



Report of the Oxford Design Review Panel

Plot 2000

14th October 2022

Introduction

This report reflects the design workshop held in Oxford on 29th September 2022, following a site visit and presentation by the design team.

The proposal is for a speculative research and development building providing lab and office space within the Oxford Business Park (ARC Oxford).

A summary of the Panel discussion is provided below, highlighting the main items raised. We then provide the key recommendations aimed at improving the design quality of the proposal. Detailed comments are presented under headings covering the main attributes of the scheme and we close with the details of the meeting (appendix A) and the scheme (appendix B).

Paragraph 133 of the National Planning Policy Framework (2021) states that "local planning authorities should ensure that they have access to, and make appropriate use of, tools and processes for assessing and improving the design of development. These include workshops to engage the local community, design advice and review arrangements, and assessment frameworks such as Building for a Healthy Life 51. These are of most benefit if used as early as possible in the evolution of schemes and are particularly important for significant projects such as large scale housing and mixed use developments. In assessing applications, planning authorities should have regard to the outcome from these processes, including any recommendations made by design review panels."

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Ref: 1866/220929

Summary

We welcome the opportunity to review one of the first schemes that will be built as part of Oxford ARC's (advanced research clusters) innovation campus. This proposal is intended to be an exemplary R&D scheme, setting the benchmark for development coming forward within the wider masterplan. However, although the industrial references are positive, fundamental questions, such as how this building relates to its users and surrounding community, have not been addressed.

This is also an opportunity to deliver a sustainable landscape-led design that can adapt in the long term and respond to the ongoing change within the Cowley area. However, the focus of design development to date appears to be that of maximising the quantum of office and lab space, and if this continues to be the case, we are concerned that this opportunity may be lost.

Our recommendations and comments are given in the spirit of the scheme being at an early, concept stage. That said, we do not think the proposed submission date will enable sufficient time for the necessary design development and the amount of work needed to progress this proposal to a detailed design stage. We would encourage the team to reconsider their timeline which is dictated by the final expiration of an extant outline permission first granted in 1992.

We look forward to seeing this project again once our recommendations have been addressed.

Key recommendations

- 1. Take a long-term approach to the design, considering how this building can be genuinely flexible and adaptable to future scenarios.
- 2. Describe the people that will potentially use and experience this building. Clarify their lifestyle, how they will travel here daily, and where they will be coming from.
- 3. Urgently investigate the removal of the basement carparking and explore alternative temporary carparking provision as part of a long-term movement strategy that accounts for the new Cowley branch line and movement patterns.
- 4. Work closely with stakeholders to deliver the Cowley branch improvements within a suitable timeframe.
- 5. Deliver deeper carbon savings and take a regenerative approach to design. Demonstrate in detail how renewed sustainability ambitions will be delivered.

6. Explore how the sawtooth roof can relate more appropriately to the local residential skyline. Refine the tower and explain how it might relate to the wider Oxford context.

Detailed comments and recommendations

1. Strategic context

- 1.1. This site makes up less than 5% of the land owned by ARC but will be the first plot of many. The proposal is therefore looking to set the tone of the masterplan and change the existing urban grain. We acknowledge the challenge of projecting forward to ensure this building works in the long term. There is a risk of design decisions becoming out of date even before construction, so this requires a flexible and adaptable approach, modelling a number of different scenarios.
- 1.2. The building is proposed to be part of an innovation campus, an aspirational place that facilitates those working at the forefront of research to create and innovate within the office and lab spaces. However, this narrative is not reflected in the scheme's design response to context and landscape as well as to the changing social and physical context. The team's thinking needs to shift to the future in every aspect, not just to changing working practices within the wider campus, beyond the site boundary.
- 1.3. The panel emphasised the importance of prioritising pedestrian and cycle movement in this site, lined as it is on three sides with car parking and on the fourth by the Eastern-By-Pass. The site therefore needs to work extra hard to achieve a humane and healthy environment for its users. A more ambitious long-term approach all round is needed, considering this site as part of a larger development.
- 1.4. Although this building is part of a global destination, a greater understanding of the local community is needed. As proposed, there is a risk of the building being uninviting and hosting an insular community of people. The team's understanding of community is described as the people who will use the building not the community of Cowley, which it should also be engaged with.

