix K: Marketing, local needs assessment and viability appraisal

South Cambridgeshire Local Plan

- Policy SS/4: Cambridge Northern Fringe East
- Policy HQ/1: Design Principles
- Policy SC/4: Meeting Community Needs
- Policy SC/5: Community Healthcare Facility Provision
- Policy SC/6: Indoor Community Facilities
- Policy SC/7: Outdoor Play Space, Informal Open Space and New Developments

6.4 Shops and local services

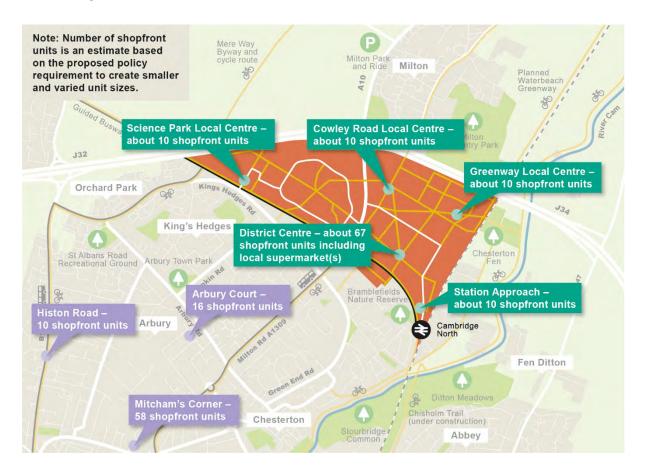


Figure 35: Proposed locations and amounts of shopfront units anticipated in North East Cambridge

North East Cambridge will provide a balanced range of shops and services – such as cafés, restaurants, and leisure activities - that meets the daily needs of local residents, employees and visitors while not creating a 'destination' location for people living further afield which would increase car trips into the area. The policy sets out how much retail should be provided, its location and design criteria to make sure that everyone has easy access by walking and cycling to the shops and services they need.

Policy 15: Shops and local services

Hierarchy of centres and retail capacity

The hierarchy of centres in North East Cambridge is set out below along with their indicative identified capacity to support convenience, comparison and other town centre uses.

Retail capacity (gross m2) GIA

Type of centre	Designated centres	Convenience	Comparison	Other Town Centre uses	Total
District Centre	NEC District Centre	2,000	1,700	4,200	7,800
Local Centre	Station Approach Local Centre	300	250	625	1,200
Local Centre	Greenway Local Centre	300	250	625	1,200
Local Centre	Cowley Rd Local Centre	300	250	625	1,200
Local Centre	Science Park Local Centre	300	250	625	1,200

Within the District and Local centres as shown on the Area Action Plan Spatial Framework, new Class E uses (sub-categories E(a), E(b) and E(c)) will be permitted, where:

• they are in proportion to the scale and function of the centre; and

 their cumulative floorspace for convenience or comparison uses (including the proposal and all other similar uses in the same centre) do not exceed the floorspace provision (outlined above).

All other proposed uses, listed below within this policy will be permitted provided:

- they complement the retail function and character as well as maintain or add to the vitality, viability and diversity of the centre;
- they would not give rise to a detrimental effect, individually or cumulatively, on the character or amenity of the area through smell, litter, noise or car parking; and
- for any new 'other town centre use' proposals, their cumulative total floorspace (with any existing 'other town centre use' in the same centre) does not exceed the floorspace provision outlined above.

Changes of use from sub-category E(a) to another town centre uses (subcategories E(c), E(d), E(e), E(f)) will be permitted where the development would satisfy the above criteria. Additionally, for E(a) convenience use, a minimum of 25% of the centre's total floorspace would remain in E(a) convenience food store use.

Except for each centre's main convenience food stores, all other units should be flexible, internally configurable units and will not exceed a maximum floorspace of 150 m2 gross (GIA). The merging of separate flexible, internally configurable units will not be permitted. No single proposal, regardless of use, will be permitted that is large enough to generate a need for a car park.

Any retail developments proposed outside these centres in North East Cambridge must be subject to a retail impact assessment where the proposed gross floorspace is greater than any retail impact threshold set in the Cambridge Local Plan (2018) or any future equivalent. A retail impact assessment may be required below this threshold where a proposal could have a cumulative impact or an impact on the role or health of nearby existing or planned North East Cambridge centres within the catchment of the proposal.

The following uses are suitable at ground floor level in the identified centres:

Shops (Sub-category E(a) Use Class)

- Cafés and restaurants (Sub-category E(b) Use Class)
- Financial and professional services (Sub-category E(b) Use Class)
- Drinking establishments (Sui Generis)
- Takeaways (Sui Generis)
- Private social and healthcare related facilities that cannot be provided in multifunctional community or social facilities premises (Sub-category E(e) Use Class)
- Small-scale indoor gyms, recreation or fitness uses (Sub-category E(d) Use Class)
- Small-scale 'sui generis' uses typically found in local/district centres, including launderettes, beauty parlours and small collection points (or lockers)

Across all centres, the withdrawal of permitted development rights will be used to control sub-categories E(c), E(d) and E(g) Use Class uses, in their first instance and change of use to those uses. Other sub-category restrictions and sui generis uses may also be considered as part of an Article 4 Direction to control changes in these centres.

In the district centre, no more than 200 m2 net should be in either sui-generis take-away use or sui generis betting shop use. In Local Centres, takeaways and betting shops will permitted where it is demonstrated that these uses are not becoming the dominant use in the centre and that the cumulative impacts of these uses are acceptable. All uses (except for sub-category E(a) convenience or comparison shopping) will be categorised as 'other centre uses' for the purpose of determining if proposals exceed their capacity threshold.

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

Cambridge City Centre is the regional centre for the area, providing the majority of floorspace for both retail and commercial leisure activities in the city. However, a key aspect of sustainable communities is easy access to shops and other local services such as cafés and restaurants which help meet the day-to-day needs of the local

communities. It is therefore important that both new and existing communities have easy access to these types of facilities, including during the construction phase to reduce the need for residents to travel and, maintain vibrant and viable district, local and neighbourhood centres.

Currently, there are three centres on the northern fringe of Cambridge adjoining the North East Cambridge area. The centres include: a local centre at Orchard Park with two budget hotels nearby; and two neighbourhood centres, one on Campkin Road and the other on the corner of Milton Road and King Hedges Road. North of the A14 there is a rural centre at Histon & Impington and Milton village centre where the closest, large supermarket is located adjacent to Junction 33 of the A14. It is important that any new proposed centres at North East Cambridge are sustainable, but do not undermine the viability of these retail centres. Any retail proposal in the North East Cambridge area which is outside a designated or planned centre, as defined on the Area Action Plan Spatial Framework and Land Use Plan, will need to ensure it will not have an adverse impact on either the proposed or existing centres including those in neighbouring centres.

Quantity of town centre uses required to meet local needs

It is the intention of the area to provide a balanced range of shops and services that meet the needs of local residents, employees and visitors to the area. The Retail Town Centre Study sets out the retail needs specific to North East Cambridge, as set out under Hierarchy of centres and retail capacity in the policy. which outlines how the vision for North East Cambridge's approach to creating vibrant and highly sustainable local centres can best be achieved.

Scale and type of proposed town centre uses

It is important that North East Cambridge meets local needs but is not a 'destination' location for people living further afield who may travel to the area by car, in order not to exceed the 'trip budget' for North East Cambridge. It is therefore necessary to resist any proposal that will create a need for specific car parking provision. A small to medium sized food store not exceeding 1,200m2 gross floorspace is not expected to generate a need for a car park. This should be achievable within the District

Centre along with other smaller scale, independent shops to support local people meeting their day-to-day needs.

In the four local centres, at least one convenience store would be expected per centre. The proposed amount of convenience floorspace (outlined above) indicate enough capacity, in all the centres, to provide for these convenience food stores.

The North East Cambridge Retail Town Centre Study indicates that other commercial retail units located within either local or district centres would require smaller format units of between 80-150 m2 gross floorspace. Some flexibility to allow for different floorspaces is supported as it will help retailers to adapt to fluctuating demand and changing consumer trends.

All the centres would require a range of 'other' town centre uses in addition to comparison and convenience goods floorspace to complement the function of the centre. It is intended that these should add to the centre's vitality and vibrancy by strengthening the centre's distinctiveness and ensure its long-term success.

Local appropriately scaled commercial leisure uses such as pubs and restaurants will be an acceptable use in the North East Cambridge's centres. However, given the need to ensure North East Cambridge remains a sustainable destination but not a destination location, which attracts high volumes of car-based travel from beyond the local area, it is not intended for North East Cambridge to accommodate any large-scale cultural, entertainment or leisure facilities such as a cinema complex or a tenpin bowling facility. These would most likely not be able to be delivered within the North East Cambridge Area Action Plan 'trip-budget' and have the potential to undermine other established centres already providing similar uses. As such, leisure uses involving entertainment and culture will need to comply with Policy 14: Social, community and cultural Infrastructure, where applicable.

To ensure that the District and Local centres are diverse and balanced in terms of meeting the day to day needs of the local community, takeaway and betting shop floorspace will be limited to up to 200m2 within the District Centre. Within the Local Centres, proposals for takeaways and betting shops will be required to demonstrate that they will not become the dominant use in the centre to avoid the over proliferation and excessive clustering of these uses, which can often have a negative

impact on amenity as well as the vitality and viability of centres. It is also important these uses do not detract from the centres primary retail function or create dead frontages during daytime hours. Takeaway uses should also be sited away from entrances to schools to discourage children from following unhealthy lifestyles by frequenting these types of food providers before or after the school day. As the primary schools at North East Cambridge are located within the District and Local Centres, it is not feasible to create takeaway exclusion zones around the schools. It is recognised that there may be a need for some private social and healthcare facilities such as dentists in the centres, and it is essential that enough provision is retained for meeting the day-to-day needs for local people. As a minimum, a quarter of the floorspace available in the centres should be retained for E(a) convenience food shopping. In effect these uses will act as an 'anchor' store for other centre uses. Proposals that lead to the loss of this minimum 25% threshold should be resisted to avoid undermining the centre's main purpose of meeting the everyday needs of local residents and employees. The types of permitted ground floor uses should be commensurate in scale and function of the centre, to meet local need.

Design and flexibility of units

The higher density nature of North East Cambridge means that there should be sufficient demand to support a range of shops, cafés, pubs and restaurants. However, it is recognised that with ever changing nature of consumer retail trends and entertainment preferences, it is important that these units are genuinely flexible in both size and format to encourage an appealing range of different retail and leisure activities including independent retailers which create a vibrant and authentic high street environment.

It is therefore proposed to allow different floorspace configurations to allow greater flexibility for shops and other local services to set-up, operate and allow for some expansion as business needs change over time. However, in order to avoid the creation of large units that would be out of character with the intended approach of attracting small, independent retailers, a limit to the size of these flexible units will be permitted. Similarly, the merging of separate flexible, internally configurable units will not be permitted. This approach should also allow for centres to adapt to changes in

consumer trends and habits in a sustainable manner that supports the strategic objectives for North East Cambridge.

The withdrawal of Permitted Development rights (and the use of Article 4 Directions or equivalent if necessary and appropriate) will need to reflect the Permitted Development regime in operation. Their use is intended to ensure all North East Cambridge centres remain vibrant and attractive for local people and cater to their day-to-day needs. Widespread conversion of units to non-food retail use will have a significant adverse effect on their ability to fulfil their primary function. Controls may therefore be necessary to ensure the character and function of each centre is properly protected through the planning process.

Evidence supporting this policy

- Greater Cambridge Retail and Leisure Study Baseline Report 2021
- Innovation Districts Paper (2020)
- North East Cambridge Retail Town Centre Evidence Base Study (2021)

Topic Papers and other documents informing this policy

- Health Facilities and Wellbeing Topic Paper (2021)
- Community Safety Topic Paper (2021)

Monitoring indicators

 Amount of new retail and other town centres floorspace permitted and completed by type (gross and net)

Policy links to the adopted Local Plans

Cambridge Local Plan 2018

- Policy 2: Spatial strategy for the location of employment development
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 56: Creating successful places
- Policy 59: Designing landscape and the public realm

- Policy 72: Development and change of use in district, local and neighbourhood centres
- Policy 73: Community, sports and leisure facilities

South Cambridgeshire Local Plan 2018

- Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- Policy HQ/1: Design Principles

7. Connectivity



Figure 36: Infographic showing approach to achieving sustainable transport and a modal shift across North East Cambridge

A vital part of reducing our climate impacts is to reduce the need to travel and bring about a major shift in how people travel. This means news forms of digital connectivity and people walking, cycling and using public transport for as many of their journeys as possible.

North East Cambridge is a 15-20 minute cycle ride from the city centre. It already has good public transport links, and there are many walking, cycling and public transport improvements already planned for this area. The ambition is to build on this

by creating a movement network that prioritises walking and cycling over vehicle traffic. Figure 37 shows the Cambridgeshire and Peterborough Combined Authority's ambition for a future bus network (included in the Bus Service Improvement Plan) and how North East Cambridge fits into it.

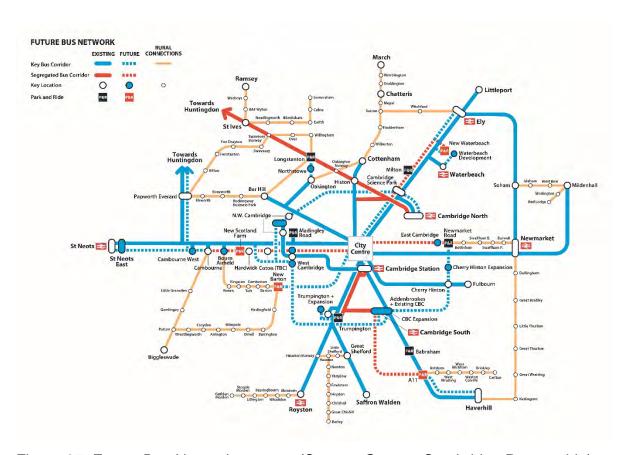


Figure 37: Future Bus Network concept (Source: Greater Cambridge Partnership)

Adding more vehicular movements into the area will be unacceptable in terms of road capacity, as well as air quality and placemaking. For those vehicles that do access the area, there will need to be a significant shift in balance away from private vehicles to make way for public transport vehicles enabling travel by bus, rail and active travel, at a level not seen in Greater Cambridge before. To achieve this the Area Action Plan encourages the use of sustainable travel modes, as well as limiting car use and parking significantly.

This section contains the following policies:

- Policy 16: Sustainable Connectivity
- Policy 17: Connecting to the wider network

- Policy 18: Cycle and Micro-mobility Parking
- Policy 19: Safeguarding for Public Transport
- Policy 20: Last mile deliveries
- Policy 21: Street hierarchy
- Policy 22: Managing motorised vehicles

7.1 Sustainable connectivity



Figure 38: Strategic walking and cycling routes and mobility hubs, to be retained and created in North East Cambridge.

North East Cambridge must be designed around the principles of walkable neighbourhoods and healthy towns, to reduce the need to travel and to encourage

sustainable travel choices. The policy sets out how development in the area should create a comprehensive network of routes along desire lines, which are direct, permeable, legible and safe which is suitable for all people, where people are prioritised over vehicular traffic and can move easily between different forms of sustainable transport in order to complete their journey.

Policy 16: Sustainable Connectivity

All new development within North East Cambridge will need to facilitate travel by active and sustainable modes within and across the wider area, either through onsite provision or through planning obligations. In particular, all developments should:

- be designed around the principles of walkable neighbourhoods and healthy towns, fully accessible to everyone, to reduce the need to travel and encourage active sustainable travel;
- be designed to facilitate the delivery of a comprehensive network of high quality links and connections within and between sites, that are direct, permeable, legible, integrated with the green and open space network, safe and where priority is given to people over vehicular traffic with low traffic and design speeds as well as car free neighbourhoods (see Policies 21 and 7a) to encourage active travel trips and deliver excellent connections via high-quality public transport (see Policy 19).

The network should seamlessly integrate and improve connectivity within the Area Action Plan area, to the adjoining areas around north Cambridge including nearby villages, Cambridge city centre, employment areas, and utilising green links to the wider countryside and Rights of Way network (see Policy 17). Leisure routes should include appropriate provision for equestrians.

The pedestrian and cycle connections to be made as part of North East Cambridge are shown on Figure 38 and include:

 a) Cowley Road will form a new high-quality spine through the development between Cambridge North Station/Station Approach Local Centre – across Milton Road (via new bridge) - Cambridge Science Park - Cambridge Regional College.

- b) Cambridge Science Park Milton Road (north) crossing Cowley Road
 Neighbourhood Centre railway crossing Chesterton Fen open space and
 River Cam towpath
- c) Cambridge North Station District Centre Cowley Road Neighbourhood
 Centre Milton Village (via Jane Coston Bridge).
- d) Milton Village (via Jane Coston Bridge) Cowley Road Neighbourhood
 Centre Milton Road.
- e) Waterbeach Greenway (under A14) Linear Park new Guided Busway stop
 Nuffield Road.
- f) Waterbeach Greenway (under A14) Linear Park District Centre –
 Cambridge North Railway Station/Station Approach Local Centre.
- g) Cambridge North Station/Station Approach Local Centre Chisholm Trail
 (proposed) Cambridge Station Cambridge Biomedical Campus
- h) District Centre Gainsborough Close (East Chesterton)
- i) Cambridge Science Park Garry Drive (King's Hedges) Campkin Road Neighbourhood Centre.
- j) Mere Way (under A14) Cambridge Regional College Science Park Local
 Centre King's Hedges Road Guided Busway stop (existing).

The public realm must be designed to put people first and to create a vibrant and socially interactive environment (see Policy 7a) with a seamless interface with public transport and other travel options at mobility hubs (see Policy 19). The design of streets and spaces should consider the needs of those walking, cycling and using other sustainable modes to provide generous spaces to enable high volume use and minimise conflict between different users of different abilities, including those using mobility wheelchairs, electric bikes and e-scooters (when legalised).

Planning applications should demonstrate how innovative and flexible solutions to internalising trips and reducing motor vehicle use have been explored, including measures such as:

- digital infrastructure
- online information for journey planning
- Mobility as a Service (MaaS)
- micro-mobility
- demand responsive transport and ride sharing

- electric car clubs
- smart / mobile ticketing
- cycle taxis
- last mile deliveries (see Policy 20: Last mile deliveries)
- future proofing for technological improvements, and the use of autonomous vehicles (see Policy 30).

Why we are doing this

Relevant Objective: 1, 2, 4, 5

The location and connectivity of North East Cambridge provides a unique opportunity to bring forward a highly sustainable type of development designed around accessibility and the needs and desire lines of people rather than cars, marking a step change in the way people move around. The strategic objectives for the Area Action Plan state that it must be designed around the principle of walkable neighbourhoods and healthy towns, providing local services, cultural opportunities and amenities that are accessible by everyone, whatever their age and ability, on foot, by cycle and micro-mobility modes such as scooters.

Making sustainable travel possible for everyone

Sustainable modes of travel, including walking, cycling and other forms of micromobility are zero-emission, socially inclusive, promote health and wellbeing, and help
to create a more vibrant and socially interactive environment. To make sustainable
travel the first choice for everyone who works, lives and visits North East Cambridge,
the new district must be designed from the outset with a network of links and
connections that are direct, permeable, legible, and safe. This network, together with
an extensive network of frequent public transport services, will help people access
and move around this new city district and wider area without needing to rely on the
private car.

To achieve this the city district will be designed around the principles of walkable, low traffic neighbourhoods, removing direct through routes for traffic, discouraging non-essential vehicles into certain areas, and with low traffic speeds (in accordance with Policy 7: Creating high quality streets, spaces and Policy 21: Street hierarchy). Walkable neighbourhoods are designed around prioritising walking and cycling (or

use of other sustainable means) to access local services and facilities. These are typically based on distances of 400 metres (5 minute) and 800 metre (10 minute) walking catchments, although this is only a guideline and the key factor is providing attractive, convenient and well-designed routes which form part of a coherent network.

A people-first approach will ensure that streets (including junctions) and public spaces will be people-friendly, designed for all ages and abilities with a low-design speed for vehicles, and which are integrated with the built environment. Accessibility for people with more specific requirements such as disabled people, older people and those who look after young children or other dependents must be considered from the outset. They should also feel safe and be overlooked by buildings which are in use throughout the day and night. Development across North East Cambridge should form a coherent network of streets, paths and green links for people that offers choice for how they move around and through the Area Action Plan area. This includes pedestrians, cyclists and horse riders. Guidance on the design principles is contained within Department for Transport Local Transport Note (TN) 1/20: Cycle Infrastructure Design.

Linking to the wider area

North East Cambridge must be linked to surrounding communities and key employment, social and retail destinations within the wider area, to ensure people do not need to travel by private vehicle. It is therefore essential that North East Cambridge is served by, and seamlessly connected with, existing and planned high quality public transport (see Policy 19) and routes for non-motorised users (see Policy 17).

New and upgraded infrastructure is already being planned and delivered in the vicinity of the site through the Greater Cambridge Partnership, for example the Waterbeach to Cambridge public transport route and Greenway, Chisholm Trail, and along Milton Road. However, there are currently severance issues and barriers to movement within North East Cambridge (Milton Road) and hindering wider connectivity (A14, railway line, Cambridgeshire Guided Busway and existing development) which will need to be addressed (see Policy 17). It is important that development specific masterplans across the site include networks for existing and

planned infrastructure within the site, and must consider whether improvements are needed to the quality or capacity of existing routes in the wider area. Active sustainable modes also form the 'first and last mile' of longer journeys, connecting people's origins and destinations with high quality public transport. North East Cambridge is already directly served by Cambridge North railway station and bus services, some using the Cambridgeshire Guided Busway. Further high quality public transport services and infrastructure enhancements are proposed within the site and the wider area, including a new route between Cambridge and the proposed New Town at Waterbeach. It is important that seamless interchange through mobility hubs is included in proposals for locations for public transport interchange (see

Discouraging car use

Policy 19).

The scope for highway capacity improvements is limited due to the existing road configuration and lack of space, particularly at the junction of Milton Road with King's Hedges Road and Green End Road. The already high levels of traffic and peak hour congestion on the existing road network mean that the introduction of additional non-essential vehicular traffic is unacceptable in terms both highway capacity, place making and air quality. As a result, development will need to support a significant shift away from the private car and towards sustainable travel to a level not seen in Greater Cambridge previously (see Policy 22).

