

Cambridge Northern Fringe Area Action Plan Issues and Options 2

Draft for:

South Cambridgeshire
Cabinet 9 January 2019

Cambridge Planning and
Transport Scrutiny
Committee 15 January
2019

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Foreword

We are delighted to introduce this document, which forms an important early stage in developing the joint Area Action Plan, which will set out the blueprint for the comprehensive and co-ordinated regeneration of the Cambridge Northern Fringe area.

The principle of regeneration for this area is established in the recently adopted Local Plans. In a parallel but separate process, Cambridge City Council has been working with Homes England on their business case for Housing Investment Funding that will facilitate the relocation of the Cambridge Water Recycling Centre.

This significant initiative, if ultimately successful, provides the opportunity for the Councils, as local planning authorities, to reconsider what role this site and the surrounding area will play in meeting Greater Cambridge's future growth needs.

New transport evidence has also shown the importance of planning for this area comprehensively. We are therefore proposing to include the Cambridge Science Park within the Area Action Plan boundary.

We were encouraged by the positive comments received to an earlier round of consultation on issues and options held in 2014, in particular, the desire to see comprehensive regeneration of the area east of Milton Road to the railway line.

We are excited about the enormous potential of the Cambridge Northern Fringe and are pleased to see the intent of landowners to bring forward new development within the area. However, we recognise there are some significant challenges that need addressing and some key choices that need to be made that will ultimately determine the future of this area. It remains the view of both Cambridge City and South Cambridgeshire Councils that such matters are best made through the making of the Area Action Plan in consultation with the community rather than through individual planning applications.

Having taken account of the comments received to the previous consultation in 2014, the main purpose of this document is to set out our draft vision of what the future Cambridge Northern Fringe might look like and the challenges that need to be addressed in delivering that vision.

Our aspiration is to have a joint Area Action Plan that is more than just a policy tool. It is important to us, and our delivery partners, that the local community and key stakeholders can give their support to the final Plan and can work with us to deliver it over both the short and long-term. The comments we received at this early stage will significantly influence the approach we take to planning for the future development of the area.

We therefore strongly encourage you to continue to engage with us in the preparation of this important Plan for Greater Cambridge as a whole.

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Contents Page

Executive Summary

Introduction

1. The Cambridge Northern Fringe provides a major opportunity to deliver sustainable development to help support the continued success of Greater Cambridge in a new and innovative way, particularly reflecting the accessibility of the area by public transport, cycling and walking. The area includes a major brownfield site within the urban area of Cambridge and successful business parks for knowledge-based businesses.
2. The principle of development in this cross-boundary area is now established in the recently adopted Cambridge and South Cambridgeshire Local Plans 2018, but the nature, balance and quantity of development still needs to be considered through production of a joint Area Action Plan (AAP). This AAP will be a statutory development plan, with equivalent status to a local plan.

A changing context

3. In a separate but parallel process to the AAP, a bid to the Government's Housing Investment Fund has been made to support the relocation of the Cambridge Water Recycling Centre, and a decision on funding is expected in early 2019. If successful, the removal of this constraint would provide the catalyst for an ambitious regeneration of the area, and the Issues and Options document is predicated on this being the case. The planning process for the future location of the Water Recycling Centre is outside the scope of this Area Action Plan. The County Council is the Local Planning Authority for waste matters.
4. New transport evidence identifies significant capacity issues in the road network in the vicinity of Cambridge Northern Fringe East (the area east of Milton Road allocated in the Local Plans). It suggests that a more residential-led development mix for the site which reduces external trips would provide better transport outcomes. Therefore, plans for the area will need to seek to minimise car use to the site, maximise the take-up of non-car modes including walking, cycling, bus and rail use, and promote land uses that encourage trips to be retained on-site where possible.
5. Cambridge Science Park also has growth plans, and intensification of uses in this area is supported by the South Cambridgeshire Local Plan. The transport evidence shows that there needs to be a comprehensive approach to managing the future development of the Cambridge Northern Fringe, and it is proposed that the AAP now include both areas, and be called the Cambridge Northern Fringe (CNF) AAP. It also supports a new approach in terms of the way people travel to and around the area, which is forward thinking, to ensure best use is made of land in this area having regard to the constraints of the current transport network. The area provides a real opportunity for low carbon living and working.

6. The CNF area is already recognised as a location that can accommodate change and has capacity to do so. However, such change must be managed in a clear and comprehensive manner. In particular, the successful regeneration of the CNF area is not just about providing for new development and physical growth, it is also about the realisation of the social benefits and improvements to the overall quality of place that new development can deliver. Such quality of place could draw on the principles that underpin successful 'Innovation Districts' around the world and reflect the global nature of businesses that currently occupy this high-tech cluster.
7. In the current local plans, the Councils have so far placed no reliance on any development in this area in meeting the growth needs of the Greater Cambridge area. Therefore, the Area Action Plan is particularly significant, as it will feed into the wider joint Greater Cambridge Local Plan that the Councils have committed to start work on in 2019.

Issues and Options 2 process

8. The Issues and Options stage is an early part of plan making where ideas about the broad land use principles for the future development of the area are tested. It invites the community and stakeholders to share their views to ensure we fully understand and appreciate the characteristics of the area, as well as the significant opportunities it presents.
9. We first carried out an issues and options consultation for this area in 2014, and we have considered that feedback. Responding to the changing circumstances, we have now drawn up a new vision and objectives for the plan and identified a range of issues and options, the response to which will influence the strategy to be taken forward as the plan is prepared.
10. To assist respondents, we have included a series of questions covering a range of themes. These are summarised below with examples of some of the questions being asked. However, for a comprehensive understanding please look at the main consultation document and questions.

Area Action Plan Boundary

11. The Issues and Option 2 document explains that the proposed AAP boundary is to include the CNF East area allocated in the Local Plans and the Cambridge Science Park. This reflects the need for a comprehensive approach to managing transport movements across the area to enable significant further development. We need to make sure the northern fringe area works as a whole if we are to achieve our vision. Our preferred approach is therefore that the Cambridge Science Park be included within the AAP boundary, and subsequent chapters of this Issues and Options Report reflect this. The consultation therefore asks whether this is the most appropriate

boundary for the AAP and the Councils will make a decision on this following the consultation.

Vision

12. The following new vision is proposed for the AAP area:

‘Cambridge Northern Fringe - A thriving low carbon place for innovative living and working; inherently walkable where everything is on your doorstep’

Overarching Objectives

13. A number of objectives are proposed for the area around three headings:
- A place with a strong identity that successfully integrates into Cambridge.
 - A high quality, healthy, biodiverse place.
 - An adaptable knowledge district.

Place making

14. Cambridge Northern Fringe has the potential to create a new City District that sustains the current Research & Development Businesses that are an essential ingredient in the ‘Cambridge Phenomenon’. However to make best use of the land available and to maximise the possibility of creating a self-supporting new neighbourhood, Cambridge Northern Fringe needs to provide a mix of uses and at a density that creates the best conditions for this to happen, and that creates an excellent and improved knowledge gateway to the City.
15. A design led approach is needed to maximise the opportunities provided by the area and to successfully integrate it into the surrounding existing residential and business areas to create a cohesive community. ‘Placemaking’ best defines this approach, with the Area Action Plan forming the first layer in the establishment of an overall framework to guide the successful and high quality redevelopment of the area.
16. An Indicative Concept Plan is included that begins to indicate the kind of place that could be created with the successful regeneration of the area. The ability to move around easily on foot, by bike or on public transport is central to making the area a well-connected place that reduces the need to travel by car. A high quality green route that supports sustainable transport modes could improve connections from the Cambridge North Station to the Cambridge Science Park, and reduce the barrier that is Milton Road.

17. The concept of creating a walkable neighbourhood helps guide where new centres of activity should be placed, providing local services and amenities. These present opportunities to optimise accessibility in relation to the movement network and to create the kind of vitality and footfall needed to support a range of uses and activities that a self-sustaining new City District needs.
18. The area is not just about regeneration. The intensification and potential diversification of the range of uses on the Cambridge Science Park could create a genuine opportunity to bring additional businesses to the area and strengthen the Cambridge Phenomenon. Development in areas to the east of Milton Road is proposed to be predominately residential led with land allocated to support business uses including the relocation of existing industrial uses where these are suitable for co-location.
19. New green infrastructure can capitalise on the network of existing trees and landscape but could also extend this to create an overall framework for improving biodiversity and linkages to the wider countryside. It is proposed that the water management network be embedded into this framework, improving the amenity of the First Drain and adding richness to the landscape. This could include a new green space at a district scale – akin to Parker’s Piece - that would enrich the heart of this new place and provide the kind of multifunctional space that is so typical of Cambridge and central to public life.
20. Questions elsewhere in this chapter ask for views on each of the individual elements shown on the indicative concept plan, including the nature of the mixed-uses that should be considered in different parts of the AAP area; how we create a new district for Cambridge with its own identity; and how we create an innovation district that makes best use of the neighbouring Cambridge Regional College.
21. It also explores the appropriate approach to building heights and skyline in this area. The recent additions of Cambridge North railway station and the Guided Busway create the potential to optimise development in proximity to this infrastructure. There are opportunities for development to be at a scale and height that would usually reflect a city centre location, and this brownfield site on the edge of Cambridge provides opportunities that may not be available in the historic city centre. Clusters of taller buildings around areas of high accessibility including district and local centres and transport interchanges could form part of the design of this new city district, with heights and massing carefully modelled to create varied and well-articulated forms appropriate to their location within the area, including being sensitive to surrounding areas.
22. As a city edge location, development will also need to maintain and enhance the overall character and qualities of the skyline, including demonstration of how they have taken account of the prevailing context and more distant views. Appropriate

building heights, including the consideration of taller buildings, will be informed by the findings of the further studies that the Councils have commissioned.

23. At the local level, and intrinsically linked into the placemaking led approach, are decisions around movement and connectivity within the CNF and linkages to the surrounding area. Views are sought on a range of measures:
- Improvements which establish new or upgraded walking, cycling and public transport connections between Cambridge North Station, the employment areas, Cambridge Regional College, and the surrounding neighbourhoods.
 - Leisure and active routes for walking, cycling and equestrian that integrate with the wider countryside beyond.
 - Measures to reduce the dominance of Milton Road by creating one or more green bridges over the road, putting it in a cutting to limit its visual impact, or changing the nature of the road itself by prioritising non car modes and rationalising junctions.
 - Regeneration of areas facing Milton Road, to create a high quality frontage with a new urban character.
 - A high quality internal movement network that seamlessly links with existing and proposed external sustainable transport modes, helping people access and move around the area, reduce car parking provision significantly as part of new development proposals and to enable a reduction or redistribution in the existing number of car parking spaces found in the employment areas across the entire CNF area.
 - A radical rethink of car use patterns to create opportunities to consider creatively about how and where private cars should be stored and help to reduce the visual and practical impact of car parking on the area. It is referred to as car storage, as cars would not be needed for day-to-day use. Developments in Freiburg show how using 'car barns' on the periphery of development areas allows streets and spaces to be rebalanced in favour of walking and cycling.

Transport

24. The Ely to Cambridge Transport Study (January 2018) considered the transport needs of the Ely to Cambridge corridor as a whole, including the needs of the major developments on the corridor such as the new town north of Waterbeach, and CNF. Currently around 76% of work trips to the northern fringe area are made by car. This is significantly higher than many other areas in and around Cambridge, such as the Cambridge Biomedical Campus or CB1. The opening of the railway station, public transport, and cycling and walking improvements means there is a real opportunity to improve this situation.

25. New infrastructure will be needed to enable people to get to the area by means other than the car. There are a range of transport schemes which have the potential to support development in the CNF area, many of which are being undertaken by other bodies such as Highways England, Greater Cambridge Partnership or the Cambridgeshire & Peterborough Combined Authority. These include the Cambridge North Station opened in 2017, Guided Busway, Milton Road public transport improvements, and improvements in the wider Greater Cambridge public transport network that will provide better connectivity to jobs and homes elsewhere such as the northern public transport orbital. Cycling improvements will also be key and the area will link into existing proposals such as the Chisholm Trail and the cross-city cycling improvements project.
26. In view of the evidence, the emphasis is on seeking a very low share of journeys by car to, from and within the area. A trip budget approach is proposed for car trips, based on the number of journeys the network can accommodate, rather than any particular level of development. The emphasis also needs to be on designing and planning for a place that makes the best of current technologies and is also future proofed to respond to changing technologies over time and we ask how that can be achieved.

Employment

27. Cambridge firms come in a range of sizes, from start-ups with a few individuals, to major firms with hundreds of employees. Many high technology firms carry out research and development (R&D) in office-like buildings. However, there is also demand for specialist laboratory space, alongside office uses. We therefore ask about the types of employment spaces we should be seeking to support in this area.
28. There are a number of industrial uses currently within the area. These provide an important function for Cambridge, and there is a limited supply of industrial land in the City. However, much of the land in the area is under-utilised in terms of development density. Examples from around the country have shown that there are ways to accommodate some industrial uses within higher density urban environments using innovative solutions. Careful consideration would need to be given to the compatibility with adjoining uses such as residential development. Alternatively, provision could be made to relocate these uses elsewhere, which may be necessary for those uses deemed 'bad neighbours', such as the concrete batching plant.

Housing

29. The CNF provides an opportunity to make a significant contribution to addressing the future housing needs of the Greater Cambridge area. Given the number of new homes that could be delivered in the area, it is proposed that the AAP seeks a wide

range of housing types, sizes and tenures. This could include a variety of affordable housing tenures, such as social housing for rent and other affordable routes to home ownership, purpose built private rented sector housing (PRS) and open market housing, including custom and self-build. There is also an opportunity to plan and deliver a range of housing products aimed at specific groups, for example essential local workers, as well as housing tethered to employment use within the area.

Retail, Leisure and Community Services and Facilities

30. New development and growth will drive a need for new local retail services, but will also require investment in community and physical infrastructure to meet needs. This will include services such as education, healthcare, recreation and open space. During the next stage of the AAP's preparation, once the type and quantum of the development planned is better known, the size and number of each type of infrastructure required can be determined and the sites suitable to host these services and facilities identified.

Climate Change and Sustainability

31. The Councils plans need to respond to the challenge of mitigating and adapting to our changing climate. The CNF should be an exemplar in sustainable living, supporting the transition to a zero carbon society in the face of a changing climate. Cambridge City Council has set an aspiration in its Climate Change Strategy¹ for Cambridge to achieve zero carbon status by 2050. South Cambridgeshire District Council has also resolved² to support the transition to "Zero Carbon by 2050" in the next Local Plan. There are options around the approach to the standards the Councils could require in the AAP, to use one or other Local Plan's approach, combine the two, or include a new higher standard and develop further evidence alongside the new joint Local Plan. It is also important to ensure appropriate sustainable drainage systems and networks are incorporated. A key principle will be to achieve net gains in biodiversity, notwithstanding the higher density approach proposed for this area.

Implementation and Delivery

32. The success of the AAP will be measured based on the delivery of development outcomes within the Plan's timeframe. The Councils are therefore proposing to prioritise land within the AAP that can feasibly be developed early, whilst being conscious of not preventing other development sites from coming forward if market

¹ Zero Carbon Cambridge <https://www.cambridge.gov.uk/climate-change>

² South Cambridgeshire District Council: Full Council Meeting 29 November 2018
<http://scambs.moderngov.co.uk/ieListDocuments.aspx?CId=410&MId=7252>

conditions allow for this. The report asks whether a relocation strategy should be prepared in preference to leaving this to the market to resolve.

33. The intention through the AAP is to put in place a Section 106 regime, specific to the CNF, to ensure all proposed developments across the CNF contribute equitably to the provision and/or funding of all appropriate infrastructure requirements. Once the mix and quantity of land use has been established, the mechanism for ensuring an appropriate apportionment of costs of supporting infrastructure to the land use types and by development distribution and phasing will need to be established. Views are sought on this approach, and what is the most appropriate basis to apportion the cost of infrastructure between different land uses to ensure an equitable outcome.
34. As we draft the plan the Councils will also need to test the viability of the policy requirements, including the provision of the range of infrastructure needed, ensuring these do not inhibit development coming forward. Flexibility will need to be included to account for changes affecting viability over the build out of the CNF but it is equally important that this does not compromise the certainty the AAP is intended to provide. The report asks how this should be approached.
35. Land assembly may be required needed to achieve the comprehensive regeneration of the CNF. Views are sought on how this should be done, including whether the Councils should use their Compulsory Purchase powers.
36. While the Councils welcome the significant developer interest being shown in the regeneration of the CNF. The Councils consider that the future development context of the CNF should be plan-led and not determined through planning applications for individual sites ahead of the AAP. Applications for development ahead of the adoption of the AAP will therefore be determined in accordance with the extant policies of the relevant local plan(s). It will also be necessary to demonstrate that the proposed development would not prejudice development within the CNF area or the achievement of the comprehensive vision for the area as a whole as set out in the Local Plans.
37. Recognising the lengthy building period for CNF, the Councils are proposing to support and encourage temporary uses, known as 'meanwhile use'. Views are thought on how this should be done.

Next steps

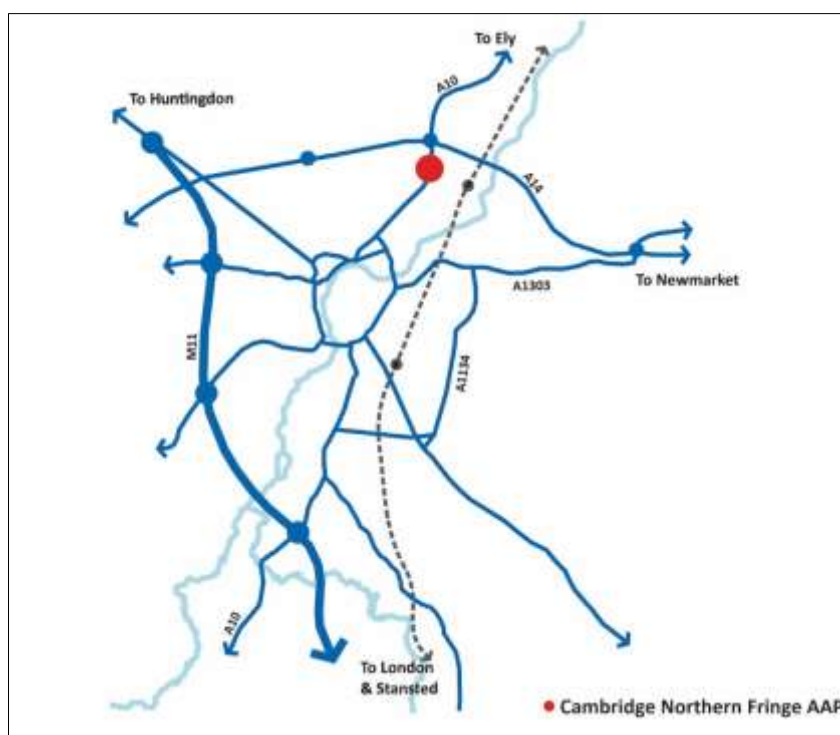
38. It is proposed to carry out a six-week consultation on Issues and Options 2 to take place xxxx to xxxx 2019. Following the consultation, the representations received will be considered and will help inform the preparation of a draft AAP, with a view to

undertaking a further public consultation in Spring 2020 before moving to the formal stages of Proposed Submission plan and examination.

1. Introduction

- 1.1 Sustaining Greater Cambridge's³ success and growth comes with the significant challenge of identifying further suitable locations for sustainable development. The northern fringe of Cambridge, shown in Figure 1.1, contains one of the last remaining substantial brownfield sites within the City. The area presents a genuine opportunity to create a sustainable new City District, to make a significant contribution to Greater Cambridge's future growth needs.

Figure 1.1 Location of Cambridge Northern Fringe



Why prepare an Area Action Plan?

- 1.2 Over the past decade, there has been much discussion about the future of the CNF, its poor environmental quality, the incremental intensification of development on the Cambridge Science Park, as well as proposals for and around the new railway station. Various studies have been commissioned, and infrastructure projects undertaken to respond to particular issues or concerns, but to date no clear comprehensive and deliverable overall plan has emerged or been prepared for the area or its constituent parts. As a result, development and investment in infrastructure has taken place on an ad-hoc basis in the absence of an understanding of how these schemes might contribute to the delivery of a shared vision for how the area, and the places within it, could look and feel in the future.

³ Greater Cambridge is Cambridge and South Cambridgeshire

- 1.3 While the Local Plans allocate the Cambridge Northern Fringe East for regeneration, and the Cambridge Science Park for employment intensification, they do not set out any details about the amount of development to be provided, its distribution, phasing, resultant form and function, or how wider community and sustainability outcomes will be co-ordinated and their delivery secured.
- 1.4 The preparation of an AAP is intended to provide a detailed and pro-active planning policy framework to guide development, regeneration and investment decisions across the area over the next ten years and beyond.
- 1.5 The successful regeneration of the CNF area is not just about providing for new development and physical growth, it is also about the realisation of the social and economic benefits and improvements to the overall quality of place that new development can deliver. Such place could draw on the principles that underpin successful Innovation Districts around the world and reflect the global nature of businesses that currently occupy this high-tech cluster.
- 1.6 An AAP will provide the opportunity to engage the community and stakeholders in the consideration of such matters in a formal and structured process. It is expected that, through consultation on issues and options and then a draft AAP, the final AAP will establish a more definitive shared vision and objectives for the area as a whole as well as its constituent parts, and will set out the policies, proposals and site allocations required to ensure growth and development is promoted, coordinated and managed to deliver that vision and the social, environmental and economic outcomes sought.

Previous Issues & Options Consultation in December 2014

- 1.7 Work on preparing a joint AAP initially commenced in early 2014, with an Issues & Options report published in December 2014 for consultation. Recognising the challenges involved in relocating the Water Recycling Centre, this set out four potential options for the future development potential of the area. The first three options focused on development opportunities that could coexist with the Water Recycling Centre remaining on site as it is currently or in a consolidated form. Due to adverse odour constraint issues associated with the facility, these options significantly constrain the potential development in the vicinity to primarily employment uses. The fourth option proposed relocation of the Water Recycling Centre, enabling a greater mix of development.

What you told us previously

We asked for your views on four different levels of development.

You told us:

- Option 1 Lower Level of Redevelopment (Water Recycling Centre remains on site) - Limits development potential released by infrastructure, but it was deliverable. However, inconsistent with vision and development objectives.
- Option 2 Medium Level of Redevelopment (Water Recycling Centre remains on site) - Offered a better balance between delivery and ambition, but leaves significant area of under-used land.
- Option 3 Medium Level of Redevelopment (reconfiguration of the Water Recycling Centre onto a smaller site) - Benefits from reduction of Water Recycling Centre, but concerns over deliverability. Support for a mixed use approach, but imbalance between residential and employment.
- Option 4 Maximum Level of Redevelopment (Water Recycling Centre relocated off site) – A more comprehensive approach. Concerns about viability and deliverability. Imbalance between homes and jobs provision.