2. Design strategy and sustainability

- 2.1. The design team's sustainability goals are admirable and include going beyond net zero towards regenerative design. This site has already been built on, those structures demolished, and the land remediated and levelled out. In embodied carbon terms, therefore, the site is already responsible for significant emissions before any new construction has taken place. The scale of the total building is considerable and therefore will have a large carbon impact in gross terms. We would encourage the team to pursue not only making reductions per square metre, but also a more efficient massing solution, as large savings can be made by delivering relatively small tweaks to the volume. If the proposal is taking a truly regenerative approach, the emissions for construction and operation should be considered, calculated, addressed on site, and only offset if it has been proved that there is no other option.
- 2.2. Including a sizeable basement for carparking has a significant embodied carbon impact and is likely to create a much greater impact than additional storeys above ground. The panel does not support a basement scheme. The team must investigate thoroughly if the basement can be removed or reduced by providing alternative, temporary carparking provision. Several options were discussed: building temporary above-ground car parking on other campus sites within ARC's ownership or using upper levels for carparking and converting them to office space in the future. Removing the basement would make significant carbon savings and would positively impact the landscape strategy. In a worst-case scenario, where the basement is retained, plans for its conversion and for the insertion of natural daylight should be incorporated into the design strategy.
- 2.3. The aesthetic approach should be based on environmental studies, not come before them, and must consider likely future climatic risks. Sun path analysis must be carried out and applied to refine the scheme's massing and architecture. Overlaying sun paths will enable the team to understand how each façade can reduce overheating and heat loss. Further work is needed on the sawtooth roof, because solar studies may reveal that in low-sun times of the year some of the photo-voltaic roof panels are shaded.

- 2.4. Occupants of the building will have very specific requirements for office and lab spaces. However, it is important not to over-specify to ensure the building is adaptable and can accommodate both more and less servicing. Fitting out the building could have a higher cost in carbon terms than the entire building envelope over the whole life of the building. The team should set out how the fit-outs will be managed in the long term so that this is done sustainably and is flexible enough to accommodate different uses, not re-fitted with every tenant.
- 2.5. The team should interrogate whether a solely concrete framing system is required, or whether there is a lower carbon alternative, for instance an option for a concrete system with CLT (cross-laminated timber) floorplates. A well-designed concrete frame and slabs will be robust and adaptable but perhaps overly wasteful and a balance will have to be struck. Perhaps the tower could be a timber element to deliver the office spaces, whilst concrete is used for the lab spaces. The quantum of GGBS (ground granulated blast-furnace slag), an industrial waste by-product which is a globally finite resource, should also be rejected or robustly justified, as this project is proposing 50% without any clear justification or analysis of carbon savings and other system alternatives having been explored (9% has been recommended as a globally sustainable quantum to allow the use of GGBS to be more fairly distributed).

3. Landscape and open space

- 3.1. The landscape lacks a concept. Rather, it should be underpinned by a strong narrative and, through it, linked to the uses in the building or be capable of being reflective of them in the future. The proposed landscape is surrounding the building rather than integrated and used to drive the scheme's design. Describing the landscape proposals as a campus is misleading as buildings are not set within the landscape. Instead, there are buildings with large swathes of limited areas of landscaping including carparking and trees. A clear concept and vision linked to the site's industrial heritage and future aspirations should be used to drive a truly landscape-led scheme.
- 3.2. The team should clarify how the landscape and the wider campus works for a community of users and provides the spaces, amenities, and facilities they need. There is ample opportunity for this to be an aspirational place, where creative collisions and interactions happen.

- 3.3. This site should seek to deliver over and above a 10% net increase in bio-diversity net gain, ahead of forthcoming legislation, but this will require the building and landscape to work together to achieve that aim. Beyond statutory targets, designing to maximise biodiversity can be used to drive forward an aspirational design strategy.
- 3.4. Although the reference images are positive and rich, the landscape is limited by being above a podium. We do not support the principle of excavating the site for cars, covering up the basement and describing this as 'landscape'. Removing the basement would enable a more integrated approach to blue and green infrastructure, and for more of the trees to be retained.
- 3.5. The SUDs strategy must be underpinned by an advanced understanding of where water is coming from, where it will be collected, how much water will be generated from rain and greywater, and how it will be used for irrigation. A significant volume of grey water will be generated by this building. As part of regenerative thinking, the team should explore how grey water could be reused within the building and landscape.
- 3.6. Excavation material from construction processes can be used to reduce the flatness of the site and introduce more interest to the landscape making it more three-dimensional. Utilising the subsequently increased surface area can offer a means to maximise biodiversity gains.
- 3.7. There is no reason that large trees on the front boundary of the site should be removed. The landscape design and construction management plan should be designed to allow them to remain and thrive since, together with the ecosystems they support, they are valuable components of the new proposal.