A site-wide approach to reduce car trips and car parking is set out at Policy 22. The master planning process will ensure the delivery of an environment which puts people first and integrates measures to carefully control vehicular traffic, whilst ensuring essential traffic can be accommodated for disabled access and people who rely on private vehicles or taxis as well as public transport and service vehicles. The scale of the required mode shift is such that innovative solutions are going to be needed to reduce not only the need to travel, but also reduce the distances travelled by keeping trips local, and for those longer distance trips that will still need to be made the options are in place from the beginning to encourage and enable modal shift. Where vehicular use is unavoidable no or ultra-low emission vehicles will be encouraged, including through provision of supporting infrastructure such as EV charge points / hubs.

The way that people access services and facilities, and personal travel, are evolving, including becoming increasingly digital. There is a shift away from personally owned modes of transport to new models of mobility including more demand responsive travel, 'Mobility as a Service' (a shift away from personally owned modes of transport towards the integration of various modes of transport along with information and payment functions into a single mobility service. Recent services that allow customers to purchase monthly subscription packages giving them access to public transport and private taxi and bike hire schemes are an example) and micro-mobility (Micro-mobility provides access to on-demand scooters, cycles, electric cycles and potentially other devices that come into the market), with increasing use of ondemand ride-share, scooters and electric scooters, cycles and electric cycles. Technology will have an important role in enabling and supporting this and is constantly evolving; for example, with the implementation of 5G and smart / mobile ticketing. In the future, autonomous vehicles may have a role for first and last mile journeys, demand responsive travel, ride sharing, and deliveries. It is important to future proof infrastructure at North East Cambridge through ensuring there is enough flexibility to consider new options and models for mobility within the design of the area.

Evidence supporting this policy

- North East Cambridge Area Action Plan Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council)

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2021)
- Internalisation Topic Paper (2021)
- Health Facilities and Wellbeing Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 5: Strategic transport infrastructure
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 59: Designing landscape and the public realm
- Policy 80: Supporting sustainable access to development
- Policy 81: Mitigating the transport impact of development

South Cambridgeshire Local Plan

- Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- Policy HQ/1: Design Principles
- Policy TI/2: Planning for Sustainable Travel

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire and Peterborough Local Transport Plan (2020)
- Transport Strategy for Cambridge and South Cambridgeshire (2014)
- Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (2020)
- Draft Making Space for People Supplementary Planning Document (2019)
- Manual for Streets (Department for Transport, 2007)
- Waltham Forrest Mini Holland Design Guide (2015)

7.2 Connecting to the wider network

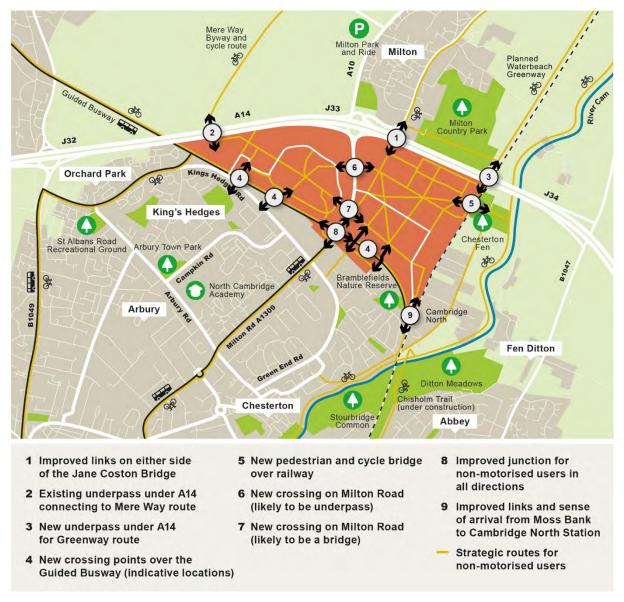


Figure 39: Overcoming barriers to movement: improved connections for non-motorised users to be created by the Area Action Plan

North East Cambridge will be fully integrated into its wider context. Currently there are several barriers to movement which prevent people travelling along desire lines, including the railway line, the A14 and the Cambridgeshire Guided Busway, and while there are already planned improvements to crossing these barriers, development at North East Cambridge must include further new and enhanced connections. This policy sets out the new and improved crossings that will need to be delivered.

Policy 17: Connecting to the wider network

To improve the wider connectivity between North East Cambridge with adjoining areas development will be required to contribute to new and improvements to existing connections for non-motorised users, as shown on Figure 39. The adjoining areas include nearby villages, Cambridge city centre, employment and residential areas, and open spaces within the wider countryside and Rights of Way network. The following new and improved provision must be incorporated early in the design stages and layout of the development:

Crossing the A14

- Existing Jane Coston Bridge over the A14 links to and from the bridge should be improved to reduce the current conflicts with motor vehicles.
- Existing underpass under the A14 funding has been secured for a new facility for non-motorised users from Landbeach and Waterbeach via Mere Way Byway.
- c. New underpass under the A14 Greater Cambridge Partnership Waterbeach Greenway route will enter the site to the north east of the site adjacent to the railway.

Crossing the Cambridgeshire Guided Busway

- d. The creation of active frontages on to the Guided Busway, particularly through the removal of fencing around individual sites. This would need to be carefully considered alongside Policy 5: Biodiversity and Net Gain;
- e. Opportunities to introduce further crossing points should be actively explored, in particular those identified on the Spatial Framework and on Figure 38.
- f. Any proposals to further restrict access across the Cambridgeshire Guided Busway will be resisted unless facilities of an equal or better standard for pedestrians and cyclists are provided.

Crossing the railway

g. A new pedestrian and cycling bridge over the railway to provide direct access to Chesterton Fen to the east of the railway line, and onwards to the River Cam tow path.

Crossing Milton Road

h. To the north of the area, connecting the area through St John's Innovation Park to the north-east part of Cambridge Science Park. Due to topography

- constrains in this location, this crossing is likely to need to take the form of an underpass (see Policy 9).
- i. Centrally, connecting the new District Centre to Cambridge Science Park. Unless more detailed design can prove the feasibility of a street level crossing of Milton Road, this crossing is likely to be a bridge. This will need to be carefully designed to accommodate cycle movements and be integrated seamlessly into the wider built form and green network.
- j. An improved crossing for non-motorised users should be delivered at the intersection between Milton Road and the Cambridgeshire Guided Busway. Proposals should facilitate easy diagonal movements to ensure integration with the wider pedestrian and cycling improvements being delivered as part of the Milton Road Project³. An enhanced surface level crossing at this location will facilitate the removal of the existing subway and significant public realm improvements.

Master planning at the development management stage should ensure these connections and routes are fully integrated with routes identified on Figure 38 to provide an extensive network of interconnected high-quality routes (see Policy 23: Comprehensive and coordinated development). This includes maintaining desire lines, providing legible, direct and unhindered passage, and ensuring enough space is designed-in for landings for bridges and underpass approaches at appropriate gradients to accommodate the most vulnerable users.

New structures, including underpasses and bridges, must be designed to a high quality, having regard to their surroundings to minimise visual impact and should consider potential connectivity for biodiversity, where appropriate. They should incorporate enough capacity to accommodate existing and future user demands for pedestrians, cyclists (and, where appropriate, horse riders) of all abilities, bearing in mind the low car mode share requirements if applicable. Approaches and structures should maintain sight lines, be accessible and feel safe for all users including wheelchair users and cyclists, and, for underpasses, should incorporate as much light as possible. Partnership working between different landowners and the relevant authorities will be required to deliver these new connections.

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³ www.greatercambridge.org.uk/transport/transport-projects/milton-road

Why we are doing this

Relevant Objective: 1, 2, 4, 5

North East Cambridge is already a well-connected site and further walking, cycling and public transport projects are currently being planned for and delivered. However, despite the links already in place, there are weaknesses around the site which at the moment prevent it from fully exploiting the opportunities that these links provide. The Area Action Plan area is tightly bounded by the A14 and railway line to the north and east, whilst the Cambridgeshire Guided Busway crosses the site east to west. These constrain the connectivity of the site with communities outside the Area Action Plan area by walking, cycling and public transport. Furthermore, inward-looking sites and fencing exacerbate these physical barriers creating added psychological barriers which further discourage through movement. Internally, the greatest severance is caused by Milton Road which dissects the area and is a hostile environment for anyone wanting to travel from east to west.

The Area Action Plan provides a unique opportunity to break down many of these barriers to connectivity, not only to enable people working in the area to move around by more sustainable modes, but also to enable residents in surrounding communities to access jobs and facilities within the area. This is to be achieved through the provision of high-quality public transport and segregated facilities that put the needs of pedestrians, cyclists and equestrians first and improvements to existing routes. The provision of mobility hubs (see Policy 19) will facilitate seamless interchange between public transport and active modes.

Given the ownership of land within the Area Action Plan area it will be imperative that individual developments play their part in facilitating the connections into and across the site for the benefit of all (in accordance with

Policy 23: Comprehensive and Coordinated Development).

More widely, it is acknowledged that outside the AAP area, existing links may not have sufficient capacity or there are missing links. The North East Cambridge Area Action Plan High Level Transport Strategy (prepared by the five main landowners within the Plan area in collaboration with the Councils and the County Council) identifies the package of site specific, local and strategic transport interventions required to support the phasing of development alongside compliance with the trip budget. The specifics of the interventions to be secured should be put forward

through Transport Assessments submitted with planning applications, demonstrating the contribution they will make to the overall package of transport measures. In addition, a draft Local Cycling and Walking Infrastructure Plan has been developed by Cambridgeshire County Council to identify a prioritised list of cycling and walking networks that provide the greatest benefit to people making short trips. Furthermore, the Greater Cambridge Partnership has built on this plan (through Cycling Plus: Investing in Greater Cambridge's Active Travel Network⁴) to identify gaps and missing links in Cambridge to be addressed in coming years.

Cambridgeshire County Council's 'Rights of Way Improvement Plan' (ROWIP) contains a number of statements of action to which the Area Action Plan can contribute. These include making the countryside more accessible, supporting development, and encouraging healthy activities though a safer rights of way network. North East Cambridge will include off-road routes such as shared use pedestrian, cycle and equestrian tracks through areas of green infrastructure, and will connect to the wider Public Rights of Way network. Cambridgeshire County Council Highways broadly supports the proposed connectivity measures introduced by the Area Action Plan as they are aligned with the ROWIP and by doing so this supports the Local Transport Plan.

A14

The Jane Coston Bridge currently provides the only segregated means of crossing the A14 for pedestrians and cyclists. Phase 1 of the Greater Cambridge Partnership's Greenway will connect Waterbeach with North East Cambridge via this existing link. Phase 2 of the project seeks to make this route even more direct through the creation of an underpass close to the railway that takes the Greenway directly into the north east part of the site.

An improved strategic cycle route joining Landbeach and Waterbeach to the northwest corner of the site via the Mere Way Byway through an existing underpass under the A14 has been secured as part of the major new town development north of Waterbeach. Similarly, as the masterplanning of the whole North East Cambridge area progresses in detail, this connection needs to be designed into the wider connectivity for the whole site and for onward journeys, including via Milton Road or

⁴ https://consultcambs.uk.engagementhq.com/cycling-plus

the Chisholm Trail into the City. It is proposed that this route will also enable a circular ride for equestrians, via the Guided Busway, through the new development and onto the Waterbeach Greenway.

Crossing the Cambridgeshire Guided Busway

The Cambridgeshire Guided Busway has been identified as a physical and psychological barrier to permeability into North East Cambridge from communities to the south. Fencing along the perimeter of Cambridge Science Park and Cambridge Business Park further exacerbates this as people working on these sites have limited permeability through to the Guided Busway stops. Improving connectivity between the existing residential areas to the south east of the Area Action Plan area will significantly improve the existing community's access to new services and facilities within North East Cambridge.

However, the legal status of the Cambridgeshire Guided Busway is different to that of a traditional highway as it is the subject of a Transport and Works Act Order and has Statutory Undertaker status. The restraints of this Order mean that any changes to the Busway corridor will need to be considered at a higher health and safety level than a highway as incidents in the area would be investigated under the jurisdiction of the Health and Safety Executive.

Crossing the railway

The area to the east of the railway, known as Chesterton Fen, provides green space and access to the towpath and Fen countryside. However, at present, the only way to access this is across the Fen Road level crossing which lies outside the North East Cambridge area. In order to provide a more direct access for pedestrians and cyclists into Chesterton Fen and onwards to the towpath along the river a new bridge for pedestrians and cyclists needs to be delivered in accordance with the Area Action Plan Spatial Framework. The new bridge will also provide improved access for the existing Fen Road community to the new services, facilities and open spaces provided within the new development and will help to integrate this community into the wider area.

Crossing Milton Road

Milton Road forms a barrier to movement within the site and two new crossings are proposed to improve the connectivity across the site, as well as improvements to the existing at-grade crossing at the Guided Busway intersection. Whilst the aspiration is to provide new at-grade crossings, this is likely to cause unacceptable delays to traffic on Milton Road with traffic at present levels. As the developers continue to refine their High Level Transport Strategy, they will need to do detailed analysis of the number of trips crossing Milton Road to establish the most appropriate form and design of the crossings.

Cambridge North Station

Cambridge North Station is an important interchange and gateway to North Cambridge. Policy 19 safeguards land for providing interchange facilities within an attractive public realm. However, it is also important that the approaches to the interchange are enhanced to ensure they are legible, attractive, and safe for non-motorised users, particularly from the existing communities in North Cambridge via Moss Bank.

Evidence supporting this policy

- North East Cambridge Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council)

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Internalisation Topic Paper (2021)

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 5: Strategic transport infrastructure
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 59: Designing landscape and the public realm
- Policy 80: Supporting sustainable access to development
- Policy 81: Mitigating the transport impact of development

South Cambridgeshire Local Plan

- Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station
- Policy HQ/1: Design Principles
- Policy TI/2: Planning for Sustainable Travel

Other Council/County strategy and policy and other supporting guidance

- Ely to Cambridge Transport Study (2018)
- Manual for Streets (Department for Transport, 2007)
- Waltham Forrest Mini Holland Design Guide (2015)
- Department for Transport Local Transport Note (LTN) 1/20: Cycle Infrastructure Design (2020)
- Draft Cambridgeshire Local Cycling and Walking Infrastructure Plan (2020)
- Cambridgeshire Rights of Way Improvement Plan (2016)
- Cambridgeshire and Peterborough Local Transport Plan (2021)
- Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (2020)
- Draft Making Space for People Supplementary Planning Document (2019)

7.3 Cycle and Micro-mobility Parking

Providing sufficient and convenient cycle parking at people's homes, places of employment, shops, key community locations and transport hubs for residents, workers and visitors is critical to encouraging more people to cycle. The range and

type of cycles are diversifying, and it is important to ensure parking provision can accommodate all types of cycles in a way that is accessible to all, covered, safe, and secure. The recent and growing use of other forms of personal or micro-mobility such as e-scooters also mean that these forms of travel should be safely and conveniently provided throughout the development. This policy sets out the standards and quantities of cycle parking that new development must provide.

Policy 18: Cycle and Micro-mobility Parking

Cycle parking must be provided in excess of the minimum standards set out in Appendix 2. At least 5-10% of cycle parking provision must be designed to accommodate non-standard cycles and should consider appropriate provision for electric charging points. Provision should also be made to store, and charge where necessary, micro-mobility options and mobility scooters.

Cycle parking infrastructure must be provided in a manner that is convenient to both new and adjacent residential and business communities, flexible, safe, secure, and integral to the public realm. Cycle parking should also be provided at key locations throughout the Area Action Plan area, including at mobility hubs and at public spaces and facilities. Long-stay parking should also be covered.

Innovative solutions to cycle parking infrastructure are encouraged, including shared spaces where the location and patterns of use permit, and incorporation of cycle maintenance facilities.

The developer must provide clear justification in the Design and Access Statement, Transport Assessment and/or Travel Plan for the level and type of cycle parking infrastructure proposed to demonstrate it will meet the trip budget outlined in Policy 22: Managing motorised vehicles.

Why we are doing this

Relevant Objective: 1, 4

Cycle parking will be provided to levels in excess of adopted Cambridge Local Plan (2018) standards, reflecting the low car nature of the city district, the need to meet the trip budget for the development (Policy 22: Managing motorised vehicles) and to facilitate active travel. Cycle parking must be available from the outset, including in

conjunction with temporary meanwhile uses. This will assist in encouraging more people to cycle for journeys in the knowledge that they will be assured of a safe and secure place to park their cycle at each end of their journey.

The design of cycle and micro-mobility parking must be considered at the outset to ensure it is appropriately integrated into the development and public realm and located so that it is more convenient than access to car parking and to minimise conflict between cycles, pedestrians and vehicles.

Level access should be provided and sufficient space within which to easily manoeuvre cycles of all types. Short-stay and visitor parking should be provided within 15 metres of the main site entrance, where possible. Consideration should be given to integrating public cycle maintenance facilities, including a pump and tools. All parking must be secure (for example with root fixed stands), flexible, safe to use at all times, and long-stay parking should be covered.

Non-standard cycles are non-conventional upright cycles, which have different cycle parking requirements due to their different shape, size or bulk. These include tandem, cargo cycle, box bikes, hand cycle, adapted cycles, electric cycle, electrically assisted pedal cycle, adult trike, recumbent cycles, cycles with various additions such as baskets, paniers and child seats.

The range and type of cycles are diversifying to accommodate a wider range of users and abilities. Electric cycles are helping to make cycling accessible to people who previously did not cycle and for journeys over longer distances. Most charging is done at home or in the workplace as the battery is removable, but consideration should be given to appropriate provision for electric charging points, including for escooters, e-strollers, and mobility scooters. Cycle parking must include capacity for all types of cycles with at least 5-10% of parking for non-standard cycles such as cargo cycles and cycles with trailers; the former can be secured through the provision of low bar / anchor loop which are unsuitable for standard cycles.

For residential purposes cycle and micro-mobility parking should be within lockers or cycle stands within a lockable, covered enclosure within or adjacent to the building. Space should be flexible enough to accommodate non-standard cycles, such as cargo cycles and/or securely store cycle trailers and accessories. Visitor parking should be provided for at the front of properties.

It is recommended that supporting facilities are provided where long-stay cyclists require them, i.e. places of employment. Supporting facilities include lockers, drying

rooms, showers and changing rooms, as well as charging facilities for electric cycle batteries.

Space should also be provided to accommodate dockless cycle hire schemes, electric cycle schemes and micro-mobility forms of travel. Whilst these do not need to be secured to cycle stands, to reduce street clutter, allocated space should be provided in convenient locations, such as adjacent to visitor parking and at mobility hubs (see Policy 19: Safeguarding for Public Transport).

Innovative solutions are encouraged, and some flexibility will be applied to applications where it can be demonstrated that strict adherence to the standards within mixed-use areas is likely to result in a duplication of provision.

Guidance on the design principles and dimensions for new cycle parking provision is contained within Cambridge City Council's Cycle Parking Guide for New Residential Developments and Department for Transport Local Transport Note (LTN) 1/20: Cycle Infrastructure Design.

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2021)
- Internalisation Topic Paper (2021)
- Skills, Training, and Employment Topic Paper (2021)

Monitoring Indicators

 Number of cycle parking spaces in permitted schemes (residential and nonresidential)

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 59: Designing landscape and the public realm
- Policy 82: Parking management
- Appendix L: Car and cycle parking requirements

South Cambridgeshire Local Plan

• Policy TI/3: Parking Provision

• Policy HQ/1: Design Principles

Other Council/County strategy and policy and other supporting guidance

- Manual for Streets (2007)
- Cambridge City Council: Cycle Parking Guide for New Residential Developments
- Department for Transport Local Transport Note (LTN) 1/20: Cycle Infrastructure Design (2020)
- Cambridge City Council's Cycle Parking Guide for New Residential Developments (2010)
- Draft Making Space for People Supplementary Planning Document (2019)

7.4 Safeguarding for Public Transport



Figure 40: Map showing location of land to be safeguarded for the Transport interchange

Enabling people to travel to, from and within the new development by non-car modes is critical to supporting the strategic objectives for the redevelopment of the area and for underpinning the vehicular trip budget approach to traffic within North East Cambridge. Many more people will need to use bus, rail or other emerging forms of public transport to arrive in the area and will need to continue their journey on foot, cycle or by other methods.

Fundamental to the success of this is ensuring that people can switch seamlessly between different modes. As the site is built out, it will also be important to ensure that there is enough flexibility to adapt to new and emerging technologies which will assist in encouraging people to travel by non-car modes of transport. This policy ensures that land is safeguarded for public transport hubs as well as ensuring there is enough flexibility to adopt to new and emerging technologies.

Policy 19: Safeguarding for Public Transport

North East Cambridge is a key public transport interchange and gateway to North Cambridge. Development proposals within or adjacent to the safeguarded area (shown in Figure 40) must demonstrate how they will support and enhance this function including how they have engaged with key transport bodies, including Network Rail, the Cambridgeshire and Peterborough Combined Authority, the Greater Cambridge Partnership and Cambridgeshire County Council.

Cambridge North Transport Interchange

Sufficient land will be safeguarded in the vicinity of Cambridge North Station to facilitate a quality transport interchange and mobility hub. The interchange shall accommodate the convergence of the two mass transit routes from St Ives and the proposed Waterbeach route, as well as services into the city centre and other destinations across the wider area. It will link seamlessly to the railway network at Cambridge North Station. It will also incorporate space for first/last mile journeys utilising cycling and other micro-mobility options. The interchange will be designed in such a way that it caters for existing technologies, however it should include enough flexibility that it can be adapted in the future for emerging technologies, such as autonomous vehicles.

Mobility hubs

Site-wide masterplans (in accordance with Policy 23: Comprehensive and Coordinated Development) are required to incorporate the provision of mobility hubs. These should be located at key points on the main public transport, cycle and walking corridors close to the main arrival points, and centres of attraction (as illustrated in Figure 38). However additional mobility hubs may be required elsewhere to facilitate the seamless interchange between walking, cycling and other micro-mobility modes.

