



# Cambridgeshire Quality Panel

Former NIAB headquarters building

Thursday 29<sup>th</sup> October 2020

Microsoft Teams Meeting

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.

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## Scheme Description

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**Architect/Designer:** JTP Architects

**Applicant:** Vertex Living

**Planning status:** Pre planning application stage

**Issue date:** 4<sup>th</sup> November 2020

## Declarations of Interest

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Panel members are required to declare any interests they may have in relation to the development before the Panel and any such interests are recorded here.

None.

## Previous Panel Reviews

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None

## Development Overview

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The current proposal is for:

- Residential conversion of frontage Building of Local Interest (BLI) under prior approval (68 flats).
  - Demolition of 1960s extension and other buildings at rear.
  - Mixed use development of apart-hotel (194 units) and build to rent residential dwellings (290 units including affordable housing provision), a microbrewery (190 sqm), health & fitness suite (400 sqm), gym (130 sqm), cycle workshop café (120 sqm), co-working space (325 sqm) and resident event space (115 sqm).
  - Basement car parking, cycle parking, servicing, open space and landscaping.
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## **Cambridgeshire Quality Panel views**

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The Panel had been issued with background reference information from the applicant and local planning authority ahead of the review session. This information is listed at Appendix A.

Proposals will be submitted as a full planning application although the presentation showed the masterplan as illustrative, which should be amended.

The advice and recommendations of the Panel reflect the issues associated with each of the four 'C's' in the Cambridgeshire Quality Charter and the main comments below include both those raised in the open session of the meeting and those from the closed session discussions.

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

The Panel raised questions on affordable housing, discounted rent and how service charges will affect the affordability of the scheme, to ensure the development will meet the needs of the Cambridge population.

In discussing the relationship between the proposed development, neighbouring and planned communities, the Panel asked how the main arrival point will be integrated with the surrounding context, and how the development will become a stepping stone between Darwin Green and Eddington. Questions were raised about the mixed-use centre being hidden behind the NIAB building and it was recommended the applicant explore how people are welcomed into the scheme and engage with the east-west route. While it is important to ensure residents feel secure, especially with the interaction between children playing outside and people passing through, the public realm feels private.

Different modes of arrival were discussed by the Panel and how that pattern will change over time; will the site be car oriented, or will most residents be likely to walk, cycle or use public transport. The Panel were keen to understand how the service yard will work for deliveries. Based on previous experience, the applicant advised that deliveries will be dealt with quickly as it is very much part of their thinking around delivering a successful community; this approach would be extended to community related transport measures, such as a car club/pool.

The aim is for high quality provision for this site to be successful and it should be exemplary so that residents want to stay long term. The Panel questioned apartment ceiling heights as a good sense of space is important in this type of development.

The Panel explored the different use types and where they are located both within the development and in relation to Huntingdon Road. Where is the 'front door' and are the public services in the east–west route enough to generate the footfall expected. Would the NIAB building have been a better option as the public facing use. The applicant responded that several options had been explored, but the NIAB building has many constraints, such as small windows and hedges that don't provide inward views. The mixed uses currently located is the next best place and they expect to see enough passing through trade along with demand from the build to rent market for the microbrewery and café to be viable.

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

The Panel noted there will be contrasting elevations between the “urban” Lawrence Weaver Road frontage and the “arcadian” frontage to Howes Place and asked if this contrast has been considered sufficiently.

In the absence of a history of the scheme's development, the Panel suggested an alternative strategy for the build to rent buildings with two U-shape courts instead of four bars? This arrangement could provide an over-all better sense of place. Currently, the spaces between the four bar blocks feel more like 'gaps' rather than places. Later they suggested a colonnade could link the bars along the urban side and if covered would provide protection in adverse weather, in a Cambridge way.

The Panel recognised the cost of providing an underground car park but felt the car park with its ramps didn't feel welcoming. Questions were raised about what other uses the underground car park could have in the future if car usage is reduced.

