Cambridgeshire Quality Panel

Eddington – Future Phases

Monday 28th April 2025

Storey's Field Centre, Eddington Ave, Cambridge

Panel: Robin Nicholson (chair), Kirk Archibald, David Birkbeck, Fiona Heron, Lynne Sullivan, and David Taylor.

Local Authority: Jonathon Brookes (GCSP), Guy Wilson (GCSP), Sarah Chubb (GCSP), and Helen Sayers (GCSP).

The Cambridgeshire Quality Charter for Growth sets out the core principles for the level of quality to be expected in new development across Cambridgeshire. The Cambridgeshire Quality Panel provides independent, expert advice to developers and local planning authorities against the four core principles of the Charter: connectivity, character, climate, and community.

Development overview

Eddington, located in north-west Cambridge between Huntingdon Road and Madingley Road, falls within the administrative boundaries of Cambridge City Council and South Cambridgeshire District Council. The development is allocated in the local plans and governed by the North West Cambridge Area Action Plan (2009).

The initial planning permission allowed for 3,000 homes, evenly divided between market housing and University key worker accommodation. Additionally, the approved 2013 scheme included 2,000 student spaces, employment opportunities, and community facilities.

To date, 1,848 dwellings have been constructed or granted permission, along with supporting infrastructure. However, the remaining housing allocation has expired. The University is now preparing new proposals to develop the remaining part of the site, aiming to expand the total number of dwellings from 3,000 to approximately 5,650.

A planning application is expected to be submitted in autumn 2025.

Presenting team

The scheme is promoted by the University of Cambridge supported by Hawkins Brown Architects, Max Fordham, Grant Associates, KMC and Quod. The presenting team was: -

Diego Grinberg – Hawkins Brown, Darryl Chen – Hawkins Brown, Claire Hobart – Grant Associates, Hero Bennett – Max Fordham, Elliot Page – KMC, Matt Johnson – University of Cambridge, David Smith – University of Cambridge, Rebecca Saunt – University of Cambridge, and Matt Sherwood – Quod.

Local authority's request

The Panel were asked to focus on matters related to vision and quality; density and massing, employment land to the north-west part of the site, openness and character

of sports in the Girton Gap, community development of the new housing mix, and integration of new strategies into the masterplan and control documents.

Several questions of clarification or fact were raised as summarised here.

Is there data on the percentage of land used for car storage? There isn't but as the amount of parking has decreased, savings will be made.

How has the scale of development changed? Phase 1 had a housing density of 91 dwellings per hectare, while Phase 2 has increased to 114 dwellings per hectare. Despite this intensification, the overall character of the development will remain similar.

Will there be many single aspect dwellings? Around 25% of the dwellings may be single aspect.

What is the parking ratio? The policy position is 1:1, but the proposals are for 0.43:1.

Will the mid-tech units be accessible from the main site? Yes, pedestrians and cyclists will have direct access, but vehicular entry will be restricted to Huntingdon Road.

What is the Behavioural and Performance Group? The Behavioural and Performance Group (BPG) is a research team within the Department of Architecture. They have been commissioned to enhance understanding of future project phases and have produced a comprehensive 115-page report on their findings

Cambridgeshire Quality Panel summary

Eddington set a remarkable standard of aspiration and vision when it emerged over a decade ago. The Panel is eager to see this excellence mirrored in the next phase, though it remains to be convinced that will happen. It may be good to reconsider the presentation and establish the evidence-based vision before diving into the detail.

These views are expanded upon below, and include comments made in closed session.

Community – *"places where people live out of choice and not necessity, creating healthy communities with a good quality of life"*

The updated development mix indicates a higher proportion of one-bedroom units and potentially more senior living options than before. This shift makes it essential to consider how the community is evolving and how both existing and planned infrastructure will accommodate these changes. Will downsizers be factored into these considerations as well?

The current mix of housing types might not cater to varied demographics and needs. Could introducing more diverse housing typologies help create a more inclusive community – it seems very homogenous.