The design of a mobility hub should be tailored to its location, having regard to:

 The public transport modes that need to be included, whether they are timetabled or demand-responsive and their pick-up/drop-off requirements;

- The shared mobility facilities to be included, such as dockless cycles, escooter, e-bike, lift share;
- The facilities needed to facilitate seamless transfer between modes, such as secure cycle parking, EV charging, digital information, as well as integration into the surrounding neighbourhood through well designed wayfinding;
- Other facilities, such as public toilets, café, or parcel collection;
- User safety and accessibility, which should extend to the consideration of the surrounding public realm and pedestrian approaches; and
- The need for the hub to be highly visible and, therein, its contribution to sense of place and community focus;
- Opportunities for co-location with other community facilities.

Development proposals must show how flexibility can be designed into the mobility hubs to enable them to adapt over time to be responsive to emerging trends, technologies and travel habits.

Why we are doing this

Relevant Objective: 1, 3, 5

North East Cambridge will build upon and expand the existing public transport network that already serves the site and surrounding area. Cambridge North Station is an important interchange and as North East Cambridge is developed its role will become even more significant not only for enabling people to travel into the area without using private vehicles, but also as an important public transport node in the city.

Plans are already being advanced by the Greater Cambridge Partnership (GCP) for a rapid transit bus service between the city centre, North East Cambridge and the new town north of Waterbeach (as shown in Figure 41). It is therefore important that the Area Action Plan safeguards land around Cambridge North Station to accommodate the additional transport services and associated passenger infrastructure at this key interchange.

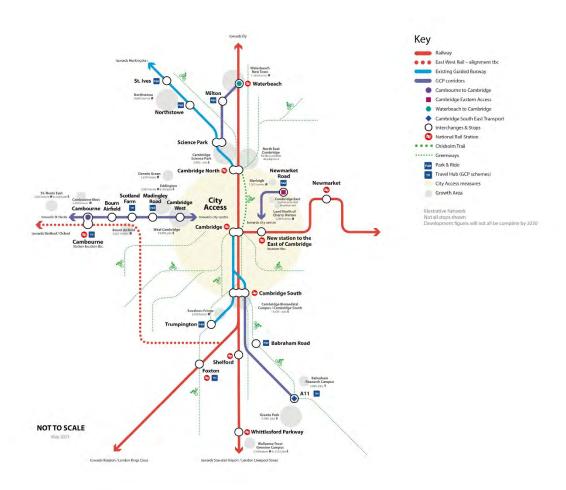


Figure 41: Greater Cambridge 2030 Future Network (source Greater Cambridge Partnership)

In order to maximise the use of the existing, planned and emerging public transport modes, a series of mobility hubs will be required across North East Cambridge to facilitate seamless transfer to first and last mile connections. The mobility hubs will enable people, whatever their mobility requirements, to have a choice in how they make different journeys, will facilitate more multi-modal journeys and will provide the information and digital infrastructure needed to do that.

Whilst consideration of the public transport modes and their requirements will be necessary for each hub and a minimum standard will be expected at each, the hubs provide an opportunity to integrate not only with walking and cycling networks but other emerging micro-mobility and shared modes of transport, to expand the choice of first and last mile connections. They should become a natural focus for dockless/free floating micro-mobility services which otherwise run the risk of

becoming street clutter. Consideration should also be given to the range of mobilityrelated facilities that should be provided at each hub, including cycle parking, electric charging, and cycle repair facilities.

Digital integration will be key to the success of the mobility hubs. Basic digital information must be included such as real time transport information and ticketing, but in demonstrating flexibility, development proposals should show how the hubs will be able to facilitate Mobility as a Service (MaaS) as new technologies and services come forward.

Consideration should be given to the space needed for each mobility hub and how it will integrate with and enhance the surrounding public realm to become a positive focus for the surrounding community and environment. Over time, the mobility hubs may need to adapt to new and emerging modes of transport, which may be physically and operationally different to those around today. As such, proposals will be expected to demonstrate that there is enough space to provide flexibility to accommodate changing requirements in the future. Consideration should also be given to the range of non-mobility facilities that could be provided at each hub to enhance the experience for users and support the local community, such as package delivery lockers, wi-fi and phone charging, public art, planting or play equipment. Mobility Hubs should also be easily recognisable and branding across the whole area should be considered.

Evidence supporting this policy

- Ely to Cambridge Transport Study (2018)
- North East Cambridge Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council)

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Smart Infrastructure Topic Papers: Environmental Monitoring (2021)

Monitoring indicators

- Number of passenger journeys starting and ending at Cambridge North Station
- Passenger numbers on the Guided

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 5: Strategic transport infrastructure
- Policy 59: Designing landscape and the public realm
- Policy 80: Supporting sustainable access to development

South Cambridgeshire Local Plan

- Policy HQ/1: Design Principles
- Policy TI/1: Chesterton Rail Station and Interchange
- Policy TI/2: Planning for Sustainable Travel

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire and Peterborough Local Transport Plan (2021)
- Draft Making Space for People Supplementary Planning Document (2019)

7.5 Last mile deliveries

Changing patterns of retailing with greater use of e-commerce means that consumers (businesses and residents) increasingly expect products to be delivered to their door. Cambridge has been a pioneer in cycle deliveries with a consolidation centre at the edge of the city that transfers parcels on to smaller cycle-logistic bikes. North East Cambridge provides an opportunity to develop at least one consolidation hub that would enable smaller electric vehicles or other ultra-low emission vehicles and cycles to serve the development. This policy sets out where we expect delivery hubs to be located and what they should provide.

Policy 20: Last mile deliveries

A delivery and consolidation hub has been identified within Cambridge Science Park Local Centre, as set out in Policy 10c. An additional delivery and consolidation hub could be located close to Milton Road where it can be accessed directly from the primary street to reduce vehicle movements within the Area Action Plan area. Development proposals within these locations must make provision for a delivery hub of up to 1,500m² to enable the consolidation of deliveries to service the needs of local businesses, retailers, community uses and residents.

The delivery and consolidation hubs should be designed to receive goods from larger vehicles including adequate turning and unloading space and to enable onwards 'last-mile' delivery to be provided by sustainable modes, including by cycle logistics solutions using cycles / cargo cycles and for bulkier items using electric vehicles.

Development proposals should be accompanied by a Delivery and Service Plan which demonstrates how delivery and consolidation hubs will serve the development and reduce vehicle trips within the area.

Innovative and flexible solutions are encouraged, including utilising measures such as digital and online infrastructure to better manage supply and demand, dynamic management of the kerb for deliveries of goods, and future proofing for technological improvements which may include use of drones and autonomous delivery vehicles.

Why we are doing this

Relevant Objectives: 1, 2, 4

To meet the demand for fast deliveries of good and services the movement of freight is typically performed by a large number of delivery companies who inefficiently duplicate each other's journeys with partially filled trucks and vans. This results in unnecessarily high levels of congestion, safety issues, pollution and environmental impacts, and rising distribution costs.

With the existing capacity constraints on the highway network in and around North East Cambridge and no opportunity to increase this in future, the additional pressure from services and deliveries needs to be addressed in a comprehensive and coordinated way to make deliveries as efficient as possible. Unconstrained deliveries direct to business premises and properties is, with the growth in e-commerce, likely

to generate many trips and exceed the trip budget (Policy 22: Managing motorised vehicles and available highway capacity causing unacceptable levels of congestion and air pollution. In addition, there would be limited control over the types of vehicles, such as diesel trucks and vans, used to make the deliveries and the resultant environmental impacts. Numerous vehicles pulling up at the kerb to make deliveries could also impact on the public realm, public safety (conflict with pedestrians and cyclists) and the quality of life of people living and working in the area. However, it may be possible, in this scenario, to introduce some controls to constrain deliveries to certain times of the day by 'managing the kerb'. In addition to reducing the number of delivery trips, use of a delivery and consolidation hub provides environmental benefits in excess of those achieved by converting the existing vehicle fleet to zero emissions. The ability to replace multiple deliveries into a single delivery can improve the customer experience, save money and time. Coupled with vehicular access restrictions (see Policy 21: Street hierarchy), reducing the number of vehicles and switching trips to more sustainable modes will improve the safety of vulnerable road users such as pedestrians and cyclists, help re-enforce the people first approach (Policy 16: Sustainable Connectivity) and improve the quality of life for the new community.

The Councils have identified preferred locations for delivery and consolidation hubs and expect development proposals coming forward in these areas to make appropriate provision. Consideration should be given to co-locating hubs with other active uses, such as shops and other services and facilities to enable residents to make multi-purpose trips if they collect their purchases from the hub in person. The hubs should be located and designed to ensure there is sufficient space for cycles and vehicles to manoeuvre safely and load / unload without obstructing pavements, cycleways, and vehicular traffic.

The onwards 'last-mile' delivery should be undertaken by sustainable modes, including by cycle logistics solutions using cycles / cargo cycles (including electric cycles). For bulkier items it may be necessary to use larger sustainable vehicles; such as electric vehicles.

Innovative solutions and technology should also be considered to further reduce the number of delivery trips and manage onwards 'last-mile' deliveries; Cambridge has seen the first drone delivery by Amazon and companies are beginning to look at autonomous delivery of small items (with trials being undertaken in Milton Keynes).

Consideration should be given to use of secure lockers, including refrigerated units, throughout the development. Technology can also assist with managing supply and demand. For example, allowing the consumer to select a delivery window to suit their availability and reduce the number of abortive trips. Technology can also be used to manage the kerb for deliveries by vehicles, by controlling times of day that deliveries can be undertaken and/or the dwell time. Additionally, it may be possible to allow packaging to be returned for recycling, providing an accessible centralised place for refuse vehicles to collect from.

Evidence supporting this policy

- North East Cambridge Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council)

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2021)
- Internalisation Topic Paper (2021)
- Community Safety Topic Paper (2021)

Monitoring indicators

Number of delivery hubs permitted and completed

Policy links to adopted Local Plans

Cambridge Local Plan

- Policy 80: Supporting sustainable access to development
- Policy 81: Mitigating the transport impact of development

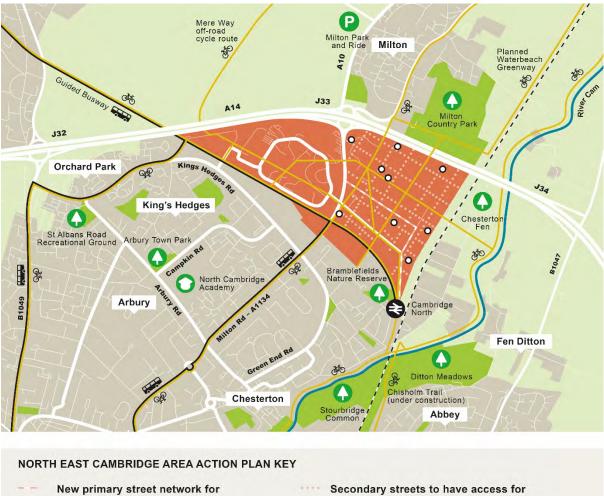
South Cambridgeshire Local Plan

Policy TI/2: Planning for Sustainable Travel

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire and Peterborough Local Transport Plan (2021)
- Greater Cambridge Sustainable Design and Construction SPD (2020)
- Draft Making Space for People Supplementary Planning Document (2019)

7.6 Street hierarchy



- motorised traffic
- New primary routes for pedestrians and cyclists
- servicing, drop-off, blue badge and emergency access only - no through routes.
- Car barns to be located where they are accessible to residents and workers

Figure 42: Street hierarchy for North East Cambridge

While North East Cambridge will be designed around active travel as the first choice, we must also ensure that there is a functional street network for vehicular access including for public transport, emergency vehicles, servicing local businesses, and for people with mobility issues as well as community transport and taxis. This policy describes the primary and secondary street network and how these streets should be designed for low vehicle speeds, and with excellent provision for walking and cycling to ensure these remain the travel mode of choice. It also sets out how space efficient car parking should be provided in 'car barns' so that residents and workers who need to occasionally use cars, can access private or shared cars.

Policy 21: Street hierarchy

North East Cambridge should be designed to manage vehicle movements in accordance with the street hierarchy shown in Figure 42 and the design principles described in Policy 7: Creating high quality streets, spaces and shown in Figure 17, Figure 18 and Figure 19:

Primary streets will provide the main vehicular access into and within North East Cambridge. They should be designed to:

- Include high quality segregated paths and cycle paths for all nonvehicular users, including micro mobility;
- Give priority to active sustainable modes at and across junctions using the primary street and across side roads;
- Give priority access to public and community transport; and
- Accommodate speeds below 20 mph.

Secondary streets will provide access to the wider area for essential emergency vehicles, as well as servicing commercial, community and residential properties, off-plot car parking in car barns (including car pool hire schemes), and to provide access for people with mobility issues. These should be designed to

- Provide full permeability and priority for active sustainable modes;
- No through routes for non-essential traffic, with filtered permeability to enable access for essential vehicles;
- Public realm designed for low traffic volumes and speeds below 20 mph; and

 Any loading bays, drop-off/pick-up points and vehicle parking for people with mobility issues, should be integrated into the public realm. Innovative solutions should be considered to 'manage the kerb'.

Consideration should be given to the incorporation of car-free zones, particularly close to centres of activity and mobility hubs.

Why we are doing this

Relevant Objectives: 1, 4, 5

It is not intended to prevent vehicular traffic within North East Cambridge but to minimise and manage vehicle movements through a clear street hierarchy and filtered permeability. Filtered permeability "filters out" through car traffic on selected streets to create a more attractive environment for walking and cycling, while maintaining accessibility for emergency and service vehicles. This will maintain appropriate access to all areas to enable the area to function in a manner that will not undermine place making and active travel objectives. All streets will be designed around people, to feel safe, with low traffic speeds and accord with the design principles outlined in Policy 7: Creating high quality streets, spaces and shown in Figure 17, Figure 18 and Figure 19 with the aim of making it more convenient and faster for people to walk and cycle than drive:

Primary streets

The main vehicular access to North East Cambridge will be via primary streets which will serve the key areas including Cambridge Science Park and Cambridge North railway station. They have been designed to keep non-essential traffic away from centres where there will be clusters of public uses and activity, such as the district and neighbourhood centres, schools and other spaces where the public realm puts people first, to minimise conflict.

Whilst primary streets will be the main traffic routes through the site, priority will be maintained for active travel routes at all junctions to provide seamless connections and maintain continuity for cyclists and pedestrians, adopting 'Mini-Holland' principles. Crossing points should be level, safe (with good sight lines and lighting), and ensure vehicular traffic is required to give way.

High quality segregated routes and spaces for pedestrians and cyclists will be provided to maintain separation and minimise conflict between different users travelling at different speeds, as well as from vehicular traffic. The design of cycleways should accord with the principles in Local Transport Note 1/20: Cycle Infrastructure Design, whilst ensuring other non-motorised users are not disadvantaged.

Priority will be provided to public and community transport over other vehicular traffic to ensure direct access and minimise the chance of delays.

Secondary streets

Secondary streets will be accessed from the primary streets and provide access to the wider area for essential emergency vehicles, as well as servicing commercial, community and residential properties, off-plot car parking in car barns, and to provide access for people with mobility issues. These streets will be designed as no-through routes (except for essential traffic such as emergency vehicles) to reduce circulating traffic and create opportunities for car free zones within the development. With low traffic volumes the design of secondary streets should be more inclusive for all users within a shared space with less need for physical segregation, although there should be clear delineation for different users (for example through use of different surfacing materials and low kerb heights) to minimise conflict, particularly for vulnerable users such as those with visual impairments.

Consideration should be given to any vehicle parking, including for people with mobility issues, space for drop-off / pick-up and delivery vehicles (allowing flexibility for future technological advances such as autonomous vehicles), and to integrate it into the public realm in a way that the space can be repurposed when the space is not in use. Policy 22 sets out the approach to be taken to design out inappropriate parking.

Evidence supporting this policy

- North East Cambridge Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council)
- Ely to Cambridge Transport Study (2018)

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2021)
- Internalisation Topic Paper (2021)
- Skills, Training and Local Employment Opportunities Topic Paper (2021)

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 59: Designing landscape and the public realm
- Policy 80: Supporting sustainable access to development
- Policy 81: Mitigating the transport impact of development

South Cambridgeshire Local Plan

- Policy HQ/1: Design Principles
- Policy TI/2: Planning for Sustainable Travel

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire and Peterborough Local Transport Plan (2021)
- Greater Cambridge Sustainable Design and Construction SPD (2020)
- Draft Making Space for People Supplementary Planning Document (2019)
- Waltham Forrest Mini Holland Design Guide (2015)
- Manual for Streets (Department for Transport, 2007)

7.7 Managing motorised vehicles

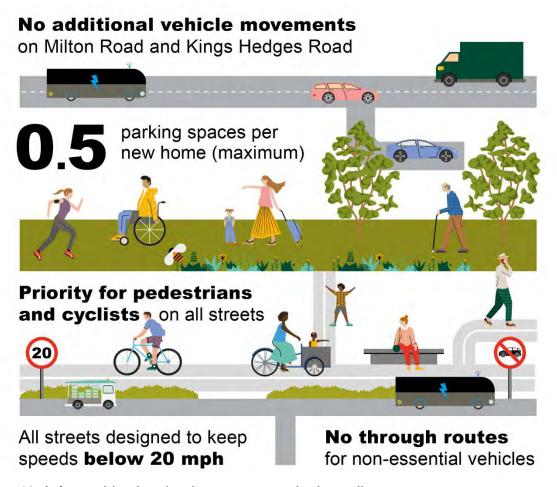


Figure 43: Infographic showing key measures in the policy

In order to create a walkable, cyclable and sustainable neighbourhood which does not increase pressure on the road network around the area, the overall number of vehicle movements in North East Cambridge will have to be carefully managed and significantly reduced from current levels. To achieve this, development will be subject to strict trip budgets which will limit the number of vehicle trips allowed to and from each site, and supported by reduced levels of car parking. This policy sets out the trip budget principles and quotas, and the ratio of parking spaces that will be permitted for new development.

Policy 22: Managing motorised vehicles

Development proposals will be supported where it can be demonstrated that it can be delivered within the vehicle trip budget. Development will not be permitted if proposals exceed the vehicle trip budget.

The NEC AAP High Level Transport Strategy 2021 (prepared by the five main NEC landowners in collaboration with the Councils and County Council) must be kept under review by the developers to demonstrate the deliverability and achievability of the scale of development within the prescribed trip budget, site wide car parking provision, and to monitor the transport impacts of development.

The maximum vehicular trip budget for the Area Action Plan area on to Milton Road is:

• AM Peak: 3,900 two-way trips

• PM Peak: 3,000 two-way trips

For access on to Kings Hedges Road, the maximum vehicle trip budget is:

AM Peak: 780 two-way trips

• PM Peak: 754 two-way trips

The trip budget has been proportioned to development areas across the North East Cambridge area in accordance with the total indicative development capacities proposed for each area as set out in Policy 12a Business and Policy 13a Housing. In order to comply with the vehicle trip budget, the area as a whole will need to significantly reduce the car-driver mode share down from the 70% indicated in the 2011 Census but the final figure depends on the development mix.

With the exception of relatively minor highway works at Milton Road accesses, the scenario above does not require major highway mitigation. To achieve compliance with the trip budget and, therein, the required non-car mode share, there will need to be significant investment in enhancing the sustainable travel options and radical restrictions on the available parking on the site.

Car Parking

In order to support the principle of the vehicle trip budget, it is essential that:

- a) each land parcel within North East Cambridge significantly reduces the existing parking allocation / occupancy, and
- b) new development takes a restrictive approach to car parking, in order to achieve the Area Action Plan strategic objectives.

The Transport Evidence sets out that in order to manage compliance with the vehicle trip budget employment related parking spaces accessed directly from Milton Road should be limited to a maximum of 4,800 space. Provision of only 1,160 spaces (390 for the Regional College and 770 for Cambridge Science Park) should be made for vehicles accessing the Area Action Plan area from Kings Hedges Road; this would require the prevention of a vehicular through route from Milton Road to Kings Hedges Road through the Cambridge Science Park site.

For residential uses, a maximum site-wide parking standard of 0.5 spaces per dwelling should be used as a starting point, with an expectation that lower levels will be achieved for all housing types and tenures.

A site-wide residential parking strategy should be developed to incorporate neighbourhoods of car-free housing, particularly close to centres of activity and mobility hubs. For ancillary uses, parking should be limited to operational and blue badge use only.

In order to create a place that positively encourages walking and cycling instead of car use for short trips, car parking will be accommodated off-plot within car barns rather than immediately outside properties. Car barns should be provided throughout the area (in accordance with Figure 42) and incorporate electric charging points with a minimum rates output of 7 kW for all spaces as well as appropriate space for motorbikes, scooters and car pool hire scheme vehicles. They should be well planned as part of a comprehensive design approach which includes the principles of designing out crime. Electric charging points should also be designed into the public realm, delivery/servicing areas and existing vehicle parking areas to address the national commitment to phase out the sale of petrol and diesel cars within the Plan period. Charging infrastructure should be able to accommodate other vehicles including mobility scooters, electric cycles and electrification of the bus fleet.

Developers will be required to submit evidence of a management strategy for any communal charge points.

Control of inappropriate parking

On-street parking should be limited through prohibitive design to ensure the appeal of the public realm is maintained, and that priority is clearly given to active sustainable modes and public transport. This will be enforced where necessary. The

use of smart technology should be investigated to encourage 'management of the kerb'.

To mitigate potential parking displacement, parking demand and capacity, the areas within a 2km distance from North East Cambridge will be monitored throughout the Plan period. Should monitoring reveal parking displacement, additional mitigation agreed through travel plans, such as the introduction of control parking zones, will need to be implemented before further development can take place.

Monitoring

A monitoring strategy for the trip budget and car parking should be agreed between the landowners and the highway and planning authorities, the beginnings of which are detailed in the NEC AAP High Level Transport Strategy (2021). The monitoring requirements should be secured through appropriate planning obligations as planning applications come forward.