The relationship between outdoor and indoor spaces needs to be interrogated further. For example, consideration should be given to the quality of internal corridors and staircases where people meet. Features, such as balconies, would provide personal, outdoor space and integrated planters can green and soften them.

The Panel suggested that the 5 metre drop across the site was an opportunity to celebrate the passage of rainwater; for example water trickling through the scheme could develop character and distinctiveness.

The mews is very tight but appears to work well, although the Panel wondered if a visitor would read the reflected square across Howes Place due of the rows of pleached trees.

The Panel noted the high density of the development and the resulting pressure this will place on the open space which was felt to be below local authority requirements so will need to be of exceptional quality. The Panel suggested using the flat roofs so the residents could enjoy vistas right over Cambridge; cover and shelter could be provided by designing a conservatory recalling NIAB's research greenhouses.

The Panel questioned the appropriateness of the landscape as portrayed. The landscape is a fabric and the planting needs to respond to climate change bringing drier summer soil conditions, wetter winter soils, dry winds and a changing microclimate. Some of the drawings show informal meadow landscapes but, given the intensity of use, the landscape needs to be robust.

The Panel would have liked to see more reference to the importance of NIAB's history with food production research over many years. There is an opportunity to provide a continuous productive landscape which could help establish relationships across the community and encourage residents to talk to each other.

Vegetation has an important role in cooling spaces, especially high-density spaces but at the moment the buildings look architecturally dominant and rather hard and stark. This could be softened through planting. The quality of place is centred on the box-head lime trees along Howes Place and opportunities to take some of that language through the site should be explored.

In terms of biodiversity connectivity, the Panel would have liked more information on what is being targeted for habitats and the linkages between them and their different layers. Landscape is three-dimensional but this hasn't been yet been fully developed.

The Panel was not clear how the SuDS will work across the site, as the swale at the top of the site doesn't seem to connect with any other areas. There appears to be an

assumption that the courtyards will hold some water, but the Panel queried what happens with intense rain and whether rain garden could help.

The Panel were concerned about health and wellbeing with single aspect flats facing north looking onto external spaces with perhaps only 1 hour of sunlight; this would not create places where people want to be and could be a depressing environment to be in.

The Panel queried the embodied carbon and offered ideas on carbon sequestration particularity through mineralisation with crushed concrete which is easy to do.

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

The use of the underground car park for health & fitness, storage and other uses in the future if the car ownership reduces drastically in the future were supported. The layout of the car park and in particular the ramps were questioned to see if this impact could be reduced. Similar developments across Europe often have tighter, steeper ramps that work well. Some of the car park spaces seemed quite a distance away from the exits.

The Panel asked how visitor parking will work if there are any. Suggestions about operating a car-pool/club were raised, which the applicant confirmed is part of their plans.

The Panel were concerned about the provision of cycle parking in the car park as underground parking can be perceived as unsafe. Is there a danger of residents bringing their bikes into their apartments causing conflict with other residents? Bike ramps don't work well if they have steep gradients.

The Panel suggested car lifts would remove the need for ramps and be designed to be attractive features, albeit they can be expensive and require on-going servicing.

The Panel questioned if the in and out loop for servicing was necessary as the expected volume of traffic on the site is low. How will grocery vehicles access the site? How will mews access be managed with the bollards on a practical level? It is important to consider day to day functionality of these movements.

The Panel suggested a one-way loop so the refuse trucks do not have to reverse back in the same direction.

Assuming Lawrence Weaver Road has buses where would be the best place for a bus stop?

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

The Panel questioned the comfort, climate and energy strategy and suggested that the energy scheme did not look as advanced as the architecture, which will need to change.

It was noted that the air circulation modelling report is still at an early stage but some of the assumptions about the amount of free air and natural ventilation indicate that there may not be enough opening window. The design of the ground floor windows should not compromise any safety or security concerns.