4. Movement and connectivity

4.1. Over 70% of people travel to this site by car according to recent data. Thinking ahead, to reduce the number of people travelling in private vehicles in the future, the Cowley Branch Line improvements must be delivered so that it becomes a passenger line. The team must work closely with stakeholders and be involved as much as possible in the delivery of this key infrastructure so that the scheme is not without a nearby train line for a prolonged period.

- 4.2. A transport strategy should be developed for the future rather than responding to the status quo. Innovative approaches to movement and travelling to the site should be explored, considering future scenarios when the passenger train line is delivered, and electric vehicles are the norm. For example, there are precedents of organisations providing shuttle buses from nearby stations to campuses that could be explored.
- 4.3. Access diagrams are urgently required. If people coming here are travelling for over 45 minutes one way daily there will be an impact on their well-being and wellness. The team should consider how people will get here and their journey times, and what the building and surrounding area can do to support a healthy lifestyle and the wellness of its occupants.
- 4.4. All parking provision should include electric vehicle charging points and a high proportion of these should be rapid charging.

5. Character, architecture, and placemaking

- 5.1. Unlike the site, the proposed building has a front and back. Considering the building as one with fronts all the way around may make for a more active and welcoming place. The proposed wall bordering the Eastern-By-Pass Road will be a non-active corporate façade which backs onto Cowley instead of creating a lively and attractive environment that reaches out to the local community. The lack of permeability to the ground floor to the east means that those accessing the site will have to know that they must walk around the building to the entrance, and this may not be obvious. A fissure in the eastern ground floor could start to let life in from the east.
- 5.2. The team have taken a generally positive approach to massing. The industrial references are interesting, although the sawtooth roof appears bulky from some views. Clarification is needed regarding whether the taller element is a chimney, or a tower and the team should use descriptions consistently to accurately present concepts and how they relate to the wider historic Oxford context.
- 5.3. There is an opportunity for the scheme to incorporate a successful industrial-style 'landmark' tower supported on colonnades which forms connections with other towers across the city. We are unconvinced by the inclusion of a crown and would encourage the team to experiment with height and bulk considering the tower to be one with a 'body' and 'head'. The impact on views from St Mary's Tower is not of great concern.

- 5.4. The design rationale for the sawtooth roof should be better justified and not used to arbitrarily re-produce the historic warehouse buildings. The scale and rhythm of the sawtooth roof is perhaps too small resulting in an overly busy roofline. The scale of the roof could instead take cues from the local domestic gable ends, depicted in the views, to provide further physical connection with the local environment. We are unconvinced by the face of the teeth being vertical: they could be at a right angle instead as was the case in the historic sheds which would also prevent unnecessary shading. The sawtooth element could be limited to half of the roof space and the rest of the roof used for biodiverse amenity, or green, brown, or blue roofs.
- 5.5. The design team should reconsider how the space below the sawtooth roof is inhabited. As currently proposed it is intended only for plant. We encourage the team to consider whether this space would be better suited to be a delightful place for humans to work and gather.

Reference number

Ref: 1866/220929

29 September 2022 Date

The Works, 4650, Cascade Way, Oxford Business Park South, Oxford Meeting location

OX4 2SU

Panel members

Joanna van Heyningen (chair), Architecture and Public Realm attending Dan Jones, Architecture and Education, Arts & Public Buildings

Deborah Nagan, Landscape Architecture and Architecture

Kat Scott, Architecture and Sustainability

Martin Stockley, Civil Engineering and Transport Planning

Lizzie Atherton, Design South East Panel manager

Oliver Milton, Hawkins Brown **Presenting team**

Julia Roberts, Hawkins Brown

George Valentin Soare, Hawkins Brown

Other attendees Robin Moxon, ARC

> Daniel Williams, ARC John Staker, ARC

Stephanie Weeks, Carter Jonas

James Ellis, Carter Jonas

Rupert Grierson, Macgregor Smith

Simon Speller, Stantec Jonathan Bell, Spie

Jennifer Coppock, Oxford City Council Rosa Appleby-Alis, Oxford City Council Maura Cordell, Oxford City Council