1.8 While the results from the consultation indicated a strong preference for variations of Options 2 and 4, Cambridge City Council members considered the cost and challenge of relocating the Water Recycling Centre under Option 4 was unfeasible. Work on preparing the AAP was paused at this point to consider the way forward, and whilst the Councils Local Plans were being progressed.

What has happened since?

1.9 Since consultation closed on the Issues and Options document, there have been a number of significant developments that both affect and inform the preparation of the AAP. These are:

Opening of the new North Cambridge Station and extension of the Guided Busway

1.10 These were still proposals or under development when the last Issues & Options consultation was undertaken. Now operational, and with increasing patronage, there is a need to maximise the investment in these new public transport facilities and ensure they become part of the sustainable transport network for the city.

The Ely to Cambridge Transport Study (ECTS)

- 1.11 The ECTS was commissioned by the Greater Cambridge Partnership (GCP) to consider the transport needs of the Ely to Cambridge corridor as a whole, in addition to the specific needs of the major developments included in the local plans for the new town north of Waterbeach and at the CNF. Published in January 2018, the work produced a Preliminary Strategic Outline Business Case for the corridor as a whole, as well as separate transport studies for the two main constituent parts of the CNF (i.e. east and west of Milton Road) as well as for the new town north of Waterbeach.
- 1.12 The existing (baseline) transport situation across the CNF area was explored in this work, and was informed by modelling undertaken using the Cambridge Sub Regional Model (CSRM2), which considered the previous employment led options from the Issues and Options in 2014. This suggested that a more residential-led development

mix for the site, which reduces external trips, and would provide better transport outcomes. Therefore, plans for the area would need to seek to minimise car use to the site, maximise the take-up of non-car modes including walking, cycling, bus and rail use, and promote land uses that encourage trips to be retained on-site where possible. This suggests it will be important to review the policies in the Local Plans which seek employment led development with supporting uses including residential, and consider whether a more balanced approach is now appropriate, and if so what the balance should be.

- 1.13 The Transport Study identified significant transport constraints to the realisation of further growth across the CNF. In accordance with the findings of the ECTS, it recommends the application of a 'highway trip budget' approach. This essentially identifies the level of vehicular trips that can be made to and from the areas east and west of Milton Road without leading to a severe further impact on the strategic road network. It is therefore based on the number of trips generated and not any particular level of development. The highway trip budget, alongside further mitigation through innovative transport policy measures and other transport infrastructure improvements, will inform the different types and amount of development that could be considered on the CNF through the AAP.
- 1.14 Cambridge Science Park also has growth plans, and intensification of uses in this area is supported by the South Cambridgeshire Local Plan. The ECTS also showed that there needs to be a comprehensive approach to managing the future development of the CNF, and it needs a new approach in terms of the way people travel to and around the area, which is forward thinking, to ensure best use is made of land in this area having regard to the constraints of the current transport network.

The Government's Housing Infrastructure Fund

- 1.15 In July 2017, the government announced a new funding initiative – the Housing Infrastructure Fund (HIF) – which funds the unlocking of challenging sites for the delivery a significant quantity of housing. In September 2017, with the endorsement of the Cambridgeshire and Peterborough Combined Authority, Cambridge City Council and Anglian Water submitted a bid to cover the cost of relocating the Water Recycling Centre. This separate but parallel process if successful could release the site for comprehensive regeneration.
- 1.16 The Government announced in March 2018 that Cambridge's HIF bid had been shortlisted and was advancing to the detailed business case stage. Securing the HIF will provide certainty that the Water Recycling Centre can be relocated off the CNF site. This is the context within which the AAP is being progressed, and the basis on which this Issues and Options consultation has been prepared. It also prompts the need to revisit the development potential of the CNF and, in particular, the balance of the land use mix to be delivered from that previously proposed under the 2014 Issue & Options consultation. It is therefore necessary to assess a new set of

development options for the future of the CNF through the AAP. A formal announcement on the HIF is due in early 2019, with the decision informing future stages in the preparation of the AAP.

- 1.17 The planning process for the future location of the Water Recycling Centre is outside the scope of this AAP. The County Council is the Local Planning Authority for waste matters and there will be a separate process put in place that will allow interested parties to engage in the Water Recycling Centre's relocation.

Local Development Schemes

- 1.18 Responding to the evidence, the Councils Local Development Schemes propose that the AAP now include both Cambridge Northern Fringe and the Cambridge Science Park, and be called the Cambridge Northern Fringe (CNF) AAP. This would be subject to consultation.

Purpose of the Area Action Plan

- 1.19 The removal of the constraint of the Water Recycling Centre would provide the catalyst required to realise a more ambitious regeneration of the CNF area. It also necessitates a revisiting of the emerging policy framework being progressed for the area through the joint AAP. In particular, a reconsideration of the development potential and role of CNF in addressing Greater Cambridge's future growth needs.
- 1.20 The existing local plans placed no reliance on the development in this area in accommodating the current growth needs of Greater Cambridge. Subsequently, the strategic development planned for through the CNF AAP will feed into the wider joint Greater Cambridge Local Plan that the Councils have committed to start work on in 2019.
- 1.21 Overall, the aim of preparing the AAP is to provide clarity, guidance and certainty to landowners, developers, service providers and the community about how places and sites within the CNF area will develop, and against which investment decisions can be made and development proposals can be assessed.
- 1.22 The aims for the AAP are therefore:
- To contribute to meeting the future strategic development and land use needs of Greater Cambridge for employment, housing and infrastructure;
 - To agree a shared, ambitious and innovative vision and strategic objectives for the regeneration of the CNF area;
 - To provide clarity and increased certainty through the AAP about how the CNF, and the strategic sites within it, are to develop, including the scale, form and distribution of new development and land use expected across the CNF area;
 - To test various development scenarios through plan making, informed by evidence and consultation, to arrive at the optimum development potential of the area and

sites within it, with respect to the mix and scale of uses, with environmental impacts minimised, mitigated or, where appropriate, enhanced;

- To identify and secure the coordinated delivery of the necessary social and physical infrastructure and service improvements required to support the new development;
- To determine the appropriate phasing of development, taking into account the need to ensure regeneration occurs in a coordinated manner across the whole CNF area, including on sites with greater constraints than others; and
- To provide a sound basis upon which to assess and direct decisions on planning applications.

The purpose and scope of the Issues and Options Consultation document

- 1.23 The Issues & Options stage represents an early stage in the AAP's production. It identifies the key issues, challenges and opportunities facing the CNF area and sets out the different ways (options) we can respond. It invites public and stakeholder views and comments on these but also offers the opportunity for people to suggest alternatives or provide further information of relevance to the development of the Plan.
- 1.24 The publication of this document is also accompanied by a Sustainability Appraisal, published in a separate document, which forms part of evidence base and will help inform the preparation of the strategic development options through identifying potential positive and negative social, economic and environmental impacts. Comments on the Sustainability Appraisal are also invited. This and other supporting documents are made available for inspection at the same locations as the AAP. All consultees are recommended to read these alongside the Issues & Options document to ensure you have all the information necessary to make informed comments.

What has happened to the responses to the 2014 consultation?

- 1.25 The Councils have prepared a summary of the comments received and our response to these. This is available to view in the Statement of Consultation that accompanies this report. Previous representations are also available to view in full on the Councils' websites. While the HIF significantly changes the future potential development opportunities and options for the area, the vast majority of comments received remain valid and have been taken into account in preparing this Issues & Options document.
- 1.26 When drafting the next iteration of the AAP, the Councils will take into account all comments received to both Issues & Options consultations.

Status of this document and its relationship to other Local Plan documents

- 1.27 The final adopted AAP will be a development plan document that will form part of the statutory development plan for both Cambridge and South Cambridgeshire. It will include a schedule setting out which policies in district wide Local Plans are superseded by policies within the AAP for areas within the AAP, and which policies within the AAP are strategic (for the purposes of neighbourhood planning).
- 1.28 However, at this early and informal stage of the AAP's preparation, the Issues & Options document cannot carry any commitment or weight in the determination of planning applications.

Have Your Say

- 1.29 We are interested to hear your views on the CNF area. What do you like and dislike about the area? What needs to change or should be retained or improved? Are there any issues or challenges you think we have overlooked? What would you like to see provided through redevelopment of the area? What wouldn't you like to see provided? Are there lessons, both good and bad, we can learn from other recent developments in and around Greater Cambridge? Or from further afield?
- 1.30 To help with responding to the consultation, we have proposed a number of questions that we would like your views on. You may comment on one, some, or all the questions, as well as offering up other comments and ideas you want us to consider.
- 1.31 This document and all supporting documentation can be found on the Councils' websites. Hard copies of the Issues & Options Consultation document are available for inspection at the Councils' offices and at selected public libraries. A response form containing all the questions posed can also be obtained at the above locations and can be downloaded from the Councils websites.
- 1.32 During the six-week consultation period, a series of exhibition events are planned. The times and locations of the drop in events are set out in the public notice and on the council websites. These events will be informal and offer the opportunity for the public to come in and discuss the issues and options outlined, and any other matters you consider of relevance to the AAP, with officers.
- 1.33 For more information, including the accompanying documents, go to the Councils' websites:
- www.cambridge.gov.uk/cambridge-northern-fringe-east-area-action-plan
 - www.scambs.gov.uk/cnfeaap

How you can make your comments

- 1.34 Comments on the document can be made in the following ways:

- Electronically by filling in the response form online on Councils' websites or through the Councils' consultation portal at <https://cambridge.jdi-consult.net/localplan/>;
- By email to xxx or xxx;
- Filling in the response form and sending it back to us at the addresses below;
- By writing to either:

Cambridge City Council:

Address: Planning Policy Team
Planning Services
Cambridge City Council
PO Box 700
Cambridge
CB1 0JH
Tel: 01223 457384

South Cambridgeshire District Council:

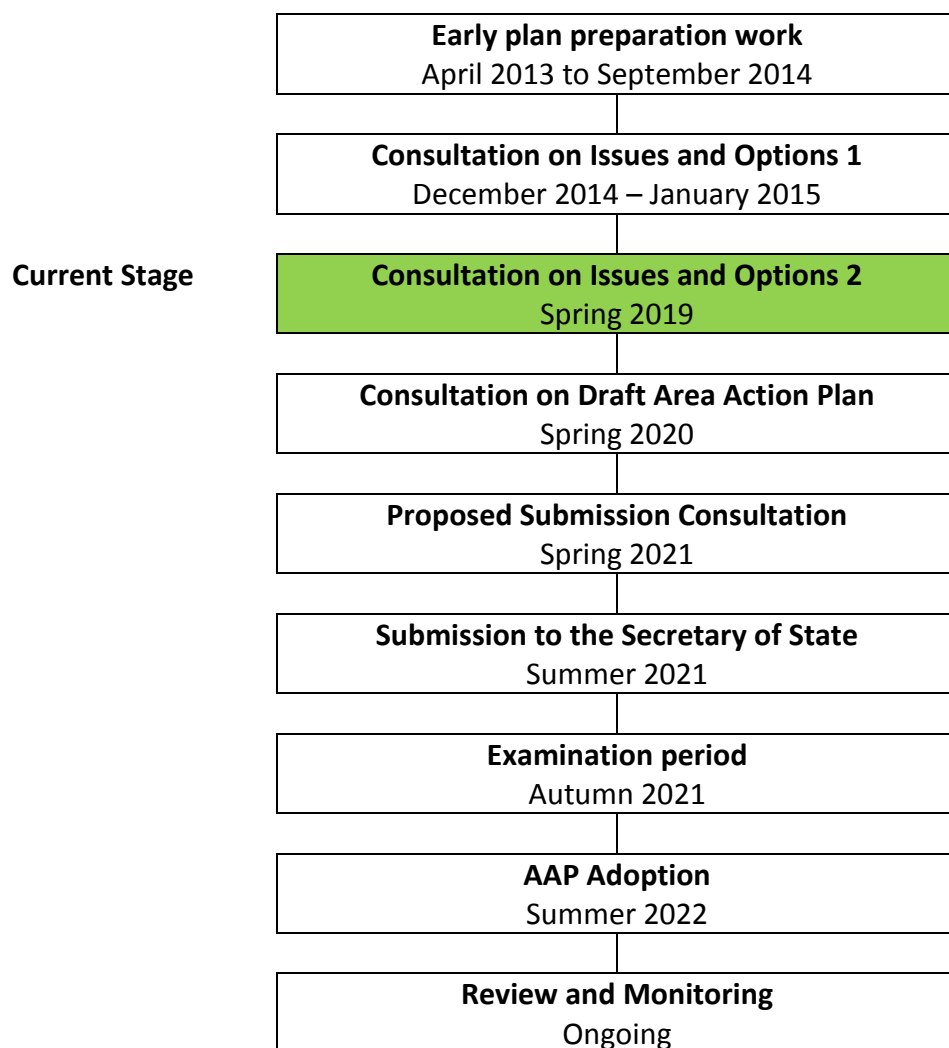
Address: Planning Policy Team
South Cambridgeshire Hall
Cambourne Business Park
Cambourne
Cambridge
CB23 6EA
Tel: 01954 713183

- 1.35 The closing date for receipt of comments is the xxx 2019. All duly made comments received during the consultation period will be taken into account in deciding the way forward for the CNF area.

What happens next?

- 1.36 The next stage of the AAP's preparation will be to consider the responses received to consultation, alongside the emerging evidence base, to inform an appropriate development strategy to be progressed in a draft of the Plan. This will involve the consideration of spatial development options, including proposals for identified development sites, urban design guidance, and infrastructure and public realm proposals that will help deliver the vision for the area.
- 1.37 The draft Plan will also be published for further public consultation, programmed for Spring 2020. The plan-making stages following this are set out in Figure 1.2 along with an indicative timetable.

**Figure 1.2 Stages of preparation of the
Cambridge Northern Fringe AAP**



Supporting Evidence Base	
Document	Description
<u>Cambridge Local Plan 2018</u>	Adopted Local Plan for Cambridge. Includes Policy 15 – Cambridge Northern Fringe East and new railway station Area of Major Change.
<u>South Cambridgeshire Local Plan 2018</u>	Adopted Local Plan for South Cambridgeshire. Includes Policy SS/4: Cambridge Northern Fringe East and Cambridge North railway station
Cambridgeshire and Peterborough Minerals and Waste Local Plan	Cambridgeshire County Council is the Minerals and Waste Local Planning Authority for this area. The <u>adopted Minerals and Waste Plan</u> comprises a Core Strategy 2011 and Site Specific Proposals Plan 2012. These plans are under review. The County Council consulted on the <u>Preliminary Draft Local Plan</u> , the first of three rounds of consultation in May to early June 2018.
<u>Cambridge Northern Fringe AAP Issues and Options 1 2014</u>	Prepared in 2014, set out issues and a series of options for future development of the area. Was subject to consultation between December 2014 and February 2015.
<u>Cambridge Northern Fringe AAP Sustainability Appraisal Scoping Report 2014</u>	This Scoping Report informs the SA process by outlining the scope of the assessment in terms of relevant plans, programmes and policies; key environmental, social and economic evidence base and sustainability issues, opportunities and problems. This information has been used to create an SA framework of objectives to be used to identify the significant sustainability effects of implementing the AAP and the effects of its alternatives.
<u>Cambridge Northern Fringe AAP Issues and Options 1 Interim Sustainability Appraisal 2014</u>	An appraisal of the sustainability effects of the first issues and options. An interim stage of the sustainability appraisal, which must accompany the draft plan.
<u>Cambridge Northern Fringe AAP – Consultation and Engagement Strategy 2014</u>	Sets out Cambridge City Council and South Cambridgeshire District Council joint approach to consulting and engaging the community on the Cambridge Northern Fringe East AAP. Note: The Councils are also preparing a Joint Statement of Community Involvement for consultation in 2019 (see below)
Cambridge Northern Fringe AAP – Statement of Consultation 2018	Sets out the Councils consultation process for plan making. It includes a summary of representations received in 2014, and how those issues have been considered. A Statement of Consultation was published in <u>2014</u> and has been updated in 2018.
Cambridge Northern Fringe AAP Issues and Options 2 Interim Sustainability Appraisal 2018	An appraisal of the sustainability effects of the issues and options 2 2018. An interim stage of the sustainability appraisal, which must accompany the draft plan.
Equalities Impact Assessment (EQIA) 2018	Considers the impact of proposals on people that live in, work in or visit the area. An EQIA has been carried out on the Issues and Options 2 document.

	A Cambridge version and a South Cambridgeshire version of EQIA were published to accompany the 2014 consultation.
Cambridge Statement of Community Involvement 2013	Sets out the Council's general approach to public consultation. Currently being reviewed towards production of a Joint Statement of Community Involvement. This will be subject to consultation in 2019.
South Cambridgeshire Statement of Community Involvement 2010	Sets out the Council's general approach to public consultation. Currently being reviewed towards production of a Joint Statement of Community Involvement. This will be subject to consultation in 2019.

2. Policy Context

- 2.1 This section provides a brief summary of the broader policy context within which the AAP is to be prepared.

National Policy

- 2.2 The AAP, whilst reflecting local needs and circumstances, must be consistent with national policy prepared by the Government in the [National Planning Policy Framework](#) (NPPF 2018) and [National Planning Policy Guidance](#) (NPPG), which identify a range of environmental, social and economic policies that will need to be considered. In preparing this Issues and Options document, regard has been had to the published national planning policies as well as other matters at the national level that might affect the context and content of the AAP. This includes proposed further changes to the regime around development contributions, the introduction of further permitted development rights, proposals for the Cambridge - Milton Keynes - Oxford corridor, and East-West Rail.
- 2.3 Given that the AAP is at an early stage of preparation, it is expected that any proposals or developments regarding reforms affecting the planning system, as well as development viability, will be able to be taken into account as the Plan is progressed.

Cambridgeshire and Peterborough Combined Authority

- 2.4 The devolution deal agreed with the formation of the Cambridgeshire and Peterborough Combined Authority (CPCA) included a vision to increase economic output by nearly 100% over the next 25 years, and accelerate the delivery of new homes and sustainable communities. The CPCA will be producing a Non-Statutory Spatial Plan (NSSP) for the CPCA area.
- 2.5 To support the NSSP, the Cambridgeshire & Peterborough Independent Economic Review (CPIER) was completed in September 2018. This identified that the rate of new homes being built in the county needs to increase to support the number of jobs being created and to tackle the high cost of housing – and that Greater

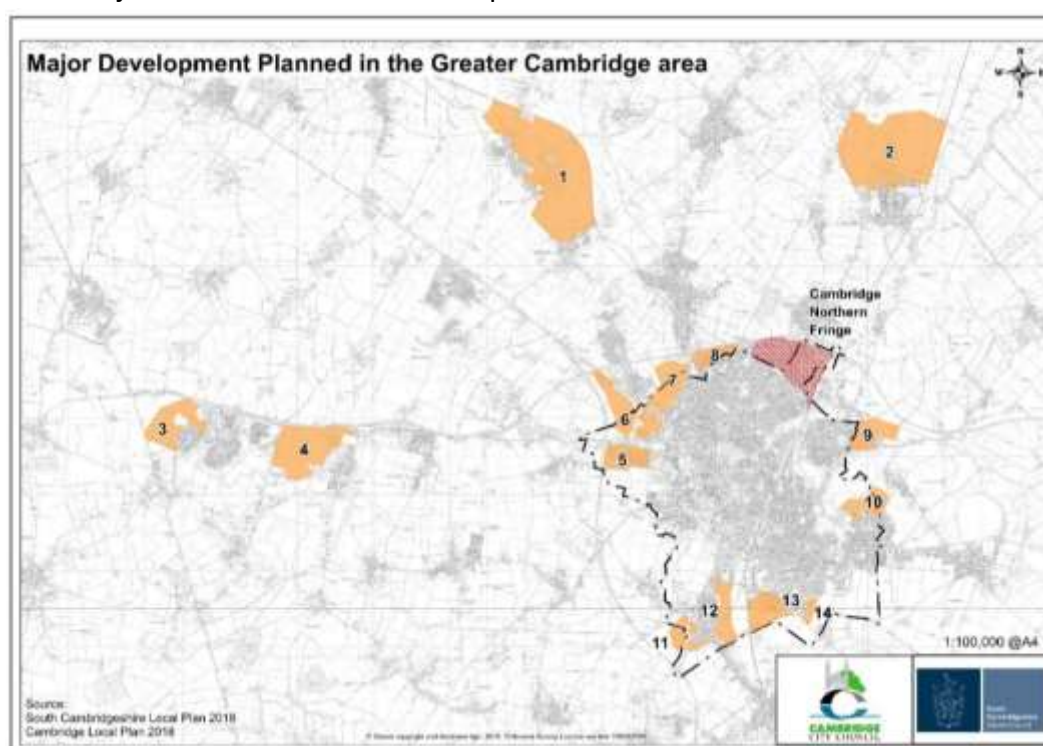
Cambridge must play the pivotal role in generating economic growth across Cambridgeshire and Peterborough.

- 2.6 The CPCA are also developing a new Local Transport Plan for Cambridgeshire and Peterborough. When adopted this will provide the strategic transport planning framework within which the CNF sites will be brought forward. In the meantime, the Mayor's Interim Transport Strategy Statement (May 2018) provides an indication of the direction of travel for strategic transport planning across the CPCA area.
- 2.7 The CNF area can play an important role in delivering both housing and jobs in the years ahead.

Local Plans

- 2.8 Both Councils adopted new Local Plans in 2018. These allocate a range of major development sites in the Greater Cambridge area (see Figure 2.1).

Figure 2.1: Major Sites allocated in the Adopted District Local Plans



Key.