The Common feels underwhelming. If it's meant to be a vibrant heart of the development, does its design encourage activity, gathering, and a dynamic public realm? Could it be better integrated into surrounding spaces or is it designed just to accommodate taller buildings?

As you move northwards, there seems to be a loss of momentum or identity. Where is the real community focus, and does the design unintentionally dilute engagement and vibrancy?

Are the mobility hubs equitably positioned across the site to serve all users? Could they be better connected to key destinations, ensuring accessibility without creating barriers?

Will there be spaces for teenagers to hang out in and what about Padel provision – as one of the fastest growing sports globally.

Connectivity – *"places that are well-connected enable easy access for all to jobs and services using sustainable modes"*

The transport strategy is good at the going in and out element but perhaps you need to go down a level to understand the movement analysis and links with Darwin Green and why. There are strong radial links to Cambridge, but the illustrated big arrow goes to Darwin Green.

Look at Eddington as a city quarter over time, from say 2010 before the development commenced through 2013/15 and then to today and beyond. This will help us all understand the evolution of patterns of movement.

The movement profile is good, but it would have been good to know what fundamentals have affected it, such as working from home for example.. It is not clear if the bottom up and top down approaches have met.

Rationalising road space can free up more space for better uses. Cars have increased safety features now, which together with reduced speed limits and good road design can mean less road space is necessary.

Podium parking is not the success it was hoped it would be as it is inflexible and carbon intensive. Gardens on podiums are often not very successful.

There is a fascinating shift in urban mobility and personal transport habits. As e-bikes and other micro-mobility options become more prevalent, vehicle storage solutions will need to evolve to accommodate this dual-vehicle lifestyle.

Secure, convenient bike storage solutions are important as traditional bike racks may not suffice for high-value e-bikes. People will want secure and weather-protected storage integrated into residential buildings, office spaces, and transport hubs. Think smart lockers, charging stations, and small in-home storage spaces.

If car ownership shifts toward weekend use, dedicated parking spaces might be used differently—perhaps repurposed into multi-functional storage areas. Shared car access models could gain popularity, making designated parking spots less critical for individuals. Many might consider subscription-based car access instead of full ownership, reducing the need for permanent parking at home. Studies, such as from the Kings Foundation, have looked at percentages of space needed for storage, and this is worth considering for how it can be optimised for greater efficiency.

Rethink parking space allocations, moving away from expansive car parks in favour of bike storage solutions or multi-modal transport hubs that seamlessly integrate cars, public transit, and e-bikes.

This transformation isn't just about storage—it's about designing places around actual mobility needs**,** creating convenience without compromising security.

What is the strategy for edge-of-town and back trips for e-bikes?

Storage provision can affect housing design too. Typical housing frontages can be around 7m but in Cambridge they can need to be up to 14m wide to accommodate storage for bikes, cars and bins.

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

Did the BPG research include looking at the success or failure of sustainable features in phase 1, as it was exemplary at the time? What is the cost of energy for residents and was the Combined Heat and Power and water recycling systems worth doing?

It was heard that some of these features have not been as successful as hoped either as a result of legislation or design making them unviable to continue into phase 2 and more localised or conventional solutions will be used instead.

The widespread use of full height glazing was challenged because of the over-heating this causes. 25% of single aspect units is a concern and seems very high against normal standards. Do the passive air vents perform well in phase 1?

Consider the weather profiles towards 2080 – it is not that far away.

Will air quality be good inside? How has opening windows for fresh air on the M11 side worked with noise impacts?

Brick is a robust if high carbon building material, but how have the composites performed?

Is there a baseline figure for embodied carbon for phase 1 than can be used to set targets for phase 2?

Consider non-domestic buildings too and their embodied carbon and operational performance.

Water should be kept where it falls as much as possible and then distributed in rills which would be wonderful around the development.

Consideration of soils and its carbon content is most welcome and enhancement with biochar is recommended.

