Welcome

The Stirling Building is in need of urgent repairs to ensure the longer term future of this Grade II* listed 20th Century icon. The project presents a once in a generation opportunity to improve the building's accessibility, safety and comfort and provide a new range of learning and working environments at the heart of the Sidgwick site.

At this exhibition

You can find out more about the current proposals and the likely timelines for the refurbishment.

The design team will be on hand during the exhibition to answer any questions. The information presented here can also be found online:

https://www.em.admin.cam.ac.uk/stirling-exhibition



The site

A home for Arts, Humanities & Social Sciences

In the early 19th century, colleges such as King's, Trinity, and Gonville & Caius established Fellows' Gardens west of the river. Later, Newnham, Selwyn, and Ridley Hall joined, attracted by the open space and proximity to the medieval centre. In 1952, the university planned a new arts campus in this area; architects Casson & Conder designed the first buildings around a series of informal blocks and courtyards.

In the 1960s, the university sought a design for a new History Faculty building. The library, founded in 1807 and moving to various locations over the years, needed a permanent home. The brief required both a home for the library and various faculty spaces with most of the entries proposing separate library and faculty buildings.

However, James Stirling & James Gowan impressed the selection panel by proposing a unified building symbolising a community of students and teachers with knowledge, represented by the library, at its physical and symbolic heart.







History & significance

A 20th Century icon

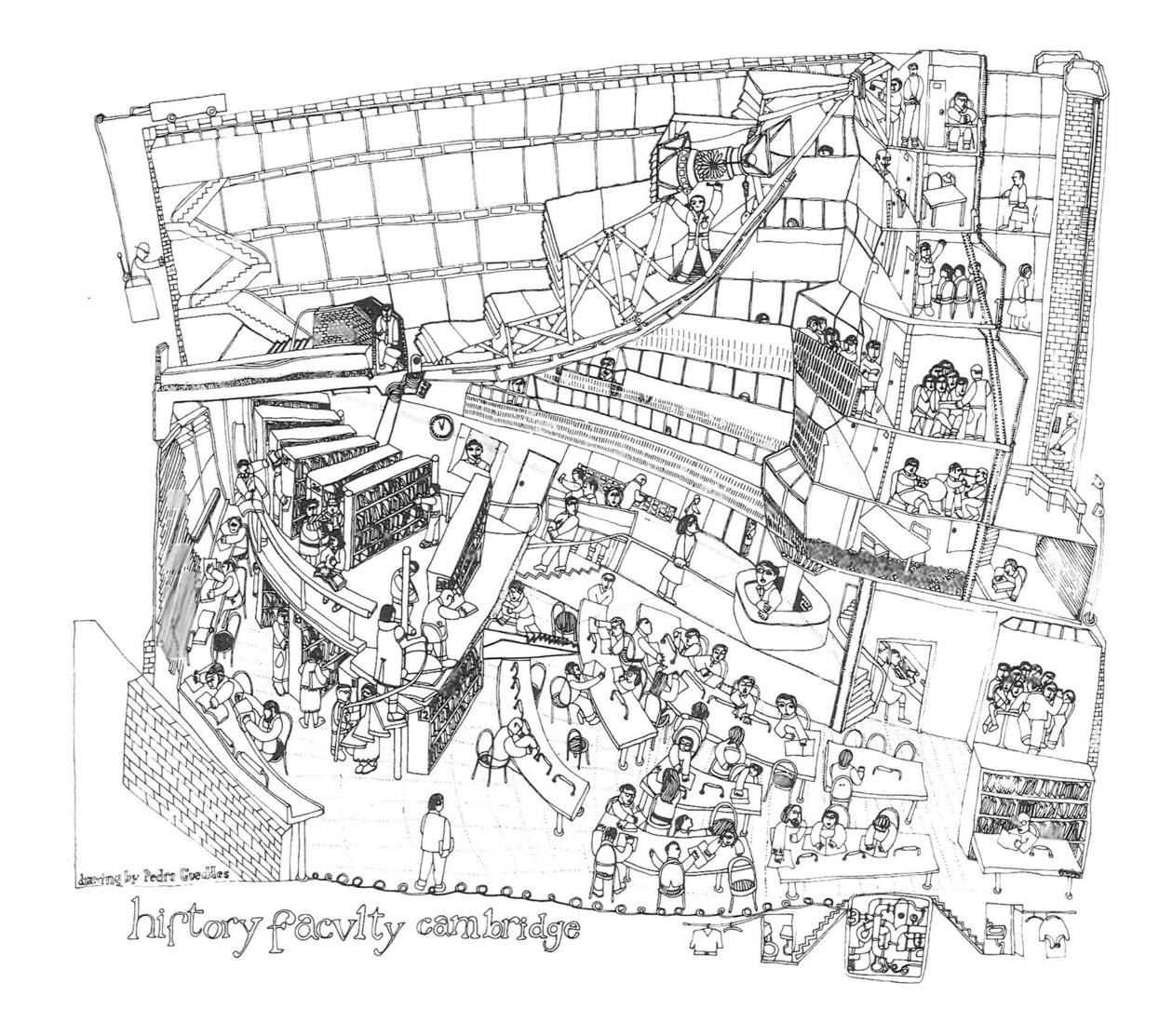
The building is a landmark in the history and development of architecture. It is one of three similar works by James Stirling, along with those at Leicester and Oxford, which have had an enormous influence on architecture worldwide and engendered a vast body of literature.