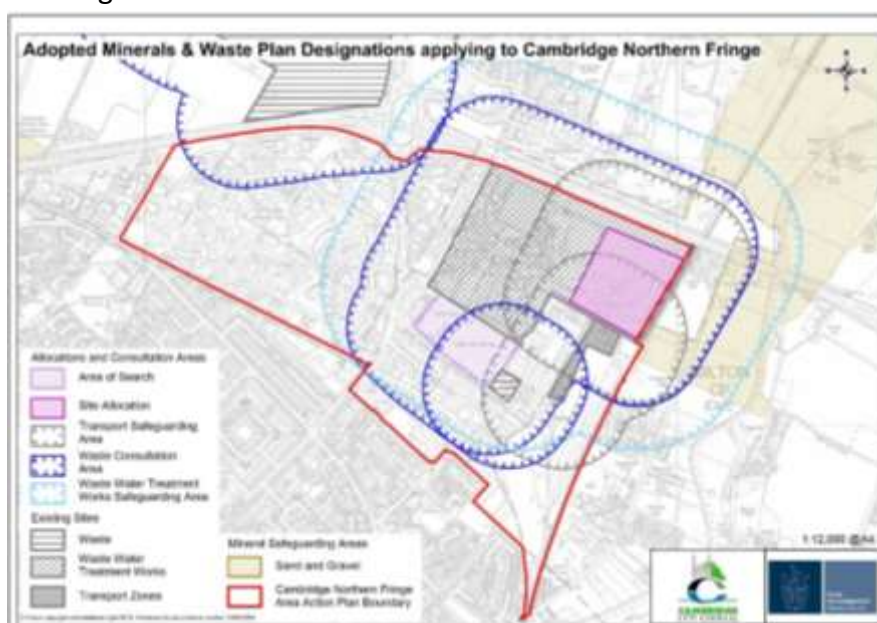
1	Northstowe	8	Orchard Park
2	New Town north of Waterbeach	9	Cambridge East – North of Newmarket Road
3	Cambourne West	10	Cambridge East – North of Cherry Hinton
4	Bourn Airfield New Village	11	Trumpington Meadows
5	West Cambridge	12	Clay Farm
6	North West Cambridge	13	Cambridge Biomedical Campus
7	Darwin Green	14	Land at Worts Causeway

- 2.9 The CNF area crosses the administrative boundary of Cambridge City Council and South Cambridgeshire District Council. As a result, the planning policies of each Council will apply within their district for those matters not covered with the AAP.
- 2.10 Both Councils have included a policy on the CNF area within their Local Plans; Cambridge City Council (Policy 15) and South Cambridgeshire District Council (Policy SS/4). Cambridge City Council's policy identifies an 'Area of Major Change' and South Cambridgeshire District Council's policy a 'Major Development Site'.
- 2.11 The policies allocate the area for a high quality mixed-use development with a range of supporting uses, and state that the jointly prepared AAP will determine site capacities, and the viability, phasing and timescales of development. Both site allocation policies are set out in full in **Appendix 1**.
- 2.12 The Councils will be starting an early review of their Local Plans in 2019, and will be preparing a joint Local Plan for the Greater Cambridge area.

Minerals and waste management and transport

- 2.13 Cambridgeshire County Council is the Minerals and Waste planning authority for the area. The county-wide planning policies that form the context for the AAP are set out in the adopted Cambridgeshire and Peterborough Minerals and Waste Core Strategy (July 2011) and Site Specific Proposals Plans (February 2012).
- 2.14 Parts of CNF and its immediate surroundings are the subject of several adopted County minerals, waste management, and transport planning policies. The extents of the County planning designations are shown on the map at Figure 2.2.

Figure 2.2: Minerals & Waste Planning Designations applying to Cambridge Northern Fringe and the surrounding area



- 2.15 The waste management designations and safeguarding areas relate to the protection of existing waste facilities (Anglian Water's Water Recycling Centre and Veolia's Waste Transfer 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 sites for additional and/or replacement waste facilities in the area i.e. Household Waste Recycling Centre, Inert Waste Recycling and suitable new waste management technologies. The transport designations in the County's Minerals and Waste Plan focus on the retention and safeguarding of the strategic railhead and associated aggregates operations on the Chesterton Rail Sidings.
- 2.16 The Minerals and Waste plans are currently under review. The County Council consulted on the Preliminary Draft Local Plan, the first of three rounds of consultation in May to early June 2018. A consultation on the draft plan will take place in spring 2019. More information can be found on the County Council's website: <https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/emerging-minerals-and-waste-local-plan/>

Evidence Base Studies		
Supporting Study	Description	Status
Supporting Technical Statement	Identifies the key constraints currently facing the CNF and wider area. Produced in 2014	Completed
Area Flood Risk Assessment	Assessment of the flood risk to the area. Produced in 2014, will be updated to accompany the draft plan.	Completed
Odour Studies	A study on the impact of odour from the existing Water Recycling Centre facility on current development opportunities for CNF.	Completed
Air Quality and Noise Assessment	Further assessments related to the impact of constraints on development including the A14 trunk road, railway station/line, and existing industrial sources of noise. Impacts generated by and associated with development itself will also be assessed.	To be completed
Habitats Surveys	Ecology surveys to identify habitats and species of value and importance that need to be taken into account in determining constraints and opportunities.	To be completed

3. The Cambridge Northern Fringe Area Today

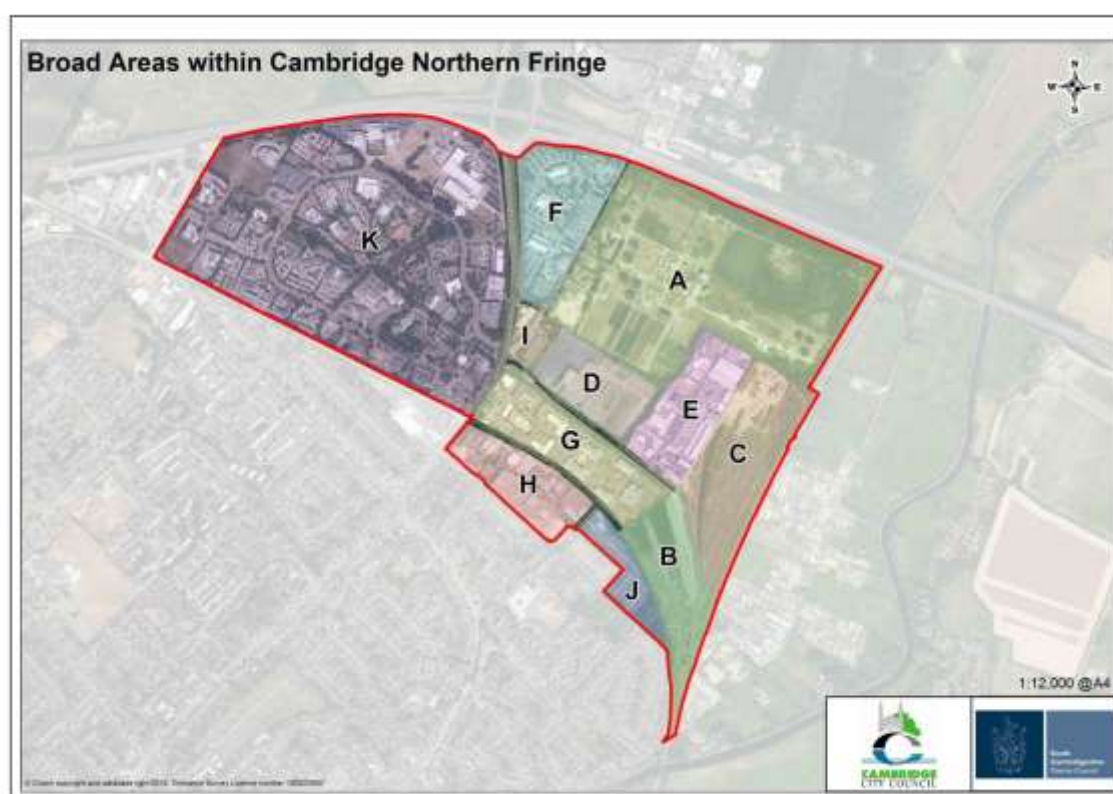
3.1 This section provides a summary of what the CNF area is like now, and issues that need to be considered when preparing the development plan for the area. The area is subject to a number of constraints, but the area's physical size and strategic location within the City also presents a unique development opportunity for Cambridge.

3.2 The physical characteristics of the CNF area include:

Existing Land Use

3.3 Land uses within this large area are diverse, but can be summarised broadly into a number of areas as set out in Figure 3.1.

Figure 3.1: Map Showing Broad Areas within the Cambridge Northern Fringe



Key.

	Name	Land Use & Characteristics
A	Anglian Water's Water Recycling Centre (38.36 Ha)	Provides a key facility serving the Cambridge area, but also places a major constraint to development in the wider area. A successful HIF bid would allow the existing facility to be relocated off site.
B	Cambridge North Station (8.36 Ha)	Cambridge North Station was opened in 2017, and there is consent for a hotel to be built next to the station.
C	Chesterton Rail Sidings (13.19 Ha)	This large area has been largely unused for many years. Much of the site has been freed up for development by reconfiguring the aggregates railway transfer siding and railhead to operate closer to the main rail line.
D	Former park and ride site and Golf driving range north of Cowley Road (6.45 Ha)	The park and ride site became vacant when a new site was created north of the A14 at Milton. The golf driving range is still operational.
E	Cambridge Commercial Park /Cowley Road Industrial Estate (7.80 Ha)	Includes a range of low-density industrial and commercial uses, and a bus depot. The frontage of Cowley Road is on the main route to the new station, but is home to industrial uses like a concrete batching plant.
F	St. John's Innovation Park (9.53 Ha)	Provides serviced office space, fostering innovative clusters. It is currently occupied by over 80 companies.
G	Cambridge Business Park	Home to 12 office / technology buildings, fronting into

	(9.43 Ha)	Cowley Park Road. The site is gated and currently provides no pedestrian/cycle or vehicle through routes to link Cowley Road with the Nuffield Road area.
H	Nuffield Road Industrial Estate and Trinity Hall Farm Industrial Estate (6.36 Ha)	An industrial estate with vehicular access solely through residential areas off Green End Road. The majority of users are industrial/manufacturing businesses or those undertaking open storage/car repair activities.
I	Orwell Furlong (1.84 Ha)	Consists of small office and industrial units on Merlin Place and office building south of St. Johns Innovation Park.
J	Open space alongside the Cambridgeshire Guided Busway (3.25 Ha)	Includes the Bramblefields Local Nature Reserve and Nuffield Road allotments.
K	Cambridge Science Park (61.89 Ha)	Located to the west of Milton Road, it has been a successful part of the Cambridge economy since the 1970s. It provides a home for a range of science and technology based industries, with a range of supporting facilities, set within a managed landscape with significant areas of surface level car parking. Planning permission has already been granted for some buildings to be demolished and replaced with new more intensive commercial buildings.
	Circa 166.46 Ha in Total	

Locational context

- 3.4 CNF is situated between the A14 to the north, the Cambridge to King's Lynn railway line to the east, and the Chesterton residential area to the south. It is bisected by Milton Road, which then continues north as the A10 towards Ely and Kings Lynn.
- 3.5 It is approximately 3km from Cambridge City Centre. To the north of the A14 lies the village of Milton, 0.8km from the CNF. The planned new town north of Waterbeach lies around 5.5km to the north.
- 3.6 Milton Country Park, which provides access to woodlands and lakes, as well as a visitor centre and children's play areas, is located across the A14 to the north. The River Cam corridor, to the east of the CNF, includes walking and cycling opportunities.

Neighbouring communities

- 3.7 The areas adjoining the CNF area are largely residential. To the east of the railway line, there are a number of Gypsy and Traveller sites located along Fen Road.
- 3.8 Of the three wards adjoining the site, two fall within the 20 most deprived wards in Cambridgeshire in terms of indices of multiple deprivation, namely the King's Hedges and East Chesterton wards.

Figure 3.2 Map of Surrounding Wards

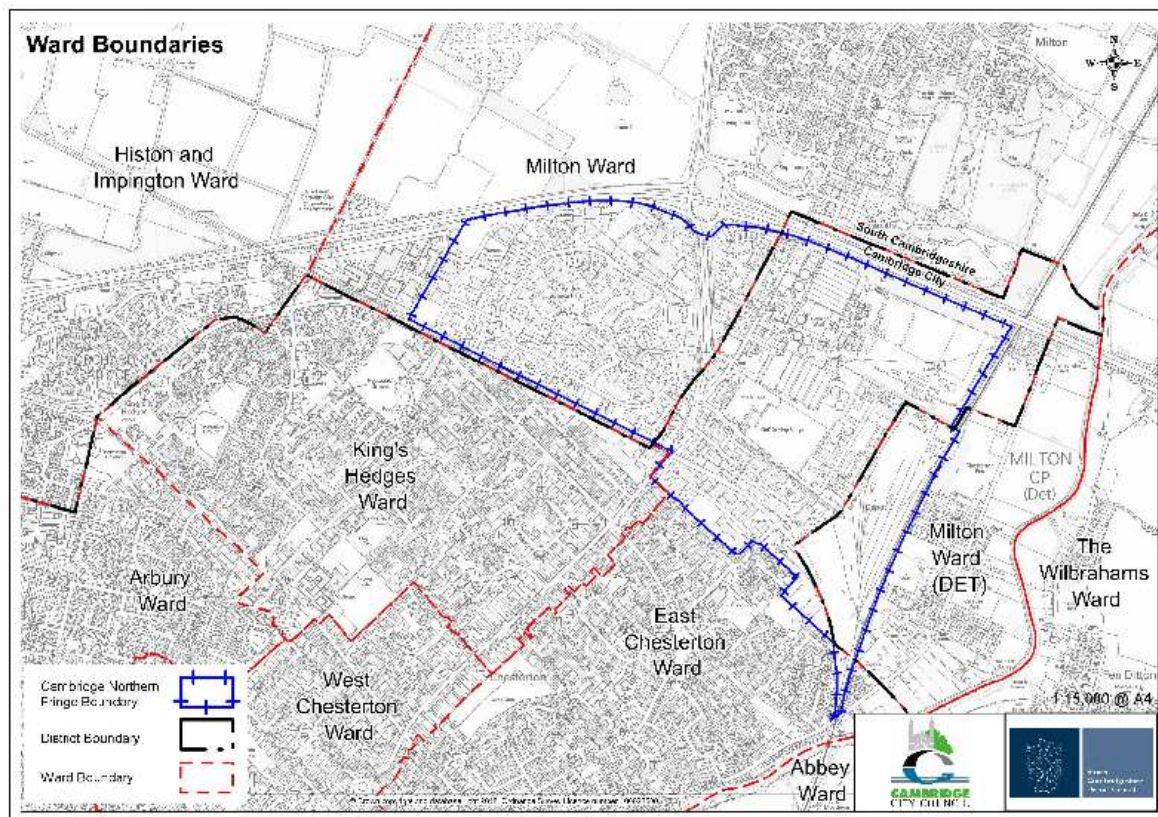


Figure 3.3 Map of Existing Community Facilities

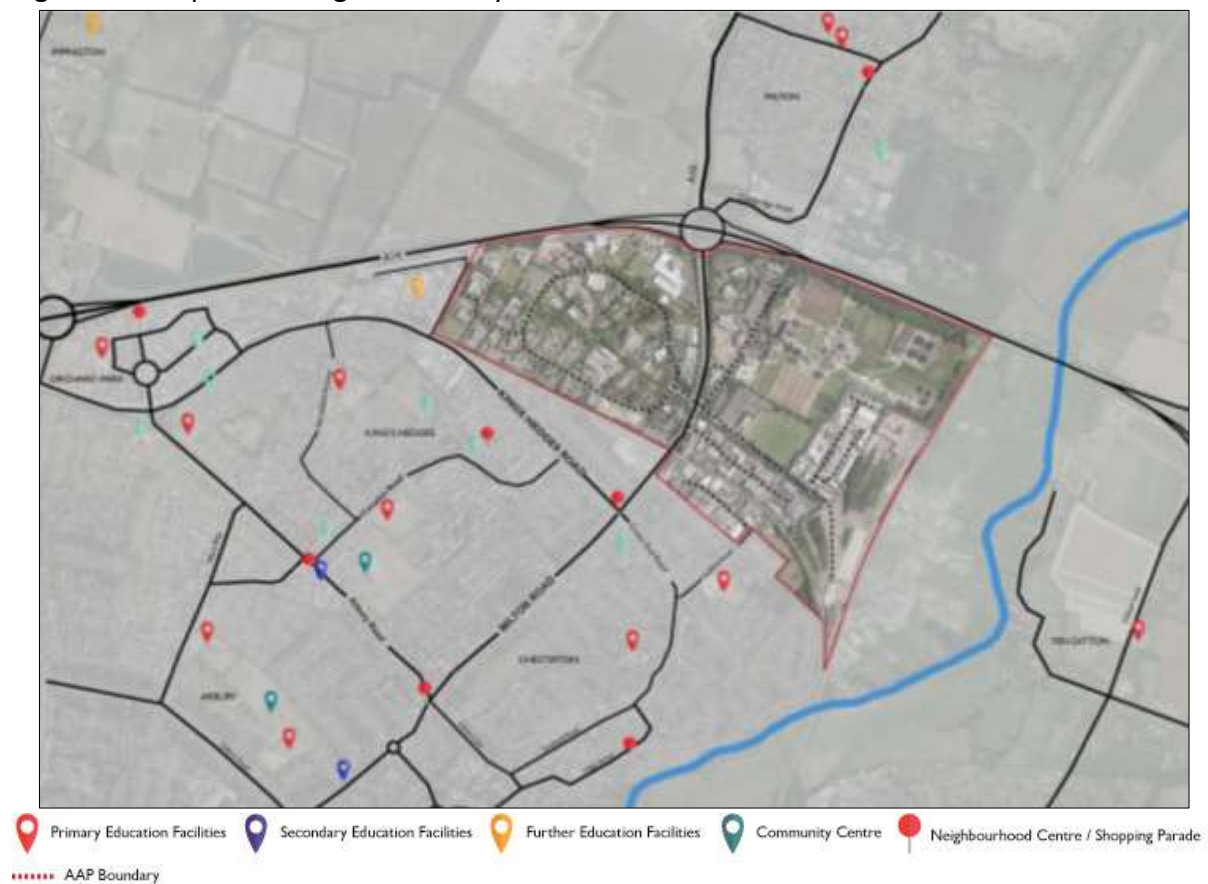


Figure 3.4 Map of Existing Open Spaces



Transport & Movement

3.9 The CNF benefits from a range of existing walking & cycling, public transport and road connections.

Cycling and walking

3.10 There are a range of routes available from the area towards destinations in Cambridge. The area is also connected to the north via the Jane Coston Bridge, and the Guided Busway. The quality of existing routes is mixed. There are severance issues in a range of places, which make moving within and beyond the CNF area more challenging, such as difficulties in crossing Milton Road, the boundaries of business parks and their lack of permeability, the A14 and the railway line.

Public Transport

3.11 The Cambridge North Station opened in May 2017, providing services to London, Ely, King's Lynn and Norwich. The Cambridgeshire Guided Busway provides access to the Science Park and links to the Cambridge North station. There are also other existing local bus connections that focus on providing north-south connections on Milton Road. North of the A14, west of the A10 and South of Butt Lane in Milton, a bus-based park and ride site is provided.

Road Transport

3.12 The CNF area has close connections to the A14 trunk road, and the A10, also part of the Primary Route Network. Highway access to the site is mainly served via local

junctions off Milton Road. Nuffield Road Industrial Estate is served from Green End Road. Parts of the highway network frequently operate at or near capacity, particularly in the morning and evening peaks with queuing and delays prevalent on Milton Road, as well as the A10 and A14, particularly at the Milton Interchange to the north of the site.

Figure 3.5: Cambridge Northern Fringe Existing Bus Connections



Figure 3.6: Cambridge Northern Fringe Existing Cycling Connections



Figure 3.7: Cambridge Northern Fringe Existing Road Connections



Issue: The physical characteristics of the CNF

Question 1: In this chapter have we correctly identified the physical characteristics of the CNF and its surroundings?

Site Constraints

Areas of ecological value

- 3.13 The area contains three notable areas of ecological value that will need to be protected and enhanced: Bramblefields Local Nature Reserve (LNR) (shown as area J on Figure 3.1); the protected hedgerow on the east side of Cowley Road opposite St. John's Innovation Centre, which is a City Wildlife Site; and the First Public Drain, which is a Wildlife Corridor. The Cambridge Science Park also has a number of ponds.

Figure 3.8: Cambridge Northern Fringe Existing Green and Blue Infrastructure on site



Townscape and Landscape

- 3.14 There is a need to maintain and, where appropriate, enhance the overall character and qualities of the townscape and skyline of Cambridge, as the city continues to develop into the future. Views into and out of the CNF, and the wider landscape context, will be important considerations.

Flooding

- 3.15 An Area Flood Risk Assessment was completed for the 2014 Issues & Options document that covered the area to the east of Milton Road. This showed that the risk of fluvial (river) flooding was low but identified a risk of surface water (pluvial) flooding, although this is confined to small areas. Levels of groundwater in the area

are known to be high, although there are no recorded instances of groundwater flooding within CNF. Development proposals will need to take this level of risk into consideration, providing mitigation through carefully designed sustainable drainage systems, and other design measures.

Odour

- 3.16 The Water Recycling Centre treats used water from customers in Cambridge and surrounding villages and is a source of odour generation that acts as a significant constraint to developing the surrounding area whilst it remains on site and in operation. An independent Odour Impact Assessment Study, commissioned by the Councils, has been undertaken to model and map the levels of odour exposure emanating from the Water Recycling Centre. If this facility is relocated off the CNF site, this odour constraint will be removed.

Noise

- 3.17 Areas adjacent to noise sources including the A14 trunk road, Milton Road, Cambridge Guide Busway, the railway line, Cambridge North Station and railway sidings may be unsuitable for some forms of development or will require careful acoustic design and mitigation due to adverse noise impact issues.

Air Quality

- 3.18 As the area is immediately adjacent to the A14, local air quality impacts will be an important consideration. Sources of air pollutants can have an impact on public health, and for transport, sources such as trunk roads particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂) are most relevant. There is a current Air Quality Management Area designated along the A14 corridor from the A14 Milton Junction to Bar Hill.
- 3.19 Careful consideration will be required of the layout and design of new development across the CNF, such as new homes, workplaces or other land uses where these may be affected by poor air quality. It will also be important to ensure that new development does not add unacceptable risks to local air quality.

Contamination

- 3.20 There has been a range of historical uses across the CNF, including the Water Recycling Centre and various industrial uses that may have resulted in land contamination. Where further investigations identify contamination, depending on the nature of contaminants found, this will require remediation and may influence the suitability of the land for specific land uses, including the layout and design of any future development proposals.

Minerals and Waste

- 3.21 The area east of Milton Road is the subject of several adopted County minerals and waste management planning policies. These are shown on the Planning Policy Designations Map at Figure 2.2. The designations relate to the potential for new

waste management uses in an area of search; and the protection of existing facilities, which seek to ensure that the continued operation is not prejudiced by future development. This includes the aggregates railway siding and railhead that have been relocated within the site and contributes to Heavy Commercial Vehicle movement on Cowley Road.