The BNG of +10% seems unambitious although it was heard that the work undertaken in phase 1 cannot be counted so the baseline is set at 2024 which makes this more challenging. Off-site works for biodiversity creation will all be within 2 miles of the development.

The ambition for phase 2 does not seem to have grown from the experience of phase 1.

The university confirmed they will retain general ownership and stewardship of the site/estate, which was welcomed for securing the long-term aspirations and sustainability performance of the site.

Will here be PVs and battery storage across these phases?

Character – *"Places with distinctive neighbourhoods and where people create 'pride of place'*

Remember to look back at lessons learnt from phase 1.

The streets still seem a little harsh, so use as many big trees as possible. Chestnut Avenue will not always be there either so consider succession planted too.

Variety is important, there is too much that looks the same, so define buildings more clearly. The landscape could be softened, and the Panel were not sure the angled buildings are needed or work – they create odd shapes, and something better could be done by the landscape.

The western edge and where the formal meets the informal needs more thought to define character better.

Use water more through the site and not just in the greener areas.

Develop the play strategy so it is not just logs in woods. Be innovative and think about all types of play – balancing, swinging etc. – and perhaps use technology too.

Will interactions in the mobility hubs be more than just utility led or can they be places for people to loiter, play and socialise.

Ensure the site is legible and bring the green in more

Not a great sense of place yet, this needs to be brought out more.

Will the procurement strategy for the plots be across streets or be bounded by the streets? The former is a better approach for making place.

Cartwright Avenue is not just a corridor for movement but should be thought of as a series of places as it has a social function too. The mid-tech units seem cut off from the rest of the site; it should be announced better and be less separated. Will they have good access to sports and social facilities?

Whilst the panel is not concerned about the 6-storey element, be mindful of the new regulatory impacts on higher buildings.

Could the plots parallel with Huntingdon Road be used for self-build? These would seem to work well in this location and likely to be viable.

Although the build out rate would seem to be healthy for Cambridge in general, greater diversity in terms of housing typology can future-proof sales.

Specific recommendations

The Panel expressed their gratitude to the applicant for their presentation and underscored their role as constructive critics in this process for all involved parties. Although certain remarks may come across as robust, this stems from the exemplary standards established during phase 1, which the Panel is eager to see upheld in phase 2.

Community and Social Infrastructure

- Evaluate whether the mix and provision foster a sustainable, diverse community.
- Reassess social facility locations; current layout seems scattered.
- Ensure the Common serves as a vibrant social hub, not just a backdrop for taller buildings.

Design and Quality

- Future-proof dwelling mix, typologies, and frontage widths.
- Minimize hard surfaces and embed quality throughout the project.
- Reevaluate building angles for better functionality.

- Enhance legibility to emphasize Cartwright Avenue as both a place and corridor.

Environmental and Sustainability Goals

- Promote carbon targets, biochar use, and soil-conscious strategies.
- Expand biodiversity net gain (BNG) potential.
- Maximize green assets, including large trees, photovoltaic systems, and battery storage.

Transportation and Connectivity

- Define a robust public transport strategy.
- Balance car use with efficient storage solutions for vehicles, bikes, and bins.
- Address podium design challenges thoughtfully.

Land Use and Building Efficiency

- Analyse land use percentages to optimize planning.
- Reconsider 25% single-aspect dwellings
- Rethink the northern end's functionality and explore less segregated mid-tech units.
- Integrate self-build plots near Huntingdon Road

Innovative Solutions

- Challenge the prevalence of full height glazing to avoid overheating.
- Leverage the Research Group's expertise for greater impact.
- Investigate Octopus Energy's zero-bill offer for energy savings.

The opportunity for ongoing engagement with the developer and design team would be welcomed as the scheme develops.

Contact details

For any queries in relation to this report, please contact the panel secretariat via growthdevelopment@cambridgeshire.gov.uk

Author: SC

Issue date: 7th May 2025

Appendix A – Background information list and plan

- Main presentation
- Local authority background note

Documents may be available on request, subject to restrictions/confidentiality.

