



Cambridgeshire Quality Panel

Darwin Green 2/3

Thursday 10th March 2022

Virtual Meeting

Panel: David Prichard (chair), June Barnes, John Dales, Fiona Heron, David Birkbeck and Kirk Archibald.

Local Authority: Charlotte Burton (GCSP), Joanne Preston (GCSP), Julia Briggs (GCSP), Chenge Taruvinga (GCSP) Bana Elzein (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

Outline proposal for a mixed-use development comprising of up to 1,000 dwellings, a secondary school, primary school, community facilities, provision for outdoor sports facilities, informal open space, and allotments on an 80-hectare site (approx.) at land between Huntingdon Road and Histon Road, near Cambridge. If consented, it would form a subsequent phase to Darwin Green 1, which is currently being built out.

Presenting team

The scheme is promoted by BDW and supported by Allies and Morrison. The presenting team was:

Andrew MacLaren – BDW, Tim Leadbetter – BDW, Alison Wright- Bidwells , Harriet Wooler – Bidwells , Catrin Stephens – Bidwells , Nathan Jones – Allies and Morrison, Miles Leigh – Allies and Morrison , Aurora Avedillo – Allies and Morrison, Matt Jarvis – Rural Solutions , Stuart Postlethwaite – Rural Solutions , Lorna Parsons- Sweco , Rob Holbrook – Environmental Economics, Juliet Clark – Stantec

Local authority's request

The local planning authority asked the Panel to focus on:

- The design of parking arrangements for corner apartment blocks.
- The design of the public realm and landscaping along the embankment at the boundary with DG1, including the design of pedestrian and cycle ramps and steps linking DG1 and DG2/3.
- The character of the prominent frontage along the raised DG1 edge and its relationship to the character of DG2/3.
- The design of the public realm and pedestrian, cycle and motor-vehicle crossing at the corner of the community building, where the primary street makes a 90 degree turn.

- The use of built form to reinforce a clear street hierarchy, and in particular the relationship between apartment buildings and new houses.
- The integration of 'pocket' landscaped areas and other landscape features within the development blocks.
- The design proposal for integrating the surface water pumping station within the Central Green Corridor.

Cambridgeshire Quality Panel summary

The Panel was generally disappointed by the lack of evolution since the scheme was last reviewed in 2019. Concerns about the balance of developable space and surrounding green space were raised, along with the relationship between building frontages and the park. If the intention is to submit a planning application in April (2022), then there is insufficient time to take the Panel comments on board.

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

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

Regarding the cycle network, the Panel emphasised that the quality of the route and connection east to west, from DG2 through to the existing housing at Girton, is very important and will need to be a safe seamless and attractive route.

It appeared that connections from the broader cycling network with the NW-SE alignment that joins the three green corridors isn't continuous, but cyclists may like to continue on their bikes. This could be difficult because of the location of bridges over the swales, and therefore this needs to be resolved. Infrastructure should be consistent with Local Transport Note 120.

Public transport walk times should not be marked as circular isochrones, instead actual walking distances should be shown using catchment areas within 400m.

The Panel recognised that some of the walking routes are quiet, not well lit nor overlooked at certain times of the day. Has the character of these walking routes been considered so these routes are attractive for anybody at any time?

Review whether bidirectional cycling routes are the right response, especially where there are house frontages along both sides of a road. Also, are cycle routes of adequate width when used as shared paths with pedestrians. Consider separating walking and cycling on some of the routes through the green spaces.

Think about how attractive routes are at different times of the day and year, especially where they run north to Histon and through the park to the west of the development.

There are several locations with 90 degree turns close to the community building, the bus route and along the primary route. As the final design comes forward, this needs to make sure it can safely accommodate the needs of walkers and cyclists at different times of the day.

Consider ease of deliveries, how legible the development will be to white van drivers, and how this will work in different character areas, especially the Mews.