Other Environmental Impacts

- 3.22 Consideration will need to be given to dust and particulate matter from the minerals and waste operations; and vibration close to the railway line and sidings. Consultation will be required with Cambridge airport regarding the safeguarding consultation zone on building heights. Measures to reduce light pollution from new development will also be required. Existing sources of lighting may also have an impact on any proposed residential development and will need assessment on a case-by-case basis. There is a 132Kv overhead power line running east to west across the area. Options to realign and bury this line should be explored so that it would not constrain development.

Issue: Existing Constraints

Question 2: Have we identified all relevant constraints present on, or affecting, the CNF area?

The AAP Boundary

What you told us previously

We asked you about the area that should be covered by the AAP, and whether we should include the Cambridge Science Park.

Views mainly supported the proposed area. Some considered that the area should be expanded to include land east of the railway line up to the river. The response to including the Cambridge Science Park was mixed, with views for and against, including that it would help achieve comprehensive development of the area. It was recognised there was a need to integrate the Cambridge Science Park with the wider area, and there was potential to enhance connections. On the other hand, it was not considered necessary for the Cambridge Science Park to be within the AAP area, as the Park was already successful, and additional policy guidance was not required.

- 3.23 The boundary for the Cambridge Northern Fringe East allocation, established in the Local Plans, took account of the characteristics of the area, the boundaries created by infrastructure like the A14 and the railway line, and the brownfield development opportunities present in the area.
- 3.24 The 2014 Issues & Options consultation sought views on whether the Cambridge Science Park should be included in the AAP area. The South Cambridgeshire Local Plan includes a policy that supports intensification of employment uses on the site.

Some of the existing building stock is dated, and there is an opportunity for the site to evolve to continue to make a significant contribution to the employment needs of Greater Cambridge.

- 3.25 The Ely to Cambridge Transport Study has confirmed the importance of the Science Park to the transport issues in the vicinity of the CNF. If further growth in the CNF is to be enabled, there is a need to bring this development forward in a very different way so as to significantly reduce the mode share of trips made to the site by car, and enable access by other means. Links to the Railway Station, Guided Busway, and other transport improvements will be key to this. In addition the development of the area will need to secure significantly higher levels of internalisation, than have traditionally been achieved in Cambridgeshire, where the mix of facilities provided within the area enable residents and employees to satisfy daily needs within the area, will also be key as will measures to discourage car use where feasible.
- 3.26 We need to make sure the northern fringe area works as a whole if we are to achieve our vision. The Councils' preferred approach is for the Science Park to be included within the AAP boundary, and subsequent chapters of this Issues and Options Report reflect this.
- 3.27 The proposed boundary extends to the Cambridge Regional College, but does not include it, as the College is not intended to undergo major change in the way the other sites across CNF are. However, elsewhere in this document we do consider linkages to this important education site, including opportunities to enhance sustainable transport serving the College.
- 3.28 In addition, the proposed boundary of the AAP does not include land east of the railway or north of the A14. To include land to the north or east of the proposed area would include land that does not reflect the characteristics of the northern fringe area. These areas are largely Green Belt. Much of the land near the river is also at flood risk. The area to the east contains Gypsy and Traveller site provision. Existing Gypsy and Traveller sites are safeguarded in the South Cambridgeshire Local Plan.
- 3.29 Figure 3.4 below shows the boundary of Cambridge Northern Fringe East included in the Cambridge and South Cambridgeshire Local Plans, and the area covered by the Science Park policy in the South Cambridgeshire Local Plan. Figure 3.10 identifies the proposed new boundary for the CNF AAP.

Figure 3.9: Cambridge Northern Fringe East Local Plan and Science Park

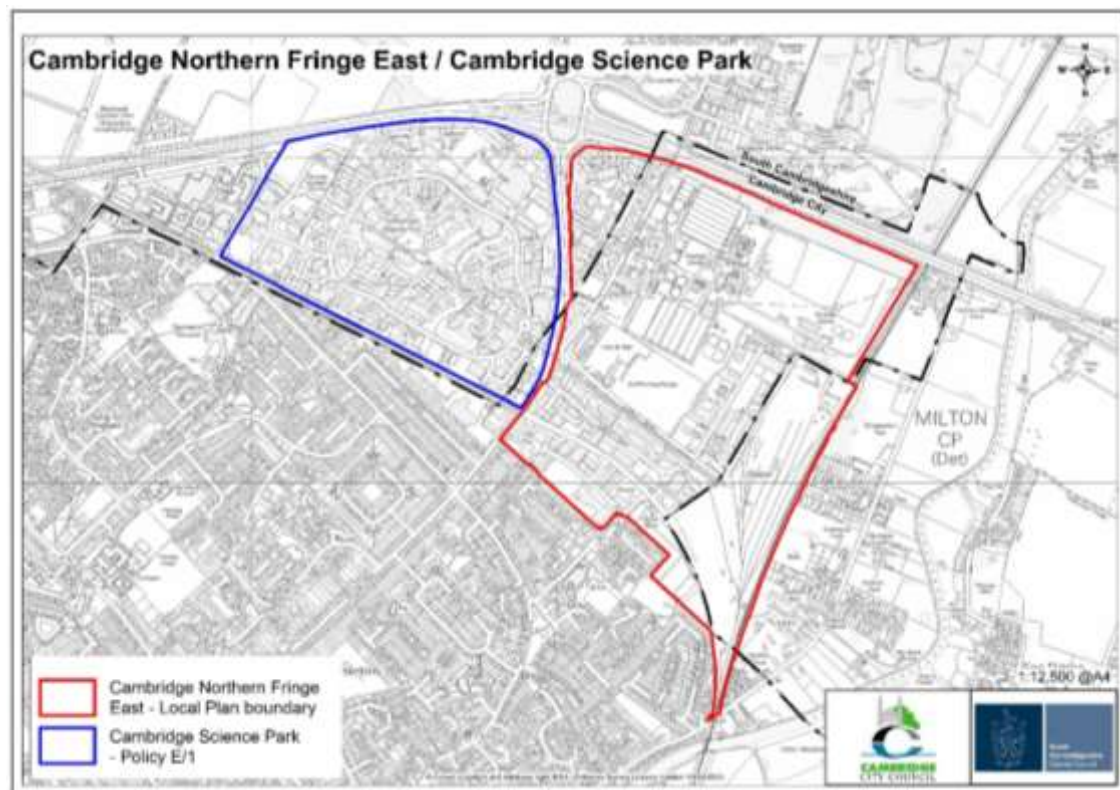
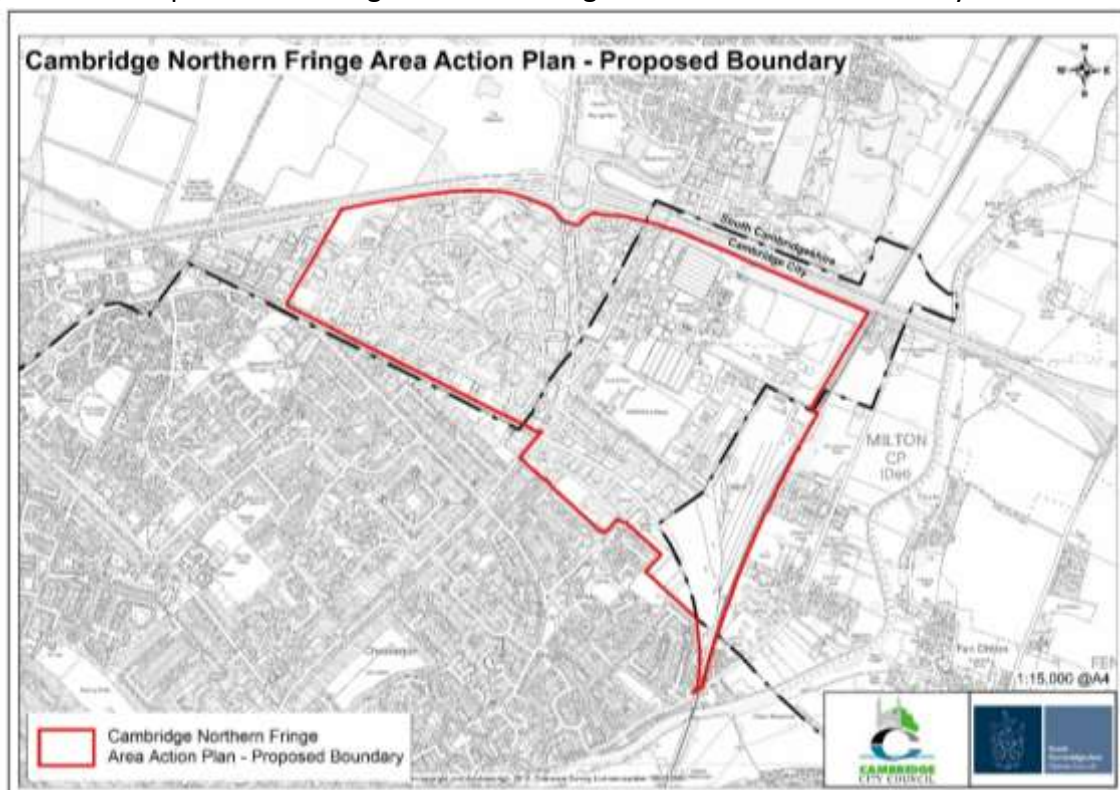


Figure 3.10: Proposed Cambridge Northern Fringe Area Action Plan boundary



Issue: CNF AAP Boundary

Question 3: Is the proposed boundary the most appropriate one for the AAP?

4. Vision & Strategic Objectives

What you told us previously

We proposed a vision and objectives for the AAP.

A wide variety of opinion was expressed. There was support for achieving a comprehensive and masterplanned development of the area around the new railway station. There were mixed views on whether the Water Recycling Centre should be relocated. Some considered the vision should be focused more on housing development. Others were concerned about the impact on existing uses and businesses. Infrastructure needs were highlighted, both in terms of services and facilities on the site, and transport connections off the site. We also received a number of comments on the existing constraints of the site, and future opportunities.

- 4.1 In 2014, we consulted on an employment led vision for Cambridge Northern Fringe East, reflecting the allocations of the Local Plans and the significant constraint of the Water Recycling Centre. There was overall support for this from the comments received but also support for a more ambitious comprehensive and masterplanned regeneration of the area, recognising this is the last major brownfield site in Cambridge and the potential that could be realised by provision of the new railway station and extension to the Guided Busway.
- 4.2 However, with Cambridge City Council and Anglian Water's HIF bid receiving positive support from Homes England, the extent and ambition for the regeneration has grown with the ability, through HIF funding, for the relocation of the Water Recycling Centre. Subject to this funding, this would remove this significant constraint on the site that previously limited development to compatible employment and industrial uses and a small amount of residential.
- 4.3 In addition significant new transport infrastructure has been delivered serving the CNF which radically changes the accessibility model for the area and makes sustainable modes a realistic and viable reality to support an innovative low carbon way of living.
- 4.4 The 2014 approach made best use of the land at that time but did not allow for the creation of a balanced and mixed community that creates the real possibility of a self-sustaining new City District, that responds to the transport challenges and opportunities facing the area. Accordingly a new vision for Cambridge Northern Fringe is now proposed that captures the ambition for the area and that puts innovation and a sense of community at its heart. Such a vision captures the spirit of enterprise and technological excellence to create a knowledge gateway to Cambridge and which also reflects the inherent qualities of the Cambridge area. The Centre for Cities organisation provides a helpful definition of what great Innovation Districts are all about, bringing together 'leading research institutions such as universities and R&D companies with large firms and small start-ups in well

connected, mixed-use, urban locations that are attractive places to live, work and play.⁴



Area Action Plan Vision

‘Cambridge Northern Fringe - A thriving low carbon place for innovative living and working; inherently walkable where everything is on your doorstep’

Issue: Future Vision for the CNF

Question 4: Do you agree with the proposed Vision for the future of the CNF? If not, what might you change?

Overarching Objectives

4.5 The following AAP objectives are key to realising the broad strategic vision for the CNF:

A place with a strong identity that successfully integrates into Cambridge

- CNF will be design-led to create a true ‘place making’ approach to fostering an identity rooted in the essence of Cambridge and which promotes a sense of belonging and liveability, bringing together a diverse range of business and employment opportunities, education and training, living options, retail and recreation in a vibrant, safe and integrated mixed use district.

⁴ <https://www.centreforcities.org/reader/making-it-the-advanced-manufacturing-economy-in-sheffield-and-rotherham/what-is-an-innovation-district-and-how-does-advanced-manufacturing-fit-in/>

- CNF will be demonstrably resource efficient, supporting the transition to zero carbon living that successfully combines low-tech green solutions with high-tech smart city technology to respond positively to the challenges of climate change.
- CNF will be a new walkable district for Cambridge that promotes easy navigation and transition between sustainable transport modes using density and critical mass to support and sustain uses.
- CNF will provide a new model for low car dependency living, through maximising the use of and integrating with public transport, walking and cycling infrastructure.
- CNF will integrate with surrounding communities, spreading the benefits it delivers to surrounding areas.

A high quality, healthy, biodiverse place

- High quality spaces and buildings will be multi-functional to create a richer, fine grain and more vibrant place that makes efficient and effective use of the land and allows imaginative rethinking of existing buildings and spaces.
- Green spaces will be a core part of the place structure extending, connecting and improving biodiversity to achieve a net gain and integrating Sustainable Drainage Systems within the development.
- Microclimate will be understood at all scales and development forms designed to maximise positive orientation.
- Individual neighbourhoods will be attractive, human in scale and have their own recognisable and legible identity.
- CNF will be a healthy place, with a focus on creating a new community with good health and wellbeing.
- Seamless links between adjacent land uses will ensure a workable and consistent approach that ensures the quality of place is maintained at a high level over the longer term.

An adaptable knowledge district

- CNF will be a welcoming and inclusive district that supports the knowledge economy of Cambridge with a local and global reach
- Innovative and adaptable, so that it is resilient and able to evolve and adapt over time.
- CNF will provide a layered economy that includes large, small and start-ups businesses, integrated with opportunities to facilitate collaboration between educational institutions and businesses and supported by business uses such as cafés, hotels, leisure facilities and service providers that help create community.
- CNF will be an inherently legible place centred round identifiable new centres of activity and focussed on a new green space network and sustainable transport infrastructure.
- Density will not mean 'town cramming' but will respond positively to the uses and accessibility of the site to create a critical mass capable of creating a self-sustaining place.

- CNF will consider its role in meeting the strategic needs of the city, for example enabling the continued use of the minerals railhead.

Issue: Overarching Objectives

Question 5: Do you agree with the overarching Objectives? If not, what might you change?

Supporting Study	Description	Status
Landscape Character & Visual Impact Assessment	An assessment of the impact of development on the landscape and key view points, and potential mitigation measures.	To be completed
Development Capacity Study	An assessment of the capacity of the relevant land parcels within CNF to accommodate development (including employment activities, residential and other uses) including the quantum of floorspace and assumed typologies.	To be completed

5. Place Making

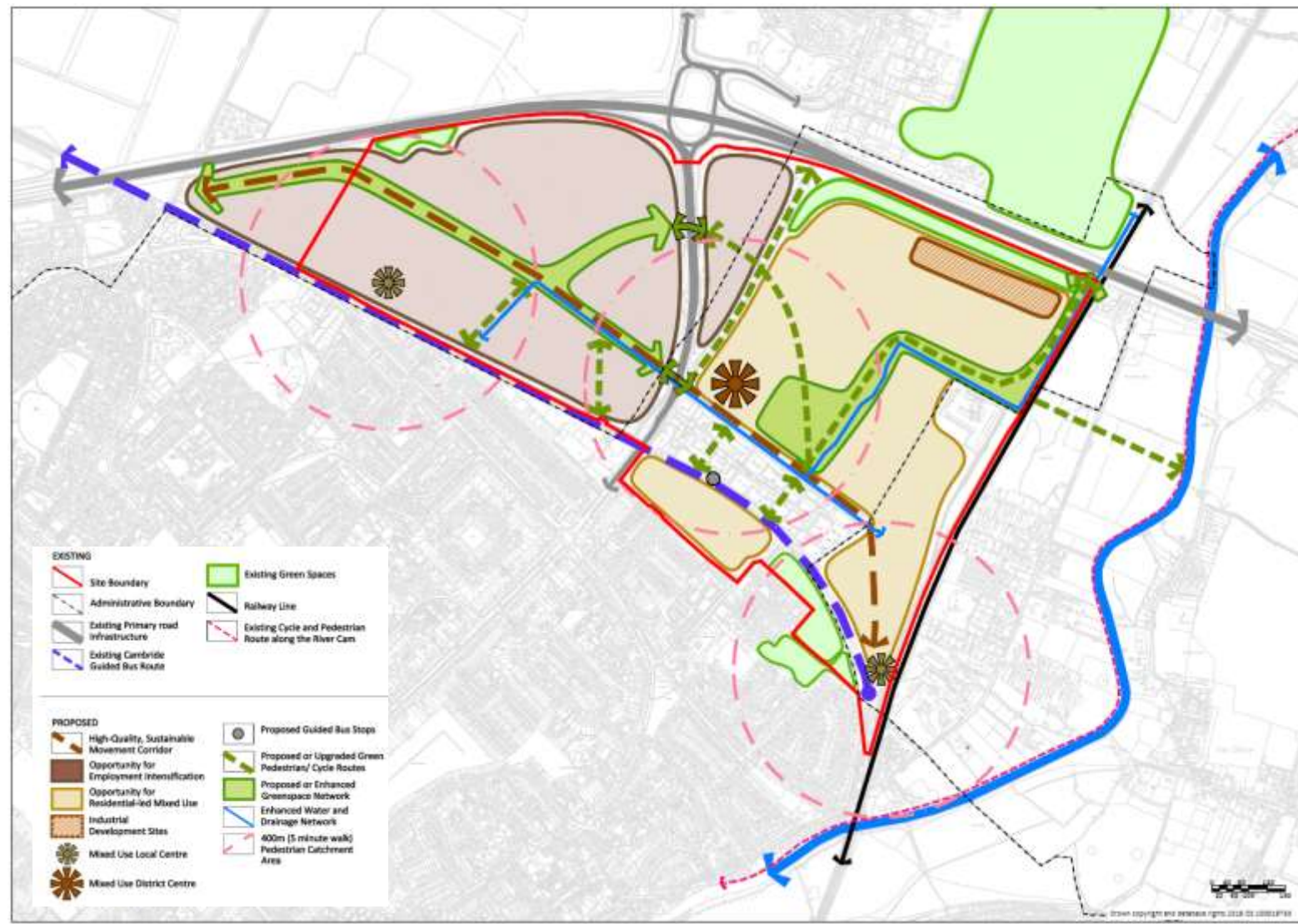
What you told us previously

We asked you about whether we should apply a design led approach to the development, and whether density should reflect the sustainability of the location, particularly near the railway station.

You told us there was support for a higher density approach, in particular around transport interchanges, but this needed to consider context, and be accompanied by open space. Tall buildings needed to consider their impact on Cambridge and the surrounding area, and there was range of views on building heights that would be appropriate to the area.

- 5.1 The CNF has the potential to create a new City District that sustains the current Research & Development Businesses that are an essential ingredient in the 'Cambridge Phenomenon'. However to make best use of the land available and to maximise the possibility of creating a self-supporting new neighbourhood, development needs to be at a density that creates the best conditions for this to happen and that creates an excellent and improved knowledge gateway to the City.
- 5.2 A design led approach is needed to maximise the opportunities provided by the area and to successfully integrate it into the surrounding existing residential and business areas to create a cohesive community. 'Placemaking' best defines this approach, with the AAP forming the first layer in the establishment of an overall framework to guide the successful and high quality redevelopment of the area.

Figure 5.1 Concept Plan



CNF Indicative Concept Plan

- 5.3 The CNF Indicative Concept Plan (at Figure 5.1) begins to describe the kind of place that could be created with the successful regeneration of the area. Movement and the ability to do so easily on foot, by bike or on public transport is central to making the area a well-connected place that reduces the need to travel by car. A high quality green route that supports sustainable transport modes will improve connections from the Cambridge North Station to the Cambridge Science Park, and reduce the barrier that is Milton Road.
- 5.4 The concept of creating a walkable neighbourhood helps to define the number and location of the district centre and two ancillary local centres. These present opportunities to optimise accessibility in relation to the movement network and to create the kind of vitality and footfall needed to support a range of uses and activities that a self-sustaining new City District needs.
- 5.5 The area is not just about regeneration. The intensification and potential diversification of the range of uses on the Cambridge Science Park creates a genuine opportunity to bring additional businesses to the area and strengthen the Cambridge Phenomenon. Development in areas to the east of Milton Road will be predominately residential led with land allocated to support the relocation of existing industrial sites.
- 5.6 Green infrastructure capitalises on the network of existing trees and landscape but also extends this to create an overall framework to improve biodiversity and linkages to the wider countryside. Embedded into this framework will be the water management network that improves the First Drain and adds richness to the landscape. A new green space at a district scale will enrich the heart of this new place and provide the kind of multifunctional space that is so typical of Cambridge and central to public life.
- 5.7 Questions elsewhere in this chapter ask for your views on each of the individual elements shown on the indicative concept plan. However, we would like your views on the high level concept presented above.

Issue: Indicative Concept Plan

**Question 6: Do you support the overall approach shown in the Indicative Concept Plan?
Do you have any comments or suggestions to make?**

Mixed Use City District

- 5.8 The transport constraints and opportunities in this area mean that we need to take an innovative approach to future development. We need to deliver a place where people can live work and play locally, and travel to, from and within the site without

the need for a car. The plan needs to deliver the right mix of uses where people working in the area have more opportunities to live nearby, and those living and working in the area have access to the right mix of services and facilities. This is referred to as an 'internalisation', where people's day to day needs can be met within an area without having to travel. This will significantly influence the optimum land use mix to be achieved across the CNF.

- 5.9 The existing employment areas such as Cambridge Science Park and St John's Innovation Park have and will continue to play a pivotal role in the 'Cambridge Phenomenon'. The existing office and Research & Development buildings are home to over 100 companies from multi-national organisations to start-up companies. However, the potential to intensify and diversify these existing areas needs to be explored through the AAP to help deliver the comprehensive development of the area and make best use of the significant brownfield regeneration opportunity afforded by the relocation of the WRC. The South Cambridgeshire Local Plan already includes a policy supporting intensification of uses on the Cambridge Science Park.
- 5.10 The AAP area should continue to be a focus for development related to high technology and innovation. This well established and world renowned cluster will need to be carefully supported to ensure that increasing demand for employment floorspace is met over future decades.
- 5.11 Both the Cambridge and South Cambridgeshire Local Plans support economic growth in these industries and a number of new office buildings have recently been granted planning permission/redeveloped within Cambridge Science Park and St John's Innovation Park.
- 5.12 Whilst the predominant land use within Cambridge Science Park will continue to be office and research premises, there is the opportunity to introduce other land uses that would be of benefit to existing and future employees within the science park.

