RTPI East of England
Royal Town Planning Institute

Case Study – Phase 1 - Cambridge Science Park

Submission to the RTPI Awards for Planning Excellence 2021

A redevelopment of the oldest part of Cambridge Science Park to deliver speculative accommodation and provide for science and technology sector demand, whilst embracing the modern planning agenda around sustainability, heath and wellbeing, public realm and anti-poverty.

Constructed in the 1970s, Cambridge Science Park (CSP) was the first science park in Europe. Since then, some of the original buildings do not meet the current standards of the Research and Development (R&D) industry involved in cutting-edge global research.

The Phase 1 redevelopment of CSP has enabled there to be a comprehensive approach to the re-planning of the space to provide modern purpose-built accommodation, but to take the opportunity to make a more efficient use of a significant area of brownfield land and embrace modern planning priorities in the redesign.

The cluster of R&D uses in Cambridge is of global importance. While this can be a somewhat overused term, it is appropriate in this case and recognised as such. It is important to ensure the cluster remains vibrant and up to date to retain this global position; to stand still is to go backwards in the energetic and fast paced arena of R&D.

The Phase 1 redevelopment started six years ago and since seen the redevelopment and completion of a number of plots that comprise 'Phase 1' – plots 26, 27, 22, 25, 1-21. In addition, there is a consent for a new 'hub' within the Phase 1 area to provide for a hotel with business suite, gym, pub, café and general meeting spaces; along with a seven-storey building to act as a marker building within CSP.

The construction of Phase 1 presents a new generation of buildings and shows CSP continues to respond to changing requirements and priorities. The concept for CSP was in the 1960s, with development of it thereafter; a time when the 'car was king'. The context and brief for the redevelopment is to change this – to create a better-connected park, one that better provides for pedestrians and cyclists and raises the bar on sustainability and ecology.

Over the course of six years, the construction has led to a new place with five major new buildings constructed and consent for three more (the Hub).

Outcomes for People and Communities

Within Cambridge there is hidden poverty behind the headlines of major economic growth and leading R&D.

Prior to the Phase 1 redevelopment, the CSP was insular in its appearance and activity. It is a huge estate, but one could drive passed without knowing it was there. Phase 1 changes this and creates legibility to the main Milton Road frontage, becoming outward facing and more welcoming. A significant new pedestrian entrance is created to the Cambridgeshire Guided Busway, formed with sculpted contempered arches to celebrate and present the entrance.

This physical change has been the catalyst for cultural change. There is now a connection to the local primary school, that sits within one of the poorer wards in Cambridge. There are now opportunities for those children to come into the park, meet scientists and to know that they can be part of it, raising their aspirations and life expectations.

The original science park had verdant and green areas, but these were simple swathes of green space. The redevelopment has led to a greater density of built form; there are fewer swathes of green space, but what the new approach has brought is greater focus on the purpose of spaces. Those external areas that are formed have a function and allow people to enjoy the outside spaces in different ways; to provide spaces for people to work, meet, relax, contemplate and enjoy.

The development adds to the local and wider economy. All of the buildings started as speculative, with no occupant in mind or signed up. The ability to have confidence in the local market and have space available for growing firms in the city is massively helpful to retain such companies in Cambridge which has limited Grade A accommodation.

The most recent buildings were able to attract TUS, which is a huge science park operator in China. This creates a direct link between UK and Chinese science, as two leading parts of the global community. The latest buildings at plots 1-21 were also of such stature that it attracted TUS to invest directly and so attract foreign capital into Cambridge and the UK. The economic benefits are elevated further with the efforts to connect locally and try and make the science park feel a part of the local area and it is a place that local people can gain employment.

Planning Contribution

While the redevelopment land is brownfield and with overarching policy support, the planning authority has reservation about densification in regard to traffic impacts and reducing the quality of the public realm and green space.

The economic benefits of the scheme are readily acknowledged, but it was ensuring that the new development embraced the modern planning agenda to ensure there was planning support and to take the opportunity to keep the science park modern and forward-thinking.

Most notably, the planning arena and planning strategy reduced the prominence of the car, in quantum and in the design. Alongside, to heighten the role of the pedestrian and cyclist in the design; that these are the modes of travel that have priority in the design to make them the most convenient modes to use. To strengthen the role of the public realm, to create a place that is beautiful, but functional. To embrace sustainable design and construction, which has risen over the six years and helps to illustrate the speedy progress that sustainability (and carbon) has made as a tangible planning priority.

Underpinning all of the above is the vision, giving confidence that the redevelopment was a considered and coherent approach. There is no site-wide masterplan yet in place, so the vision needed to convey how this development would achieve the aspirations we set and would be a development all parties would be proud to advance the science park further. The vision comes from overarching objectives – how the park wanted to make a

change and embrace the modern agenda; but also, how a vision articulates into tangible things that shape the development of each plot and ties them together.

The planning role had to give the planning authority confidence that the development was creating a new legacy that helped the planning authority push its own published priorities:

- Responding to climate change;
- Increasing Biodiversity and Green Spaces;
- Promoting wellbeing and equality; and
- Delivering quality places.