The aspiration of no children being dropped off at the schools by car is supported, but it will be unlikely to happen and therefore how will parking be controlled?

Ensure good cycling connections to outside the development and under 3 miles in length, such as to Eddington or Storeys Field centre, are attractive, secure, and cycling friendly. Connections to Histon Road and on to the new Cambridge North railway station are important connections. Consider 4 metres cycling path widths instead of 3 metres to secure appropriate access to National Cycle Route Link 51 to Cambridge along Histon Road.

The ultimate popularity and usage of the park, if it lives up to its billing as a Country Park, will bring need for visitor parking, coaches, access to shelter and toilets.

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

The community building might benefit from a location nearer the schools, the allotments and the country park that could also support a café. Shared parking could

be used for parents dropping off children, for people using the country park and toilets for gardeners using the allotment site.

There appeared doubt on the part of the applicant as to whether both school sites would be needed, which needs to be agreed with the County before the scheme can be finalised.

The Panel suggest that the development is fundamentally reliant on the quality of open space. They questioned how this space will be managed and who will pay for it as the potential cost for residents could be too high. The proportion of open space planned was considered high compared to the amount of private space residents will have. The balance of private and public/shared space needs to be reviewed.

There are several Flats Over Garages (FOGs) and mews dwellings proposed which have minimal open space. Some appear be single aspect and north facing which is not acceptable in new development in the opinion of the Panel.

A management company was suggested for the long-term management of the open spaces, however, a community land trust may be better option with residents having some form of ownership. The landscape maintenance will employ several people and need for a ground staff yard with facilities is required.

The function and attractiveness of the Country Park needs more definition. Who will come and why and for how long? Is it part of a longer running and dog walking trail? Might it be a sculpture park or are there inspirations originating from its former agricultural uses?

A skatepark for teenagers, on the edge and overlooked could become a focus for nefarious activity; relocating that activity to a more central position where it is overlooked would seem prudent.

As mentioned in 2019, provision of space for a creche would make the area attractive for young families with both parents working. Provision of a retail unit beside the community building seems appropriate and supports the idea of proximity to the school will help its viability. Timing of the delivery of community facilities will be crucial for the success of this large isolated estate that will be built out over many years.

The Panel would have appreciated hearing about the lessons learned from DW1 and how that and input from the social-economist's advice has informed the plans.

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

The Panel was pleased to see the scheme has considered an electric future.

Heat pumps are the right technology for new build, but the Panel urged the applicant to think carefully about their location on each dwelling and how much noise (hum) they generate which is especially important in the mews streets.

PVs are a complementary technology to the electric future and the panel suggested these could be provided on car shelters.

Consider compatible SmartCharge facilities as electric vehicle take up rates increases and how the network can accommodate increased demand.

The Panel questioned how all the emerging technologies will come together as a strategy and if there is an opportunity to optimise these benefits for new residents.

The number of substations was queried by the Panel, and they wondered if they could be adapted to facilitate battery storage?

Consider windows sizes to avoid overheating. It will be important to reduce noise impacts expected from the A14, which may limit how far windows can be opened especially on the houses facing the country park. The Panel noted that there was no reference to pollution levels from traffic and questioned whether and how traffic noise had impacted on the designs.

The Panel noted the inclusion of the sound barriers in the form of bunds and fences along the boundary with the A14 but were concerned about where the quantity of spoil needed was coming from. If it is from within the site, will there be enough and how much sequestered carbon release would it generate and what would that mean in terms of the overall carbon calculations?

Think about off-site manufacturing to try to limit waste at production and site work stages.

Rainwater should be transferred on the surface rather than through underground pipes so it becomes part of the visual landscape design, providing delight and opportunities for flora and fauna.

The Panel asked if there have been thoughts about recycle potable water or wastewater as done in Eddington and if there has been engagement with Cambridge Water? Given the number of attenuation ponds provided as part of the development a pumping station to treat water on site could be considered. The prominent location for the proposed Pumping Station means the design and access need detailed consideration and justification.