Why we are doing this

Relevant Objective: 1, 3, 4, 5

Despite already being relatively well-connected to surrounding public transport and cycling networks, North East Cambridge is currently dominated by vehicular traffic and has a significantly higher car mode share than other large employment sites in the city. The majority of traffic enters the area from Milton Road which creates congestion issues on to the Milton Road / A14 Interchange during peak periods. However, vehicles in the area also put pressure on the Histon Road / A14 interchange and King's Hedges Road, as they access Cambridge Regional College and the western end of Cambridge Science Park from a second access off King's Hedges Road.

There is currently prolific and unconstrained car parking across the whole area but especially at Cambridge Science Park and the other employment parks. This exacerbates the situation because the oversupply of parking disincentivises the use of public transport, even where it is available. The 2011 census indicated that 70% of existing employees drove to the North East Cambridge area to work (although this

had reduced to around 58% as a result of the opening of the Cambridgeshire Guided Busway and Cambridge North Station).

The location and connectivity of North East Cambridge provides a unique opportunity to bring forward a highly sustainable type of development for the area which is firmly designed around the needs of people rather than cars (see Policy 16 Sustainable Connectivity), marking a step change in the way people move around. Whilst planned and potential transport improvements in the area will mean that North East Cambridge will become increasingly accessible and connected by non-car modes, highway capacity improvements will be relatively minor, particularly to the south of the A14 on Milton Road. The introduction of new junctions on the A14 are likely to be impractical given the close proximity of the existing junctions. Any new junctions would also encourage further traffic through the existing junctions and would risk traffic queuing on the A14 itself, causing a safety issue. There is little capacity to make any improvements at the access to Cambridge Science Park or the junction with Kings Hedges Road/Green End Road. Even if such a policy direction were desirable, technically, it would also be highly challenging and would require significant land that would restrict development. Such an approach would only serve to further undermine the alternative transport offer and would not respond to the climate and biodiversity emergencies declared by the Councils.

The transport evidence is clear that for the aspirations for growth at North East Cambridge to be realised, a radically different approach to the management of motorised vehicles will need to be adopted for the area. Any further development in the area will have to be delivered without an increase in development-related vehicular trips. Furthermore, given the existing target of the Greater Cambridge Partnership to reduce traffic entering the city by 10% to 15% based on the 2011 traffic figures (which equates to a 24% reduction on 2018 figures), coupled with the declaration of the climate change emergency by the Councils, then a step change is required to support these principles.

The policy approach for managing motorised vehicles therefore is one of 'decide and provide' rather than 'predict and provide', moving towards the transport characteristics of the site that are desired rather than traditionally forecast and putting measures in place to achieve this. The move towards a significantly reduced mode share for cars and away from unconstrained, prolific parking is the first step in achieving that vision.

In order to realise this approach, developers will need to not only consider how new residents and employees access the site but will also need to commit to changing the travel habits of existing employees if the trip budget approach is to succeed. A package of schemes and policy requirements - set out in more detail elsewhere in this plan - will be required, each contributing in different ways to the shift away from the reliance of travelling to or within the site by car.

Encouraging internalisation of trips within the site is both a higher level policy approach related to the level and mix of development considered in more detail in Policy 16: Sustainable Connectivity, as well as a more detailed masterplanning consideration. These must balance the needs of those with disabilities who rely on the car, taxi or bus with the need to encourage people who are able to use alternatives to the car for short journeys within the area (Policy 21: Street hierarchy). The approach to car parking set out above, coupled with measures set out in Policies 16, 17 and 19 to increase accessibility to the site by non-car modes and more intensive travel planning measures has the potential to result in a significant reduction in car driver mode share. However, it is acknowledged that the reduction and restriction of car parking across the area could lead to parking displacement. This could affect the adjacent areas of Orchard Park, Milton, East and West Chesterton, King's Hedges and Abbey, but also potentially further afield. During the plan period, ongoing monitoring will be required to assess the impact of any parking displacement which will inform further mitigation measures if required. In order to be able to mitigate these problems, should they arise here (or elsewhere in the district) Cambridgeshire County Council has agreed to make an application to the Secretary of State to decriminalise parking enforcement in South Cambridgeshire, with the Greater Cambridge Partnership funding the early feasibility work. If the application is granted, it will mean that any parking displacement has a legal means with which it can be dealt with. As further public transport schemes are delivered across Greater Cambridge, this will increase the public transport catchment area which serves North East Cambridge and will play a key role in the gradual shifting of people using private cars to more sustainable modes. The phasing of the car parking strategy will need to be closely aligned with the delivery of public transport and active travel improvements, to ensure that these benefits are in place before more restrictive measures are imposed.

The Area Action Plan anticipates that there will remain a proportion of commuter journeys which begin without a viable alternative to the car. These trips will necessarily need to be intercepted by utilising the existing and proposed Park & Ride or Park & Cycle facilities across the wider area, including Milton Park and Ride. Mobility needs have already changed significantly over the last 25 years, with commuting journeys in England falling by 16% between 1995 and 2014, despite population growing by 11% and employment growing by 18%⁵. Continuing improvement to public transport provision, changes in flexible working practices, the spread of commuter journeys away from peak hours and the ongoing decline in car ownership levels among younger generations are all some of the future travel trends that are likely to contribute further to the reduction in car-driver mode share.

Different travel habits established during the pandemic may have reinforced these trends but this will need to be monitored in the coming years as we adjust to a new normal of living with Covid.

To achieve an equitable split of both the vehicular trip budget and car parking spaces across the whole area, the overall trip and parking provision has been apportioned to individual areas within the Area Action Plan area as set out in Appendix 3 and transposed within the NEC AAP High Level Transport Strategy (2021). Some sites will need to significantly reduce their vehicular trip generation and parking over time to achieve the desired level and to comply with the overall trip budget. Given the complexity of land ownership and tenancies within the area, the main landowners have work together to agree a High Level Transport Strategy in collaboration with the County Council as the local highway authority. As individual planning applications come forward, site-specific Transport Assessments and Travel Plans will need to demonstrate how they fit into this overall plan and set out how they intend to meet their targets, setting out specific travel planning measures for supporting this approach as well as a monitoring framework and further mitigation actions should they be needed.

Although the mode share targets are challenging, within the timeframes of the Area Action Plan, a phased approach to deliver significant transport improvements can

⁵ 'Future of Mobility: Urban Strategy', DfT, 2019

achieve the mode shift required to support the development planned through the Area Action Plan.

Due to the nature of our changing vehicle fleet and the decarbonisation of transport, it is important that development at NEC facilitates the transition to low emission vehicles. This policy sets a clear strategy for the delivery of vehicle charging points within North East Cambridge in both Car Barns and other locations across the Area Action Plan area.

Evidence supporting this policy

- Ely to Cambridge Transport Study (2018)
- North East Cambridge Transport Evidence Base (2019)
- NEC AAP High Level Transport Strategy (2021) (prepared by the five main NEC landowners in collaboration with the Councils and County Council)

Topic Papers and other documents informing this policy

- Transport Topic Paper (2021)
- Skills, Training and Employment Opportunities Topic Paper (2021)
- Smart Infrastructure Topic Paper: Environmental Monitoring (2021)
- Smart Infrastructure Topic Paper: Future Mobility (2021)
- Internalisation Topic Paper (2021)

Monitoring indicators

- Compliance with the Trip Budget
- Numbering of car parking spaces in permitted schemes (residential and nonresidential)

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 5: Strategic transport infrastructure
- Policy 81: Mitigating the transport impact of development
- Policy 59: Designing landscape and the public realm
- Policy 82: Parking management

• Appendix L: Car and cycle parking requirements

South Cambridgeshire Local Plan

• Policy HQ/1: Design Principles

Policy TI/2: Planning for Sustainable Travel

Policy TI/3: Parking Provision

Other Council/County strategy and policy and other supporting guidance

- Cambridgeshire and Peterborough Local Transport Plan (2021)
- Draft Making Space for People Supplementary Planning Document (2019)
- Waltham Forrest Mini Holland Design Guide (2015)

8. Development process

Developing North East Cambridge will take around 20 years, so there is the need to ensure that there is a clear and achievable plan for how this will take place over time. It is important that that the development process helps to reduce inequality, builds a strong and sustainable community, and is phased so that disruption is minimised. This section sets out how the Councils will work with developers and partners to achieve the vision and strategic objectives of the Area Action Plan, and how monitoring will be undertaken to ensure the plan remains effective.

- This section contains the following policies:
- Policy 23: Comprehensive and Coordinated Development
- Policy 24a: Land Assembly
- Policy 24b: Relocation
- Policy 25: Environmental Protection
- Policy 26: Aggregates and waste sites
- Policy 27: Planning Contributions
- Policy 28: Meanwhile uses
- Policy 29: Employment and Training
- Policy 30: Digital infrastructure and open innovation

8.1 Comprehensive and coordinated development

There are many challenges to realising the vision, strategic objectives and Spatial Framework for North East Cambridge, from managing existing noise, air quality and highway capacity constraints to overcoming social and physical barriers. Significant structural changes are required to the layout of existing land uses, with a number of large-scale operations needing to be relocated, reconfigured, or bridged over or under. It will also require early delivery of infrastructure to unlock the development potential of the area and to begin the transition to a high quality new mixed-use district.

With multiple landowners, development will be phased on different sites concurrently across North East Cambridge over the next 20 years and beyond. There are clear benefits of joint working and cross stakeholder engagement to ensure key issues are considered and, where possible, resolved jointly by all relevant parties prior to the

submission of planning applications, including the timing of required strategic infrastructure.

At the same time, it is important that new and existing uses can continue to successfully operate during the implementation phase, until such time as relocation is necessary to deliver the plan. It is also important that the establishment of new communities is supported and managed, the benefits of the development for the surrounding communities are realised. Delivery of the plan also needs to ensure that it is able to respond to economic cycles, changes in technology and climate change are planned for in a positive way.

A comprehensive and coordinated approach to the development of land and the delivery of area-wide interventions, infrastructure provision, and management regimes, is the only means by which to enable new development to come forward and to optimise the development opportunity of North East Cambridge, in terms of densities, delivery rates, levels of affordable housing, access to new job opportunities, and better place-making.

Policy 23: Comprehensive and Coordinated Development

Planning applications for major development within the North East Cambridge Area Action Plan area will be supported where:

- a. The proposal demonstrates the development will make an appropriate and proportionate contribution to site wide infrastructure such as road and rail crossings, public transport, active travel, community facilities, open space and Green Infrastructure provision, to be secured through the use of planning contributions in accordance with Policy 27;
- b. The proposal is supported by a comprehensive masterplan accompanied as necessary by parameter plans in relation to layout, scale, appearance, access and landscaping - that accords with the overarching Area Action Plan Spatial Framework and other relevant Development Plan policies, including, where appropriate:
 - The ability to connect and contribute to Area Action Plan-wide utilities and communications grids; and
 - ii. The setting aside of land for strategic and site-specific infrastructure provision.

- c. Through the masterplan, applications should demonstrate how the proposal:
 - i. Contributes proportionally to the achievement of the vision and strategic objectives for North East Cambridge and the creation of place;
 - ii. Integrates, connects and complements successfully with the existing and proposed surrounding context, including areas beyond the boundary of North East Cambridge, and supporting the timely delivery and optimised approach to the phasing of development across North East Cambridge;
 - iii. Supports the delivery of a new community, including demonstrating how early residents will be supported through community development;
 - iv. Is landscape-led with respect to layout and access and design-led with respect to capacity, scale and form;
 - v. Will achieve and secure the required modal shift in accordance with the North East Cambridge Transport Study and Policy 22: Managing motorised vehicles, including the management of vehicle numbers, movements, servicing and parking, including throughout the construction phase of delivering the masterplan;
 - vi. Responds to the impacts of climate change;
 - vii. Contributes to biodiversity net gain and forms part of a coherent green infrastructure network;
 - viii. Successfully mitigates environmental constraints; and
 - ix. Where relevant, has regard to the existing site circumstances, including the existing character, neighbouring uses and constraints; implementing the Agent of Change principle to ensure the ongoing functioning and amenity of existing uses is not materially affected.
- d. In instances where the infrastructure provision is to be phased, either strategic or site-specific, an approved phasing strategy is in place;
- e. The proposal demonstrates health and wellbeing impacts have been fully considered and accommodated for through design of the development and evidenced through the submission of a Health Impact Assessment; and
- f. The application is supported by a Statement of Community Involvement detailing the engagement with the Councils, surrounding and affected landowners, occupiers and the local community on both the masterplan, phasing strategy, and development proposal.

Should development proposals depart significantly from the development assumptions (set out in Appendix A) that have informed the site capacities and infrastructure requirements, they will need to be accompanied by an assessment of the implications for social and physical infrastructure provision, including triggers for delivery.

Why we are doing this

Relevant objectives: 1, 2, 3, 4, 5

The above policy recognises that land within North East Cambridge is in various ownerships and use and that, while redevelopment of strategic sites is likely to come forward on a plot-by-plot basis, a site wide approach is required to provide an integrated, well laid out, comprehensive development whilst enabling, without constraint or prejudice, each parcel to be developed separately over time.

The uses to be included within a proposed development, and their arrangement and design within the site, need to be the subject of a comprehensive masterplan exercise, that has engaged neighbouring occupiers and other potentially impacted parties, to ensure the mix of uses proposed would be compatible with each other and those on adjoining sites, and that together they deliver on the strategic objectives for the North East Cambridge Area Action Plan. This should also extend to the consideration of the health and wellbeing of future users and occupiers to enhance the potential positive aspects of the proposal whilst avoiding or minimising any negative impacts. Particular emphasis should be placed on disadvantaged sections of communities that might be affected.

A comprehensive masterplan approach to sites also provides a mechanism for effective early stakeholder and local community engagement, aiding in gaining community ownership of proposals and, crucially, ensuring phased delivery of development and infrastructure is properly coordinated, distributed and timed across individual parcels.

The infrastructure requirements for North East Cambridge are based on the population projections that derive from the assumed housing mix. If proposals come forward with a significantly different housing mix this may impact on the levels of infrastructure and/or when it is needed. It will therefore be important to monitor this

through the Development Management process as new planning applications are considered over the life of the Plan.

Evidence supporting this policy

- North East Cambridge Landscape Character & Visual Impact Appraisal (2020)
- North East Cambridge Transport Assessment (2019)
- Cultural Placemaking Strategy (2020)
- Innovation District Paper (2021)
- Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

 North East Cambridge Stakeholder Design Workshops 1-6 – event records (2019-2020)

Monitoring indicators

None – Housing mix is monitored under policy 13

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 14: Areas of Major Change and Opportunity Areas general principles
- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change

South Cambridgeshire Local Plan

 Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station

8.2 Land assembly and relocation

The layout of the Area Action Plan as included in the spatial framework has been developed with consideration to the existing land uses in the area. In some places it

is appropriate to retain these and incorporate or re-provide them within the area as part of comprehensive redevelopment. Where existing uses are inconsistent with the strategic objectives of the Area Action Plan, it will be necessary to relocate these uses. This policy sets out how the Councils will both assemble land and will support other landowners and developers to do so, including when and how compulsory purchase powers may be used.

Policy 24a: Land Assembly

Where land assembly is necessary to deliver the Area Action Plan Spatial Framework for North East Cambridge and/or to achieve comprehensive development in accordance with Policy 1: A comprehensive approach at North East Cambridge, the Councils will assemble land and support other landowners and developers to do so.

The Councils will use compulsory purchase powers to assemble land where it can be demonstrated that:

- a. land assembly is the only means of achieving delivery of the Area Action Plan
 Spatial Framework;
- b. comprehensive redevelopment of the assembled land is in the public interest and capable of delivering a viable scheme that is development plan compliant;
- c. all reasonable attempts have been made to acquire, or secure an option over, the land/building(s) needed, through negotiation; and
- d. All other elements of policy and legislative requirements for the exercise of powers of compulsory acquisition are met.

Where compulsory purchase is necessary, applicants will be required to demonstrate how the associated costs impact upon development viability.

Policy 24b: Relocation

The delivery of the North East Cambridge Spatial Framework proposes the redevelopment of the area, which includes some existing uses.

The AAP requires there to be no net loss in industrial floorspace (B2 and B8) through the re-provision and/or relocation of the equivalent amount of existing industrial floorspace located in Cowley Road and Nuffield Road industrial estates. See Policy 12b.

The Spatial Framework identifies the need for relocation of existing uses that need to be considered individually by virtue of protection or safeguarding polices in other parts of the development plan or by reason of the strategic significance of the use. The plan also identifies the desirability of off-site relocation of the existing minerals operation. These are as follows:

- a. Waste Transfer Station protected as a Waste Management Area in the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036. The proposed relocation of this use preferably off-site or alternatively, and preferably as an interim site, adjacent to the Aggregates Railheads in order to facilitate the delivery of the district centre and residential development is addressed in Policies 10b, 12b, 25 and 26.
- b. Aggregates Railheads protected as a Transport Infrastructure Area in the Minerals and Waste Local Plan 2036. Unless and until a suitable alternative off-site option for replacement railheads can be identified, the proposed approach is to retain the Aggregates Railheads in their current position is addressed in Policies 12b, 25 and 26.
- c. Bus Depot a strategic transport use serving Greater Cambridge and is therefore to be treated as a 'ring-fenced use' providing a status similar to that of a safeguarded use. Relocation off-site is proposed in order to facilitate delivery of the plan and is addressed in Policy 12b.

Why we are doing this

Relevant objectives: 2, 3, 5

In certain places, the Spatial Framework and Land Use Plan for North East Cambridge is at odds with existing uses on the ground. It will therefore be necessary to assemble land and/or to relocate existing floorspace and uses to accommodate the Spatial Framework layout and to optimise the development potential of individual sites. This will include:

The re-provision and/or relocation of industrial floorspace

The relocation of a number of existing protected / safeguarded and strategic uses

The policies that address these relocations are included in several different sections of the AAP. Policy 24b seeks to bring these policies together to provide an overview of the relocation of floorspace and uses that will be required to deliver the AAP.

The re-provision and/or relocation of industrial floorspace

Policy 12b (Industry, Storage and Distribution) requires that development should ensure there is no net loss of B2 (general industrial) and B8 (storage or distribution) floorspace within the North East Cambridge Area Action Plan area. Proposals for the redevelopment of existing industrial floorspace (B2/B8) at Cowley Road and Nuffield Road industrial estates are required to re-provide the equivalent amount of existing floorspace within the Cowley Road Industrial Estate and Chesterton Sidings area. This area has been identified as the most appropriate location to consolidate industrial uses as new development here will minimise conflict between industrial traffic and residential areas (see Policy 21: Street hierarchy), provide a suitable industrial buffer to the Aggregates Railheads and also serve neighbouring residential areas through the enhanced pedestrian and cycle routes identified on the Spatial Framework.

The reprovision of industrial floorspace may result in some occupants being relocated off-site. A Relocation Assistance Strategy will be formulated by the Councils to support existing in situ businesses including working with affected occupiers to help identify suitable alternative sites either within the NEC area or elsewhere.

The relocation of a number of existing protected / safeguarded uses

The relocation the Waste Transfer Station currently located at the entrance of Cowley Road Industrial Estate is required by policies 10b (District Centre) and 26 (Aggregates and Waste Sites) as a pre-requisite to future sensitive development coming forward on surrounding plots and to enable the delivery of the district centre. An off-site location is the preferred option for the relocation. However, in the event that no suitable site is identified, an alternative location has been identified adjacent to the Aggregates Railheads where the operation can move to during the AAP period, and beyond if necessary, to maintain the waste activities whilst freeing up the current site of the Waste Transfer Station for redevelopment. Policies 12b (Industry, storage and distribution) and 26 address the creation of a buffer area around both

the Waste Transfer Station and the Aggregates Railheads and Policy 25 (Environmental Protection) and Policy 26 (Aggregates and waste sites) seek to ensure that new sensitive uses do not impact existing businesses such as the Waste Transfer Station or their operations and that suitable mitigation measures are put in place.

Policy 26 (Aggregates and waste sites) states that unless and until a suitable alternative off-site option with railheads can be identified, due to their essential infrastructure role serving Greater Cambridge, the proposed approach is to retain the Aggregates Railheads in their current position and to surround it with a buffer of industrial (B2 and B8) uses. Policy 12b and Policy 26 address the creation of the buffer zone. Policy 26 seeks to ensure that new development proposals or uses do not impact existing businesses such as the Aggregates Railheads or their operations and that suitable mitigation measures are put in place.

The longer term vision for the Aggregates Railheads site is for residential development. However, this will only be acceptable if the current operation, and the relocated Waste Transfer Station are relocated off-site, subject to meeting the requirements of the Minerals and Waste Local Plan (or future equivalent) or removing the safeguarding policy related to this site.

The limitation of vehicle movements on NEC, the incompatibility of a bus depot use with residential and other sensitive uses and the ambition to at least double the size of the bus network in the local area mean that the existing Cowley Road bus depot will need to be relocated off-site to achieve comprehensive redevelopment of North East Cambridge. This requirement is included as part of Policy 12b (Industry, Storage and Distribution).

A long term solution to this issue will be found via the Local Transport and Connectivity Plan and Bus Strategy being prepared by the Cambridgeshire and Peterborough Combined Authority and the Cambridge City Access Project being prepared by the Greater Cambridge Partnership.

Evidence supporting this policy

- North East Cambridge Area Action Plan: Commercial Advice and Relocation Strategy (2021)
- Innovation District Paper (2020)

Typologies and Development Capacity Assessment (2021)

Topic Papers and other documents informing this policy

- Skills, Training and Employment Opportunities Topic Paper (2021)
- Monitoring indicators
- Availability of industrial land measured through no overall net loss of industrial and warehouse floorspace (B2 and B8).

Monitoring indicators

None

Policy links to the adopted Local Plans

Cambridge Local Plan

- Policy 15: Cambridge Northern Fringe East and new railway Station Area of Major Change
- Policy 41: Protection of business space
- Policy 56: Creating successful places

South Cambridgeshire Local Plan

- Policy SS/4: Cambridge Northern Fringe East and land surrounding the proposed Cambridge Science Park Station
- Policy E/14: Loss of employment land to non employment uses

8.3 Environmental protection

Development must be planned and designed in consideration of environmental constraints including land contamination, noise / vibration, artificial lighting and air quality including odours. This policy describes how we expect proposals to improve and mitigate the environmental impacts of development as well as improving overall health and wellbeing considerations for future and existing communities alike.