Charlotte Robinson, ODRP Mentee (observing)

Panel members visited the site before the meeting, accompanied by the Site visit

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client, design team and City Council officers

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Scope of the review

As an independent design review panel, the scope of this workshop was not restricted. The local planning authority has asked us to look at the following topics:

- bulk and massing, considering the long-distance views of the proposal from Saint Mary's Tower
- the carparking proposals and the viability of adapting the carpark in the future
- landscape design
- sustainability

Panel interests No interests were declared.

Confidentiality This report is confidential as the scheme is not yet the subject of a

planning application. Full details on our confidentiality policy can be

found at the end of this report.

Previous reviews No previous reviews

Appendix B: Scheme details

Name Plot 2000

Site location Plot 2000 Oxford Business Park, John Smith Drive, Oxford OX4 2JT

Site details Plot 2000 is a curved plot which has been developed historically but is

undeveloped at present and comprises mostly rough, natural,

unmanaged grassland. Existing trees bound the site with medium to large-scale buildings in commercial use surrounding the plot. It is bordered by John Smith Drive to the west and the Eastern By-Pass Road

to the east.

Proposal Plot 2000 is the first proposed development as part of the wider

innovation campus. The proposal is speculative and therefore subject to change. The proposed buildings would provide office and lab space

with ancillary café uses at ground floor level.

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Planning stage

Pre-application stage with intention to submit a reserved matters application delivered under the conditions and terms of the extant outline permission by December 2022.

Local planning authority

Oxford City Council

Planning context

The current Business Park is identified as a Category 1 employment site. As the development proposes an intensification of office and lab spaces for Research and Development purposes, making efficient use of the brownfield and greenfield employment sites, the principle of the proposal is found to comply with the NPPF and policies S1, E1 and RE2 of the Oxford Local Plan 2036. The site sits within the Cowley Branch Line Area of Change as designated within the Oxford Local Plan 2036.

Planning history

In 1992, outline planning permission (ref: 91/01303/NO) was granted for 125,023sqm of B1 floorspace and 10,451sqm of C1 floorspace – as well as new roads, car parking, infrastructure and landscaping. This permission forms the basis of Oxford Business Park as it exists today, following the demolition of the former car factory site.

A number of Reserved Matters applications have been submitted pursuant to this outline permission (as amended).

The time limit of this permission has been extended several times to allow the submission of Reserved Matters, the last time on 12 December 2012 through ref: 12/01424/EXT ('the extant outline permission'). Condition 1 of the extant outline permission states: "Application for the approval of reserved matters must be made to the Local Planning Authority before the expiration of ten years from the date of this outline permission".

The Proposed Development forms a Reserved Matters permission, pursuant to the remaining quantum of B1 (now E[g]) floorspace, which must be submitted before 12 December 2022.

Confidentiality

If the scheme was not the subject of a planning application when it came to the panel, this report is offered in confidence to those who attended the review meeting. There is no objection to the report being shared within the recipients' organisations provided that the content of the report is treated in the strictest confidence. Neither the content of the report, nor the report itself can be shared with anyone outside the recipients' organisations. Design South East reserves the right to make the content of this report known should the views contained in this report be made public in whole or in part (either accurately or inaccurately). Unless previously agreed, pre-application reports will be made publicly available if the scheme becomes the subject of a planning application or public inquiry. Design South East also reserves the right to make this report available to another design review panel should the scheme go before them. If you do not require this report to be kept confidential, please inform us.

If the scheme is the subject of a planning application the report will be made publicly available, and we expect the local authority to include it in the case documents.

Role of design review

This is the report of a design review panel, forum or workshop. Design review is endorsed by the National Planning Policy Framework and the opinions and recommendations of properly conducted, independent design review panels should be given weight in planning decisions including appeals. The panel does not take planning decisions. Its role is advisory. The panel's advice is only one of a number of considerations that local planning authorities have to take into account in making their decisions.

The role of design review is to provide independent expert advice to both the applicant and the local planning authority. We will try to make sure that the panel are informed about the views of local residents and businesses to inform their understanding of the context of the proposal. However, design review is a separate process to community engagement and consultation.

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