Character – “Places with distinctive neighbourhoods and where people create ‘pride of place’

A hierarchy of route considering all links would be helpful, it is unclear how different areas are used and how the landscape is incorporated into those space. Hedgerows can be used as navigation points. Advance planting of new hedgerows and woodland belts would dress the site to attract different developers. The A14 bund and boundary planting are crucial to veil the intrusiveness of the A14. The Panel suggested the park should be an early project along with establishing a tree nursery.

The possible underuse of the country park was discussed. There is an opportunity for the green fingers to be a distinctive green infrastructure that links to the tree planting in the country park, encouraging walks and by providing specific design features such bridges or water gaps. Consider different character areas or activities within the country park to encourage more people to use the park which will also help with management and maintenance of the spaces.

Develop more character within the central areas of the development and think about how blocks define the spaces. The character of the play areas can help to achieve this but make them more distinctive, some more formal some less formal. Similarly, small squares should be designed separately.

The Panel noted that 1,000 homes on the land earmarked for development gave an average density of just 33.33/ha and considered the use of apartments and whole mews streets composed of FOGs didn't align, as that would suggest a density of more

than 40/ha. As presented, houses are only up to 2 storeys and so explore the possibility of a town house strategy with 3 storey homes, examples of which can be seen at Great Kneighton in Cambridge. The massing diagram shows walls of 4 storey blocks along both sides of the Primary route, these need test studies to show how parking is achieved and sections to reveal the quality of public realm.

The mews street will not have the same value or quality as other smaller developments in an urban setting, such as the Accordia development in Cambridge. The proposed mews streets may not be a successful model in the opinion of the Panel. Similar mews street designs, such as within Northstowe Phase 1, are struggling and lessons should be learnt.

The Panel were unconvinced about the amount of northeast single aspect apartments facing the country park. The dimensions from the illustrations provided are different from what is proposed, and the Panel again felt uncomfortable with the frontages of the mews street. The strategy needs to work hard where houses can only be accessed from one aspect and won't always be attractive places for people to live.

There was no reference to accommodation mix or the distribution of affordable housing across the development and there is a concern the mews streets and FOGs will be allocated to affordable housing. The affordable housing provider should be involved with the housing allocations to ensure a mixed community evolves. The Panel urged the applicant to consider more conventional housing typologies; the context does not seem appropriate for an urban solution.

One of the biggest challenges for the scheme is the level change and the viability of having to raise slabs, gardens and road levels by 1 metre or more. The proposed level change beside DG1 creates awkward and expensive hard landscape solutions that layout designs should be trying to avoid. Cut and fill sections would have helped the Panel understand the logic for this dramatic land re-shaping which will impact on phasing. Construction sequence and clean and dirty access strategy was not presented.

Specific recommendations

- Make sure the transport assessment informs people's movements and these are incorporated into the design.
- The NW-SE alignment that joins the three green corridors needs to be resolved. Infrastructure should be consistent with Local Transport Note 120.
- Make sure walking routes are attractive for everybody at any time.
- The shared use of paths could be problematic as well as 90-degree corners to the community building, the bus route and along the primary route cannot be the preferred solution.
- Consider relocation of the community building which is too distant from where it could be of most benefit.
- The link and underpass to Girton needs to be more attractive and feel safe to use.
- Will the community building be viable, is it large enough and who is going to revenue fund and operate it?
- The balance of open spaces to build areas needs to be reconsidered, is it proportional to the amount of open space versus private spaces?
- Consider how to reduce the impact of noise and pollution from the A14, it is unclear.
- Emerging technologies will need come together as a coherent strategy.
- Provide more character areas within the country park to encourage greater use by residents and visitors.
- Landscape needs to be better integrated within the development.
- Consider more traditional housing, it is extremely urban, and it doesn't need to be, consider heights on the edges.

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

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Appendix A – Background information list and plan

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

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

Illustrative Masterplan