Issue: Creating a Mixed Use City District

Question 7: Do you agree that outside of the existing business areas, the eastern part of the Cambridge Northern Fringe (i.e. the area east of Milton Road) should provide a higher density mixed use residential led area with intensified employment, relocation of existing industrial uses and other supporting uses?

Question 8: Should Nuffield Road Industrial Estate be redeveloped for residential mixed use development?

Question 9: Do you agree that opportunities should be explored to intensify and diversify existing business areas? If so, with what sort of uses?

Question 10: Are there any particular land uses that should be accommodated in the CNF?

Creating a City District with a unique identity

5.13 This new city district needs activity and vibrancy to support the existing and establishing communities. The cultural offer to enrich lives is a key component of creating successful places and will be needed for residents, workers and visitors alike. Embedding creativity and culture into the scheme is a vital aspect to the success of the CNF as a new city district with its own identity. A cultural strategy along with a public art strategy will be needed early in the process to support the overall masterplanning and decision making for the regeneration of the CNF.

Issue: District Identity

Question 11: What uses or activities should be included within the CNF which will create a district of culture, creativity and interest that will help create a successful community where people will choose to live and work and play?

Community events and public art can be both temporary and permanent



Temporary open air cinema
Leicester, UK
(Source: leicestermercury.co.uk)

Temporary market
West Ealing, London
(Source: inwestealing.co.uk)



Public art
Wall Street, New York City
(Source: 6sqft.com)

Creating a Healthy Community

- 5.14 Cambridgeshire County Council has produced a Housing Developments and the Built Environment Joint Strategic Needs Assessment, which emphasises the relationship between planning and health and wellbeing of new communities. The draft AAP will need to include health related policies. A range of issues addressed in this issues and options report would contribute to making the CNF a healthy and safe place.
- 5.15 Recently the new town of Northstowe has been part of the NHS Healthy Towns Initiative. This considered how health, and the delivery of healthy communities, could be a key driver in the planning and design process for a new community. It provided an opportunity to explore innovation and best practice. The principles it explored included promoting inclusive communities, good access to health services, walkable neighbourhoods, high quality public transport and cycling links, and opportunities for physical activity. There are opportunities to apply similar principles in the Cambridge Northern Fringe.

Issue: Creating a healthy community

Question 12: Should the AAP require developments in the CNF to apply Healthy Towns principles?

Cambridge Regional College

- 5.16 As an innovation district, the CNF needs to capitalise on great links to education facilities in the area to improve links to businesses. Cambridge Regional College (CRC) is a major higher education facility with a catchment, which includes Cambridgeshire, Essex, Hertfordshire and Suffolk. The existing CRC site supports 3,000 full-time higher education students. Due to its close proximity to the CNF site and the role that the college plays within the immediate and wider area we need to consider how the two can function together and support each other.

Issue: Cambridge Regional College

Question 13: How should the AAP recognise and make best use of the existing and potential new links between the AAP area and the CRC?

Building Heights and Skyline

- 5.17 The CNF provides an excellent opportunity to create a new mixed use city district with its own unique character. With this in mind, as well as the recent additions of Cambridge North railway station and the Guided Busway that create the potential to optimise proximity to this infrastructure, there are opportunities for development to be at a scale and height that would usually reflect a city centre location, and this

brownfield site on the edge of Cambridge provides opportunities that may not be available in the historic city centre. Nevertheless in order to create a city district of architectural interest, development at the CNF would be expected to provide a range of building heights across the site and deliver sensitively designed and well-articulated built form along with meaningful open spaces, trees and other green infrastructure. As a city edge location, development will also need to maintain and enhance the overall character and qualities of the skyline, including demonstration of how they have taken account of the prevailing context and more distant views.

- 5.18 It is critical that the CNF is of the highest design quality and the AAP will set out design principles which relate specifically to the area. This would require further policy guidance to establish a clear framework for proposals in relation to layout, scale, height, massing and the relationship between buildings and streets. The guidance should provide a clear steer which reduces uncertainty and supports consistency with the overall vision and will be informed by evidence such as the Landscape Character and Visual Impact Appraisal.
- 5.19 In recent years the scale of development in the AAP area has started to change with the development of the Bradfield Centre on the Cambridge Science Park and the currently unimplemented planning permission for an 8 storey office building adjacent to Cambridge North railway storey (overall maximum height including plant is circa 30 metres). Many of the existing Science Park buildings are equivalent to 5-6 residential storeys.
- 5.20 In order to use land effectively and efficiently, development can be at a scale that is greater in terms of height and density than its immediate surrounding context to the south of the AAP area. Clusters of taller buildings around areas of high accessibility including district and local centres and transport stops could form part of the design of this new city district, with heights and massing carefully modelled to create varied and well-articulated forms appropriate to their location within the area, including being sensitive to surrounding context. Appropriate building heights, including the consideration of taller buildings, will be informed by the findings of the evidence base studies, including Landscape and Visual Impact Appraisal, Transport Study and alongside the Urban Design response to be taken forward in the draft AAP.

Precedent examples of tall buildings



3 to 10 storey residential development
Trafalgar Place, Elephant and Castle
(Source: DRMM Architects)



Consented 8 storey office development
Cambridge North Station
(Source: Brookgate)



6 storey residential development
CB1 'Ceres', Cambridge
(Source: Pollard Thomas Edwards)

Issue: Building Heights and Skyline

Question 14: Should clusters of taller buildings around areas of high accessibility including district and local centres and transport stops form part of the design-led approach to this new city district?

Local movement and connectivity

5.21 Chapter 6 of this Issues & Options report considers the wider transport implications of the regeneration of the CNF. At the local level, and intrinsically linked into the placemaking led approach, are decisions around movement and connectivity within the CNF and linkages to the surrounding area. Improvements could establish new or upgraded walking, cycling and public transport connections between Cambridge North Station, the employment areas, Cambridge Regional College, and the surrounding neighbourhoods. In addition leisure and active routes for walking cycling and equestrians which integrate with the wider countryside beyond are

crucial in achieving a shift away from private car dependent forms of development, and towards a 'walkable district'. This would allow and encourage easy change between sustainable modes and influences the way that the place will work and meet the needs of those that live and work in the area.

- 5.22 A number of projects would help to establish improved connectivity to the CNF, including the Chisholm Trail and Waterbeach Greenways. These would be delivered as part of separate projects and would connect Cambridge North Station with Cambridge Station, Cambridge Biomedical Campus and Addenbrooke's Hospital. In addition they provide linkages to Northstowe and the planned new town north of Waterbeach.
- 5.23 The development of the CNF presents a great opportunity to create a new network of streets and open spaces that will support and improve movement of people throughout the area. To achieve this, new streets, open spaces and green routes will form a comprehensive urban structure and be at the centre of the design of this new city district.
- 5.24 There are a number of potential options that can achieve this, which could include all or a combination of the options below.

Issue: Local movement and connectivity

Question 15: Should the AAP include any or a combination of the options below to improve pedestrian and cycling connectivity through the site and to the surrounding area?

A – A strong east-west axis to unite Cambridge North Station with Cambridge Science Park across Milton Road. This pedestrian and cycle corridor would be integrated into the wider green infrastructure network to create a pleasant and enjoyable route for people to travel through and around the site. The route could also allow other sustainable forms of transport to connect across Milton Road.

B – Improve north-south movement between the Cowley Road part of the site and Nuffield Road. Through the redevelopment of the Nuffield Road area of the CNF, it will be important that new and existing residents have convenient and safe pedestrian and cycle access to the services and facilities that will be provided as part of the wider CNF proposals.

C – Upgrade connections to Milton Country Park by both foot and cycle. This would include improving access to the Jane Coston Bridge over the A14, the Waterbeach Greenway project including a new access under the A14 (see Transport Chapter), as well as the existing underpass along the river towpath.

D – Provide another Cambridge Guided Bus stop to serve a new District Centre located to the east side of Milton Road.

E - Increasing ease of movement across the sites by opening up opportunities to walk and cycle through areas where this is currently difficult, for example Cambridge business park and the Cambridge Science Park.

Crossing the railway line

- 5.25 Providing a cycling and pedestrian bridge over the railway could have benefits to CNF users to access the river corridor and its recreation opportunities. It would also help neighbouring communities access the new services, facilities and employment that will be delivered in this area.

Issue: Crossing the railway line

Question 16: Should we explore delivery of a cycling and pedestrian bridge over the railway line to link into the River Cam towpath?

Milton Road connectivity

- 5.26 There is an opportunity to reduce the dominance of Milton Road to create a better environment and enhance the area as a gateway to Cambridge. This could also link the Cambridge Science Park and the area to the east of Milton Road better and create an improved environment for interaction between the two.
- 5.27 Milton Road currently acts as a barrier to pedestrian and cycling movement across the area, and in particular between the Cambridge North Station and the Cambridge Science Park. If we are to make the area more attractive for access by means other than the car, and to create a well-connected and coherent city district, significant improvements will be required.
- 5.28 There are a range of ways this could be done, from bridging over the road to changing the nature of the road itself. The ambition is to create a better environment and enhance the approach to the City of Cambridge and the gateway to the Innovation/High-Tech cluster.

Issue: Milton Road connectivity

Question 17: Which of the following options would best improve connectivity across Milton Road between Cambridge North Station and Cambridge Science Park?

A - One or more new 'green bridges' for pedestrians and cycles could be provided over Milton Road. The bridges could form part of the proposed green infrastructure strategy for the CNF, creating a substantial green/ecological link(s) over the road.

B - Subject to viability and feasibility testing, Milton Road could be 'cut-in' or tunnelled below ground in order to create a pedestrian and cycle friendly environment at street level. This option would allow for significant improvements to the street which would be more pleasurable for people to walk and cycle through.

C - Milton Road could be significantly altered to rebalance the road in a way that reduces the dominance of the road, including rationalising (reducing) the number of junctions between the Guided Busway and the A14 as well as prioritising walking, cycling and public transport users.

D - Connectivity across Milton Road could be improved through other measures. We would welcome any other suggestions that would improve the east-west connectivity through the site.

E – Other ways of improving connections (please specify)

Precedent examples of improving pedestrian and cycling connectivity



Green bridge, Mile End Park, London
(Source: Tower Hamlets Council)



Reducing the width of the carriageway and creating a more pleasant pedestrian experience, Holborn Circus
(Source: J Briney / TFL)



Proposed Hamburg Road Tunnelling and introduction of green spaces at street level
Hamburg, Germany
(Source: Hochtief Solutions)



Improvements to the public realm to reduce the dominance of the road
New Street, Brighton
(Source: Gehl People)

Development fronting Milton Road

- 5.29 Milton Road has the potential to form an important linking area within the wider CNF area. Currently the development to either side of the road is relatively hidden and inward facing and allows the junction and 'highway' to dominate. Regeneration of the area creates the opportunity to revisit how development on each side of Milton Road might interface with this key route. The role of Milton Road as part of the knowledge gateway to Cambridge is therefore a key consideration.

Issue: Development fronting Milton Road

Question 18: Should development within the CNF be more visible from Milton Road, and provide a high quality frontage to help create a new urban character for this area?

Managing car parking and servicing

- 5.30 Cambridge North Station and the Guided Busway (including the adjacent maintenance track/cycleway) have radically altered the accessibility of the area and make sustainable modes a realistic and attractive option. There is also limited scope to increase the number of motorised vehicles using Milton Road. Car parking and traffic generation are inextricably linked. Whilst some parking will be needed, there is a recognition that car parking provision will need to be below the standards set out in the Local Plans and provided in different ways. This needs to have a key impact on how the site operates in transport terms in order to reduce levels of car use and support travel by means other than the car. The level of car parking provided, and the management of both on and off-site car parking and car use, will need to be carefully considered. In placemaking terms reducing the impact of vehicles through the district, either moving or stationary, is a key aim of rebalancing spaces in favour of pedestrians and cyclists and supporting sustainable transport modes.

- 5.31 There is also a need to differentiate between car ownership and car use. Vehicles using the network 'off peak' are unlikely to create the same issues that peak time movements will bring, but seeking to minimise car use, at any time of the day, is an important consideration. However, such an understanding will be vital to managing servicing and deliveries too with consideration of last mile delivery strategies, consolidated deliveries and delivery/collection hubs required to ensure that this new place 'works' to meet the day to day needs of people living and working in the area. The use of car clubs could provide for infrequent car based trips when other more sustainable modes are not possible.
- 5.32 In order to address this, there will be a need to reduce car parking provision significantly as part of new development proposals and to consider whether the existing number of car parking spaces found in the employment areas across the entire CNF area could be reduced or redistributed. The latter would require further discussions with the relevant businesses and landowners but would ensure that there is a minimal net increase in the number of additional car parking spaces as a result of development and potentially allow further development within the overall proposed area-wide highway trip budget. Measures to manage on-street parking in the area and surrounding areas may also be required.

Issue: Managing car parking and servicing

Question 19: Do you agree with proposals to include low levels of parking as part of creating a sustainable new city district focusing on non-car transport?

Question 20a: In order to minimise the number of private motor vehicles using Milton Road, should Cambridge Science Park as well as other existing employment areas in this area have a reduction in car parking provision from current levels?

20b: Should this be extended to introduce the idea of a reduction with a more equitable distribution of car parking across both parts of the AAP area?

Question 21: Should the AAP require innovative measures to address management of servicing and deliveries, such as consolidated deliveries and delivery/collection hubs?

Car and other motor vehicle storage

- 5.33 Radically rethinking car use patterns creates opportunities to think creatively about how and where private cars should be stored and help reduce the visual and practical impact of car parking on the area. It is referred to as car storage, as cars would not be needed for day to day use. Developments in Freiburg show how using 'car barns' on the periphery of development areas allows streets and spaces to be rebalanced in favour of walking and cycling. The CNF could adopt this approach along with more conventional basement car parking to provide 'car storage' and make more efficient use of the land available. Car parking structures should be designed so that they complement their local environment, for example wrapping

them in other uses and being designed to allow their future conversion to meet other needs such as for increased cycle parking or alternative uses such as commercial or residential.

Precedent examples of car storage and car share scheme



Indicative example of a car barn – a multi-storey car park located on the edge of a neighbourhood
Bordeaux, France
(Source, Brisac Gonzalez)



Car share scheme
Birmingham, UK
(Source: Car2Go)

Issue: Car and other motor vehicle storage

Question 22: Should development within CNF use car barns for the storage of vehicles?

Green Space

- 5.34 The site is in close proximity to Milton Country Park and the River Cam Corridor. There will be a requirement for development in the CNF to improve pedestrian and cycle connectivity to these well used spaces. As part of this strategy, a strong green infrastructure network will be introduced through the site which will connect north towards Waterbeach new town, west through the Science Park and into Cambridge Regional College, and east to the River Cam and the fenland landscape beyond (see Transport Chapter).
- 5.35 If the CNF is to make a significant contribution to Greater Cambridge's employment and housing needs, maximising the benefits to be realised from the new rail station

and Guided Busway, it will be critical that the AAP requires enhanced pedestrian and cycle connectivity to Milton Country Park and the River Cam corridor.

5.36 Green Infrastructure provision will help to structure and soften this new city district. It has a key role in providing space for sustainable drainage systems (SUDS), which will be important in this area. They also provide social spaces which support community activities and healthy activities.

5.37 There are a number of ways how this can be delivered and all would link to the proposed wider green infrastructure/biodiversity strategy.

Issue: Green Space provision

Question 23: Within the CNF green space can be provided in a number of forms including the following options. Which of the following would you support?

A - Green space within the site could be predominately provided through the introduction of a large multi-functional district scale green space. Taking inspiration from Parker's Piece in Cambridge, a new large space will provide flexible space that can be used throughout the year for a wide range of sport, recreation and leisure activities and include a sustainable drainage function. The sustainable drainage element would link into a system developed around the existing First Public Drain and the drainage system in the Science Park. The green space could be further supported by a number of smaller neighbourhood block scale open spaces dispersed across the site.

B – Green spaces within the site could be provided through a series of green spaces of a neighbourhood scale that will be distributed across the residential areas. These green spaces will also be connected to the green infrastructure network to further encourage walking and cycling. Again these spaces will include a sustainable drainage function and link into the existing First Public Drain and the Science Park drainage system.

C – Enhance connections and corridors within and beyond the site to improve the biodiversity and ecological value as well as capturing the essential Cambridge character of green fingers extending into urban areas. These corridors could also be focussed around the green space network and sustainable drainage and would reflect the NPPF net environmental gain requirement.

D– Green fingers to unite both sides of Milton Road and capitalise on the existing green networks.

E – Consideration of the site edges – enhancement of the existing structural edge landscape and creating new structural landscape at strategic points within and on the edge of the CNF. This would also enhance the setting to the City on this important approach into the City.

F – Creation of enhanced pedestrian and cycle connectivity to Milton Country Park and the River Cam corridor

Precedent examples of different types of open spaces



Multi-functional district scale open space
Parker's Piece, Cambridge
(Source: Britannia)



A series of green spaces of a
neighbourhood scale
Sonder Boulevard, Copenhagen
(Source: Visit Copenhagen)



Small green spaces set around residential
blocks
Tasinge Square, Copenhagen
(Source: Publicspace.org)



Biodiversity, ecological and movement
corridors
The High Line, New York City
(Source: Thehighline.org)



Small pockets of open space offer places to
relax
Granary Square, King's Cross
(Source: kingscross.org)



Using water to add value to the public
realm
Cheonggyecheon, Seoul
(Source: stari4ek/ Wikimedia Commons)

Supporting Study	Description	Status
Ely to Cambridge Transport Study	A wide-ranging multi modal study commissioned by Greater Cambridge Partnership on the transport schemes needed to accommodate the major development planned at a new town north of Waterbeach, Cambridge Northern Fringe and the Cambridge Science Park. Completed in January 2018.	Completed
Cambridge Northern Fringe Transport Assessment	Building on the recommendations of the Ely to Cambridge Study, it will explore measures required to enable development in the area, and inform preparation of the AAP.	To be completed

6. Transport

What you told us previously

We asked you to comment on some key transport principles for the area, which would be to promote walking, cycling and public transport, make the area safe and permeable.

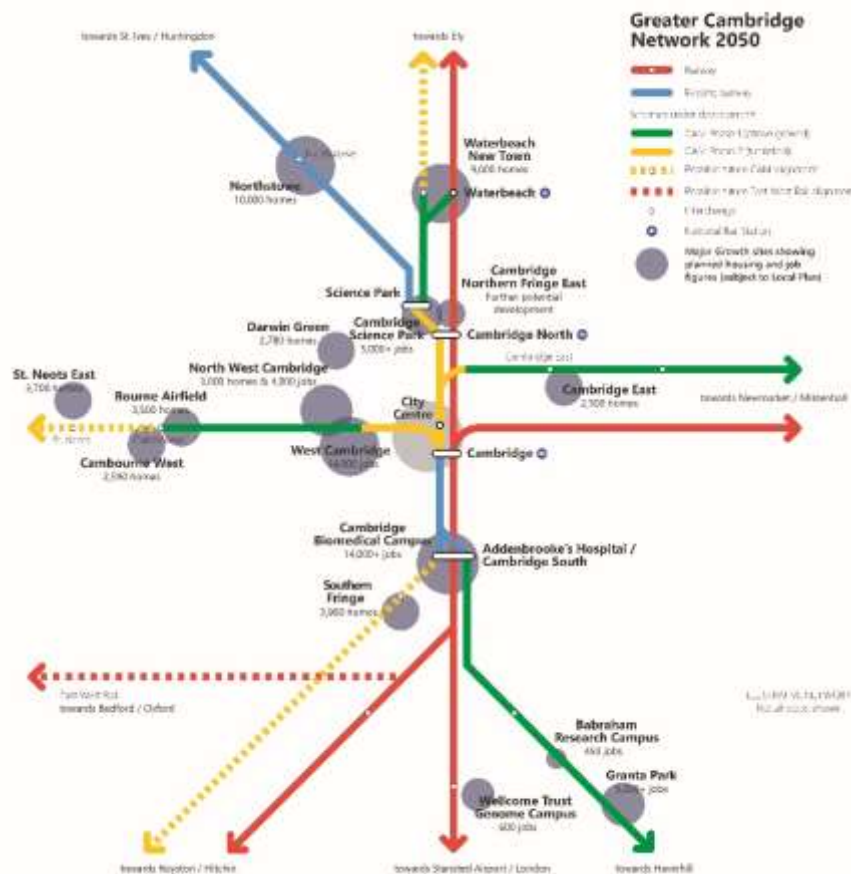
You told us you generally supported these principles, and that a comprehensive approach was needed to transport to make connections both within the site and to the surrounding area. Road access, public transport, cycling and walking were raised in individual comments.

- 6.1 Since we consulted in 2014 we have gathered new evidence of transport issues facing the area. The Greater Cambridge Partnership completed an Ely to Cambridge Transport Study in January 2018. The study considered the transport needs of the Ely to Cambridge corridor as a whole, including the needs of the major developments on the corridor such as the new town north of Waterbeach, and the Cambridge Northern Fringe.
- 6.2 Currently 76% of work trips to the northern fringe area are made by car. This is significantly higher than many other areas in and around Cambridge, such as the Cambridge Biomedical Campus or CB1. The opening of the railway station, public transport, and cycling and walking improvements means there is a real opportunity to improve this situation.
- 6.3 By finding ways to make this area more accessible and attractive to travel to by other means, there is potential to unlock the significant development potential of the area, and make a major contribution to delivering the homes and jobs that the Greater Cambridge area needs in a sustainable manner.
- 6.4 New infrastructure will be needed to enable people to get to the area by means other than the car, and a mix of uses provided within the site so that people can access a range of services and facilities so reducing their need to travel. The AAP will also need to consider how to move within the Cambridge Northern Fringe, between the station and the science park for example. The potential for new technologies, such as autonomous vehicles, should be explored.

Transport Infrastructure

- 6.5 There are a range of infrastructure schemes which have potential to support development in the Cambridge Northern Fringe area, many of which are being undertaken by other bodies such as Highways England, Greater Cambridge Partnership or the Cambridgeshire & Peterborough Combined Authority.

Figure 6.1: Major Transport Schemes in the Greater Cambridge area



Rail

- 6.6 The Cambridge North railway station opened in 2017. Used by 320,000 people during its first year, the station is an important transport asset that significantly improves the transport accessibility of this area. A relocated Waterbeach railway station serving both the existing village and the Waterbeach new town now has planning permission. Other rail improvements are being planned in the wider area, including East West Rail, which will link Cambridge to Oxford, and may also improve links to Norwich and Ipswich. A new station south of Cambridge near Addenbrooke's to serve the Cambridge Biomedical Campus is also being explored.