Furthermore, to support the Cambridgeshire and Peterborough Combined Authority objective to double the GVA of its area over 25 years, which inherently requires new development to help achieve.

Outcomes for climate action

The success is seen in how the redevelopment has continued to climb for higher sustainability standards over the various plots on Phase 1.

The last six years has seen the commercial sector marry its sustainability aspirations with the planning sector; and in many cases certain companies and sectors are pursing standards well above the policy minimums due to the speed at which the private sector can move against the period review of Local Plan policies.

Trinity College Cambridge is the majority owner and custodian of the science park. The science park remains a significant part of its portfolio, which helps to fund the academic role of the college. In 2021, Trinity College announced its approach to achieving net zero carbon before 2050 across its operation and endowment portfolio. The onward development of CSP will embrace net zero carbon and Phase 1 will be an important part of that increasing step-change in sustainable development.

Outcomes for sustainable development

The project relates very well to the UN goals. Commercial development can often be seen as merely accommodating staff and goods within its own plot and the building is solely an output to achieving the business needs of the company at that time. Good commercial development is so often so much more, as with CSP Phase 1.

In reference to the UN goals, those that relate most strongly to the project are:

- No poverty, quality education, partnership for the goals:

Phase 1 has helped drive a cultural shift, creating a more outward looking park, which is part of the local area. There is greater engagement and notably so with the local school to elevate the aspirations of the children in one of the least affluent wards of the city.

- Decent work and economic growth; industry, innovation and infrastructure

Best-in-class accommodation to help support the growing needs of the science and technology industry and its ever-important work that leads to so many benefits for communities all around the world.

- Good health and well-being, reduced inequalities

A redevelopment scheme that changes the design approach to diminish the car and celebrate sustainable modes of travel.

- Affordable and clean energy, sustainable cities and communities, climate action

A collection of buildings that advance the sustainable credentials of the park and have helped to push the agenda further to Trinity College, as the majority owners and custodians, to become net zero carbon before 2050.

Community Engagement

CSP has a form of development that historically lacked engagement from the local community. This has increased over the course of Phase 1, with a Science Park Director being a new role created for the park. A part of the role is to generate more engagement, both within the park and in the community.

One pleasing part of the scheme is the public art component of the new hub building. The hub is for users of the park but also for the local community, who will be welcomed to use the gym, pub, café and other facilities. To further engage with the local community on this facility is a public art scheme that will be including the contributions from the local primary school. A school that is within one of the less affluent wards of the city and historically has not see children go on to be employed at the park. The formation of public art and its delivery has provided a fantastic opportunity to celebrate science in the community and help give greater aspirations to local children.

The Phase 1 redevelopment has also helped raise the extent of engagement within the park and helped be the catalyst to push what is now a more connected and active park community.

Leading Practice

The greatest complexity with the scheme is answering the question of ‘why now’. The planning authority has adopted policies in place that provide overarching support to the principle of development, but alongside has an emerging Area Action Plan (AAP) for the park and a wider regeneration area to its east. The authority was concerned about granting consent to major new development prior to knowing what its AAP will want to deliver.

The scheme had to express how its delivery would not prejudice the successful delivery of the wider regeneration area. In strict policy terms, the planning authority could not refuse the scheme with supporting adopted polices against an AAP that would be years away from being in a draft form and adopted.

Two main choices arise; legalistic or collaborative. The legalistic route could have seen counsel opinions and ultimately an appeal to achieve consent; in so many ways an appeal is often the failure of the planning system to work correctly. The collaborative route was the one taken; notwithstanding what the policies say, it is about establishing what the priorities are for all parties and how can they be successfully achieved.

In this case, a key concern was traffic generation, a lack of road capacity and the relationship to car parking. If development now took road capacity, then the future ambitions of the AAP regeneration area may be stifled. This led to the strategy to bring forward a 'no net increase' in car parking. A s106 was volunteered to control car parking across the park, such that the Phase 1 schemes could be consented and built, but with an enforceable strategy in place to reduce car parking elsewhere. This would result in the overall amount of car parking to reduce over time and ensure the AAP regeneration was not hindered by a decision taken now.

One matter that is not often known by planning professionals is that a s106 legal agreement can be progressed outside of a planning application; it can be a standalone agreement. The 'no net increase' car parking agreement was such a standalone agreement, because it related to the whole park and could be put in place prior to a planning decision on Phase 1, so to give full confidence to the planning authority in making a decision to grant consent.

Does the scheme or project have particular significance to the region?

The science and technology (S&T) cluster is a key part of the 'Cambridge Phenomenon'. The clustering of like-minded companies across a host of S&T specialisms led to a rapid rise in the Cambridge economy and is now a net contributor back to the national economy. The Phase 1 redevelopment provides best-in-class modern accommodation for the S&T industry to support its ongoing growth and to help make sure it remains agile and fit for purpose. A lack of investment in the S&T sector would see it go backwards in Cambridge in what is an ever-increasing global market.

The CSP was the first of its kind in Europe and now many have followed. The speculative investment and delivery of Phase 1 gives confidence to the region and the S&T sector. It will be a notable contributor to the combined authority achieving its objective to double the GVA of its area over 25 years.