

Appendix 1: Design Quality Panel Response



Cambridgeshire Quality Panel

2000-3000 Discovery Drive and Multi-Storey Car Park, Cambridge Biomedical
Campus Phase 2

Thursday 5th October 2023

Abcam, Biomedical Campus, Discovery Drive, Trumpington, Cambridge CB2 0AX

Panel: Robin Nicholson (chair), Oliver Smith, Amy Burbidge, Luke
Engleback, and Kirk Archibald.

Local Authority: Julia Briggs (GCSP), Joanne Preston (GCSP), Helen Sayers
(GCSP), Tam Parry (CCC)

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

The development of the next buildings on phase 2 of the Cambridge Biomedical Campus have come forward comprising of two new research and development (R&D) buildings, including laboratory and office spaces, and also construction of a multi-storey car park (MSCP) to service the commercial buildings along the south of Dame Mary Archer Way. The R&D buildings will be 6 stories high, plus plant, and are known as 2000 and 3000 Discovery Drive. The MSCP will provide approximately

700 car park spaces. The proposals come forward as two reserved matters planning applications, one for each of the R&D buildings, and the other for the MSCP.

Presenting team

The scheme is promoted by Prologis and supported by BuroFour, Scott Brownrigg, Growth Industry and Bidwells. The presenting team was: -

Andrew Blevins (Prologis), Derek Lloyd (Prologis), Emily Bliss (Prologis), Matthew Keegans-Wood (BuroFour), Amy Weatherhead (BuroFour), Jason Lebidineuse (Scott Brownrigg), Felicity Hayward (Scott Brownrigg), Garreth Miller (Scott Brownrigg), Jon Akers-Coyle (Growth Industry), Guy Kaddish (Bidwells), Jennie Hainsworth (Bidwells).

Local authority's request

The local planning authority asked the Panel to focus on the landscaping of the southern boundary, the central service road layout, the impact of cycle parking on the landscape, landscape quality, the number of car parking spaces, and how the site is connecting to the campus.

Cambridgeshire Quality Panel Summary

The Panel welcomed the proposals and noted the continuity from Discovery Drive 1000 and the Abcam Building and it appeared that some lessons had been learnt. The landscape design is generally well planned and sophisticated, but the design of the buildings needs to be worked up and the cycle store reviewed.

A further review would seem appropriate to discuss the 2000 & 3000 buildings in greater detail.

Although not within the applicant's remit, the Panel is very disappointed that after many years of requesting a masterplan for the whole Cambridge Biomedical Campus this has not yet been provided. This is fundamental to understanding the context and views of developments to the north, and Phases 3 and 4 to the south, with the new road coming up from the south-east of this site. 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 proposals seem very inviting for staff and visitors alike. However, the entrances need to work together and links are needed across Dame Mary Archer Way to facilitate access to the wider site; this network should be mapped despite this being outside the red line boundary. The eastern North – South route appears to work well, but how will people connect from the wider Campus?

The Panel welcomed the provision of gathering places across the site and wondered if there could be other places around the entrance of the MSCP and the cycle parking, for example.

The arrival space at the MSCP needs to be more clearly defined. The Panel liked the idea of navigating the landscape from the car park, or the use of a more direct route if preferred, but more thinking needs to be applied to wayfinding generally. The landscape is trying hard to achieve this, but buildings should do more by making them more distinctive with clear arrival spaces.

As the site forms part of a health and wellbeing campus, the Panel wondered if there could be more active use of the MSCP. For example, how could it be used in the future for some other activity? Are there opportunities for opening the roof level up for events, or simply just for access and viewpoints?

The Panel was not clear if the MSCP roof could be seen from Addenbrookes' Road Bridge; if that is a possibility then the roof should be more attractive than it currently is.

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

During the site visit, the Panel saw some contradictory cycling restriction signs that block through routes; these may have unintended consequences and create conflict between cyclists, pedestrians, and vehicles. The scheme design needs to avoid these conflicts by thinking how people move within the site.

There needs to be an overarching walking and cycling strategy, including circuits and loops for lunchtime walks, as well as connections to the wider campus. Think about what happens when people walk and cycle and counterflow patterns and volumes.

The cycle parking entrance should be wider to avoid conflict at peak times and allow for access from the east. Make sure calculations include how the space would function at these times as well as how the volumes will change across the day. The cycle parking would benefit from lessons learnt from other cycle parks, such as Cambridge Station Cycle Park, especially regarding surveillance. Consider more spaces for cargo bikes for people having dropped their children at school. The central service road should be thought about again. There is a concern that the central East-West service road layout is trying to do too much; it may be a technically correct solution but has too many conflicts and is very hard. How would this space be in reality, would it be a pleasant space in the centre of the site? It is important to consider how this place would look like by providing visualisations of the space. Could the North-South route up the east side be made wider to allow for loading from the east? The belief that this road is not available for servicing should be challenged.

The Panel questioned if there is any scope within this planning application to enhance the roundabout opposite the MSCP, which doesn't work for walking and cycling.