- 6.7 The AAP will need to consider how to make the best use of the station, and we will be working with our partners to explore opportunities to enhance services to accommodate growth needs.

Other Public Transport

- 6.8 The Cambridge North station is already served by a bus only link to the Guided Busway. There are also busway stops serving the Science Park. We will still need to explore how to improve public transport access to the area, and how routes within the Northern Fringe can be improved.
- 6.9 There is potential for the Cambridge Northern Fringe to be supported by a range of improvements currently planned in the Cambridge area, including:
- A suite of measures to improve conditions for public transport in the city more widely.
 - Milton Road and Histon Road projects aimed at improving public transport, cycle and walking infrastructure.
 - Segregated public transport links between the new town north of Waterbeach and Cambridge, and park and ride capacity
 - M11 park and ride provision, to increase capacity and improve services in the Trumpington Area
 - The Cambourne to Cambridge Scheme, which will provide public transport and park & ride improvements west of the city.
 - A northern orbital public transport route via North West Cambridge and Darwin Green, linking Cambridge Northern Fringe with West Cambridge.
 - Public transport improvements on the A1307 corridor between Haverhill serving the Biomedical Campus, Babraham Research Park, Granta Park, and various local settlements with Cambridge
 - Park and ride and public transport improvements to the east of Cambridge
- 6.10 The Mayor and the Combined Authority's ambition is to deliver world-class public transport across Cambridgeshire and Peterborough, the city region and future growth centres as well as into neighbouring counties. The Cambridgeshire & Peterborough Combined Authority is exploring the potential of a Cambridgeshire Autonomous Metro (CAM), an advanced Mass Rapid Transit system based on innovative tram like vehicles, but without rails. A Strategic Outline Business Case is being prepared.
- 6.11 Through the AAP we will need to consider how these schemes can support development on the Northern Fringe, and what other public transport measures are required.

Cycling & Pedestrian Routes

What you told us previously

We asked you what was needed to improve pedestrian and cycling links in the area.

You gave us a wide range of ideas, supporting connections in all directions, including across the railway, and to the north towards the Country Park and Waterbeach New Town. The quality of provision was also highlighted, with separation from motor traffic sought.

- 6.12 Comprehensive high quality pedestrian and cycle networks should permeate the area and link to the surrounding area. There are a range of connectivity issues within the northern fringe area that will need to be addressed.
- 6.13 The CNF is well placed to link into the cycle network that crosses the city, as well as routes that serve destinations beyond the city, such as towards Northstowe. Improvements are already planned which will improve access to the area further.
- The Chisholm Trail, creating a mostly off-road and traffic-free route between Cambridge Station and the new Cambridge North Station.
 - Waterbeach Greenway. The Greenways will provide cycling, walking and equestrian routes into Cambridge from the larger villages surrounding the city. Route options for Waterbeach Greenway cross through the CNF site.
 - Milton & Histon Road improvements include objective to deliver safer and more convenient routes for cycling and walking, segregated where practical and possible.
 - Cross City Cycling Improvements Project.
 - A suite of measures to improve conditions for walking and cycling in the city more widely.
- 6.14 Movement networks within the area will need to be designed around people rather than cars, and the development should take advantage of the opportunities provided by Cambridge North Station and the busway to take people to and from the area.

Issue: Non Car Access

Question 24: As set out in this chapter there are a range of public transport, cycling and walking schemes planned which will improve access to the CNF. What other measures should be explored to improve access to this area?

Car Travel

What you told us previously

We asked you whether we should set a low target for car usage for travelling to and from, and within the site.

You told us that whilst many thought we should set challenging targets, we needed to do more to understand whether it was achievable, and what infrastructure would be required to support it. A range of ideas were put forward regarding specific transport measures that should be included in the site.

- 6.15 While the Cambridge Northern Fringe is well located with respect to the strategic and local highway networks, this advantage is constrained at peak times by significant levels of congestion and delay on these routes.

- 6.16 Improvements to the A10, including junction improvements and dualling, are being explored by the Cambridgeshire & Peterborough Combined Authority. Whilst this will assist delivery of development, analysis suggests that the largest movements associated with the Northern Fringe would be from the east and west on the A14 and from the south on the M11. Even with the improvements currently taking place, growth at the northern fringe has potential to displace traffic onto less appropriate routes if not planned appropriately.
- 6.17 The main road access into the area is from Milton Road. We are exploring what we can make to rationalise or improve the current access arrangements. However, there are limited opportunities to make major access improvements to this already congested route and, even if significant improvements could be made, they could potentially further encourage more car trips into this already congested area. The Cambridge to Ely study indicates that a new road junction to serve the area directly from the A14 is not a practical or viable option. Even if it were, this too could potentially also encourage further car-dependent development and increase congestion levels.
- 6.18 The area is well placed to take advantage of existing and planned transport solutions which do not rely on the car. The challenge for achieving development at the Cambridge Northern Fringe is to deliver growth without also delivering a significant overall increase in car use to the sites and resulting traffic congestion.
- 6.19 From a technical perspective, the Ely to Cambridge Study proposed that a highway ‘trip budget’ approach is used. This approach would require finding ways to accommodate development with a constrained number of car trips by supporting means other than the car, rather than planning for unconstrained car trip growth.

Issue: Car usage in Cambridge Northern Fringe

Question 25: Do you agree that the AAP should be seeking a very low share of journeys to be made by car compared to other more sustainable means like walking and cycling to and from, and within the area?

Question 26: Do you have any comments on the highway ‘trip budget’ approach, and how we can reduce the need for people to travel to and within the area by car?

Car Parking and Cycle Parking Levels

What you told us previously

We asked you whether we should set low car parking standards for all or part of the area, given the alternatives available to the car for getting to the site. We also asked you whether we should also have higher cycle parking standards than normal in this area.

Responses were varied. There was benefit in restricting car parking for discouraging car use, but concern about the impact on the area if car parking was not sufficient. We also needed

to consider the impact on businesses. Most respondents considered that high levels of cycle parking were needed in this area.

- 6.20 Existing employment sites in the CNF currently have high levels of car parking provision, and this provision is in many cases significantly underutilised. Further, these employment sites generally have higher levels of car use than other large employment areas in the city. While good progress has been made in reducing this in recent years, the proportion of workers at these sites who drive to work is almost double that of the Cambridge Biomedical Campus, and five times that planned at CB1 (56% on northern fringe, 31% car driver mode share for staff at the Biomedical Campus, 11% car driver mode share agreed through transport assessments for CB1)⁵.
- 6.21 One of the key recommendations from the Ely to Cambridge Transport Study is that a policy of stringent parking constraints should be applied in the area. This would need to apply to existing sites in the area as well as new developments, and be accompanied by measures to manage on-street parking. We will be carrying out more work on this to inform the draft plan.
- 6.22 Cycle provision will need to support the level of mode shift required and therefore must be designed to accommodate high levels of cycling provision, including the implications of this on cycle storage and parking. This should consider innovative solutions that increase capacity without resulting in masses of unsightly cycle racks.

Issue: Car Parking

Question 27: Do you agree that car parking associated with new developments should be low, and we should take the opportunity to reduce car parking in existing developments (alongside the other measures to improve access by means other than the car)?

Issue: Cycle Parking

Question 28: Do you agree that we should require high levels of cycle parking from new developments?

Question 29: Should we look at innovative solutions to high volume cycle storage both within private development as well as in public areas?

Question 30: What additional factors should we also be considering to encourage cycling use (e.g. requiring new office buildings to include secure cycle parking, shower facilities and lockers)?

⁵ Ely to Cambridge Transport Study Strand 3 page 50, table19

Precedent examples of high density bike storage and bike sharing scheme



High density cycle parking
Utrecht Central Station, Netherlands
(Source: skyscrapercity)



Bike sharing scheme and live travel
information
St Petersburg, Florida
(Source: saintpetersblog.com)

Innovative approaches to Movement

6.23 The CNF will be developed over a long period, and the transport technologies available in that time will also evolve. It will be important that the CNF is capable of responding to those changes.

Issue: Innovative approaches to Movement

Question 31: How do we design and plan for a place that makes the best use of current technologies and is also future proofed to respond to changing technologies over time?



Project Information: The Waterbeach Greenway

The Waterbeach Greenway would enable cyclists, walkers and equestrians to travel sustainably from Waterbeach into Cambridge.

The Greater Cambridge Partnership consulted on the scheme in November 2018

www.greatercambridge.org.uk/transport/transport-projects/greenways/waterbeach-greenway/

Movement within the Cambridge Northern Fringe - Last Mile Trips

6.24 In the Place Making Chapter of this Report, we considered what kind of place this area should be, and what it should be used for. Mixed use development, with a diverse range of residential, employment, education, retail and local amenities

would provide the opportunity for those living and working in the area to access many services without using a car.

- 6.25 Movement networks in the area will need to be designed around people rather than cars. Comprehensive high quality pedestrian and cycle networks should permeate the area and link to the surrounding area.
- 6.26 Effective 'last mile' links from the station and from the busway stops to destinations like the Science Park will be key to the area's success. This potentially could use innovative solutions like autonomous vehicles.

Issue: Linking the Station to the Science Park

Question 32: what sort of innovative measures could be used to improve links between the Cambridge North Station and destinations like the Science Park?

Supporting Study	Description	Status
Cambridge Northern Fringe Employment Sector Profile	Completed in 2014, provides an overview of sector strengths and likely sources of demand for employment space in the Cambridge Northern Fringe East AAP area.	Completed
Cambridge Northern Fringe Employment Options Study	Completed in 2014, considered the employment development opportunities of the Cambridge Northern Fringe area.	Completed
Cambridge and Peterborough Independent Economic Review	Commissioned by the Cambridgeshire and Peterborough Combined Authority and Cambridge Ahead. To inform the development of the Local Industrial Strategy and associated investments. Final report published in September 2018.	Completed
Employment Land Review	Studies which review the demand and supply of employment land. A new study has been commissioned to inform the Local Plan Review, and will also consider Cambridge Northern Fringe.	To be completed

7. Employment

Employment Development Opportunities

What you told us previously

We asked whether the plan should encourage a range of employment opportunities to meet the needs of different businesses and to maximise the potential of successful clusters in the area. We also proposed that it should include social facilities to make it an attractive area to work.

You told us you would like to see a mixed use development that integrates with the surrounding area. Flexibility was important, as well as providing a range of uses, although a range of views was expressed on the types of business that should be supported.

- 7.1 Cambridge Northern Fringe has a significant role to play in meeting the future employment needs of the Greater Cambridge area.
- 7.2 The success of the Greater Cambridge area is of national importance. Evidence that informed our current Local Plans highlighted that the northern fringe was an area of high demand for employment space in Cambridge. The highly accessible location, combined with the presence of a range of successful businesses, including at the Science Park and St. Johns Innovation Park, makes the area attractive to business. The area presents a significant opportunity to support the clustering of related businesses in high technology sectors and related businesses that have developed in Greater Cambridge.

- 7.3 Employment will form an important part of the mix to create a vibrant new district for Cambridge, where there are opportunities to live and work in the area, and which responds to the transport constraints and opportunities in the area.

Types of employment space

- 7.4 The CNF will need to meet the needs of a range of users. Cambridge firms come in a range of sizes, from start-ups with a few individuals, to major firms with hundreds of employees. Many high technology firms carry out research and development (R&D) in office-like buildings. However, there is also demand for specialist laboratory space, alongside office uses. Our evidence has also suggested the need for grow on space for firms in the area, or space for large firms.

Issue: Types of Employment Space

Question 33: Are there specific types of employment spaces that we should seek to support in this area?

Question 34: In particular, should the plan require delivery of:

A - a flexible range of unit types and sizes, including for start-ups, and Small and Medium Sized Enterprises (SMEs);

B - Specialist uses like commercial laboratory space;

C - hybrid buildings capable of a mix of uses, incorporating offices and manufacturing uses.

D - shared social spaces, for example central hubs, cafes.

E – Others (please specify).

Industrial and other employment uses

What you told us previously

The redevelopment options we consulted on previously showed different ways of reconfiguring the current uses on the eastern area. We also asked about the future of the Nuffield Road industrial estate.

You told us we should make the most of this area, and give more consideration to other uses like residential, but there was still a need for industrial uses in the City. Some existing site users expressed concern, and that alternative sites would be required if they were to be relocated. With regard to Nuffield Road, environmental benefits of alternative uses for the area such as residential uses were expressed.

- 7.5 There are a number of industrial uses currently within the area. These provide an important function for Cambridge, and there is a limited supply of industrial land currently in the City. Areas like Cambridge Commercial Park (sometimes referred to as Cowley Road Industrial Estate) accommodate a range of functions which are important to the Cambridge economy.

- 7.6 However, much of the land in the area is under-utilised in terms of development density. In order to make best use of the opportunities provided by Cambridge Northern Fringe, and the potential unlocked by relocating the water recycling centre, the area will come under increasing pressure for change.
- 7.7 Examples from around the country have shown that there are ways to accommodate some industrial uses within high density urban environments using innovative solutions. Careful consideration would need to be given to the compatibility with adjoining uses such as residential development.
- 7.8 Alternatively, provision could be made elsewhere for these uses, in order to maximise the development potential of the area, providing the alternative locations meet the needs of current occupiers. This may be necessary for some uses, which cannot be delivered in a way compatible with a new city district.

Issue: Approach industrial uses

Question 35: Which of the following approaches should the AAP take to existing industrial uses in the CNF?

A - seek to relocate industrial uses away from the CNF?

B - seek innovative approaches to supporting uses on site as part of a mixed use City District?

Question 36: Are there particular uses that should be retained in the area or moved elsewhere?

Precedent examples of innovative approaches to industrial development



Light industry, commercial and residential mixed use development
Caxton Works, Canning Town, London
(Source: Studio Egret West)



Industrial (Travis Perkins) with
residential development above
St Pancras, London
(Source: Cooley Architects)



Office, commercial and
residential mixed use
development
The Sun Ship, Freiburg
(Source: Rolf Disch Architects)

Supporting Study	Description	Status
Greater Cambridge Housing Strategy	Cambridge and South Cambridgeshire Councils are jointly preparing a new housing strategy, which will be published in 2019.	To be completed
Objectively Assessed Housing Need	The Council's adopted Local Plans include housing targets for the period to 2031. Housing need will be reviewed through the Local Plan Review which commences in 2019. A new evidence base will be prepared to inform the review.	To be completed
Gypsy and Traveller Accommodation Needs Assessment	Identifies the specific housing needs of the Gypsy and Travellers community. The Councils current assessment was completed in 2016, and it will be reviewed to inform the Local Plan review.	Completed / to be updated
Cambridge Northern Fringe Development Viability Assessment	A Viability Assessment will be prepared to accompany the AAP.	To be completed
Evidence for Residential Space Standards	Evidence prepared by South Cambridgeshire District Council in September 2016, to demonstrate the need to apply the national residential space standards in South Cambridgeshire. Cambridge City Council considered issues in an Examination Hearing Statement: https://www.cambridge.gov.uk/media/2210/cc6-ccc.pdf	Completed

8. Housing

What you told us previously

We asked you whether the plan should seek a balanced mix of dwellings, and whether there were any particular types of housing that should be included in the area. You told us we should deliver a mix of dwelling sizes, types and tenures, and put forward range of ideas on the types of housing that should be delivered.

We asked you whether Cambridge Local Plan affordable housing requirements should apply across the AAP area. You mainly supported this approach, although it was noted that viability should be a consideration given the nature of the site.

We asked you about Private Rented Sector (PRS) housing, and whether the AAP should include guidance. Some said detailed guidance was not required, and the market should be allowed to deliver. Others expressed concern if it would result in properties being left empty.

We asked you about student housing, whether the site should exclude student housing, set a limit, allow it if justified, or make specific provision. Mixed opinions were expressed, with

some arguing it was too far from the educational institutions, others said if there was demand, it should be accommodated, and the plan should be flexible.

- 8.1 The CNF provides an opportunity to make a significant contribution to meeting the future housing needs of the Greater Cambridge area.
- 8.2 Cambridge and South Cambridgeshire are currently preparing a Housing Strategy for the two districts. This will help to inform the drafting of the AAP, but there are many issues that we will need to consider regarding the form of housing development that should be sought in the CNF.

Housing mix

- 8.3 Given the number of new homes that could be delivered in the area, it is proposed that the AAP seeks a wide range of housing types and tenures. This would include a variety of affordable housing tenures, such as social housing for rent and other affordable routes to home ownership, purpose built private rented sector housing (PRS) and open market housing, including custom and self-build. There is also an opportunity to plan and deliver a range of housing products aimed at specific groups, for example essential local workers, as well as housing tethered to employers within the area.
- 8.4 Households have varying needs regarding a 'home' and requirements can often change over time. Therefore, a wide choice of housing sizes and tenures broadens the appeal of an area to new residents and creates more sustainable communities. However, the provision of family sized housing also generates a need for more community facilities. It can also be a challenge to secure appropriate levels of well-designed family accommodation as part of higher-density development if this is not carefully planned and located from the outset.

Issue: Housing Mix

Question 37: Should the AAP require a mix of dwelling sizes and in particular, some family sized housing?

Question 38: Should the AAP seek provision for housing for essential local workers and/or specific housing provided by employers (i.e. tethered accommodation outside of any affordable housing contribution)?

Affordable housing

- 8.5 There are around 4,500 applicants on the social housing register across the two districts. Affordability analysis referenced above suggests that 35% of existing households across Cambridge and South Cambridgeshire are on lower incomes of less than £30,000, and 26% have middle incomes between £30,000 - £50,000. Social

housing for rent is particularly important for supporting lower income households, and other affordable tenures can support those on middle incomes.

- 8.6 Both Councils' Local Plans include a requirement for 40% of housing to be affordable on larger development schemes, subject to viability. It is proposed to maintain this approach in the Cambridge Northern Fringe.

Issue: Affordable Housing

Question 39: Should the AAP require 40% of housing to be affordable, including a mix of affordable housing tenures, subject to viability?

Question 40: Should an element of the affordable housing provision be targeted at essential local workers?

Custom and Self Build Housing

- 8.7 Custom and self build housing is housing built or commissioned by individuals (or groups of individuals) for their own occupation. This can help local residents develop their own lower cost market housing, support the local economy by providing work for local builders and tradesmen, increase the diversity of housing supply, and facilitate innovative designs.
- 8.8 The vision for the Northern Fringe district does not lend itself to provision of self build plots, but there may still be opportunities to support custom build. There are national and international examples⁶ where developers deliver the shell of a building, and then private individuals can finish the building and interior as they wish. The AAP could require a proportion of dwellings to be made available for this type of development.

Issue: Custom Build Housing

Question 41: Should the AAP require a proportion of development to provide custom build opportunities?

Houses in Multiple Occupation (HMO)

- 8.9 Houses in Multiple Occupation (HMO) are flats or houses permanently occupied by more than one household, where each household does not have exclusive access to all cooking, washing and toilet facilities behind a locked front door.
- 8.10 HMOs contribute to the overall supply of housing and have an important role in helping to meet an area's housing need for lower cost housing especially for young

⁶ <http://righttobuildtoolkit.org.uk/case-studies/#>

people and those new to Cambridge. A proportion of the new housing in the area could take the form of purpose-built HMOs. However, they can also adversely impact the amenity of neighbouring properties, especially if clustered, and need appropriate management arrangements to be in place.

Issue: Houses in Multiple Occupation (HMO)

Question 42: Should the AAP allow a proportion of purpose built HMOs and include policy controls on the clustering of HMOs?

Private Rented Sector (PRS) housing

8.11 Central government has introduced reforms to the National Planning Policy Framework to speed up delivery of new homes. One of these changes has been to introduce 'Build to Rent' as a tenure option, which can form part of a wider multi tenure development. Homes in such developments are typically 100% rented. Schemes will usually offer longer tenancy agreements of three years or more, and will typically be professionally managed with a single ownership and management control of all the homes on a site. We need to consider to what extent is there a role for PRS in the CNF.

Issue: Private Rented Sector (PRS) Housing

Question 43: Should the AAP include PRS as a potential housing option as part of a wider housing mix across the CNF?

Question 44: if PRS is to be supported, what specific policy requirements should we consider putting in place to manage its provision and to ensure it contributes towards creating a mixed and sustainable community?

Question 45: Should PRS provide an affordable housing contribution?

Question 46: What 'clawback' mechanisms should be included to secure the value of the affordable housing to meet local needs if the homes are converted to another tenure?

Question 47: What would be a suitable period to require the retention of private rented homes in that tenure and what compensation mechanisms are needed if such homes are sold into a different tenure before the end of the period?

Question 48: What type of management strategy is necessary to ensure high standards of ongoing management of PRS premises is achieved?

Specialist Housing

- 8.12 The AAP will need to consider whether there are any other forms of specialist forms of housing provision that should be made in the CNF, as required by the NPPF, having regard to the Greater Cambridge Housing Strategy and to evidence of need. This could include for older people, students, and travellers
- 8.13 The Cambridge Local Plan states that there is no identified need for further student accommodation provision before 2026. As such, the Councils are not proposing to identify specific provision for student housing in the CNF, rather any proposals would need to be considered on their merits.
- 8.14 The Joint Local Plan Review that the Councils will be starting in 2019 will review the accommodation needs of travellers, including those who no longer travel. The current South Cambridgeshire Local Plan refers to seeking opportunities to deliver new traveller sites through major developments. However, Gypsy and Traveller provision is unlikely to represent the best use of land within the CNF, especially in context of delivering higher densities and optimising the development potential of the area.

Issue: Other forms of specialist housing, including for older people, students & travellers

Question 49: Should the area provide for other forms of specialist housing, either on-site or through seeking contributions for off-site provision?

Quality and Accessibility

- 8.15 Both Councils' Local Plans apply the national internal residential space standards. These set minimum sizes in terms of floorspace, and for the size of key rooms. It is important that high quality new homes are delivered, and there is public health evidence of the need for space standards. It is proposed to maintain this approach in the Cambridge Northern Fringe.
- 8.16 The Cambridge Local Plan also sets external residential space standards. This requires all new residential units to have direct access to an area of private amenity space. The form of amenity space will be dependent on the form of housing and could include a private garden, roof garden, balcony, glazed winter garden or ground-level patio with defensible space from any shared amenity areas.
- 8.17 The Local Plans set different standards regarding the minimum portion of new homes that have to meet the standards on accessibility introduced by the Government through Part M of Building Regulations in 2015. The Cambridge Local Plan sets a higher standard than the South Cambridgeshire Local Plan, requiring the design of all new homes to be delivered as 'accessible and adaptable dwellings' (Building Regulation M4(2)) and 5% of new housing as 'wheelchair user dwellings' (Building Regulation M4(3)) across all tenures. It is proposed that this approach is applied to the CNF.