Policy 25: Environmental Protection

Development at North East Cambridge will be required to fully consider all environmental impacts to ensure that the future health, quality of life, amenity and the natural environment are fully considered. Effective mitigation and remediation plans will be required to consider individual and cumulative impacts, timing and phasing, and current and future uses.

In order to ensure that risks from land contamination are adequately assessed, prior to commencement of any development, a comprehensive site wide Contaminated Land Phase 1 - Desk Top Study / Preliminary Risk Assessment of the entire area shall be undertaken and completed.

Development will be permitted where it can be demonstrated that:

- a. It is appropriate for its location and will contribute to creating healthy internal and external living environments through preventing unacceptable risks and adverse / negative impacts on health and quality of life / amenity and the wider environment from matters such as land contamination, noise and vibration, artificial lighting and air quality (including odours), from the local road and rail network, wastewater treatment infrastructure, and existing and future industrial, commercial and business type uses;
- b. Opportunities are taken, where possible, to enhance and improve local environmental conditions such as noise pollution and air quality;
- c. Noise (including industrial and transport sources), air quality (such as particulate matter, nitrous oxides, dust and odour) and land contamination constraints have been comprehensively and cumulatively addressed as part of the design and layout of the site masterplan;
- d. New sensitive uses are integrated effectively with existing and future uses to ensure they do not prejudice their operation;
- e. Unreasonable restrictions are not placed on existing businesses, operations, and facilities, even on a temporary basis, as a result of new development;
- f. Mixed-uses are located to complement rather than conflict with neighbouring uses in terms of environmental protection impacts;
- g. Areas of public open space and recreational / play spaces are suitable for their intended use and are not located in areas where the risk to health or

amenity from contaminated land, environmental noise or air quality is unacceptable.

A construction environmental management plan should also be prepared to avoid, minimise and mitigate environmental pollution during the construction phase of the development Furthermore, developers should be encouraged to register with The Considerate Constructors Scheme which includes guidelines for considering the impact on neighbours, and for protecting and enhancing the environment.

Why we are doing this

Relevant objectives: 1, 4, 5

Applicants should engage in pre-application discussions with the Greater Cambridge Shared Planning Service, to determine the individual submission requirements for impact assessments as required. In accordance with para 187 of the NPPF (2021), the policy seeks to ensure new sensitive uses do not impact existing businesses or their operations, such as the Waste Water Treatment Plant (pending its relocation on which the Plan is predicated), Waste Transfer Station, and Aggregates Railheads and requires suitable mitigation measures to be put in place. The above policy should be read alongside Policy 26: Aggregates and waste sites, which contains specific requirements applying to development within the Consultation Area of a safeguarded facility under the Cambridge and Peterborough Minerals and Waste Local Plan 2036. The Councils will consider the use of planning conditions or obligations to require the provision of appropriate design measures and controls to mitigate and reduce to minimum adverse environmental impacts. Planning obligations may assist in mitigating the impact of unacceptable levels of risk from pollutants and development to make it acceptable in planning terms. Environmental requirements should be considered alongside the other relevant polices of the Area Action Plan to ensure effective integration including climate

change.

Developers are encouraged to register with the Considerate Constructors Scheme which identifies guidelines on minimising the impact of construction on neighbours and protects and enhances the environment.

Land Contamination

Due to a long history of industrial uses, activities and processes on the site and given the sensitive nature of future proposed residential development, including external amenity / recreational spaces, as a minimum, prior to commencement of development a comprehensive site wide Contaminated Land Phase 1 - Desk Top Study / Preliminary Risk Assessment of the entire area shall be undertaken and completed. The study shall include coverage of soil and controlled water contamination and consideration of relevant environmental, geological, hydrogeological site history information specific to the site, a review of previous contaminated land reports, GIS information and a preliminary Qualitative Contaminated Land Risk Assessment with Conceptual Site Models and Source-Pathway-Receptor analyses in accordance with British Standards. Landowners across the area should agree the approach to how this can be done effectively and equitably to support wider development.

The Phase 1 study shall inform the scope and phasing as appropriate of future Contaminated Land Phase 2 - intrusive site investigations and the understanding of the need for future site remediation requirements for development, following detailed options appraisals as part of a Phase 3 Remediation Strategy / Scheme following appropriate quantitative risk assessment (QRA) and options appraisal (OA). Given the dated contamination testing results and uncertain / poor site coverage of past investigations, an intrusive ground investigation is likely to be required to reduce uncertainty and to inform future remediation options to current remediation standards.

Noise

The A14 traffic noise has widespread prevalent adverse impacts across a significant proportion of the Area Action Plan area. It is likely that a strategic site environmental noise barrier close to the A14 will be the most effective option to mitigate and reduce to a minimum adverse noise both internally and externally.

Site specific noise sources that will require assessment and consideration include transport (the A14 and Milton Road traffic noise, the Cambridge to Ely / King's Lynn railway line and the Cambridge Guided Busway, Cambridge North Station and future internal streets / and haul roads) and industrial uses (existing industrial uses that may remain and coexist including safeguarded minerals and waste uses such as the

Aggregates Railheads, Waste Transfer Station, and the Waste Water Treatment Plant (until decommissioned)). Where noise barriers have been implemented, the effectiveness of these should form part of any noise assessment.

As part of future development proposals there will be a need for detailed noise impact assessments of all relevant noise sources as appropriate, and consideration of inherent good acoustic design to ensure noise does not give rise to unacceptable adverse impacts on health and quality of life / amenity and ensure satisfactory internal and external residential living conditions are achievable.

Air Quality

The A14 and Milton Road are both subject to high traffic volumes which have an impact on local air quality. North East Cambridge is not located within an Air Quality Management Area (AQMA).

Redevelopment of North East Cambridge will introduce new relevant sensitive receptors such as residential uses into the area and therefore create new areas where national air quality objectives would be relevant / applicable and therefore air quality assessments will be required.

The construction of new higher density mixed use development also has the potential to generate and release additional emissions into the air that may affect receptors located in the surrounding areas outside of the Area Action Plan area and subsequently may have an impact on local AQMAs. This could include onsite energy facilities. This could lead to deterioration in air quality for these receptors.

Nevertheless, the nature of development proposed could also help to address these issues due to the strategic objective to reduce the need to travel by car and locate a wide range of uses such as homes and jobs in close proximity to each other.

Further assessment should be carried out at the detailed planning application stage. It is also recommended that detailed air quality atmospheric dispersion modelling is undertaken at the detailed planning application stage, to quantify air quality concentrations at proposed receptor locations and at relevant existing receptors off site.

The combination of monitoring and modelling would determine the minimum distance at which new receptors could be located relative to the road sources of air pollution.

Odour & Dust

Any new development which may coexist with existing sources of odour and dust such as the Waste Water Treatment Plant, safeguarded minerals / waste sites and other industrial, commercial or business uses in the area will require an odour and dust impact assessments to ensure no unacceptable adverse impact arise on health and quality of life / amenity both internally and externally.

Any odour impact assessment must consider existing odour emissions from odour sources at different times of the year and in a range of different weather conditions and detailed odour dispersal modelling may be required. Planning permission will only be granted when it has been demonstrated that the proposed development would not be adversely affected by the continued operation of existing sources of odour and dust that may coexist.

Artificial Light Pollution

Any development that has the potential to be adversely affected by existing artificial lighting levels for example associated with Cambridge North Station, street lighting and other existing premises, will require a lighting impact assessment and consideration of mitigation to limit the impact on local quality of life / amenity and biodiversity.

Evidence supporting this policy

- Phase 1 Gio-Environmental Desk Study (2021)
- Landscape and Visual Impact Assessment (2020)

Topic Papers and other documents informing this policy

Environmental Health Topic Paper (2021)

Monitoring indicators

None

Policy links to adopted Local Plans

Cambridge Local Plan

- Policy 33: Contaminated land
- Policy 34: Light pollution control
- Policy 35: Protection of human health and quality of life from noise and vibration
- Policy 36: Air quality, odour and dust
- Policy 38: Hazardous installations

South Cambridgeshire Local Plan

- Policy SC/9: Lighting Proposals
- Policy SC/10: Noise Pollution
- Policy SC/11: Contaminated Land
- Policy SC/12: Air Quality
- Policy SC/13: Hazardous Installations
- Policy SC/14: Odour and Other Fugitive Emissions to Air

8.4 Aggregates and waste sites



Figure 44: Map showing location of aggregates and waste sites within the Area Action Plan boundary. Brown fill shows Safeguarded Aggregates railheads; Green fill shows Existing Safeguarded Waste Transfer Station; Blue fill shows Safeguarded Broad Location for re-located Waste Transfer Station

The Area Action Plan area includes safeguarded Aggregates Railheads and a Waste Transfer Station. The Aggregates Railheads are of strategic importance and also provide the potential to minimise the movement of construction materials and waste by road. Unless and until a suitable off-site alternative for replacement railheads can be identified, the proposed approach is to retain the Aggregates Railheads in situ. It is proposed to relocate the Waste Transfer Station preferably off-site or alternatively, and preferably as an interim site, to a more appropriate location within Cowley Road Industrial Estate adjacent to the Aggregates Railheads to facilitate the Area Action Plan vision and Spatial Framework. This policy sets out how this should be achieved and the implications for development on and around these sites.

Policy 26: Aggregates and waste sites

Unless and until a suitable off-site alternative for replacement railheads can be identified, the continued operation of the Aggregates Railheads at North East Cambridge are supported due to their essential infrastructure role serving Greater Cambridge and consistent with the safeguarding policy in the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036.

The Waste Transfer Station will need to be relocated as a pre-requisite to future sensitive development coming forward on surrounding plots and to enable the delivery of the district centre, but must be re-provided consistent with the safeguarding policy contained in the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036 and in collaboration with the Mineral and Waste Planning Authority. Relocation is preferably off-site or alternatively, and preferably as an interim site, adjacent to the Aggregates Railheads within the Cowley Road Industrial Estate. This will be secured through planning contributions from new development within 250 metres of the boundary of the existing Waste Transfer Station site. In accordance with Policy 12b: Industry, Storage and Distribution, industrial, storage and distribution uses are to be intensified around the existing Aggregates Railheads and the relocated Waste Transfer Station (if retained on site) to act as a buffer to more sensitive uses, as shown in the land use plan (Figure 11). All development proposals, including the residential within the Consultation Area of either facility must apply the Agent of Change principle, and will need to demonstrate that the proposal will

- not prejudice the existing use of the facility;
- not result in unacceptable amenity issues or adverse impacts to human health for the occupiers or users of the proposed development due to the ongoing operation of the facility;
- ensure that any mitigation measures proposed either as part of the new development or in relation to the existing operation or its site are practical; and
- ensure that all costs can be met by the developer of the development proposal.

Residential and commercial development of the Aggregates Railheads site will only be acceptable if the current operation, and the relocated Waste Transfer Station are relocated off-site, subject to meeting the requirements of the Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036 (or future equivalent) or removing the safeguarding policy related to this site.

Why we are doing this

Relevant objectives: 3

The adopted Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036 (adopted 2021) and Policies Maps (2021) safeguards both the Aggregates Railheads at Chesterton Sidings and the Waste Transfer Station on Cowley Road. The safeguarding policies include requirements on all new development proposals within a Consultation Area (circa 250m from the boundary of the existing facility) to ensure such proposals do not proposals do not prejudice the existing operation. There are currently no suitable alternative locations identified outside of the Area Action Plan area to which these uses could be suitably relocated. As such, both uses must be accommodated within the development proposals of the Area Action Plan. In order to protect future residential amenity and other sensitive uses, the Area Action Plan provides for the provision of intensified General Industrial (B2) and Storage and Distribution (B8) uses around these operations, providing a buffer. All new development proposals within the Consultation Area of the respective facilities must demonstrate that they can achieve satisfactory design mitigation, either at source (i.e. improvements to the environmental performance of the facility) or to the development (i.e. in terms of acceptable environmental standards). All costs of required mitigation will need to be met in full by the developer of the new development proposal.

There has been a long-term ambition to relocate the Aggregates Railheads from North East Cambridge. Whilst this policy and Area Action Plan Spatial Framework do not seek to relocate this use off-site, it also sets a clear preference for residential development to be delivered on the site should the site become available for development during the plan period. Any future development in this area would need

to protect residential amenity in accordance with Policy 25: Environmental Protection.

The Cambridge Waste Water Treatment Plant is also a safeguarded use within the Minerals and Waste Plan. However, the adoption of the Area Action Plan is predicated on it being possible, through a separate planning process, to relocate this facility to another site and freeing up the land for comprehensive redevelopment and it is not a proposal of the Area Action Plan.

Evidence supporting this policy

 North East Cambridge Area Action Plan: Commercial Advice and Relocation Strategy (2021)

Monitoring indicators

None

Policy links to the adopted Local Plans

• Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021)

8.5 Planning contributions

Planning contributions can take the form of financial or in-kind contributions from developers to mitigate the impacts from the development. These help to provide affordable housing, can secure employment opportunities during the construction and post construction phases of development; and secure necessary infrastructure, all of which should be provided in a timely manner alongside development.

Policy 27: Planning Contributions

A. The Councils will seek appropriate planning contributions on a scheme-byscheme basis to secure the provision of affordable housing (in relation to residential development schemes), employment opportunities, and to ensure development proposals provide or fund new or enhanced strategic infrastructure and improvements, and to mitigate site specific impacts made necessary by the proposal.

It is expected that applicants engage in pre-application discussions with the Greater Cambridge Shared Planning Service to agree draft S106 Heads of Terms that will be submitted with each application.

Viability

- B. Where there are concerns with site specific development viability, the onus is on the applicant to provide clear evidence of the specific site circumstances. Viability concerns should be raised at the pre-application stage.
- C. Where viability considerations are accepted, the Councils will determine the balance of obligations and will require a future review and, where appropriate, clawback mechanisms.

Why we are doing this

Relevant Objectives: 1, 2, 3, 4

All new development proposals within NEC are required to contribute fairly and equitably towards the necessary supporting infrastructure, through both on-site provision and financial contributions to relevant area-wide requirements. NEC Area-wide requirements may extend to include not just physical provision, but the management and maintenance of strategic infrastructure (such a public transport, public realm, and green infrastructure) and, where appropriate, the monitoring of activities or mitigation measures (such as vehicle trips).

While the councils expect most site-specific impacts to be mitigated through good design and layout (in accordance with Policy 6), some impacts are likely to require physical works or other forms of improvement to mitigate them.

Development proposals must consider the full policy requirements set out in the Area Action Plan. Viability assessments should only be conducted where justified through exceptional site-specific circumstances. Viability assessments should be produced in line with the national planning practice guidelines. Independent verification of viability assessment will be sought, and any costs that this incurs will be borne by the

developer. Once accepted by the councils, the assessment will be made publicly available.

Evidence supporting this policy

- North East Cambridge Viability assessment (2021)
- North East Cambridge Infrastructure Delivery Plan (2021)

Topic Papers and other documents informing this policy

- Health Facilities and Wellbeing Topic Paper (2021)
- Skills, Training and Employment Opportunities Topic Paper (2021)
- Community Safety Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- Smart Infrastructure: Future Mobility (2021)
- Smart Infrastructure: Digital Infrastructure (2021)
- Internalisation Topic Paper (2021)

Monitoring indicators

Securing of S106 contributions

Policy links to adopted Local Plans

Cambridge Local Plan

 Policy 85: Infrastructure delivery, planning obligations and the Community Infrastructure Levy

South Cambridgeshire Local Plan

- Policy TI/8: Infrastructure and New Developments
- Policy H/10: Affordable Housing

8.6 Meanwhile uses

Development across North East Cambridge will be phased over a number of years and critical to its success will be making sure that a sense of place and community is

developed from the start. Policy 23 requires consideration of how early residents will be supported through community development.

Temporary 'meanwhile' projects which create community services, small-scale business and retail spaces and public realm can achieve this, supporting local skills development and entrepreneurship, and meeting short-term gaps in the delivery of permanent community infrastructure.

This policy sets out how temporary planning permission will be supported for meanwhile uses that contribute to the vibrancy and wider vision for the area.

Policy 28: Meanwhile uses

Temporary planning permission will be granted for "meanwhile" uses in buildings or on spaces that would:

- 1. otherwise remain empty or underused as they are not expected to come forward for development in the short-term;
- 2. contribute to meeting the day-to-day needs of the local community;
- 3. contribute positively to the emerging identity of North East Cambridge;
- 4. reinforce the longer term uses planned for the area, including the consideration given to supporting meanwhile occupiers securing permanent spaces within developments; and
- 5. not give rise to an unacceptable impact on existing or proposed neighbouring uses, on the transport network, and to environmental conditions.

Such uses should meet accessibility standards, provide for safe and convenient access for both servicing and users, include sufficient and secure cycle parking and be designed to be provided in a flexible and coordinated way.

Temporary permission for meanwhile uses will be linked to the phasing of the delivery of the District's Centres and the delivery of permanent facilities.

Why we are doing this

Relevant Objective: 1, 2, 4, 5

The value of meanwhile use is recognised by the councils as a strategy for enabling early delivery of longer-term regeneration and development proposals. The comprehensive regeneration of North East Cambridge will be phased over a number

of years and it is not feasible to put the full range of permanent structures and/or uses planned for the area from the outset. Providing temporary "meanwhile" ⁶ spaces, buildings and uses during the initial stages of the development can help provide opportunities for active uses throughout the redevelopment and to ensure that the new residents do not need to travel far to meet their day to day needs and avoid unsustainable patterns of movement.

Meanwhile uses also have an early role in place making, by being able to quickly bring life and activity to an area before permanent development begins. This also has the benefit of acting as a prototype for the character of this new city district, ensuring early understanding of it as a place, enhancing the attractiveness to potential future tenants, and businesses may flourish helping to provide readymade tenants that can migrate into permanent space.

Ideally the meanwhile use would occupy a space which is intended to be available for at least five years, in order to offset the start-up costs and enable the establishment of viable businesses, noting the low cost and low-risk nature of the development makes them attractive to business start-ups, community groups and the creative and cultural sectors.

Meanwhile uses could take a number of different forms, such as repurposing an existing building, new build, the use of outdoor space, or a combination of these, and may comprise one or a wide range of compatible uses, such as shops, bars, cafes, other retail, office start-ups, health facilities, cultural spaces and workplaces, charities, nurseries and community centres spaces and facilities.

The policy does not therefore seek to constrain innovation in the form of meanwhile use(s) but concerns itself with ensuring what's proposed will meet local needs, contribute to place-making and place-identity and will not impact upon the operation of existing uses or inhibit policy compliant permanent development coming forward on neighbouring sites. In this context, the location, siting, access arrangements, and the achievement of satisfactory environmental conditions for users are all key considerations as to the acceptability of a proposal.

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⁶ "Meanwhile" use is a catch-all title adopted in recent years to describe a diverse range of pop-up cafés, shops and temporary uses of empty property and land awaiting longer-term development.

New facilities should be provided in flexible spaces which are adaptable, and consideration should be given to co-locating uses to generate vibrant spaces. Meanwhile uses will not be permitted where it would prevent development from being brought forward in a timely fashion. Consideration should be given to how meanwhile uses transition to new permanent sites within the Area Action Plan area as they become available to ensure their continuity.

Evidence supporting this policy

- Community and Cultural Facilities Audit Provision (2021)
- Cultural Placemaking Strategy (2021)
- Greater Cambridge Creative Business and Cultural Production Workspace
 Study (2021)

Topic Papers and other documents informing this policy

- Health Facilities and Wellbeing Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)

Monitoring indicators

Meanwhile use permissions granted

Policy links to the adopted Local Plans

- South Cambridgeshire Local Plan
- Policy SC/4: Meeting Community Needs

8.7 Employment and training

Many of the areas surrounding the Area Action Plan area experience relatively high levels of deprivation and unemployment and it is essential that new development contributes to addressing these inequalities. This policy sets out how development should create meaningful employment and training opportunities for existing residents during both the construction and operational phases of the development.

Policy 29: Employment and Training

In order to support and enable employment and training opportunities for local people, proposals for development over 1000m2 commercial floorspace or 20 dwellings will be required to be accompanied by an Employment and Skills Plan (ESP) for agreement with the Councils as part of the planning application process. The ESP will need to demonstrate how employment, skills and training opportunities for local people will be provided in the construction phase of developments, and in addition the operational phase of commercial developments.

The ESP should:

- Demonstrate how opportunities will be taken to employ a skilled local workforce such as local contractors, apprentices and trainees and how opportunities will be advertised;
- Detail how training opportunities will be provided, which could include working with local academies, colleges and educational establishments, such as Cambridge Regional College, to provide training and apprenticeships;
- Demonstrate how opportunities arising from the scheme will be made accessible to local residents, particularly those in existing communities bordering the site and to priority groups;
- Propose targets, and set out how the delivery of the plan will be monitored.

Implementation of the ESP will be secured through a planning obligation (S106).

Why we are doing this

Relevant objectives: 3, 5

Greater Cambridge is recognised as having one of the fastest growing economies in the UK and delivers large numbers of employment opportunities across a range of sectors. It is envisaged that North East Cambridge will play a significant role in meeting future employment needs of the Greater Cambridge area. As such the North East Cambridge area will continue to provide short and longer- term opportunities for a workforce with a range of skills to be employed during the construction phases of development and beyond.

The areas adjoining the North East Cambridge area are largely residential where the wards of King's Hedges and East Chesterton both fall within the twenty most deprived wards in Cambridgeshire in terms of indices of multiple deprivation. It is essential the proposed development at North East Cambridge contributes towards reducing such inequalities by securing training and employment opportunities for unemployed and underemployed residents in these neighbouring areas. The amount of development planned for North East Cambridge provides an opportunity to benefit local residents through support for skills development, vocational training, apprenticeships and similar employment training programmes. These programmes are of particular benefit to those residents within the local area experiencing economic and social deprivation. Provision for these schemes will therefore be sought in Planning Obligations for all major development within North East Cambridge. This will be part of a broader Anti-Poverty Strategy to improve skills and opportunities for local people in the wider area.

New development should proactively support local employment opportunities ensuring that skills, training and employment is not only provided but taken-up by a local workforce in both the construction and end-use phase and utilise existing and new private/public funding opportunities to develop new initiatives where possible. This will enable residents to access skilled-based employment locally and apprenticeships to those who wish to attain qualifications that will allow them to progress in their careers.