Phase 1 Plan (Source: University of Cambridge)

Cambridgeshire Quality Panel

Eddington Masterplan – revised proposals

Thursday 28th November 2024

Sanders Hall, Postdoc Centre at Eddington, 105 Eddington Place Cambridge CB3 1AS

Panel: Robin Nicholson (chair), John Dales, Lynne Sullivan, Steve Platt, Fiona Heron and David Birkbeck

Local Authority: Guy Wilson (GCSP), Jonathan Brookes (GCSP), Sarah Chubb (GCSP), and Helen Sayers (GCSP)

Others: Emma Everitt (observer), Rachael Pinion (observer)

The Cambridgeshire Quality Charter for Growth sets out the core principles for the level of quality to be expected in new development across Cambridgeshire. The Cambridgeshire Quality Panel provides independent, expert advice to developers and local planning authorities against the four core principles of the Charter: connectivity, character, climate, and community.

Development overview

In 2013, outline planning consent was granted for the 150 hectare site – known as Eddington - for 1500 homes for University and College key workers, 1500 homes for sale, accommodation for 2000 post-graduate students, 100,000 square metres of research facilities (including 40,000 square meters for research institutes and private research facilities linked to the University), and a wide range of community facilities, including a primary school.

The vision for Eddington is to create a place that is sustainable, long-lasting and ambitious, offering a high quality of life to enhance both the City and University of Cambridge.

Now, a replacement outline permission is required to facilitate development of the balance of the site to deliver an uplift in the number of dwellings, from the original 3,000 to up to 6,000. The final capacity is yet to be decided and is proposed to be determined by a combination of design testing and understanding of infrastructure constraints.

This review considers the revised proposals for the Masterplan.

Presenting team

The scheme is promoted by the University of Cambridge and supported by Hawkins Brown, Grant Associates, Max Fordham, Quod and KMC. The presenting team is:

Diego Grinberg and Darryl Chen (Hawkins Brown), Claire Hobart (Grant Associates), Hero Bennett (Max Fordham), Elliot Page (KMC), Matt Johnson, David Smith, Paul Milliner and Becky Saunt (University of Cambridge)

Local authority's request

The local authorities are Cambridge City Council and South Cambridgeshire District Council, represented by the Greater Cambridge Shared Planning Service, who have asked the Panel to focus on several issues associated with updating the vision to take account of changes of approach and pressures since the consented scheme; integration of mid-tech uses; impacts of the M11 and how to create a successful urban edge; addressing increased density whilst upholding existing parameters; orbital routes and connectivity; and sustainability and biodiversity.

Cambridgeshire Quality Panel summary

The Panel are excited by the emerging plans for the revised masterplan, having been involved in the development since the very beginning and hope that lessons learnt from the first phase, together with new updated aspirations will lead to the on-going success of Eddington.

Thanks for the presentation were given, and several questions raised as follows.

Will there be an internal design and review panel as there was for the first masterplan? The applicant responded that this does not exist anymore.

In many cases, existing streets on Phase 1 are too wide. What are the dimensions of the streets – it is hard to tell? The primary street is 6.2m carriageway with a 3m bi-directional cycleway. Tertiary streets are 5.5m plus footway, and community lanes 4.5m. Edge-to-edge, the maximum width is 18m.

Are existing houses on Huntingdon Road being consulted on the plans? Yes, the University has engaged with these residents to outline mitigation measures whether that be 20m gardens to new-builds or 20m no build zones to facilitate rear accesses.

How will infrastructure, such as roads be procured? In the past the university undertook more direct delivery of all infrastructure but going forward, whilst it will still deliver the primary roads, lower order roads will be more of a partnership approach with plot developers.

The emerging plans are moving away from basement parking, which will mean less spoil and soil for mounds and acoustic barriers. Is this an issue? No, a lesson learnt from phase 1 is that the acoustic performance was small from the mounds and acoustic mitigation is not a great concern anyway with dual aspect dwellings and greater thought in design to mitigate noise better.