The Panel noted that only two apartments had been studied for overheating and a larger sample should be assessed. Concerns were voiced about overheating of the single aspect flats with limited possibility of cross ventilation and the floor to ceiling windows, which do not help with daylight distribution. This review will need to be carried out before the submission of the planning application. The Panel referred to the 17<sup>th</sup> century Dutch painter Vermeer’s placing of windows next to the cross wall to increase the light distribution.

In relation to the energy strategy, it would be useful to have a review of all the electric heating pump options including ground source heat pumps, consideration given to the location of heat-exchange units and whether these are going to be on the roof. Noise and vibration need be assessed prior to the submission of any planning application. Location of all of the equipment is crucial as there is going to be a lot of competition on the roof for solar PVs, planting, social activities and building services equipment.

The Panel supported that the all- electric energy system and a fabric first approach but the airtightness target could be improved from 3m<sup>3</sup>/m<sup>2</sup>/pa to 2 or even 1 which would result in a reduction in energy bills and better quality of build.

The Panel stressed the importance of the procurement method to ensure the right performance. The applicant explained that this is a project that will be built, operated and managed by Vertex.

## **Panel Conclusions and Recommendations**

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The Panel considered this is a thought-provoking scheme and were generally supportive of the emerging designs. The quality of the presentation was good, but further work is necessary, especially in relation to the environmental aspects of the scheme and the consequential impact this will have on the elevations.

In summary, the main recommendations of the Panel were:

- 1) More detail needed on the affordable element and service charges.
- 2) Where is the heart of scheme? Does the east-west route work as a space for the community and will residents feel secure?
- 3) There is a need for sheltered outdoor places.
- 4) NIAB building could be more public facing, but the scheme needs to explore the arrival routes at different times of the day and year and the working of the central space with the gym and microbrewery.
- 5) The underground car park, nature of the ramp and possible lifts need further consideration. Post meeting, the Panel wondered about the impact of the underground car park ventilation.
- 6) Visitor parking is always an issue in terms of availability and location.
- 7) Consider the challenges around underground cycle parking.
- 8) Review the "In and out" loop.
- 9) Does the architecture articulate the difference between the urban and the arcadian frontages?
- 10) Possibility of open C or U shapes instead of bars. Trying to emulate the quality of Eddington with its courts is a big challenge.
- 11) The idea of a colonnade could be considered.
- 12) Design of staircases to enhance social interactions should be explored.
- 13) Potential of balconies for personalisation and possible planting scheme.
- 14) Given the low level of outdoor space, this should be of high quality and maximise the use of the roof by considering a conservatory.



- 15) What is the fabric and capacity of the landscape?
- 16) Consider food and productive landscapes.
- 17) Wind effect needs to be considered and how this influences the design for doors and entrances.
- 18) Develop a plan to catch and retain water where it lands.
- 19) Biodiversity connectivity and targets, carbon sequestration through mineralisation and testing of the environmental design particularly in relation to mitigating the risk of overheating and daylighting could be developed.
- 20) Consider the importance of security at the ground floor windows.
- 21) Consider location of heat pumps to avoid noise.

## References

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n/a

## Next Steps

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The Panel would welcome the opportunity for ongoing engagement with the developer and design team as proposals for this site progress.

## Attendees

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Chair: Robin Nicholson

Panel Members: Amy Burbidge

Ashley Bateson

Luke Engleback

David Prichard

Phil Jones

Panel Support: Judit Carballo and Stuart Clarke

Local Authority: Charlotte Burton, Greater Cambridge Shared Planning  
Jonathan Hurst, Greater Cambridge Shared Planning  
Emma Davies, Greater Cambridge Shared Planning  
Bana Elzein, Greater Cambridge Shared Planning

Applicant Team: Eric Holding – JTP architects  
Emmet O'Sullivan- JTP architects  
Alec Borrill- JTP architects  
Paul Harney – Paul Harney Associates  
Zac Bishop-Peck – Vertex Living  
Alex Duchesne – Vertex Living  
Colin Brown – Carter Jonas  
Hannah Murton- Landscape, planitLE  
Judith Sykes – Expedition UK

## **Appendix A – Background Information List and Plan**

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

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

# Masterplan