It has a remarkable formal inventiveness, synthesising strands of British architectural traditions with the visual culture of the early twentieth century. Beyond aesthetics, Stirling understood that buildings can carry a philosophical meaning: the design for History symbolises a community of students and teachers with knowledge, represented by the library, at its physical and symbolic heart.

The Faculty of History has always divided opinion and sown controversy: it is the best of buildings and the worst of buildings. Objections to its unusual appearance serve to reinforce prejudices fuelled by stories of its technical weaknesses. Like almost all historic buildings it fails to meet contemporary needs; it requires work to bring it up to today's technical and standards in order to safeguard the building for the future.







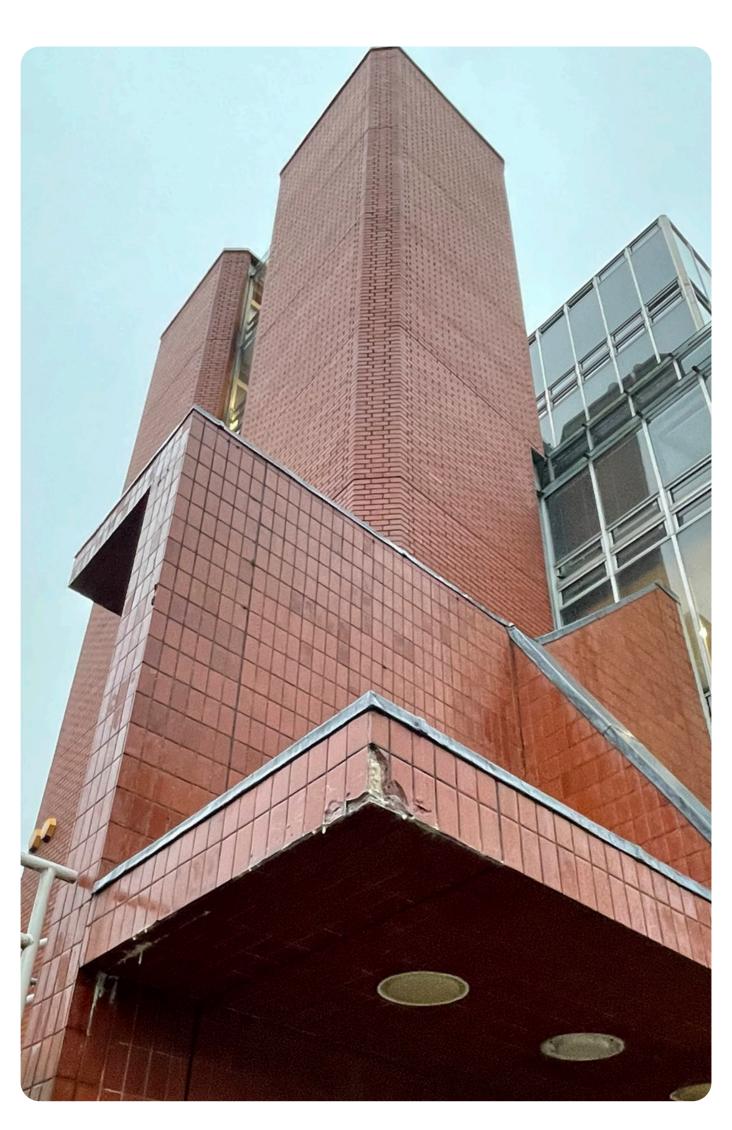