Issue: Quality and Accessibility of Housing

Question 50: Should the AAP apply the national internal residential space standards?

Question 51: Should the AAP develop space standards for new purpose built HMOs?

Question 52: Should the AAP apply External Space Standards, and expect all dwellings to have direct access to an area of private amenity space?

Question 53: Should the AAP apply the Cambridge Local Plan accessibility standards?

Supporting Study	Description	Status
Retail Study	A Cambridge Retail and Leisure Study was completed in 2013. A new Retail Needs Assessment will be commissioned to inform the Joint Local Plan Review.	To be completed
Cambridge Northern Fringe Community Facilities Audit	A detailed assessment of existing facilities and support to inform service delivery and infrastructure provision.	To be completed
CNF Infrastructure Delivery Plan	A broad assessment of the social and physical infrastructure needed to support the planned development and regeneration of CNF and how these requirements could be met.	To be completed
Cambridge and South Cambridgeshire Playing Pitch Strategy	Prepared in consultation with Sport England to guide future provision and management of sports pitches to serve existing and new communities in Cambridge and South Cambridgeshire.	Complete
Cambridge and South Cambridgeshire Indoor Facilities Strategy	Prepared in consultation with Sport England to guide future provision and management of built facilities and community use services to serve existing and new communities in Cambridge and South Cambridgeshire.	Complete
Cambridgeshire County Council Supporting New Communities Strategy	Sets out how the County Council supports people moving into new communities across the county. The focus of this strategy is how we will work to ensure new communities have a network of people-centred support.	Complete
New Developments & Built Environment Joint Strategic Needs Assessment (JSNA)	Produced by Cambridgeshire County Council, considers the relationship between planning and health and well being of new communities, and includes a number of recommendations	Complete

9. Retail, Leisure and Community Services & Facilities

What you told us previously

We asked you about the approach to services and facilities for the area, and what a new local centre for the area should be like.

You told us you were supportive of services being provided in the area, to help create a vibrant community. Early provision was needed due to pressure on existing facilities. A new local centre should complement other nearby centres. There was some support for provision of a hotel in the area.

We asked you whether we should use Cambridge Local Plan's open space standards rather than the South Cambs standards.

You told us there was general support for this approach. Open space was an important way of making places pleasant to live and work. We should also consider how the site links up to green infrastructure in the wider area. We also needed to consider the need for formal sports.

Retail and Leisure

- 9.1 Being primarily an employment area, the current CNF has little by way of existing retail or local services. The intensification of employment use and substantial new housing will drive a need for new provision. The form and function of this requires careful consideration. The quantity and type of retail and leisure provision should fully meet local needs (residents, businesses and visitors) but should not seek to compete with the City Centre, which will continue to provide higher order services and facilities for this new community.
- 9.2 Such centres can help provide a focus for community, cultural and civic life. To fulfil this function they will need to be welcoming, attractive, vibrant and inclusive, adding to the character and appreciation of the CNF, rather than becoming another indistinguishable generic local centre or shopping parade. In this respect, a mix of unit sizes should be provided to cater for both national as well as independent traders and should enable a diverse range of retail and leisure uses, including shops, local small supermarkets, bars, cafes, and restaurants, as well as public and private sector services. Consideration should also be given to extending activity into the evening.

Issue: Retail and Leisure

Question 54: Do you agree with the range of considerations that the AAP will need to have regard to in planning for new retail and town centre provision on the CNF? Are there other important factors we should be considering?

Question 55: Should the Councils be proposing a more multi-dimensional interpretation of the role of a town centre or high street for the CNF, where retail is a key but not solely dominant element?

Community Facilities

- 9.3 A range of community facilities will be required to serve local residents and staff. This will require either new provision on site, or improvements to existing facilities. The Councils are in discussion with service providers on what these needs are, and this will continue as the draft AAP is developed.

Issue: Community Facilities

Question 56: What community facilities are particularly needed in the CNF?

Open Space

- 9.4 Open spaces can provide for a variety of uses including amenity, recreation, education, biodiversity, drainage & flood management, sustainable transport, to help mitigate climate change and maintain air quality. Open space also delivers a range of health benefits⁷. Active open space often requires facilities and structures to support and promote this use, such as toilets, walkways, run routes, interpretation material, seating, tables, playgrounds and sports fields. There is also a need for such areas to be located and designed to meet the needs of the community. There may be opportunities to seek innovative approaches in this area, such as use of roof space for sport or play use. As we move forward a sports strategy will be needed, to consider how the needs of the new development will be met, building on the findings of the Councils' existing Playing Pitch Strategy and Indoor Facilities Strategy.
- 9.5 Well designed and managed spaces can help bring communities together, provide a place to meet, relax and exercise. Poor maintenance and management of park spaces, on the other hand, can deter people from visiting and using and appreciating these spaces. Barriers to participation can include fear of crime / feeling unsafe, lack of facilities / things to do, mess (e.g. dog mess, rubbish) and lack of accessibility for the disabled. Spaces also need to be appropriately located so that they can be enjoyed as intended and are suitable for use.
- 9.6 Opportunities exist to enhance access to the existing open space serving the area, and to improve the quality of these spaces to increase their use and their contribution to the amenity of the area.
- 9.7 In order to make best use of this highly accessible urban area, it may not be practicable to meet all the needs for sport and open space on site. Meeting needs could rely in part on connections to enhanced facilities and open spaces beyond the development.

Issue: Open Space

⁷ See New Developments & Built Environment Joint Strategic Needs Assessment (JSNA)

Question 57: It is recognised that maximising the development potential of the CNF may require a different approach to meeting the sport and open space needs of the new community. How might this be achieved?

Question 58: Should open space provision within the CNF prioritise quality and functionality over quantity?

Question 59: Should open space provision within the CNF seek to provide for the widest variety of everyday structured and unstructured recreational opportunities, including walking, jogging, picnics, formal and informal play, casual sports, games, dog walking and youth recreation?

Question 60: Where specific uses are required to provide of open space as part of the development, should the AAP allow for these to be met through multiple shared use (for example school playing fields & playing pitches for the general public)?

Supporting Study	Description	Status
Cambridgeshire Flood & Water SPD	Provides guidance on the approach that should be taken to manage flood risk and the water environment as part of new development proposals.	Completed
Cambridge and Milton Surface Water Management Plan	Outlines the preferred strategy for the management of surface water in the area. Prepared by Cambridgeshire Flood Risk Management Partnership in 2011.	Completed
Decarbonising Cambridge	Evidence base to inform setting targets for the CO2 performance of new developments in Cambridge. Prepared in 2010 to support the Cambridge Local Plan. This study provides an assessment of the feasibility of sustainable design and construction standards for new development in Cambridge, and provides useful background for suggested approaches to carbon reduction.	Completed
Cambridge Sustainable Drainage Design and Adoption Guide	This guide is primarily intended for use by developers and their consultants where they are seeking adoption of SUDS (Sustainable drainage systems) by Cambridge City Council within the public open space of new developments. It sets out the design and adoption requirements that the City Council will be looking for, in order to ensure a smooth and satisfactory adoption process.	Completed
Cambridge Tree Strategy 2016 to 2026	Sets out Cambridge City Council policies for managing the city's trees to maximise their benefits. Approved in 2015.	Completed

10. Climate Change and Sustainability

Sustainable design and construction standards

What you told us previously

We asked you about the approach to sustainable design and construction standards for the area.

You gave us mixed views. Some said we should seek high standards, and others that we should rely on existing local plan policies and apply on a site by site basis. There was concern from some developers about setting more onerous standards for this area compared to the rest of Greater Cambridge.

- 10.1 The Councils' plans need to respond to the challenge of mitigating and adapting to our changing climate. The CNF should be an exemplar in sustainable living, supporting the transition to a zero carbon society in the face of a changing climate.

- 10.2 Cambridge City Council has set an aspiration in its Climate Change Strategy⁸ for Cambridge to achieve zero carbon status by 2050. South Cambridgeshire District Council has also resolved⁹ to support the transition to "Zero Carbon by 2050" in the next Local Plan.
- 10.3 Climate change mitigation focuses on designing new communities, infrastructure and buildings to be energy and resource efficient, using renewable and low carbon energy generation and promoting patterns of development that reduce the need to travel by less environmentally friendly modes of transport. Climate change adaptation focuses on ensuring that new developments, including infrastructure, and the wider community are adaptable to our changing climate, including issues such as flood risk and designing buildings and homes using the cooling hierarchy so that they can cope with a warming environment without the need to resort to energy intensive means of cooling. Development should take the available opportunities to integrate the principles of sustainable design and construction into the design of proposals.
- 10.4 The adopted Local Plans include a range of policies related to climate change adaptation and mitigation for residential and non-residential uses, including approaches to sustainable building design, renewable and low carbon energy, and sustainable drainage systems. There are many similarities, but the two local plans have different approaches on some issues. However, for this cross-boundary site, a single approach for the area covered by this AAP needs to be identified. This could be done by choosing one of the existing Local Plan standards, by combining the standards, or to develop new higher standards reflecting the Councils commitments towards zero carbon. This could be explored further through new evidence that will inform the new joint Local Plan, including consideration of viability implications.

Carbon reduction and Residential Development:

- 10.5 Given the difference between policy in the adopted Local Plans, it is considered that there are four options that should be explored in relation to carbon reduction from residential development:
- A) a 19% improvement on 2013 Building Regulations (the current Cambridge Local Plan standard); or
 - B) a requirement for carbon emissions to be reduced by a further 10% through the use of on-site renewable energy (the current South Cambridgeshire Local Plan standard); or
 - C) a 19% improvement on 2013 Building Regulations plus an additional 10% reduction through the use of on-site renewable energy.
 - D) consider a higher standard and develop further evidence alongside the new joint Local Plan.

⁸ Zero Carbon Cambridge <https://www.cambridge.gov.uk/climate-change>

⁹ South Cambridgeshire District Council: Full Council Meeting 29 November 2018
<http://scambs.moderngov.co.uk/ieListDocuments.aspx?CId=410&MIId=7252>

- 10.6 Whilst both options A and B seek improvements above standard development requirements, the advantage of option A over option B is that it promotes an approach to carbon reduction that would focus on making improvements to baseline fabric and energy efficiency requirements, for example through higher performing insulation, before consideration is given to energy generation, an approach that is known as ‘fabric first’. While renewable and/or low carbon energy is still likely to play a role in meeting the requirements of this option, it will only be applied once measures to enhance fabric performance and energy efficiency have been considered and applied following the energy hierarchy of Be Lean, Be Clean and Be Green. A further option would be to require a combination of the two, as shown in option C. Alternatively, the Council could explore whether a higher standard is practicable alongside the new joint Local Plan, as shown in Option D.

Issue: Carbon Reduction Standards for Residential Development

Question 61: Within this overall approach, in particular, which option do you prefer in relation to carbon reduction standards for residential development?

A - a 19% improvement on 2013 Building Regulations (the current Cambridge Local Plan standard); or

B - a requirement for carbon emissions to be reduced by a further 10% through the use of on-site renewable energy (the current South Cambridgeshire Local Plan standard); or

C - a 19% improvement on 2013 Building Regulations plus an additional 10% reduction through the use of on-site renewable energy (combining the current standards in the Local Plans); or

D - consider a higher standard and develop further evidence alongside the new joint Local Plan.

Sustainable Design and Construction Standards

- 10.7 The following approach is proposed for all developments in the AAP area.

Residential Development:

- Water efficiency – a maximum of 110 litres/person/day (the current standard in both Local Plans, reflecting the Government’s alternative water efficiency standard that can be applied in areas of water stress).

Non-residential development:

- Minimum requirement for achievement of BREEAM ‘excellent’ with full credits achieved for category Wat 01 of BREEAM. Carbon reduction would be dealt with via the mandatory requirements associated with category Ene 01 of BREEAM.

All development:

- A requirement for all flat roofs to be biodiverse roofs (green or brown) or roof gardens (where roof spaces are proposed to be utilised for amenity space);
- Requirements related to electric vehicle charging infrastructure to support the transition to low emissions vehicles;
- In order to minimise the risk of overheating, all development must apply the cooling hierarchy as follows:
 - Reducing internal heat generation through energy-efficient design;
 - Reducing the amount of heat entering a building in summer through measures such as orientation, shading, albedo, fenestration, insulation and green roofs;
 - Managing heat within the building, e.g. through use of thermal mass and consideration of window sizes;
 - Passive ventilation;
 - Mechanical ventilation;
 - Only then considering cooling systems (using low carbon options).

Overheating analysis should be undertaken using the latest CIBSE (Chartered Institute of Building Services Engineers) overheating standards, with consideration given to the impact of future climate scenarios.

- 10.8 In order to demonstrate how the principles of sustainable design and construction have been integrated with proposals, sustainability statements will need to be submitted with planning applications, including a site wide Sustainability Statement at the outline planning application stage, which should set overarching targets for the development.

Issue: Sustainable design and construction standards

Question 62: Do you support the approach to sustainable design and construction standards suggested for the AAP?

Reviewing Sustainability Standards in the future

- 10.9 Consideration should also be given to how sustainability targets could be reviewed over time in light of the transition to a zero carbon society. In light of the recent [Intergovernmental Panel on Climate Change \(IPCC\)](#) report on the impacts of global warming of 1.5 degrees above pre-industrial levels, government have asked the Committee on Climate Change to provide advice in relation to the UK's long term carbon reduction targets¹⁰. This includes options for the date by which the UK should achieve a) a net zero greenhouse gas target and/or b) a net zero carbon target in order to contribute to the global ambitions set out in the Paris Agreement.

- 10.10 Given the lengthy timescales for development at the CNF, it is important to ensure that development in the area supports the road to zero carbon development and for the AAP to be clear that review mechanisms could be built into any planning permissions in order to reflect changes in local and national policy.

Issue: Reviewing Sustainability Standards in the future

Question 63: Do you support the proposal for the AAP to be clear that review mechanisms should be built into any planning permissions in order to reflect changes in policy regarding sustainable design and construction standards in local and national policy? What other mechanisms could be used?

Site wide approaches to sustainable design and construction

- 10.11 The development of the CNF should deliver an exemplar of sustainable living. There are many ways in which this requirement can be demonstrated. Development at the scale being considered for the area provides an opportunity for site wide approaches to be taken in the following key areas:
- Energy provision, through the development of decentralised energy systems and innovative approaches to energy infrastructure such as smart energy grids;
 - Community scale approaches to water, taking an integrated approach to water management, which gives consideration not just to reducing flood risk but also considers opportunities for water re-use and the wider benefits of managing water close to the surface.
 - Application of the [BREEAM Communities International Technical Standard](#) to the masterplanning of the site.
- 10.12 The infrastructure necessary for decentralised energy would need to be explored at a very early stage in consultation with utilities providers, including local authorities, and designed in at the front end of development in order to minimise costs and to appropriately phase the installation with the build out of the development. Consideration should be given to a range of technologies and options for decentralised energy, taking account of future carbon intensity of different energy sources and the decarbonisation of heat, in order that reduction of carbon emissions is secured over the long term. Any proposals for district heat networks should comply with current best practice for district energy by following the guidance set out in the CIBSE/ADE guide "[CP1 : Heat Networks: Code of Practice for the UK](#)", in order to ensure that the heat network operates effectively and meets client and customer expectations.

Issue: Site wide approaches to sustainable design and construction

Question 64: Do you support the plan requiring delivery of site wide approaches to issues such as energy and water, as well as the use of BREEAM Communities International Technical Standard at the masterplanning stage?

Question 65: Are there additional issues we should consider in developing the approach to deliver an exemplar development?

Drainage / SUDS

- 10.13 The AAP will need to incorporate policy requirements to achieve appropriate sustainable drainage systems (SUDs). The Councils have adopted guidance regarding sustainable drainage design that includes long-term management and maintenance.
- 10.14 Policies could seek to integrate a SUDs network into the Fen edge landscape that could help to enhance opportunities for specified species as well as providing a sense of place.

Biodiversity

- 10.15 National planning guidance requires that plans should seek to achieve net gains in biodiversity. The Government started a consultation on 2 December 2018 which proposes that developers could be required to deliver a mandatory 'biodiversity net gain' when building new housing or commercial development – meaning habitats for wildlife must be enhanced and left in a measurably better state than they were pre-development.
- 10.16 The urban area will require innovative solutions, which preserve and enhance the green infrastructure network, including enhancing existing assets like the First Public Drain. There are opportunities to drive a coordinated approach to extensive biodiverse green roof provision to provide a mosaic of different accessible and inaccessible roof top habitats. It may also be possible to target specific species early on in the design process to help create a sense of place and deliver measurable net gains in a dense urban development. Tree cover also has benefits for urban cooling, as identified in the Cambridge Tree Strategy 2016 to 2026.
- 10.17 If net gain cannot be achieved fully on site, off site improvements may be required.

Issue: Biodiversity

Question 66: What approach should the AAP take to ensure delivery of a net gain in biodiversity?

SMART Technology

- 10.18 . The Connecting Cambridgeshire Partnership is exploring Smart Cambridge, and ways to improve digital infrastructure. It is exploring transport related programmes on how make better use of data, utilise emerging technology and collaborate with businesses and the community.
- 10.19 Part of making a sustainable new city district will be ensuring that opportunities are taken to integrate smart technologies from the outset. This could allow city

managers of the future to understand in real time transport, energy, air quality and other liveability factors.

Issue: Smart technology

Question 67: Should the AAP require developments in the area to integrate SMART technologies from the outset?

Waste Collection

10.20 A fragmented system of waste collection in high density residential areas can lead to reduced recycling rates, increased emissions from collection vehicles, and unsightly bins on the street. An underground system of waste collection like the one at the Eddington Development at North West Cambridge could help address these issues. The 'smart bins' used are only collected when sensors indicate they are almost full, reducing collection vehicles miles.

Issue: Waste Collection

Question 68: Should the AAP require the use of an underground waste system where is viable?

Supporting Study	Description	Status
CNF Infrastructure Delivery Plan	A broad assessment of the social and physical infrastructure needed to support the planned development and regeneration of CNF and how these requirements could be met.	To be completed
Development Capacity Study	An assessment of the capacity of the relevant land parcels within CNF to accommodate development (including employment activities, residential and other uses) including the quantum of floorspace and assumed typologies.	To be completed
Health Impact Assessment	An assessment of the health impacts of the proposed policies and proposals of the CNF AAP.	Underway
CNF Transport Assessment – mitigation measures	An assessment of the effectiveness and cost/benefit of potential mitigation measures for implementation within CNF.	To be completed

11. Implementation & Delivery

What you told us previously

We asked you about infrastructure, delivery, and phasing, and different approaches the AAP could take regarding masterplanning.

You told us that we needed to set out clearly infrastructure requirements and costs and funding requirements, and that we needed a clear approach to the relocation of the Water Recycling Centre. Opinions were mixed regarding the approach to masterplanning, but there was support for achieving a comprehensive approach to development.

Phasing and relocations

11.1 The suggested phasing of development and necessary infrastructure requirements is not within the scope of this early stage of the AAP process. Nevertheless, the success of the AAP will be measured based on the delivery of development outcomes within the Plan's timeframe. The Councils are therefore proposing to prioritise land within the AAP that can feasibly be developed early, whilst being conscious of not preventing other development sites from coming forward if market conditions allow for this.

11.2 As set out in Section 7, there is potential to retain existing industrial uses that are compatible with the new proposed development. This could take a number of forms, including replacement as part of the redevelopment of an existing site or relocation to another part of the CNF. It could also be left entirely for the market to determine and resolve. For incompatible uses, a requirement to facilitate relocation elsewhere off-site could aid in bringing development forward more quickly.

Issue: Phasing and relocations

Question 69: Do you agree that the AAP should prioritise land that can feasibly be developed early? Are there any risks associated with this proposed approach?

Question 70: Should the AAP include a relocation strategy in preference of leaving this to the market to resolve?

Funding and delivering the required infrastructure

- 11.3 The Government has recently announced the relaxation of pooling restrictions on the use of planning obligations (Section 106 Agreements) to secure infrastructure delivery on large strategic sites in multiple ownership, such as the CNF.
- 11.4 The intention through the AAP is to put in place a Section 106 regime, specific to the CNF, to ensure all proposed developments across the CNF contributes equitably to the provision and/or funding of all appropriate infrastructure requirements. Once the mix and quantum of land use has been established, the mechanism for ensuring an appropriate apportionment of costs of supporting infrastructure to the land use types and by development distribution and phasing will need to be established.
- 11.5 The chosen approach should ensure the first phases of development do not benefit from spare capacities or are not unduly burdened with a disproportionate infrastructure requirement.
- 11.6 Given the lengthy build out period, it will be necessary to keep the schedule and phasing of infrastructure requirements under review. This may necessitate the setting aside of appropriate land in later phases as a contingency until further monitoring and assessment is undertaken.

Issue: Funding & Delivery of infrastructure

Question 71: Do you agree with an approach of devising a Section 106 regime specifically for the CNF? If not, what alternative approach should we consider?

Question 72: What approach do you consider the most appropriate basis on which to apportion the cost of the infrastructure requirements arising from different land uses to ensure an equitable outcome?

Development viability

- 11.7 The results of the development viability assessments, undertaken to support the extant Local Plan policies of both Cambridge and South Cambridgeshire, indicate a strong residential and employment market with no obvious barriers to delivery and no evidence of market failure in Greater Cambridge.
- 11.8 A managed pace of delivery and a diverse residential product including a range of housing types is required for a sustainable long-term market over the plan period.

However, private market values are not limitless, and there are a significant number of variables that can influence, both positively and negatively, residual land values. When drafting the AAP, more detailed consideration will need to be had to ensure policy requirements strike the right balance between attracting development investment, maximising the amount of affordable housing and achieving sufficient levels of developer contributions to fund the infrastructure needed to create sustainable communities. Flexibility will therefore need to be included to account for changes affecting viability over the build out of the CNF but it is equally important that this does not compromise the certainty the AAP is intended to provide.

Issue: Development viability

Question 73: How should the AAP take into account potential changes over time, both positive and negative, that might affect development viability?

Land assembly & Compulsory Purchase Orders

- 11.9 To achieve the comprehensive regeneration of the CNF and/or to optimise the development potential of land parcels to be realised, land assembly may be required.
- 11.10 It is possible that the AAP will allocate sub-areas to manage the development planned. While such sub-areas will have regard to land ownership, there could be instances where these include land in multiple ownerships. The AAP could allow development within sub-areas to come forward incrementally, however, the constraints posed by site boundaries, neighbouring development or uses, and below-ground services all have potentially limiting consequences for scale, layout and viability. The Councils therefore propose to include requirements for land assembly to achieve the proper planning of development and the ability of development to support the achievement of wider regeneration initiatives or objectives.
- 11.11 Although a tool of last resort, where compulsory purchase is necessary, the Councils do have the ability to use their powers to use compulsory purchase orders when necessary to facilitate development that is in the public interest and which is consistent with the vision and strategic objectives of the AAP.