The Area Action Plan seeks to bring together innovation, industry and education which supports the overarching principles of a successful innovation district. By integrating Cambridge Regional College with the existing science and innovation parks as well as wider planned development, the plan seeks to increase access to apprenticeships and training, ultimately reducing the skills gap and increasing employment in the area. A key outcome from this will be a more highly skilled workforce, not only enhancing social inclusion but encouraging good growth within the area.

During the construction phase developers would be expected to deliver an agreed employment and training target for apprentices and trainees along with notification of all vacancies on site which includes all opportunities with contractors and subcontractors. For both the construction and end use phases the developer should be committed to working in partnership with the Councils and specifically the

Economic Development Team to produce an Employment and Skills Plan (ESP). In order to ensure access to skilled local labour is not a constraint to development delivery, the ESP should also set out measures of how the workforce could be sourced from the wider travel to work area if there is an evidenced shortage of short term local skilled labour.

Topic Papers and other documents informing this policy

- Skills, Training and Local Employment Opportunities Topic Paper (2021)
- Anti-Poverty and Inequality Topic Paper (2021)
- Education Topic Paper (2021)

Monitoring indicators

Number of Employment and Skills Plan secured through S106 agreements

Policy links to the adopted Local Plans

None

8.8 Digital infrastructure and open innovation

Smart development can be defined as using data gathering technologies in buildings and spaces to manage assets, resources and services efficiently. This has the potential to reduce energy and resource use and improve public services to help deliver the Area Action Plan's strategic objectives. North East Cambridge provides an opportunity to embed smart thinking into the area from the earliest stages and should be carried out in an open, equitable and adaptable manner. The policy sets out the expectations for smart technology and open data provision and management.

Policy 30: Digital infrastructure and open innovation

Major development proposals will be required to be supported by a Digital Infrastructure and Open Innovation Strategy which must detail how schemes will meet current and future anticipated requirements. These should set out how the

development will be innovative and embrace the opportunity to develop sensor networks embedded into the development which supports achieving the high environmental standards set out within the Area Action Plan. The Digital Infrastructure and Open Innovation Strategy must address the following requirements.

Smart buildings

New developments should:

- a. consider the impact of the design on wireless connectivity within the building, in-building solutions should be provided if the building design is expected to impact on the quality of wireless signals;
- ensure access to high quality communications via the latest generation of high-speed gigabit-capable broadband;
- c. establish "open access" broadband infrastructure provided by at least two suppliers or a neutral host;
- d. assess the likely impact of developments on the existing mobile networks in the area and take appropriate action to mitigate any adverse impacts and design in mobile phone infrastructure from an early stage including engaging with Mobile Network Operators;
- e. incorporate SMART technologies to facilitate efficient waste management from multi tenanted buildings; and
- f. consider rooftop delivery space to provide passive provision for airborne drones; and
- g. Include public Wi-Fi in publicly accessible buildings.

Smart public realm

Developments that provide new public realm should ensure that all street furniture has been considered for smart multifunctionality. Street furniture should be self-powered through solar panels, and where appropriate it should aim to include wayfinding information, publicly accessible Wi-Fi, and electric charging points for phones and/or electric vehicles. All data collected by street furniture should be open source. This should be facilitated by:

h. ensuring that fibre connectivity is designed in a way that it will be easily accessible for connection to street furniture such as street lighting columns to

facilitate future improvements such as future rollout of the latest small cell mobile communications technology

i. designing street furniture in such a way that the installation of telecoms equipment and other sensors can be included.

Open data

All developments with data generating interventions should provide machine readable data to the Councils so that the Councils can republish the data on their open data platforms that can be used by a single API for all open data collated.

Future mobility zone

The Councils will support experiments at North East Cambridge on future mobility to help foster the area's innovation and support the delivery of new transport services. This is to enable first and last mile journeys to be made by innovative forms of transport.

3D model

All major development should submit a 3D model in a as a native file to the local planning authority as part of a planning application to allow for landscape, townscape and microclimate impacts to be considered virtually.

Why we are doing this

Relevant objectives: 1, 2, 4, 5

Using the innovation potential of new technologies, North East Cambridge could improve public services to enhance the lives of people and working within the area. The Area Action Plan needs to identify an approach that can utilise data technology and information to address the evolving needs of North East Cambridge's residents, workers, and visitors.

Open innovation initiatives at North East Cambridge will collect information and data to enhance the understanding of planning and public services by generating information on service delivery, resource consumption, and mobility patterns. All policies relating to physical, digital, and social infrastructure have the potential to be smart, but it can only be so if it is connected to a network of systems that support interlocking operations or functions. Connecting different technological interventions

with each other can provide the potential for integrated urban services that can be harnessed to add value and become smart. The integration of data at North East Cambridge should be open, i.e. shared on terms that are not only machine readable, but fair, transparent, and accountable consistent with privacy regulation of General Data Protection Regulation (GDPR).

North East Cambridge provides an opportunity to embed smart thinking into a new development from its inception. Three key areas were identified as being the most relevant to smart considerations:

future mobility, i.e. transport innovation impacting systems of movement – integrated ticketing, applications using real time information for journey planning, etc – as well as new modes of transport – drones, autonomous vehicles, etc.

environmental monitoring, i.e. equipment, systems and sensors that can support the remote understanding of environmental performance such as light pollution, noise, air quality, building energy efficiency and flood risk to enable real-time analysis.

connectivity, i.e. the enabling infrastructure that will support the realisation of new technological improvements.

All of these could have profound implications on the use of public space, the ability of residents and workers to meet the trip budget, biodiversity net gain, and the capacity of statutory authorities to provide services.

North East Cambridge needs to establish the enabling infrastructure for smart technology and become a test bed for the experimentation of new technology. Lamp posts, for example, could use low energy lighting that is responsive to different times of day and use patterns, as well as also incorporate air quality sensors, publicly-accessible WIFI, electric vehicle charging points, and share their data openly for reuse by others. A multifunctional approach to design and integrated technology can therefore provide a range of smart proposals, allow efficient data monitoring and reduce visual clutter within the public realm.

North East Cambridge's approach to the smart city will be open and flexible systems to adapt to social changes and institutional innovations. Platforms and initiatives should be designed around the needs of citizens themselves and actively involve citizens in the design of the next generation of public infrastructure and services, thereby building common ecosystems and common frameworks for interoperable

digital services. Processing urban information in real time and making data publicly accessible can facilitate a transformation in how North East Cambridge's public resources will be used, together with improving public services such as mobility, transportation, and health care systems.

North East Cambridge can harness the power of technology and digital innovation to benefit all residents, workers, and visitors, and contribute to good growth by making the economy more sustainable and collaborative. Introducing network technologies in North East Cambridge is not just about providing the city with connectivity, sensors, and AI, but there is also an opportunity to achieve strategic objective priorities such as affordable housing, sustainable mobility, and active citizenship. To ensure that these ambitions are fulfilled development proposals will need to outline their digital infrastructure and open innovation strategies.

Smart buildings

The policy seeks to future proof the built environment within North East Cambridge to adapt to the future economy. This policy is designed to enable the buildings at North East Cambridge to be designed, implemented, operated, and managed in a smart and resilient way in line with the strategic objectives of the Area Action Plan. The policy aims to ensure overall security and safety, resilience, usability, and efficiency of buildings as assets, while reducing the amount of capital and intervention required to achieve these outcomes. The policy also seeks to ensure there is a uniform and consistent approach in the delivery of waste collection across North East Cambridge by employing latest technology and innovation for example underground bunkers incorporating sensor technology to ensure efficient service provision is delivered.

By ensuring that residents and businesses have a wide selection of digital suppliers this will allow for consumer choice, competitive pricing as well as encourage providers to deliver a high quality service. The policy proactively requires developers to identify pre-designated locations for future mobile mast installations to ensure site wide mobile coverage. This should include suitable design of the land or building to accommodate the equipment as well as the provision of power and backhaul connectivity to the mast location.

Smart street furniture

Multifunctional street furniture that is self-powered can help North East Cambridge improve the interactivity of its public spaces by providing public services, information, and connectivity, while at the same time enabling the collection of valuable open data by the Councils provide opportunities for further innovation.

Open data

The policy aims to use tools such as open data to incubate innovation, improve public services, and empower residents and workers. This needs to be matched by an ethical and responsible innovation strategy, that can make the most out of data and experimenting with new innovation such as future mobility, while guaranteeing data sovereignty and privacy in line with GDPR. This will help ensure that public resources and assets are aligned to the principles of good growth.

Future mobility zone

There has been a number of technological enhancements to public and private transport in recent years. The rate of change means that conducting experiments in future mobility at North East Cambridge will enable the area to explore different mobility options which showcase innovation. These trails and experiments will help to provide a long term unique site specific approach to mobility at North East Cambridge.

Topic Papers and other documents informing this policy

- Smart Infrastructure: Environmental Monitoring Topic Paper (2021)
- Smart Infrastructure: Digital Infrastructure Topic Paper (2021)
- Smart Infrastructure: Future Mobility Topic Paper (2021)
- Internalisation Topic Paper (2021)

Monitoring indicators

 Percentage of eligible developments where Digital Infrastructure and Open Innovation Strategies were secured

Policy links to adopted Local Plans

Cambridge Local Plan

Policy 42: Connecting new developments to digital infrastructure

South Cambridgeshire Local Plan Policy

- CC/1: Mitigation and Adaptation to Climate Change Policy
- CC/3: Renewable and Low Carbon Energy in New Developments Policy
- CC/5: Sustainable Show Home Policy
- TI/10: Broadband

8.9 Trajectories

This section of the Area Action Plan provides details about anticipated delivery of development across North East Cambridge including area specific data for each of the development areas over the plan period (up to 2041) and beyond. It gives an indication of the how much development will take place in each area and when. The National Planning Policy Framework (NPPF) requires strategic policies to include a trajectory illustrating the expected rate of housing delivery over the plan period. In preparing the trajectories for the Plan, the Councils have had regard to a number of factors:

The anticipated date of a decision on the Waste Water Treatment Plant Development Consent Order application

The anticipated date of adoption of the Area Action Plan;

The relocation of the Waste Water Treatment Plant and decommission of existing site;

A higher than average but reasonable build rate for the development, informed by on-going engagement with the landowners/developers, based on:

- o current expectations of the housing and employment market;
- o efficient building processes such as modular housing;
- o the housing types to be delivered; and
- o housing tenures which support quick delivery (e.g. Built to Rent).

However, the anticipated phasing of delivery must be heavily caveated that it could be affected in the event of any changes in circumstances that affect confidence in the timing of delivery, for example the economic impact of COVID-19, availability of an adequate water supply, and further discussions with landowners and developers that identify that the rate of delivery is not achievable.

Engagement with landowners and developers in preparing the plan has suggested that they anticipate that 530 homes per year could be delivered at North East Cambridge over the plan period. The level of development assumed by the Councils on strategic sites in the past has typically been 250 dwellings per year. The Housing Delivery Study 2021, prepared to support the Greater Cambridge Local Plan, concludes that for strategic sites within and on the edge of Cambridge, a rate of 350 dwellings per year can reasonably be relied upon, with a gradual increase in annual delivery at the beginning of the site's delivery and a gradual reduction at the end, both over a period of three years. Given the nature of the proposed development at North East Cambridge, there may be potential for this to accelerate further through some of the assumptions noted above. There is no policy limit on annual delivery subject to meeting the wider policy requirements of the development plan, but the trajectory anticipates a maximum of 350 dwellings per annum. This will be kept under review through the annual housing trajectory and may be refined as necessary drawing on evidence from further engagement with landowners and developers. The phasing of business floorspace is anticipated to be fairly continuous throughout the plan period. Engagement with landowners/developers and evidence base documents note that a significant amount of business floorspace can be delivered and absorbed by the market during the plan period. The re-provision of industrial floorspace is anticipated to come forward steadily across the plan period. This reflects that land within Chesterton sidings is within single ownership, whilst Cowley Road Industrial Estate is made up of fragmented land ownership where existing lease arrangements and some relocations off-site or elsewhere within the North East Cambridge area (e.g. Waste Transfer Station) are likely to mean that development will be delivered from the middle of the plan period in this area. The Councils have prepared a Commercial Advice and Relocation Strategy to further inform these delivery assumptions for industrial floorspace. For both business and industrial floorspace delivery, this is also caveated that in the event of any changes, for example the economic impact of COVID-19 and/or further discussions with landowners and developers.

Figure 45 and 46 below provide a summary of the broad distribution and phasing of the housing provision anticipated in the plan.

Residential - Net	2020/2	2025/3	2030/3	2035/4	Plan		
additional units	5	0	5	1	Period	2041+	Total
Anglian Water /							
Core Site	-	-	400	1,500	1,900	3,600	5,500
Cambridge							
Business Park	-	-	100	200	300	200	500
Cambridge							
Science Park	-	-	-	-	-	-	0
Chesterton							
Sidings	-	650	600	-	1,250	0	1,250
St Johns							
Innovation Park	-	-	-	-	-	-	0
Trinity Hall Farm							
Industrial Estate	-	-	-	-	-	-	0
Nuffield Road							
Industrial Estate	-	-	50	100	150	300	450
Cowley Road							
Industrial Estate	-	-	-	100	100	350	450
Merlin Place	-	-	-	125	125	0	125
Milton Rd Car							
Garage	-	-	0	75	75	0	75
Cambridge							
Regional College	-	-	-	-	-	-	0
Total	0	650	1,150	2,100	3,900	4,450	8,350

Fig 45: Table showing Net additional Residential units



Figure 46: Graph showing Residential Trajectory in Net additional units

8.10 Monitoring

When this Area Action Plan has been adopted, it will be important to ensure that the policies outlined in this document are meeting the vision outlined for North East Cambridge and its stated strategic objectives. The local planning authorities will therefore follow the progress of the policies contained within the Area Action Plan by monitoring how successfully the objectives are being achieved.

A monitoring framework for the Area Action Plan has been created to establish the indicators and targets that will be used to monitor its progress. It also sets out the actions that could be taken if targets are not being achieved.

The framework will be used to monitor the Area Action Plan annually, and the results will be reported in the Authority Monitoring Report for Greater Cambridge.

Draft monitoring framework

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC1	•	Policy 1: A comprehensive approach at North East Cambridge	To deliver mixed use development at North East Cambridge reflecting policies in the Area Action Plan.	Trigger: • [No specific trigger] • Contextual indicator, which is essentially the sum of all other indicators Action: • [No specific action]	This indicator will be reported on by a paragraph describing overall progress of the plan by reference to other indicators and activity

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC2	Percentage of permissions meeting the net zero carbon buildings requirements		That all development proposals for all new dwellings and new non-residential buildings meet the policy standards.	Trigger: • For monitoring purposes a notional level of 20% or more of planning permissions permitted in a year without a condition requiring a sustainability statement and energy statement Action: Review the circumstances that led to the trigger being met, and then take action as appropriate which may include: • Review Development Management processes.	 Annual review of major planning permissions as part of AMR Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council Note: the monitoring tsystem for this indicator still needs to be developed

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC3	•		policy standards for water efficiency. Residential developments must achieve efficiency standards equivalent to 80 litres per person per day. Non-residential buildings to achieve maximum BREEAM credits for water use (Wat 01)	residential development permitted in a year without a condition applied relating to water efficiency.	 Annual review of major planning permissions as part of AMR Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC4	permissions	Policy 4c: Flood Risk and Sustainable Drainage	Environment Agency initially objected on water quality grounds without appropriate conditions.	without appropriate conditions and / or a satisfactory flood risk assessment.	with planning applications and delegation or committee reports, and (iii) conditions imposed on planning permissions.

Indicator Number	Monitoring indicator	Policy	Target	33	Data source and Frequency of Monitoring
NEC5			(on-site and off-site)	 For monitoring purposes a notional level of 20% or more of planning permissions 	 Annual review of major planning permissions as part of AMR Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council
NEC6	Number of schemes reviewed by Greater Cambridge Design Review Panel		All major schemes reviewed by the Greater Cambridge Design Review Panel	Trigger:	Greater Cambridge Design Review Panel Annual Report

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC7	permitted (Ha)	Policy 8: Open spaces for recreation and sport	 22.54 hectares net additional informal open space delivered 5.04 hectares net additional provision for children and teenagers play space delivered 	Trigger: • Significant shortfall in open space delivered Action: • Review development management process	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council
NEC8	line with spatial framework	Policy 10a: North East Cambridge Centres Policy 10b: District Centre Policy 10c: Science Park Local Centre Policy 10d: Station Approach Policy 10e: Cowley Road and Greenway Local Centres		-	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC9	Percentage of wheelchair accessible homes permitted	Policy 11: Housing design standards	5% of all new build homes should meet Building Regulation requirement M4(3) 'Wheelchair User Dwellings'	Trigger: •Schemes consistently delivering less than 5% of new build homes to M4(3) standard Action: • Review development management process	
NEC10	Amount of new employment floorspace permitted and completed by type (gross and net)	Business	Up to 188,500m2 net additional business (Class E(g)) floorspace permitted and completed	Trigger: • Lack of progress in site delivery Action: • Discuss progress with developers/ agents to identify issues and necessary interventions	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council
NEC11	Availability of industrial land measured through no overall net loss of industrial and warehouse floorspace (B2 and B8).	Policy 12b: Industry	No overall net loss of permitted and completed industrial and warehouse floorspace (B2 and B8)	Trigger: • Lack of progress in comparison with target Action: • Discuss progress with developers/ agents to identify issues and necessary interventions	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC12	Net additional homes permitted and completed	Policy 13a: Housing	Make provision for approximately 8,350 dwellings in accordance with the Area Action Plan Spatial Framework and the Land Use Figure	Trigger: • Lack of progress in comparison with annually published housing trajectory Action: • review development management process	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council
NEC13	Number of affordable homes permitted and completed	Policy 13b: Affordable housing	At least 40% of all new homes within the area to be delivered as affordable housing	Trigger: • Lack of progress in comparison with target Action: • review development management process including viability assessments	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC14	Percentage of affordable homes by tenure permitted and completed	Policy 13b: Affordable housing	Within the affordable housing secured, the following proportions of each affordable housing tenure should be provided: i. 25% First Homes, ii. 55% affordable rent homes, iii. 5% social rent homes, and iv. 15% shared ownership homes or other forms of affordable home ownership as appropriate. Affordable Private Rent homes should be provided within Build to Rent developments, as set out in Policy 13c: Build to Rent.	Trigger: • Lack of progress in comparison with target Action: • review development management process	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC15	Monitor housing mix by no. bedrooms	Policy 13a: Housing	creation of inclusive, mixed and balanced communities.	 Housing mix significantly different than that set out in the AAP without justification Action: review development management process review policy 	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC16	Net additional Build to Rent dwellings permitted and completed	Policy 13c: Build to Rent	No more than 10% of the total homes permitted across the Area Action Plan area as identified in Policy 13a: Housing should be Build to Rent	Trigger: • Built To Rent homes comprise more than 10% of total permitted homes Action: • review development management process • review policy	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council
NEC17	Proportion of Build to Rent dwellings permitted and completed that are classified as affordable rent	to Rent	Build To Rent permissions should include a minimum of 20% Affordable Private Rent homes	Trigger: • Built To Rent permissions include less than 20% Affordable Private Rent Action: • review development management process including viability assessments • review policy	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC18	Number of self and custom build homes permitted on- site	Policy 13e: Custom	new homes should be brought forward as self or	Trigger: • Self and custom build permissions less than 5% of all dwellings on schemes of 20 dwellings or more over a 5-year period Action: • review development management process including demand for self and custom build	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council
NEC19	Monitoring C1 (Hotels)	Policy 13f: Short term/corporate lets and visitor accommodation	No target	N/A - this a contextual indicator where the amount of C1 use permitted and committed will be monitored. C1 use will be monitored both in terms of floorspace and bedrooms	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC20	Amount of net floorspace for D1 and sui generis uses permitted and completed that fulfil a community or leisure use.	Policy 14: Social, community and cultural Infrastructure	1) Satisfactory progress in the delivery of the minimum required on-site social, community and cultural infrastructure provision, specifically: 2 primary schools (inclusive of nursery provision), plus one safeguarded at Greenway Local Centre if needed to meet future needs Visual and performing arts hub (including production studios, gallery/museum and theatre/community conference space) Community garden and food growing spaces Library and community centre Health hub	delivering social, community and cultural infrastructure Action: review development management process	 Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council including monitoring commitments and completions of appropriate F1, F2 and sui generis uses Annual review of major planning permissions as part of AMR

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC21	retail and other	and local services	floorspace • 2,700m2 net additional comparison retail floorspace • 6,700m2 net additional other town centre uses	Trigger: • Lack of progress in comparison with target Action: • Discuss progress with developers/ agents to identify issues and necessary interventions	• Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council including monitoring commitments and completions of appropriate E uses and other appropriate town centre uses
NEC22	Number of cycle parking spaces in permitted schemes (residential and non-residential)		provided in excess of the minimum standards set of the adopted Cambridge Local Plan (2018). At least 5-10% of cycle parking provision should be	Trigger Any permission granted with less than the minimum policy requirement for cycle parking. Action Review the Development Management process	Data compiled by reviewing number of cycle stands in each permission granted annually. Annually

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC23	Number of passenger journeys starting and ending at Cambridge North Station	Policy 19: Safeguarding for Public Transport	Contextual indicator, to provide information on the level of use of Cambridge North Station.	Trigger: • [No specific trigger] • Contextual indicator, to provide information on the implementation of policies to inform Local Plan review. Action: • [No specific action]	Data on exits and entries of station compiled annually by the Office of Rail and Road
NEC24		Policy 19: Safeguarding for Public Transport	Contextual indicator, to provide information on the level of use of the Guided Busway	Trigger: • [No specific trigger] • Contextual indicator, to provide information on the implementation of policies to inform Local Plan review. Action: • [No specific action]	Cambridgeshire County Council traffic monitoring published annually
NEC25	Number of delivery hubs permitted and completed	Policy 20: Last mile deliveries	Up to 2 delivery and consolidation hubs of up to 1,500m2 each	Trigger: No progress in delivering hubs Action: Work with landowners and developers to bring forward a delivery hub.	Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council