Higher density development may impact on energy demand and renewable provision. It is not clear what types of renewable energy there will be. It was answered that the levels achieved on phase one may not be practical going forward as there are less houses to host PVs – it will be a case of doing what can be achieved to optimise carbon reduction. The heat network will not be expanded, instead the best available solution at the time will be used.

Will allotments be successful given the transient nature of some of the residents? Allotments are a policy requirement and opportunities to grow food at or near the doorstep will be given too, to encourage all. Many of the houses will be market provision and therefore have longer-term residents, so they may be more likely to use the allotments.

What is the timetable? It is envisaged that there will be a planning application made in the summer of 2025.

The views of the Panel are expanded upon below, which include some comments made in closed session.

Community – *"places where people live out of choice and not necessity, creating healthy communities with a good quality of life"*

The challenge will be to build the new community and understand how long that will take and when the critical mass will exist to support the necessary additional infrastructure, services and facilities. There has been a lot of public consultation – which is good – but this seems to have been quite general rather than deeper engagement on the bigger issues which would make people feel that they have a say and stake in the emerging community.

Will there be a need to provide another centre towards the north of site? Where will the keyworker housing be? What will car levels be? How many children will there be and can they be accommodated at the on-site primary school and off-site secondary school?

The community need to have a framework in which they can have their say to ensure that this really is part of the wider city and not a university campus. What community facilities are missing from the first phase?

Social housing is important in providing balanced communities and this is reflected across the wider city and in the mix of children attending schools too. Such housing should be considered as well as keyworker housing to help support a mixed and balanced community as seen elsewhere in Cambridge.

The scheme does not feel intimate because of the highway design dimensions being too wide; cross-sections would help show the degree of enclosure.

The extant Design Code is too prescriptive and could be looser to allow more flexibility.

Some dwellings (Alison Brooks scheme) have had louvres retrofitted because of noise – this should be avoided going forward, especially as more homes may be nearer the M11.

Connectivity – *"places that are well-connected enable easy access for all to jobs and services using sustainable modes"*

Transport can have a key impact on the carbon performance of the development, so you need to get it right. How people live is most important, where they go, when and to do what.

What lessons have been learnt from the first phase and is through traffic an issue from Huntingdon Road to Madingley Road and vice versa? It seems that significant additional stress is being put on the streets because of movements from people who don't need to be there.

If another centre is required, what links and impacts will this have on movement patterns?

What external trips take place? Where do people go to and by what means. Local journeys should not be by ICE cars (petrol or diesel).

Mode sharing will be important for mobility, however, you don't want to be a hostage to technology. Although there will be more people than originally planned, there should be less space provided or dedicated to motor vehicles.

The public transport offer has been successful. Will there be a mobility hub that addresses resident parking too? How will deliveries be made easy for all providers from food drops to on-line shopping?

It is important to think about the transition from vehicles to home too. What will that journey be and how will the experience be.

Vauban in Germany may be an older example of good practice but is still relevant and co-locates places well.

Active travel is not necessarily about just the Lycra or knee pad cyclists but everyone, so don't over-define these needs; keep it loose to pick up the likely flows to

destinations. Overlaying these routes on the green and blue infrastructure grids would allow an understanding of stress points to be made.

Where are the stress points in the network? Again, learn lessons from phase one, such as dual use not always being comfortable to use due to the inherent conflicts that can occur; and don't over-provide, just design better.

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

Picking up the Vauban example, the amount of green space close to home there is noteworthy.

Care is needed to ensure there isn't a university campus monoculture embedded into the development. What is the demographic? Will there be lots of children and families and if so do the neighbourhoods reflect their needs with a mixture of public, semi-public and private outdoor space? There may also be lots of downsizers, so think about their needs too.

Tightening the grain is good and the reference to the shading guidance being used was welcomed.

Passivhaus standards are good but what level of compliance will be achieved?

Be honest about relying on the grid for your net zero strategy.

Over-all greening is good which helps reduce energy needs for cooling.