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

The installation of Photovoltaic Panels (PVs) on the MSCP vertical façade was suggested, which could bring character as well as generate power. However, consideration would need to be given to the additional weight the PVs would create. The Panel liked the disguised modular design of the MSCP, and asked what the embodied carbon calculations are for this? By making the building adaptable alternative uses become possible if a car park storey becomes redundant in the future; perhaps it could house an energy storage space for this “mini campus” (and distribute it through a private wire).

E-Bike charging points are welcomed but the Panel suggested to go further with electric car park charging points and have one in every single car park space or at least future proof the design so they can be added in the future.

Think about all choices of materials and whether these are reusable, recoverable, and recyclable, and the value/re-use these could have in the future.

It was pleasing to see the thought given to glazing ratios and façade orientation but the elevations need developing. The embodied carbon of the cycle park should be considered and tested to see if this outweighs the benefit of the store for 500 bikes; might they not be better in the buildings where people work and can shower. If the cycle park is going to be used as intended, it must be well lit and ventilated.

The impressive ESG (Environmental, Social, and Governance) aspirations and metrics should be clearly explained and a hierarchy of importance identified.

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

There needs to be a clear strategy for how the development identifies and presents itself. Is this a campus within a campus? Further work on the central service road layout is needed to support the applicant’s identity and vision for the place. What is the brief for this space beyond just a technical solution? How does it work with the new buildings?

As there is a premium for green buildings, think about planting on elevations that can provide shade when needed.

The cladding of the MSCP seems rather crude compared to the other buildings, so explore how it could be calmer and softer working with textures.

The landscape is key to integrating the campus with a lot of thinking having gone into what is a complicated place. The site is between Addenbrooke’s and the Gog Magog and the landscape needs to provide a transition between the two.

The MSCP would benefit from the provision of a living roof underneath the PVs to enhance biodiversity. Greening the roof also helps PVs to perform better during hot weather.

Greening the base of the MSCP would help. An example of a living wall can be found at Migros Shopping Centre in Basel, Switzerland, which could work well here with PVs. The green shed over the cycle parking could be parched in the summer.

Refer to the irrigation system used for Reisenfelt primary school in Freiburg, Germany, which may offer a better solution for irrigation.

Creating seating spaces and areas for people to be closer to nature and water is important. The book Blue Mind was commended, regarding the benefit of water for health and wellbeing. There is an opportunity for a water feature in the swale, by using raised pools near seating areas. For example, the delightful use of pods in

swales that can be observed at Newcastle University Science Campus. There could be some trees planted in the swale.

The strip on the southern edge of Discovery Drive would benefit from more thought on how to activate biodiversity. Consider the use of some larger trees and species with a bigger spread to provide shade on hot summer days. Design the edges of the mounded borders to stop them being washed out onto the pathway.

As one of the biggest issues is how to secure and maintain biodiversity in the soil to sustain plants and trees and allow them to thrive. The Panel recommended the use of a soil mix that includes biochar and/or crushed rock such as dolerite that will mineralise CO₂ from the atmosphere. The micropores in the biochar will hold water for longer and they encourage microbial and fungal growth within the soil.

It was recommended making spaces in the “shrubby woodland” so people can enjoy being in this landscape.

Are there any opportunities for an edible landscape to include fruit trees and herbs? From the landscape perspective, there was a concern that the hard space along the central service road is too wide and will get hot, so it was suggested that more and larger trees be provided to make for a more pleasant space whilst the trees will also help to shade the buildings.

If showers are to be provided within the cycle parking facilities, will the grey water be used to irrigate the shrubbery?

Specific recommendations

- Support people’s natural way of moving with clearly defined entrances.
- Make buildings more distinctive with clear entrances to help with wayfinding.
- Explore ways to get a more active use of the green space.
- Potential of the MSCP roof to be used for other uses such as a green roof, holding functions, or a viewpoint.
- Consider a living roof underneath the PVs. Green the base.
- The central space between 3000 & 4000 needs to be a place, usable and pleasant for everyone to delight in.
- Avoid sign restrictions for bikes to prevent conflicts between cyclists, vehicles, and pedestrians through good design.
- There needs to be a walking and cycling overall strategy with a movement hierarchy.

- The entrance of the cycle park should be wider and consideration should be given to how people access from the east.
- The North – South route to the east could be wider to allow for flexibility of servicing. • Consider the use of PVs on the MSCP façade.
- Design for deconstruction and reuse to help with embodied carbon.
- Consider the MSCP as a future potential centre for energy storage.
- Go further with electric car charging points in the MSCP and provide each space at least with the ability to install one in the future.
- Create a narrative about the elevations.
- Is this a campus? If so, the quality of the landscape is crucial. Where is the centre of the campus?
- Think about greening the elevations.
- Evaluate the embodied carbon consequences of building the cycle park. Is that where people would go and would like to park their bikes? Be aware of surveillance if it is built.
- Opportunity for pods in swales, University of Newcastle. • Are the trees the best species?
- Consider the use biochar and dolerite to neutralise unavoidable CO2 emissions. • Make space at the “shrubby woodland” for people to enjoy being in it.
- Thinks about the provision of an edible landscape.