Indicator Number	Monitoring indicator	Policy	Target		Data source and Frequency of Monitoring
NEC26	with the Trip Budget	Policy 22: Managing motorised vehicles	Plan area on to Milton Road is: • AM Peak: 3,900 two-way trips	 Any non-compliance with the 	Monitoring data from Cambridgeshire County Council (secured through planning obligation) - monitored annually
NEC27	parking spaces in permitted	Policy 22: Managing motorised vehicles	employment related parking spaces accessed from Milton Road, and a further maximum of 1,160	Trigger Any permission granted for residential development which exceeds 0.5 spaces per household. Action Review the development management process,	Data compiled by reviewing the ratio of car parking spaces to residential units in each permission granted annually. Annually

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC28	Securing of s106 contributions	Policy 27: Planning Contributions	Contextual indicator, to provide information regarding securing of necessary facilities and / or contributions to support all new development.	Trigger: • [No specific trigger] • Contextual indicator, to provide information on the implementation of policies to inform success of policies in the AAP. Action: • [No specific action]	 Monitoring of contributions secured through s106 agreements and CIL compiled by South Cambridgeshire District Council and Cambridgeshire County Council. annually
NEC29	Meanwhile use permissions granted	Policy 28 – Meanwhile uses	Temporary planning permissions for meanwhile uses are granted where they meet other required standards such as accessibility and cycle parking	Contextual indicator	 Annual survey of planning applications with Research & Monitoring Team at Cambridgeshire County Council Note: the monitoring system for this indicator still needs to be developed

Indicator Number	Monitoring indicator	Policy	Target	Triggers and Actions	Data source and Frequency of Monitoring
NEC30	Number of Employment and Skills Plan secured through S106 agreements		development over 1000m2 commercial floorspace or 20 dwellings will be accompanied by an Employment and Skills Plan (ESP)	Plan	Annual review of major planning permissions as part of AMR
NEC31	Percentage of eligible developments where Digital Infrastructure and Open Innovation Strategies were secured	infrastructure and open innovation	Infrastructure and Open Innovation Strategy.	Trigger: • Any major permissions do not include a Digital Infrastructure and Open Innovation Strategy Action: • Review development management process	Annual review of major planning permissions as part of AMR

8.11 Appendices, Acronyms and Glossary

Acronyms and Glossary of Terms

Acronyms

AAP Area Action Plan

API Application Programme Interface

BREEAM Building Research Establishment Environmental Assessment Method

BTR Build to Rent

CEMP Construction Environmental Management Plan

CIBSE Chartered Institution of Building Services Engineers

EV Electric Vehicles

GCP Greater Cambridge Partnership

HIA Health Impact Assessment

HIF Housing Infrastructure Fund

LNR Local Nature Reserve

LVIA Landscape and Visual Impact Assessment

MHCLG Ministry of Housing, Communities and Local Government

NHS National Health Service

NPPF National Planning Policy Framework

PRS Private Rented Sector

R&D Research and Development

RICS Royal Institution of Chartered Surveyors

S106 Section 106

SA/SEA Sustainability Appraisal/Strategic Environmental Assessment

SPD Supplementary Planning Document

SuDS Sustainable drainage systems

Glossary of Terms

Aggregates: Aggregates take a number of different forms. Primary Aggregates include naturally occurring sand, gravel and crushed rock typically used for a variety of construction and manufacturing purposes. Recycled Aggregates are typically

produced from construction and demolition wastes. Secondary Aggregates are aggregates typically derived from a range of industrial and mineral wastes such as power station ash, glass, and mineral site spoils.

Affordable Housing: Housing for sale or rent for those whose needs are not met by the market (including housing that provides a subsidised route to home ownership and/or is essential for local workers). Eligibility is determined using local incomes and local house prices.

Agent of Change Principle: The principle places the responsibility of mitigating the impact of nuisances (including noise) from existing nuisance generating uses on proposed new development close by, thereby ensuring that residents and users of the new development are protected from nuisances, and existing uses are protected from nuisance complaints. Similarly, any new nuisance-generating development will need to put in place measures to mitigate noise impacts on existing development close by.

Amenity: Element of a location or neighbourhood that helps to make it attractive or enjoyable for residents and visitors.

Apart-hotel: Self-contained hotel accommodation (C1 Use Class) that provides short-term occupancy purchased at a nightly rate with no deposit against damages. This will usually include concierge and room service, and include formal procedures for checking in and out.

Area action plan (AAP): A local plan document setting out policy and proposals for a specific area.

Battery storage: An energy storage system that captures energy produced to be uses at another time. They are suitable for a range of applications, including vehicles and buildings.

Biodiversity: The variety of life in all its forms. This includes the plant and animal species that make up our wildlife and the habitats in which they live.

Biodiversity Net Gain: Is a requirement of the NPPF and Environment Bill 2020 that seeks to ensure new development minimise losses of biodiversity, helps to restore ecological networks, and provides an overall increase in natural habitat and ecological features.

Brownfield land: See 'Previously Developed Land'.

Building Research Establishment Environmental Assessment Method (BREEAM): BREEAM is a set of standards for measuring the environmental

performance of a range of new and existing building types. It covers energy and water performance, construction materials, waste, ecology, pollution and health. Under this scheme, buildings that meet the standards are rated either 'pass', 'good', 'very good', 'excellent' or 'outstanding'.

Brownfield land: See 'Previously Developed Land'.

Build to Rent (BTR): Purpose built housing that is typically 100% rented out. It can form part of a wider multi-tenure development comprising either flats or houses, but should be on the same site and/or contiguous with the main development. Schemes will usually offer longer tenancy agreements of three years or more, and will typically be professionally managed stock in single ownership and management control.

Building density: Building density is the "floor area ratio" – the ratio of built floor area to land area. This is the most widely used measure for limiting the bulk of development on any given plot of land.

Cambridge Cluster: Refers to the 1,400+ technology, biotechnology, services providers and 22 North East Cambridge Area Action Plan - Issues and Options 2019 Term Definition support companies and organisations comprising more than 40,000 people employed by these in the Cambridge region.

Cambridgeshire & Peterborough Combined Authority: Made up of representatives from eight organisations. These are Cambridge City Council, Cambridgeshire County Council, East Cambridgeshire District Council, Fenland District Council, Huntingdonshire District Council, Peterborough City Council, South Cambridgeshire District Council and The Business Board. The Combined Authority is held to account by several committees made up of representatives from partner local authorities. The Authority is led by Mayor, Dr Nik Johnson, who was elected in 2021. www.cambridgeshirepeterborough-ca.gov.uk

Cambridgeshire and Peterborough Minerals and Waste Local Plan: Comprises the Minerals and Waste Local Plan and Policies Map adopted by Cambridgeshire County and Peterborough City Councils (2021).

Car Barn: A multi-storey car park which is positioned on the edge of a district/ neighbourhood in order to reduce the number of vehicles using residential streets. Can be designed so that they complement their local environment.

Car Club: Car club is a membership scheme that offers people use of a car on a pay-as-you-go basis.

Circular economy: An economic model in which resources are kept in use at the highest level possible for as long as possible in order to maximise value and reduce waste, moving away from the traditional linear economic model of 'make, use, dispose'.

City Wildlife Site (CWS): A non-statutory designation for sites of nature conservation interest within an urban environment.

Climate change adaptation: Adjustments made to natural or human systems in response to the actual or anticipated impacts of climate change, to mitigate harm or exploit beneficial opportunities.

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Cluster: Concentrations of companies in related activities, recognisable suppliers, service providers and institutions, which are cooperating, competing and collaborating to build competitive advantage, often across traditional sector boundaries. Such concentrations often depend on access to specialist skills and infrastructure within a specific area.

Connectivity: Connectivity describes the extent to which urban forms permit (or restrict) movement of people or vehicles in different directions. Permeability is generally considered a positive attribute of an urban design, as it permits ease of movement and avoids severing neighbourhoods. Urban forms which lack permeability, e.g. those severed by arterial roads, or with many long cul-de-sacs, are considered to discourage movement on foot and encourage longer journeys by car.

Construction Environmental Management Plan (CEMP): Outlines how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area. CEMP will often detail the implementation of measures in accordance with environmental commitments outlined in; an Environmental Statement, Policy requirements, requirements of planning conditions, planning obligations, or other legislative requirements.

County Wildlife Site (CWS): A non-statutory designation for sites of local importance for nature conservation interest.

Decentralised Energy: Local renewable and local low-carbon energy sources. **Delivery hubs**: Delivery hubs help consolidate deliveries into a smaller number of vehicles which can help reduce vehicle traffic and enable the onwards last mile delivery by cargo-bike or electric vehicle.

Design and access statement: A statement that accompanies a planning application to explain the design principles and concepts that have informed the development and how access issues have been dealt with. The access element of the statement should demonstrate how the principles of inclusive design, including the specific needs of disabled people, have been integrated into the proposed development and how inclusion will be maintained and managed.

Design Code: A set of illustrated design requirements that provide specific, detailed parameters for the physical development of a site or area. The graphic and written components of the code should build upon a design vision, such as a masterplan or other design and development framework for a site or area.

Development: This refers to development in its widest sense, including buildings, and in streets, spaces and places. It also refers to both redevelopment, including refurbishment, as well as new development.

Digital infrastructure: Infrastructure, such as small cell antenna and ducts for cables, that supports fixed and mobile connectivity and therefore underpins smart technologies.

District centre: A group of shops, separate from the town centre, usually containing at least one food supermarket or superstore, and non-retail services such as banks, building societies and restaurants; boundaries are defined on the Cambridge policies map.

District heat networks: District heating is a system for distributing heat generated in a centralised location for residential and commercial heating requirements. The heat is often obtained from a co-generation plant burning fossil fuels but increasingly biomass, although heat-only boiler stations, geothermal heating and central solar heating are also used, as well as nuclear power.

East West Rail: The East West Rail scheme will re-establish a rail link between Cambridge and Oxford to improve connections between East Anglia and central, southern and western England. The central section will link Bedford to Cambridge. Further information is available on the East West Rail company website: https://eastwestrail.co.uk/

Energy masterplanning: Spatial and strategic planning that identifies and develops opportunities for decentralised energy and the associated technical, financial and legal considerations that provide the basis for project delivery.

First Homes: First Homes are a specific kind of discounted market sale housing and should be considered to meet the definition of 'affordable housing' for planning purposes. Specifically, First Homes are discounted market sale units which:

- a) must be discounted by a minimum of 30% against the market value;
- b) are sold to a person or persons meeting the First Homes eligibility criteria;
- on their first sale, will have a restriction registered on the title at HM Land Registry to ensure this discount (as a percentage of current market value) and certain other restrictions are passed on at each subsequent title transfer; and,
- d) after the discount has been applied, the first sale must be at a price no higher than £250,000.

Futureproofing: Ensuring that designs are adaptable and take account of expected future changes.

Greater Cambridge: The combined areas of Cambridge and South Cambridgeshire. **Greater Cambridge Local Plan:** Refers to the join Local Plan being prepared for the Greater Cambridge area by Cambridge City Council and South Cambridgeshire District Council.

Greater Cambridge Partnership (GCP): Local delivery body for a City Deal with central Government, bringing powers and investment, worth up to £1 billion over 15 years. www.greatercambridge.org.uk

Green Belt: A statutory designation made for the purposes of: checking the unrestricted sprawl of large built-up areas; preventing neighbouring towns from merging into each other; assisting in safeguarding the countryside from encroachment; preserving the setting and special character of historic towns and assisting in urban regeneration by encouraging the recycling of derelict and other urban land. Specific Green Belt purposes have been set out for Cambridge.

Green infrastructure: Green Infrastructure is a multi-functional network of public green spaces and routes, landscapes, biodiversity and heritage. It includes a wide range of elements such as country parks, wildlife habitats, rights of way, commons and greens, nature reserves, waterways and bodies of water, and historic landscapes and monuments.

Gross Internal Area: The whole enclosed area of a building within the external walls taking each floor into account and excluding the thickness of the external walls.

Health impact assessment (HIA): A health impact assessment is a tool to appraise both positive (e.g. creation of new jobs) and negative (e.g. generation of pollution) impacts on the different affected subgroups of the population that might result from the development. Public participation is considered a major component of the process. It usually assesses a policy or proposal that does not have health improvement as a primary objective. The implementation of the development may result in intended objectives being met but may also result in consequences that are unintended and unanticipated. These unintended effects may be good or bad for people's health. An HIA is usually forward-looking (prospective) and done at a time when it is possible to change the proposed development if necessary, e.g. at the masterplanning stage.

Healthy New Towns: Healthy towns are those in which people can live and work in a safe, healthy, supportive and inclusive neighbourhood. A healthy town will ensure that people are able to enjoy the options of easy access by public transport and active travel modes (walking and cycling), to services and facilities that are relevant to them. It will also allow people to safely and easily move around their neighbourhood through high quality people focused spaces, while enjoying barrier free access to surrounding areas and to the city centre. They should have safe and easy access to a network of open spaces which meet their recreational needs to enhance health and wellbeing, as well as welcoming easily accessible communal spaces which provide opportunities for social interaction.

Hi-tech or high technology industry: Activities including production in fields which include biotechnology, chemicals, consultancy research and development, computer components and hardware, computer software, electronic systems and products, information technology, instrumentation, new materials technology, telecommunications, other forms of new manufacturing process or fields of research

and other development which may be regarded as high technology uses. **Higher density:** Means new residential and commercial development at a density that is higher than what is typically found in the surrounding context. It does not

mean high density nor does it translate to high-rise development.

Historic environment: All aspects of the environment resulting from the interaction between people and places through tine, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora. (Source: NPPF)

Housing Infrastructure Fund (HIF): A government capital grant programme to deliver new physical infrastructure to support new and existing communities and make more land available for housing in high demand areas, resulting in new additional homes that otherwise would not have been built.

Inclusive design: Inclusive design results in an environment which everyone can use, to access and benefit from the full range of opportunities available; confidently, independently, with choice and dignity, which avoids separation or segregation and is made up of places and spaces that acknowledge diversity and difference, meeting the needs of everyone in society.

Infrastructure: Includes transport, energy, water, waste, digital/smart, social and green infrastructure.

Infrastructure Delivery Plan: This will identify the infrastructure that is needed, when it is needed, and how much it costs.

Infra-technology: The integration of digital technology and infrastructure.

Landscape and Visual Impact Assessment (LVIA): process of assessing the landscape and visual effects of developments and their significance. Assessment should adhere to the Landscape Institute published 3rd edition of Guidelines for Landscape and Visual Impact Assessment (GLVIA3).

Local centre: A cluster of shops and other community facilities that satisfy local needs and are accessible on foot. Usually comprising a newsagent, a general grocery store, a sub-post office and occasionally other facilities such as a pharmacy, a public house and a hairdresser. Boundaries indicated on the policies map.

Local plan: A plan for the future development of a local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. A local plan can consist of either strategic or non-strategic policies, or a combination of the two.

Local Planning Authority (LPA): The public authority whose duty it is to carry out specific planning functions for a particular area. All references to local planning authority include the district council, London borough council, county council, Broads Authority, National Park Authority, the Mayor of London and a development corporation, to the extent appropriate to their responsibilities.

Local Nature Reserve (LNR): Reserves with wildlife or geological features that are of special interest locally.

Low emission vehicles: Low or ultra low emission vehicle is the term used to describe any vehicle that uses low carbon technologies and emits less than 75g of CO2/km from the tailpipe. They range from pure electric vehicles to plug-in hybrids. Major development: For housing, development where 10 or more homes will be provided, or the site has an area of 0.5 hectares or more. For non-residential development it means additional floorspace of 1,000m2 or more, or a site of 1 hectare or more, or as otherwise provided in the Town and Country Planning (Development Management Procedure) (England) Order 2015.

Massing: Massing is a term in architecture which refers to the perception of the general shape and form as well as size of a building.

Masterplan: A masterplan describes how proposals for a site will be implemented. The level of detail required in a masterplan will vary according to the scale at which the masterplan is produced.

Micro-mobility: Refers to a range of small, lightweight devices operating at speeds typically below 25 km/h (15mph) and is ideal for trips up to 10km. Micro-mobility devices include bicycles, E-bikes, electric scooters, electric skateboards, shared bicycles, and electric pedal assisted (pedelec) bicycles.

Mixed use developments: Development comprising two or more uses as part of the same scheme (e.g. shops on the ground floor and residential flats above). This could apply at a variety of scales from individual buildings, to a street, to a new neighbourhood or urban extension.

Mobility as a Service (MaaS): Mobility as a Service (MaaS) integrates various forms of transport services into a single mobility service accessible on demand. For the user, MaaS can offer a single application to provide access to mobility (such as public transport, ride-, car- or bike-sharing, taxi or car rental) with a single payment channel instead of multiple ticketing and payment operations. It is designed to help users meet their mobility needs and solve the inconvenient parts of individual journeys.

National Planning Policy Framework (NPPF): This document sets out national planning policies for England and the Government's requirements for the Planning System. The policies in the NPPF must be taken into account when preparing Local Plans. www.gov.uk/government/publications/national-planning-policy-framework--2

National Planning Practice Guidance (NPPG): The Government's Planning practice guidance to support the NPPF.

www.gov.uk/government/collections/planning-practice-guidance

Net zero carbon: Net zero carbon means that carbon emissions cannot exceed zero. In practice, a net zero carbon target means that in addition to phasing out fossil fuels and the role of renewable energy and energy reduction measures, there is also a role for balancing a certain measured amount of carbon released with an amount of carbon offsets, through, for example, tree planting or carbon capture and storage. **Older People**: People over or approaching retirement age, including the active,

newly-retired through to the very frail elderly; and whose housing needs can encompass accessible, adaptable general needs housing through to the full range of retirement and specialised housing for those with support or care needs.

Open space: Areas of land not built on and water bodies such as rivers and lakes, regardless of ownership and access. These areas include parks and gardens; natural and semi-natural green spaces; green corridors; outdoor sports facilities; amenity green space; teenagers' and children's play areas; allotments and community gardens; cemeteries and churchyards; accessible countryside in urban fringe areas and civic spaces.

Optimal Development: The optimal development potential of a site concerns the balance of land uses, the quantum of development, and the achievement of satisfactory environmental and social conditions.

Passivhaus: Passivhaus buildings provide a high level of occupant comfort while using very little energy for heating and cooling. They are designed and constructed according to principles developed by the Passivhaus Institute in Germany.

Permeability: Permeability or connectivity describes the extent to which urban forms permit (or restrict) movement of people or vehicles in different directions.

Permeability is generally considered a positive attribute of an urban design, as it permits ease of movement and avoids severing neighbourhoods. Urban forms which lack permeability, e.g. those severed by arterial roads, or with many long cul-desacs, are considered to discourage movement on foot and encourage longer journeys by car.

Permitted Development Rights: Permitted development rights are a national grant of planning permission which allow certain building works and changes of use to be carried out without having to make a planning application. Permitted development

rights are subject to conditions and limitations to control impacts and to protect local amenity.

Planning Condition: A condition imposed on a grant of planning permission (in accordance with the Town and Country Planning Act 1990) or a condition included in a Local Development Order or Neighbourhood Development Order.

Planning Obligation: A legally enforceable obligation entered into under section 106 of the Town and Country Planning Act 1990 to mitigate the impacts of a development proposal.

Previously developed land: Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or was last occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill, where provision for restoration has been made through development management procedures; land in built-up areas such as residential gardens, parks, recreation grounds and allotments; and land that was previously developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape.

Private Rented Sector (PRS): housing Build to Rent: Purpose built housing that is typically 100% rented out. It can form part of a wider multi-tenure development comprising either flats or houses, but should be on the same site and/or contiguous with the main development. Schemes will usually offer longer tenancy agreements of three years or more, and will typically be professionally managed stock in single ownership and management control.

Public open spaces: Any land laid out as a public garden or used for the purposes of public recreation. This means space which has unimpeded public access, and which is of a suitable size and nature for sport, active or passive recreation or children and teenagers' play. Private or shared amenity areas, for example in a development of flats, or buffer landscaped areas are not included as public open space. This definition relates to both open space provided within a development, and when considering the provision of existing open space.

Public realm: Public realm relates to all those parts of the built environment where the public has free access. It encompasses: all streets, squares, and other rights of way, whether predominantly in residential, commercial or community/civic uses; the

open spaces and parks; and the 'public/private' spaces where public access is unrestricted (at least during daylight hours). It includes the interfaces with key internal and private spaces to which the public normally has free access. (Source: ODPM in Living Places: Caring for Quality (January 2004))

Railhead: A point on a railway from which roads and other transport routes begin. Railheads can act as reception points for aggregates moved in bulk by rail for onward distribution, normally by road. Railheads normally comprise a railway siding, off-loading and storage facilities, and sometimes including mineral processing and other plant.

Registered Provider: Registered Provider means a provider of Affordable Housing which is designated in the register maintained by the Homes and Communities Agency. The statutory register of social housing providers lists private (non-profit and profit-making) providers and local authority providers. Most non-profit providers are also known as housing associations.

Renewable and low carbon energy: Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Research and Development (R&D): Sector within industry specialising in researching new ideas and developing these products towards being made.

Section 106 (S106): A binding legal agreement requiring a developer or landowner to provide or contribute towards facilities, infrastructure or other measures, in order for planning permission to be granted. Planning obligations are normally secured under Section 106 of the Town and Country Planning Act 1990.

Self or custom build: The terms 'self-build' and 'custom build' are used where individuals or groups are involved in creating their own home. Community-led projects can also be defined as self-build. Self-build projects are defined as those where someone directly organises the design and construction of their own home. Custom build homes are where you work with a developer as an individual or a group to help deliver your own home. The developer may help to find a plot, manage the construction and arrange the finance for your new home. This is more of a

hands-off approach but your home will be tailored to match your individual requirements.

Skyline: An outline of land and buildings defined against the sky: the skyline of the city.

Smart technology: The Smart Cambridge project defines what makes a smart city on their website: Digital technology underpins almost every aspect of modern living across work, travel, leisure and health. Smart cities technology builds on this, using digital connectivity and data in innovative ways to address city challenges in four key areas:

Transport: making travel easier, reducing congestion, and exploring intelligent mobility

Environment: managing our water, energy, air quality and waste

Healthcare: catering for an ageing population and providing public health

Smart living: improving the quality of life for communities in and around the city.