Cartwright Avenue seems too homogeneous, so ensure the procurement strategy supports the street as a place.

Malmo is also a good example of dense but family-oriented development with great blue infrastructure.

Character – *"Places with distinctive neighbourhoods and where people create 'pride of place'*

The northern edge, where the mid-tech will be, is a prominent gateway into Cambridge as well as needing to engage with the rest of the site, but it is not clear how this will work at present. It needs to make a strong statement. A 'business park typology'

would not be appropriate, but a form that brings additional uses through a more layered approach would be good.

There are lots of positive lessons from the earlier phase and play around water would be good, but try to do more than logs and mounds, perhaps use some technology too.

Think about how to create distinctive areas and integrate them into the scheme.

How will shared gardens work – what is the strategy, and will it be clear to everyone who can use and care for what? Is ownership clear?

Think further about the character of the site and who lives there.

What opportunities are there for food growing beyond just allotments. Foraging is popular now as well as food along the way and doorstep opportunities to grow. A strong strategy for green and blue infrastructure could do well.

You need the right balance of informal and formal provisions - unique is better than generic.

Acoustic performance of the scheme – particularly along the western edge is still a worry. In addition, the site feels exposed in views from further out. So management of the edge in these aspects is important.

Sounds and views are very important as new sites can be bleak and windy. Think about how the environment and micro-climate can affect the rustle of leaves on trees for example or babbling versus still water.

Form and shape and how they relate is important so ensure that words translate into design and implementation.

Bringing the edge in might be worth considering and think about how the landscape can be lifted through sport, allotments etc., not just green space and use the workshops to be creative and explore concepts.

The emerging vision for this masterplan is preferred over the previous one. One of the lessons learnt from other Cambridge developments is how Great Kneighton was able to build out at a higher rate and endure a difficult market better than other sites because the range of different products offered. Will Eddington be able to be this

robust? Variety, allowed through flexibility, can bring momentum and lead to market responsive schemes that lead more rapid build out of schemes.

Is the proposed solution to the Huntingdon Road houses the right solution? Can you loop the road around and reduce the scale.

A 15m distance between windows is best and feather cycle routes off the roads.

What are the service charges on the site –how can the site design help minimise these, given there is the estate charge in addition to the service charge for buildings?

Think about double stacking maisonettes rather than just flats. It is always better to have your own front door to the street with more 2/3 bed properties adopting this approach. As an example, Great Kneighton delivered 80% 'own door' housing typologies. In terms of the mix, increase the number of 2-3 bed properties.

Houses should not ideally be looking into car parking areas. Great Kneighton is a good example of how they have integrated courtyards and parking successfully.

The vehicle movements seem high, so could you dispense with some of the infrastructure. The transition from the main streets through to tertiary needs more thought – currently shown through a car park.

The green fingers are liked but mustn't be the whole street as this can make then windy. Building in bottlenecks at each end can work e.g. Hobsons Avenue at Great Kneighton.

Specific recommendations

- Sections through streets and buildings would have been helpful
- Use lessons learnt from earlier phase and elsewhere (Great Kneighton) to your benefit
- Include social housing
- Think about northern gateway, what it will be and how it relates to rest of site too
- Noise pollution from M11 matters
- Remember not just families but cultural impacts and downsizers too
- Think about mobility hubs for residential too and end to end journey experience (and deliveries too)

- Diversity and flexibility of typology important
- Revisit Huntingdon Road solution again
- As many own front doors as possible please
- Minimise service charges especially for the social housing

The opportunity for ongoing engagement with the developer and design team would be welcomed as the scheme develops.

Contact details

For any queries in relation to this report, please contact the panel secretariat via growthdevelopment@cambridgeshire.gov.uk

Author: Stuart Clarke

Issue date: 11th December 2024

Appendix A – Background information list and plan

- Local authority background note
- Applicant background note
- Main presentation

Documents may be available on request, subject to restrictions/confidentiality.

Draft Consultation Masterplan for Eddington 2024 (Source: applicant website)