Issue: Land assembly and Compulsory Purchase Orders

Question 74: Do you agree with the proposal to require land assembly where it can be demonstrated that this is necessary for delivering the agreed masterplan for the CNF and/or the proper planning of development?

Question 75: Should the AAP state that the Councils will consider use of their Compulsory Purchase powers? If so, should the AAP also set out the circumstances under which this would appropriate?

Joint Working

- 11.12 The Councils consider there is significant potential for joint working on a range of matters between the landowners/developers of the various landholdings across the CNF. In particular, this could include the masterplanning of individual development sites but also in respect of preparing detailed studies in support of planning applications through to construction logistics and post implementation monitoring.

Issue: Joint Working

Question 76: Should the Councils actively seek to facilitate joint working between the various landowners/developers within the CNF? If so, what specific matters could we target for joint working?

Development ahead of the AAP

- 11.13 While the Councils welcome the significant developer interest being shown in the regeneration of the CNF, the Councils consider that the future development context of the CNF should be plan-led and not determined through planning applications for individual sites ahead of the AAP.
- 11.14 Applications for development ahead of the adoption of the AAP will therefore be determined in accordance with the extant policies of the relevant local plan(s). In this context, regard will also need to be had to existing site and surrounding circumstances including the impacts of odour from the Water Recycling Centre and the capacity constraints on Milton Road. It will also be necessary to demonstrate that the proposed development would not prejudice development within the CNF area or the achievement of the comprehensive vision for the area as a whole as set out in the Local Plans.

Issue: Pre-AAP Planning Applications

Question 77: Do you agree with the Councils' proposed approach to dealing with planning applications made ahead of the AAP reaching a more formal stage of preparation?

Meanwhile (Temporary) Uses

- 11.15 Meanwhile use can provide for a range of temporary uses and activities, making efficient use of land that would otherwise be left vacant during large-scale phased development, and providing the opportunity to quickly bring life and activity to an area before permanent development begins.
- 11.16 Meanwhile uses can also act as a prototype of the character that regeneration might provide, ensuring early understanding of the future place. It can also have the added benefit of providing an interim income stream while also enhancing the attractiveness of a place to potential future tenants. What's more, businesses may

also flourish and provide ready made tenants that can migrate into permanent space over time.

- 11.17 However, it may be appropriate to introduce some requirements over meanwhile use. This could take the form of a light touch, limiting the consideration of acceptability to the type of use proposed, its scale and how long they should be allowed to operate for. Alternatively, proposals could have to demonstrate how they contribute to the vibrancy of the immediate area and/or support the delivery of the development outcomes and vision for the CNF.

Issue: Meanwhile (Temporary) Use

Question 78: What types of 'meanwhile uses' should the AAP support for the CNF?

Question 79: Should there be any limit on the scale of a proposed 'meanwhile use'?

Question 80: Do you think it appropriate to set a maximum period for how long a 'meanwhile use' could be in operation?

Question 81: Should the AAP also include a requirement for 'meanwhile uses' to demonstrate how they will add vibrancy and interest and/or deliver on the wider development outcomes and vision for the CNF?

12. General Issues

Equalities Impacts

- 12.1 The Issues and Options Report has been subject to an Equalities Impact Assessment (EQIA). This identified neutral or positive impacts on protected characteristics. We will continue to use the EQIA process to inform the AAP as it moves through the plan making process.

Issue: Equalities Impacts

Question 82: What negative or positive impacts might the proposed plans have on residents or visitors to Cambridge with low incomes or who have particular characteristics protected under the Equality Act 2010? (The protected characteristics are age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.)

Any other comments

- 12.2 This is your opportunity to tell us what you want the CNF to be like, and other issues related to the AAP that we have not already covered. In particular, are there other issues and alternatives that we should consider?

Issue: Any other comments

Question 83: Do you have any other comments about the CNF area and/or AAP? Are there other issues and alternatives that the councils should consider? If you wish to make suggestions, please provide your comments.

Appendix 1: Adopted Local Plan Policies for Cambridge Northern Fringe

South Cambridgeshire Local Plan 2018 (Extract)

Cambridge Northern Fringe East

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

1. The Cambridge Northern Fringe East and Cambridge North railway station will enable the creation of a revitalised, employment focussed area centred on a new transport interchange.
2. The area, shown on the Policies Map, and illustrated in Figure 6, is allocated for high quality mixed-use development, primarily for employment within Use Classes B1, B2 and B8 as well as a range of supporting uses, commercial, retail, leisure and residential uses (subject to acceptable environmental conditions).
3. The amount of development, site capacity, viability, time scales and phasing of development will be established through the preparation of an Area Action Plan (AAP) for the site. The AAP will be developed jointly between South Cambridgeshire District Council and Cambridge City Council, and will involve close collaborative working with Cambridgeshire County Council, Anglian Water and other stakeholders in the area. The final boundaries of land that the joint AAP will consider will be determined by the AAP.
4. All proposals should:
 - a. Take into account existing site conditions and environmental and safety constraints;
 - b. Demonstrate that environmental and health impacts (including odour) from the Cambridge Water Recycling Centre can be acceptably mitigated for occupants;
 - c. Ensure that appropriate access and linkages, including for pedestrians and cyclists, are planned for in a high quality and comprehensive manner;
 - d. Recognise the existing local nature reserve at Bramblefields, the protected hedgerow on the east side of Cowley Road which is a City Wildlife Site, the First Public Drain, which is a wildlife corridor, and other ecological features, and where development is proposed provide for appropriate ecological mitigation, compensation, and enhancement

- 3.29 Cambridge Northern Fringe East (CNFE) is located within the Cambridge City Council and South Cambridgeshire District Council authority boundaries. The majority of the area is within Cambridge with Chesterton Sidings and part of the St John's innovation Park within South Cambridgeshire. An early review of the site through a jointly-prepared Area Action Plan (AAP) will ensure a coordinated approach is taken. This will enable the feasibility of development and its viability to be properly investigated and will ensure a comprehensive

approach to redevelopment.

- 3.30 The railway station, on the sidings in South Cambridgeshire, will be served by the Cambridgeshire Guided Busway and will include cycle parking facilities and car parking. The station will significantly improve the accessibility of the site and surrounding area including access to and from the Cambridge Business Park, St John's Innovation Park and Cambridge Science Park making the area a highly attractive business destination.
- 3.31 Cambridge North railway station will provide a catalyst for regeneration of this area. Early development around Cambridge North station could help create a vibrant area around this key infrastructure to meet the needs of users of the station and bring forward further phased delivery elsewhere within the CNFE area. Planning applications submitted before the adoption of the AAP will be considered on their own merits and subject to ensuring that they would not prejudice the outcome of the AAP process and the achievement of the comprehensive vision for the area as a whole that will be established by the AAP.
- 3.32 The adopted Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011) and Site Specific Proposals Plan (2012) designates a safeguarding area for the existing Cambridge Water Recycling Centre and another for an existing aggregates railhead; as well as a Waste Consultation Area for an existing waste management facility. In addition, it identifies an area of search for a household (waste) recycling centre to serve the north of Cambridge and an inert waste recycling facility. Any development proposals will need to be assessed against the above minerals and waste policies and specifically will need to prove they are compatible to ensure the existing safeguarded aggregates railhead and waste operations can continue without conflict.
- 3.33 The sidings, in South Cambridgeshire, currently have a number of businesses importing aggregate using the railway that is used for construction and road maintenance in the wider Cambridge area. This provides an important source of building materials for the wider area.
- 3.34 Exploration of the viability and feasibility of redevelopment of the Cambridge Water Recycling Centre within Cambridge City to provide a new treatment works facility either elsewhere or on the current site subject to its scale will be undertaken as part of the feasibility investigations in drawing up the AAP. If a reduced footprint were to be achieved on the current site this could release valuable land to enable a wider range of uses. Residential development could be an option subject to appropriate ground conditions, contamination issues, amenity and air quality.
- 3.35 The development of Cambridge Northern Fringe East will require partnership working between landowners and developers as well as the two local authorities and Cambridgeshire County Council. Highways England will also be engaged with in relation to strategic road network issues.

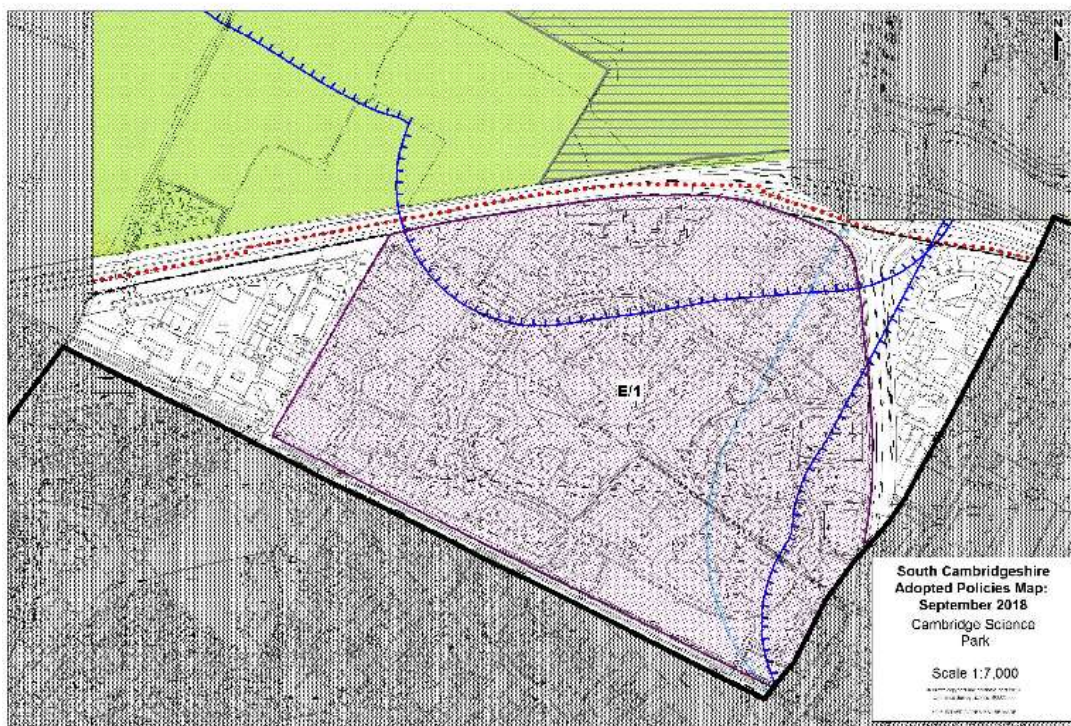


Policy E/1: New Employment Provision near Cambridge – Cambridge Science Park

Appropriate proposals for employment development and redevelopment on Cambridge Science Park (as defined on the Policies Map) will be supported, where they enable the continued development of the Cambridge Cluster of high technology research and development companies.

New Employment Provision near Cambridge

- 8.13 South Cambridgeshire has a good supply and range of existing employment sites. Additionally existing commitments with planning permission provide a wide variety and types of employment development, including significant opportunities at research parks for high technology and R&D, including at Granta Park, Babraham Institute, Wellcome Trust Genome Campus and Cambridge Research Park. At March 2012 planning permission had been granted for 238,298m² (80.3 hectares) of employment. In addition, there are opportunities for significant further provision at Northstowe, and Cambridge University's North West Cambridge development.
- 8.14 The Employment Land Review (2012) identified a particular need for office space in or on the edge of Cambridge. Opportunities have been identified on the northern fringe of Cambridge for additional employment development, taking advantage of the increased accessibility of the area as a result of by the Guided Busway and the planned Cambridge Science Park railway station. Cambridge Science Park has played a crucial role in establishing and supporting the research and development and high tech sectors since the 1970's. Some of the early phases were built at low densities and are forty years old, and there is scope for intensification or even redevelopment. Proposals will need to demonstrate they are compliant with other policies in the Local Plan, particularly in relation to design and transport.
- 8.15 The area around the Cambridge North Station itself has been identified for a high density mixed employment led development, providing a new gateway to the northern part of Cambridge (Policy SS/4).



***Cambridge Local Plan 2018 (Extract)
Cambridge Northern Fringe East***

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

The Cambridge Northern Fringe East and the new railway station will enable the creation of a revitalised, employment focussed area centred on a new transport interchange.

The area, shown on the Policies Map, and illustrated in Figure 3.3, is allocated for high quality mixed-use development, primarily for employment uses such as B1, B2 and B8, as well as a range of supporting commercial, retail, leisure and residential uses (subject to acceptable environmental conditions).

The amount of development, site capacity, viability, timescales and phasing of development will be established through the preparation of an Area Action Plan (AAP) for the site. The AAP will be developed jointly between Cambridge City Council and South Cambridgeshire District Council, and will involve close collaborative working with Cambridgeshire County Council, Anglian Water and other stakeholders in the area. The final boundaries of land that the joint AAP will consider will be determined by the AAP.

All proposals should:

- a. take into account existing site conditions and environmental and safety constraints;

- b. demonstrate that environmental and health impacts (including odour) from the Cambridge Water Recycling Centre can be acceptably mitigated for occupants;
- c. ensure that appropriate access and linkages, including for pedestrians and cyclists, are planned for in a high quality and comprehensive manner;
- d. recognise the existing local nature reserve at Bramblefields, the protected hedgerow on the east side of Cowley Road which is a City Wildlife Site, the First Public Drain, which is a wildlife corridor, and other ecological features, and where development is proposed, provide for appropriate ecological mitigation, compensation and enhancement measures either on- or off-site; and
- e. ensure that due consideration has been given to safeguarding the appropriate future development of the wider site.

Supporting text:

- 3.30 Cambridge Northern Fringe East (CNFE) is within the Cambridge City Council and South Cambridgeshire District Council authority boundaries. The majority of the area is within Cambridge with Chesterton Sidings and part of the St. John's Innovation Park within South Cambridgeshire. An early review of the site through a jointly-prepared Area Action Plan will ensure a coordinated approach is taken. This will enable the feasibility of development and its viability to be properly investigated and will ensure a comprehensive approach to redevelopment.
- 3.31 The new railway station on the sidings in South Cambridgeshire will be served by the Cambridgeshire Busway and will include cycle parking facilities and car parking. The station will significantly improve the accessibility of the site and surrounding area, including access to and from the Cambridge Business Park, St John's Innovation Park and Cambridge Science Park, making the area a highly attractive business location.
- 3.32 The new railway station will provide a catalyst for regeneration of this area. Early development around the new station could help create a vibrant area around this key infrastructure to meet the needs of users of the station and bring forward further phased delivery elsewhere within the CNFE area. Planning applications will be considered on their own merits before the AAP has been adopted and subject to ensuring that they would not unduly prejudice the outcome of the AAP process and the achievement of the comprehensive vision for the area as a whole that will be established by the AAP.
- 3.33 The adopted Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011) and Site Specific Proposals Plan (2012) designate a safeguarding area for the existing Cambridge Water Recycling Centre and another for an existing aggregates railhead; as well as a Waste Consultation Area for an existing waste management facility. In addition, an area of search is identified for a household (waste) recycling centre to serve the north of

Cambridge and an inert waste recycling facility. Any development proposals will need to be assessed against the above minerals and waste policies and specifically will need to prove they are compatible to ensure the existing safeguarded aggregates railhead and waste operations can continue without conflict.

- 3.34 The sidings, in South Cambridgeshire, currently have a number of businesses importing aggregate using the railway that is used for construction and road maintenance in the wider Cambridge area. This provides an important source of building materials for the wider area.
- 3.35 Exploration in respect of the viability and feasibility of redevelopment of the Cambridge Water Recycling Centre to provide a new treatment works facility either elsewhere or on the current site, subject to its scale will be undertaken as part of the feasibility investigations in drawing up the AAP. If a reduced footprint were to be achieved on the current site, this could release valuable land to enable a wider range of uses. Residential development could be an option, subject to appropriate ground conditions, contamination issues and amenity and air quality.
- 3.36 The development of Cambridge Northern Fringe East will require partnership working between landowners and developers, as well as the two local authorities and Cambridgeshire County Council. Highways England will also be engaged with on strategic road network issues.

Figure 3.3: Illustration of Cambridge Northern Fringe East and new Railway Station Area of Major Change



Appendix 2 – Acronyms and Glossary of Terms

Acronyms

Term	Definition
AAP	Area Action Plan
CGB	Cambridge Guided Bus
CNF	Cambridge Northern Fringe
CPCA	Cambridge and Peterborough Combined Authority
CRC	Cambridge Regional College
ECTS	Ely to Cambridge Transport Study
HIF	Housing Infrastructure Fund
HMO	Houses in Multiple Occupation
LPA	Local Planning Authority
NPPG	National Planning Practice Guidance
PRS	Private Rented Sector
R&D	Research and Development
WRC	Waste Water Recycling Centre

Glossary of Terms

Term	Definition
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.
Area action plan (AAP)	A local plan document setting out policy and proposals for a specific area.
Affordable housing	<p>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 for essential local workers); and which complies with one or more of the following definitions:</p> <p>a) Affordable housing for rent: meets all of the following conditions: (a) the rent is set in accordance with the Government's rent policy for Social Rent or Affordable Rent, or is at least 20% below local market rents (including service charges where applicable); (b) the landlord is a registered provider, except where it is included as part of a Build to Rent scheme (in which case the landlord need not be a registered provider); and (c) it includes provisions to remain at an</p>

	<p>affordable price for future eligible households, or for the subsidy to be recycled for alternative affordable housing provision. For Build to Rent schemes affordable housing for rent is expected to be the normal form of affordable housing provision (and, in this context, is known as Affordable Private Rent).</p> <p>b) Starter homes: is as specified in Sections 2 and 3 of the Housing and Planning Act 2016 and any secondary legislation made under these sections. The definition of a starter home should reflect the meaning set out in statute and any such secondary legislation at the time of plan-preparation or decision-making. Where secondary legislation has the effect of limiting a household's eligibility to purchase a starter home to those with a particular maximum level of household income, those restrictions should be used.</p> <p>c) Discounted market sales housing: is that sold at a discount of at least 20% below local market value. Eligibility is determined with regard to local incomes and local house prices. Provisions should be in place to ensure housing remains at a discount for future eligible households.</p> <p>d) Other affordable routes to home ownership: is housing provided for sale that provides a route to ownership for those who could not achieve home ownership through the market. It includes shared ownership, relevant equity loans, other low cost homes for sale (at a price equivalent to at least 20% below local market value) and rent to buy (which includes a period of intermediate rent). Where public grant funding is provided, there should be provisions for the homes to remain at an affordable price for future eligible households, or for any receipts to be recycled for alternative affordable housing provision, or refunded to Government or the relevant authority specified in the funding agreement.</p> <p>Source: NPPF 2018</p>
BREEAM Communities International Technical Standard	A simple and flexible route to improving, measuring and certifying the sustainability of large-scale development plans, and the masterplanning of new communities or regeneration projects.
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'.
Cambridge Cluster	Refers to the 1,400+ technology, biotechnology, services providers and support companies and organisations comprising

	more than 40,000 people employed by these in the Cambridge region.
Cambridge Sub Regional Model (CSRM2)	Used to forecast the demand for travel between origin and destination 'zones' by different modes of transport. The CSRM outputs are fed into a road traffic model, which is used to forecast the routes that traffic will take between each pair of origin and destination zones.
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, James Palmer, who was elected on 5th May 2017. http://cambridgeshirepeterborough-ca.gov.uk/
Cambridgeshire and Peterborough Minerals and Waste Plan	Comprises a suite of documents including the Core Strategy and Site Specific Proposals Plan adopted by Cambridgeshire County and Peterborough City Councils. There is also an adopted Proposals Map, which shows allocated sites and areas of search for future minerals and waste facilities, and safeguarding areas for existing and future facilities.
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.
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.
Decentralised Energy	Local renewable and local low-carbon energy sources.
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.
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.
Greater Cambridge Partnership	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	A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.
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.
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.
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora. (Source: NPPF)
Houses in multiple occupation (HMO)	An HMO, depending on the number of occupants, is classed as either: <ul style="list-style-type: none"> • a. small HMO – this is a shared dwelling house which is occupied by between three and six unrelated individuals who share basic amenities such as a kitchen or bathroom. This falls into use class C4 under the Town and Country Planning (Use Classes) Order 2010; or • b. larger HMO – This is when there are more than six unrelated individuals sharing basic amenities such as a kitchen or bathroom. This falls into the sui generis class under the Town and Country Planning (Use Classes) Order 2010.
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.
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.
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.
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.
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. https://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. https://www.gov.uk/government/collections/planning-practice-guidance
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.
Outline Planning Permission / Approval	Are planning applications that seek to establish the development principles of a site, such as the type, scale and nature of land uses considered acceptable, before a fully detailed planning application is put forward.
Reserved Matters Planning Permission / Approval	Applies to Outline Planning Permissions that have been granted, where the applicant is required to submit and get approval from the LPA on specific details ("reserved matters") of the proposed development before work can start.
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.
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.
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.
Skyline	An outline of land and buildings defined against the sky: the skyline of the city.
Smart technology	The Smart Cambridge project define What makes a smart city on their website:

	<p>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:</p> <p>Transport: making travel easier, reducing congestion, and exploring intelligent mobility</p> <p>Environment: managing our water, energy, air quality and waste</p> <p>Healthcare: catering for an ageing population and providing public health</p> <p>Smart living: improving the quality of life for communities in and around the city.</p>
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	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	Resolution 42/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The UK Sustainable Development Strategy Securing the Future set out five 'guiding principles' of sustainable development: living within the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.
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.

Use classes order	<p>The Town and Country Planning (Use Classes) Order 1987 (as amended) puts uses of land and buildings into various categories known as use classes. More detail on what types of uses fall within each use class is set out below.</p> <p>Planning permission is not needed when both the present and proposed uses fall within the same class. For example, a greengrocer's shop could be changed to a shoe shop without permission as these uses both fall within use class A1. However any physical changes associated with a development may still require planning permission.</p> <p>The General Permitted Development Order also allows some changes from one use class to another without the need for planning permission. For example, a restaurant (class A3) could be changed to a shop (A1) or an estate agent (A2) as the use classes order allows this type of change to occur without requiring planning permission.</p>
Walkable (neighbourhood)	<p>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.</p>
Zero carbon development	<p>Zero carbon development is development that results in no net emissions of carbon dioxide into the atmosphere.</p>