Smart energy grid: A smart grid is a modernised electricity grid that uses information and communications technology to monitor and actively control generation and demand in near real-time, which provides a more reliable and cost-effective system for transporting electricity from generators to homes, business and industry.

Sustainability Appraisal (SA): Prepared alongside the draft plan to appraise the social, environmental and economic effects of a plan and alternative approaches to help ensure that decisions made will contribute to achieving sustainable development.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable drainage systems (SuDs): Development normally reduces the amount of water that can infiltrate into the ground and increases surface water run-off due to the amount of hard surfacing used. Sustainable drainage systems control surface water run-off by mimicking natural drainage processes through the use of surface water storage areas, flow limiting devices and the use of infiltration areas or soakaways.

Sustainable modes of transport Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra-low emission vehicles, car sharing and public transport.

Total Energy Use Intensity (TEUI): Provides a measure of a building's total energy use per square metre of building area per year (kWh/m2/yr).

Townscape: Townscape is the landscape within the built-up area, including the buildings, the relationship between them, the different types of urban open spaces, including green spaces and the relationship between buildings and open spaces.

Transport Assessment: A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies measures required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport, and measures that will be needed deal with the anticipated transport impacts of the development.

Travel Plan: A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives and is regularly reviewed.

Use Classes Order: The Town and Country Planning (Use Classes) Order 1987 (as amended) puts uses of land and buildings into various categories known as use classes. Planning permission is not needed when both the present and proposed uses fall within the same class. The General Permitted Development Order also allows some changes from one use class to another without the need for planning permission.

Walkable (neighbourhood): Areas typically based on 400m (five-minute walking time) catchments. The Urban Design Compendium (2000) Paragraph 3.1.2 describes the principles of 'The Walkable Neighbourhood', describing what facilities should be within a five- and ten-minute walk from home.

Whole Life Carbon Assessment (WLC): The carbon emissions resulting from the materials, construction and the use of a building over its entire life, including its demolition and disposal. A WLC assessment provides a true picture of a building's carbon impact on the environment.

Zero carbon development: Zero carbon development is development that results in no net emissions of carbon dioxide into the atmosphere.

Appendix 1

Indicative Development Capacities and Methodology

This appendix demonstrates how development will be delivered within the North East Cambridge Area Action Plan and indicates the broad distribution of growth in accordance with the policies of the Area Action Plan. The following table summarises planned delivery on land in the Area Action Plan area for the period 2020/21 to 2040/41 and beyond.

Assumptions

On sites where planning permission has already been granted for major development (10+ Units or 1,000m²), but where material works have not been completed, the site has been identified within the housing and/or employment trajectories with the corresponding number of homes and/or floorspace that has been approved.

Where details of pre-application proposals are available and considered reasonable, the relevant housing capacity and employment floorspace have also been used to inform the site allocation.

For all other sites, the potential development capacity of the site has been estimated in accordance with the methodology described below. It should be noted that the development capacity attributed to each site is as an indicative minimum, not prescriptive. The number of dwellings and floorspaces that may be achieved on a site will be determined by many considerations such as design and layout, the size and type of the homes/employment units to be provided, relevant development plan policy requirements, site constraints, scheme viability as well as the site area available for development.

The assumed residential mix of unit sizes across the Area Action Plan area is set out below and is based on a range of development typologies which have been applied to the development parcels within the Plan area. The infrastructure and open space requirements for North East Cambridge are based on the population projections that derive from the assumed housing mix. If proposals come forward with a significantly different housing mix this may impact on the levels of infrastructure and open space and/or when it is needed. It will therefore be important to monitor this through the Development Management process as new planning applications are considered over the life of the Plan.

No of	1 bed	2 bed flat	3 bed	2 bed	3 bed	4 bed
units	flat		flat	house	house	house
8,350	2,643	4,642	426	141	282	47
%	31.7	55.6	5.1	1.7	3.4	0.6

Methodology

The gross parcel areas have been calculated using Arc GIS mapping software.

The following uses were then discounted from the gross area where applicable:

- Car barns
- o District wide infrastructure such as large electricity sub-stations
- Schools
- Waste Transfer Station (relocated)

After excluding the above uses, the net developable area for each development parcel has been assumed at c. 70% of the total gross area. This is to account for space needed for highways, public realm and SUDs within each parcel.

Land uses have been assigned and proportioned to the net developable areas within each development parcel based on the Area Action Plan Spatial Framework, evidence base documents and the policies within the Area Action Plan.

Development densities and housing mixes have been informed by relevant examples in the North East Cambridge Typologies Study (2021).

The relocation and intensification of B2 floorspace from Nuffield Road to Cowley Road/Chesterton Sidings is based on light industrial uses arranged over four storeys relating to the multi-level logistics and stacked industrial model of delivery.

The relocation and intensification of B8 floorspace from Nuffield Road to Cowley Road/Chesterton Sidings is based on distribution arranged over two storeys.

Example 1: Development Parcel A1

Net developable area: 0.66 hectares

Location: Chesterton Sidings

Residential density: 180 dwellings per hectare

Acceptable land uses:

o Residential

Development Parcel Capacity:

o 120 new homes.

Example 2: Development Parcel C11

Total developable area: 3.2 hectares

Location: District Centre

Residential density: 270 dwellings per hectare

Acceptable land uses:

- Residential
- o Commercial
- o Retail
- Community and cultural uses
- Primary School
- o Car barn

Development Parcel Capacity:

- o 650 residential units
- o 16,5003,766m2 employment (B1) floorspace
- o 6,300m2 retail floorspace
- 4,100m2 community and cultural floorspace including Community
 Centre, Indoor Sports Hall and Health Hub
- o 1 3FE Primary School with Nursery provision
- o Car barn

Delivery Summary within the North East Cambridge Area Action Plan (Net)

Development Area	Residential units	M ² employment	M ² retail	M ² Community and Cultural (excluding education)	M ² Industrial (excluding Delivery and Consolidation hubs)
Anglian Water / Cambridge City Council site	5,500	23,500	8,500	5,100	0
Cambridge Business Park	500	50,000	1,500	3,000	0
Cambridge Science Park	0	60,000	1,200	200	0
Chesterton Sidings	1,250	23,500	1,200	200	4,200
Cowley Road Industrial Estate	450	0	0	0	19,00
Nuffield Road Industrial Estate	450	0	0	0	0
St Johns Innovation Park	0	30,000	200	0	0
Trinity Hall Farm Industrial Estate	0	1,500	0	0	0
Merlin Place	125	0	0	0	0
Milton Road Car Garage	75	0	0	0	0
Cambridge Regional College	0	0	0	0	0
Total	8,350	188,500	12,600	8,500	23,200

Appendix 2: Cycle Parking Requirements

Cycle parking standards (for both residential and non-residential)

Cycle parking should:

avoid being located in the basement unless it can be shown to be convenient and easy to use, with ramps of a gradient of no more than 1 in 4 on both sides of any stepped access. Any basement cycle parking must also provide alternative parking on the ground floor for less able users and those with non-standard cycles; and

reference to staff or students should be taken to mean the peak number expected to be on the site at any one time.

All cycle parking should minimise conflicts between cycles, motor vehicles and pedestrians. Short-stay cycle parking, e.g. for visitors or shoppers, should be located as close as possible to the main entrances of buildings (no more than 10 metres) and should be subject to natural surveillance. For larger developments, covered cycle parking should be considered.

Some flexibility is applied to applications of the standards, in the following instances: where strict adherence to the standards for a mixed-use site is likely to result in duplication of provision; and

for the historic core area of the city, where constraints may make application of the standards difficult for change of use or refurbishment.

Vertical or semi-vertical cycle racks are not acceptable.

Sheffield stands are the preferred option, but the use of high-low and two-tier/ double stacker racks will be considered on a case-by-case basis for non-residential and large student developments. A minimum of 20% of the cycle parking spaces required should be Sheffield stands for less able users and those with non-standard cycles.

High-low racks should be a minimum of 400mm between centres at 90 degrees and 500-600mm between centres at 45 degrees. Any such stands must allow for cycles

fitted with baskets and require as little lifting as possible. They must be of a design that supports the front wheel of cycles and allows the frame of the cycle to be locked to the rack.

Two tier/ double stacker racks must be designed to allow the frame of the cycle to be locked to the rack and accommodate cycles with baskets. An aisle width of 2,500mm is required to enable the cycle to be turned and loaded easily.

As with Sheffield stands, drawings and illustrative dimensions to guide the implementation of high-low and two tier/ double decker/double stacker stands can be found in the Council's Cycle Parking Guide for New Residential Developments (and any successor document).

In instances where part of a site with a known shortfall in cycle parking is redeveloped, provision in excess of the standards will be strongly recommended.

Residential cycle parking

Cycle parking should accord with the Council's Cycle Parking Guide for New Residential Developments. It should:

be located in a purpose-built area at the front of the house or within a garage (appropriate garage dimensions are shown in this appendix);

only be located within a rear garden if locating it at the front of the house is shown to not be in keeping with the character of the surrounding area, and there is no garage provision; and

be at least as convenient as the car parking provided.

Table 1: Dwellings and other residential uses - cycle parking standards

Use	Minimum standard
Residential dwellings	1 space per bedroom up to 3 bedroom dwellings
	Then 3 spaces for 4 bedroom dwellings, 4 spaces for 5
	bedroom dwellings etc
	Visitor cycle parking next to main entrances to blocks of flats
	Visitor cycle parking in the form of a wall ring/bar or Sheffield
	stand at the front of individual houses must be provided
	where cycle parking provision is located in the back garden
Guesthouses and	2 spaces for every 5 members of staff
hotels	2 spaces for every 10 bedrooms (minimum 2 spaces)
	Outside the City Centre, this should include space for cycle
	hire
Nursing homes	2 spaces for every 5 members of staff
	1 visitor space for every 6 residents (minimum 2 spaces)
Retirement homes/sheltered	2 spaces for every 5 members of staff
housing	1 space for every 6 residents. 1 visitor space for every 6
	residents (minimum 2 spaces)
Student residential	1 space per 2 bedspaces within City Centre
accommodation, residential schools, college or training	2 spaces per 3 bedspaces for the rest of the city
centre	1 space for every 3 members of staff
	1 visitor space per 5 bedspaces
Hospitals	2 spaces for every 5 members of staff
	2 visitor spaces per consulting/treatment room
	1 visitor space for every 6 bedspaces

Non-residential use cycle parking standards

Cycle parking non-residential development should:

reflect the design and dimensions for cycle parking established in the Council's Cycle Parking Guide for New Residential Developments;

include parking for employees and students in a convenient and covered location, subject to natural surveillance. A proportion of the cycle parking (minimum of 20%) should be provided within a secure location.

access to cycle parking should be as close as is practical to staff entrances, and closer than non-disabled staff car parking;

In instances where part of a site with a known shortfall in cycle parking is redeveloped, provision in excess of the standards will be strongly recommended.

Table 2: Non-residential cycle parking standards

Retail, culture, leisure and sports uses

Food retail	2 spaces for every 5 members of staff and 1 short
	stay space per 25 sq m in the City Centre or Mill
	Road district centres.
	For the rest of the city, 2 spaces for every 5
	members of staff and 1 visitor space per 50 sq m
	up to 1,500 sq m, thereafter 1 space per 100 sq m
Non-food retail	As above
Financial and	2 spaces per 5 members of staff and some visitor
professional	parking (on merit)
services	

F I	0
Food and drinks	2 spaces for every 5 members of staff
	1 short stay space for every 10 sq m of dining area
	in the historic core area
	1 short stay space for every 15 sq m for the rest of
	the city
Museums,	2 space for every 5 members of staff
Exhibitions	2 space for every 5 members of staff
Venues	Some visitor parking on merit
Sports and	2 space for every 5 members of staff
recreational	
facilities and	1 short stay space for every 25 sq m net floor area
swimming baths	or 1 short stay space for every 10 sq m of pool
	area and 1 for every 15 seats provided for
	spectators
Places of	2 space for every 5 members of staff
assembly,	
including:	1 short stay space for every 4 seats
cinema,	. cc. day opace io. crory i codic
theatres, stadia,	
auditoria and	
concert halls	
Place of	1 short stay space for every 4 seats
worship, public	
halls and	
community	
centres	

Business uses

Offices	2 spaces for every 5 members of staff or 1 per 30
	sq m Gross Floor Area (whichever is greater)
	Some visitor parking on merit
General industry	1 space for every 3 members of staff
	Some visitor parking on merit
Storage and	On merit
other B use	
classes	

Non-residential institutions

Clinics and surgeries	2 spaces for every 5 members of staff 2 short stay spaces per consulting room
Non-residential schools	2 spaces for every 5 members of staff Cycle spaces to be provided for 50 per cent of primary school children to include a scooter parking area, and 75 per cent of secondary school children Some visitor parking
Non-residential higher and further education	2 for every 5 members of staff Cycle parking for 70 per cent of students based on anticipated peak number of students on site at any one time

Crèches and nurseries	2 spaces for every 5 members of staff
	1 visitor space per 5 children
	An area to be provided for the parking of cargo
	bicycles/trailers

Appendix 3: Managing Motorised Traffic

Transport Strategy

To demonstrate the deliverability and achievability of the scale of development proposed for NEC within the prescribed trip budget the developers have prepared an initial High Level Transport Strategy (2021) (which will be kept under review). This articulates a multi modal strategy for the area in terms of measures, mode shares and progression to a low car mode share over time, to ensure the trip budget for the site is not exceeded and factors such as air quality are maintained or improved. It outlines how development quantum, trips, and mode shares correlate with strategic and local transport infrastructure improvements to the area. This is a strategic rationale as to how and why the development within the NEC area can be accommodated and includes a phasing schedule/plan that matches development to new infrastructure. This has been prepared by the five main landowners within the Area Action Plan area as a joint strategy.

Each individual developer will then need to produce a site-specific Transport
Assessment that sets out how their development will contribute towards delivery of
the High Level Transport Strategy (2021) and what mitigation the individual
development proposal needs to provide, including towards strategic, local and site
specific infrastructure and provisions. Many businesses already have Travel Plans
which will need updating to further outline measures to encourage staff to switch to
sustainable modes, such as through incentivising use of public transport, provision of
a shuttle bus from the station, and provision of showers and lockers for cyclists.
Other measures could include a gradual reduction in car parking provision, phased
with the availability of alternative sustainable modes such as planned public

transport services and cycling and walking infrastructure provision. Where necessary, consideration may be given to the introduction to parking or traffic controls, adopting both a carrot and stick approach to the delivery of mode shift.

Vehicular Trip Budget

The Transport Evidence Base (2019) introduced the idea of a vehicular trip budget for the AAP area, to ensure that there was no increase in the number of vehicles recorded accessing the site.

Table 1: Site Wide Trip Budget

-	Trip Budget
AM Peak (08:00-09:00)	3,900
PM Peak (17:00-18:00)	3,000

Inclusion of additional development areas within the NEC AAP site

Since the 2019 Transport Evidence Base (2019) changes have been made to the boundary of the AAP area. The additional areas included within the AAP area are as follows:

The Car Showrooms situated to the south of Kings Hedges Road and accessed off Milton Road, and

The Cambridge Regional College Campus accessed off Kings Hedges Road

Car Showrooms

The inclusion of the Car Showrooms situated to the south of Kings Hedges Road is unlikely to have a significant impact on the operation of the area as a whole as this is an existing use and therefore already generates trips on Milton Road in the peak periods and throughout the day.

This site would need to have its own trip budget and parking target so as not to add to the existing levels of congestion on Milton Road. The setting of a trip budget for this area would not alter the trip budget already set out in the Transport Evidence

Base. Any trip budget for this additional area would need to look at the current level of trips generated by the existing land use on the Car Showroom site.

Cambridge Regional College

The inclusion of Cambridge Regional College (CRC) within the AAP area requires the introduction of a trip budget and car park cap for the Kings Hedges Road site access. The existing trip budget and car park levels apply to trips accessing the AAP area via Milton Road and therefore, the introduction of a trip budget for the Kings Hedges Road access would not result in any reduction in the trip budget set out in the Transport Evidence Base (September 2019) assuming that the internal road network within the Cambridge Science Park (CSP) does not allow for through trips from Milton Road to Kings Hedges Road and vice versa.

The Kings Hedges Road trip budget would cover current trips made using the Kings Hedges Road site access that serves both the college and the CSP. In order to generate this information, the count data collected in 2017 for the Hub application on the Science Park has been used (this is the same data set used to generate the Milton Road trip budget in the Transport Evidence Base published in September 2019).

The count data collected indicated that there was a total of 656 trips turning off Kings Hedges Road on to the access road. Of these, 409 vehicles entered the Science Park in the AM peak with the remaining 247 trips entering the college via one of the three possible access points.

The junction is largely able to cope with this number of trips and therefore the trip budget for the Kings Hedges Road junction is proposed to be 656 trips with the split between CSP and CRC as follows:

Table 2: Kings Hedges Road Trip Budget

-	AM Peak	AM Peak	PM Peak	PM Peak
-	Arrive	Depart	Arrive	Depart
CSP	409	106	71	527
College	247	18	31	125
Total	656	124	102	652

In order to comply with the vehicle trip budget, the area as a whole will need to significantly reduce the car-driver mode share down from the 70% indicated in the 2011 Census but the final figure depends on the development mix.

The High Level Transport Strategy (2021, and any updates) apportions the trip budget to development parcels across the site and demonstrates how the mode shares can be achieved.

Car Parking Provision

Car parking provision has a strong relationship with vehicular trip generation and so car parking standards will have an important role to play in helping to manage traffic levels associated with development.

The Transport Evidence sets out that in order to comply with the vehicle trip budget a maximum total provision of 4,800 employment related parking spaces accessed from Milton Road across the area should be provided.

The following sections set out the resulting parking levels for the CSP and College needed to accommodate the predicted trip budget set out above.

Kings Hedges Road Parking Figures

The methodology for deriving both sets of parking figures is the same as that used in the Transport Evidence Base (2019) to ensure consistency.

Cambridge Science Park

Table 3: CSP King Hedges Road Parking Accumulation

Time	Arrival	Departure	Arrival	Departure	Trip	Trip	Parking
	trip	trip rate	%	%	arrivals	departures	Accumulation
	rate						
07:00	0.591	0.077	100/	2%	197	26	171
07:00-	0.581	0.077	18%	2%	197	20	171
08:00	4 200	0.400	270/	40/	400	40	F20
08:00-	1.208	0.123	37%	4%	409	42	538
09:00	0.404	0.404	400/	40/	4.40	40	600
09:00-	0.421	0.124	13%	4%	143	42	639
10:00							
10:00-	0.136	0.09	4%	3%	46	30	654
11:00							
11:00-	0.123	0.122	4%	4%	42	41	654
12:00							
12:00-	0.166	0.256	5%	8%	56	87	624
13:00							
13:00-	0.201	0.168	6%	5%	68	57	635
14:00							
14:00-	0.142	0.15	4%	5%	48	51	632
15:00							
15:00-	0.09	0.261	3%	8%	30	88	575
16:00							
16:00-	0.091	0.421	3%	13%	31	143	463
17:00							
17:00-	0.069	0.851	2%	27%	23	288	198
18:00							
18:00-	0.031	0.561	1%	18%	10	190	19
19:00							
	3.259	3.204	100%	100%	1103	1085	-

In order to ensure that the car park operates effectively it has been assumed that 654 vehicles represents 85% occupancy of the car park and therefore the number of spaces proposed for the Kings Hedges Road access is 770.

In order for the Milton Road and Kings Hedges Road accesses to be accurately monitored and managed it will be necessary to prevent traffic driving through the Science Park as currently some traffic is recorded as driving through from Milton Road to Kings Hedges Road and vice versa.

The separation of the two access roads means that there is no impact on the trip budget for the remaining sites within the AAP area as these can only be accessed via Milton Road.

Cambridge Regional College

The trip budget has been set by taking the number of trips recorded in the 2017 surveys. The resulting cap on the number of parking spaces the college can have in order to comply with the trip budget is shown in the table below:

Table 4: Cambridge Regional College Parking Accumulation

Time	Arrival	Departure	Arrival	Departure	Trip	Trip	Parking
	trip	trip rate	%	%	arrivals	departures	Accumulation
	rate						
07:00	0.012	0.002	E0/	10/	AE.	11	E 7
07:00-	0.012	0.003	5%	1%	45	11	57
08:00	0.007	0.004	070/	00/	050	70	000
08:00-	0.067	0.021	27%	8%	253	79	332
09:00	0.007	0.040	4.40/	F0/	400	40	454
09:00-	0.027	0.013	11%	5%	102	49	151
10:00				101			
10:00-	0.017	0.01	7%	4%	64	38	102
11:00							
11:00-	0.015	0.014	6%	6%	57	53	110
12:00							
12:00-	0.016	0.019	6%	8%	60	72	132
13:00							
13:00-	0.016	0.015	6%	6%	60	57	117
14:00							
14:00-	0.011	0.018	4%	7%	42	68	110
15:00							
15:00-	0.013	0.023	5%	9%	49	87	136
16:00							
16:00-	0.015	0.036	6%	14%	57	136	193
17:00							
17:00-	0.015	0.031	6%	12%	57	117	174
18:00							
18:00-	0.012	0.011	5%	4%	45	42	87
19:00							
	0.25	0.251	100%	100%	944	948	1892

In order to ensure that the car parking operates effectively we have assumed that 332 vehicles represents 85% occupancy of the car park and therefore the number of spaces proposed for the Kings Hedges Road access is 390. This compares to the maximum occupancy recorded during the survey of the college car park (undertaken

10th March 2020) of 621. Therefore, the college will need to ensure the car mode share for the site is reduced to ensure the trip budget and parking cap are not exceeded.

For residential uses, a maximum site-wide parking standard of 0.5 spaces per dwelling should be used as a starting point, with an expectation that lower levels will be achieved for all housing types and tenures.

A site-wide residential parking strategy should be developed to incorporate neighbourhoods of car-free housing, particularly close to centres of activity and mobility hubs. For ancillary uses, parking should be limited to operational and blue badge use only.

The NEC AAP High Level Transport Strategy (2021) (and any updates) apportions the total car parking to development parcels across the site according to the total anticipated size of each area (current and future).