The need for repair

The need for refurbishment

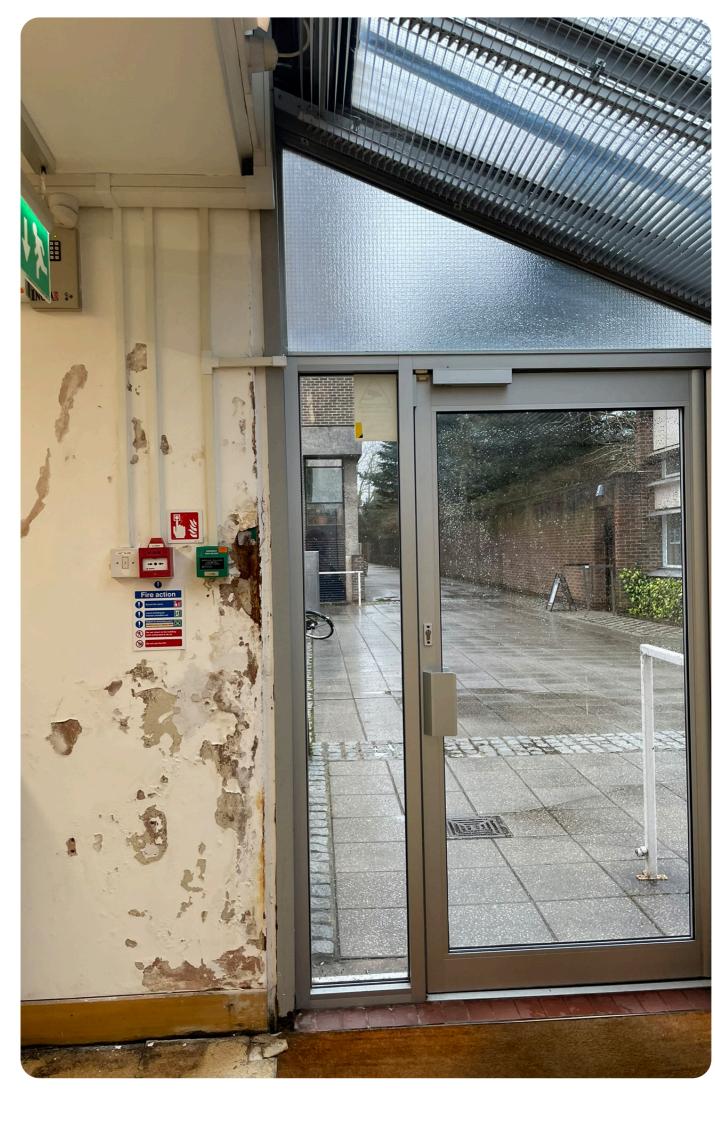
The building is difficult to maintain due its Grade II* listed status and complicated geometry. After almost 60 years of use, the building is showing significant signs of wear and a comprehensive refurbishment is required to provide a comfortable environment and safeguard the building for future generations. This presents a huge opportunity to upgrade the building to improve thermal comfort and provide a range of learning and working environments to benefit both students and staff.

"The project is true to James Stirling's vision in that it looks to the future. It will enable all those who use the building to work together in new and exciting ways."

Professor Tim Harper, Head of the School of the Humanities and Social Sciences and cochair of the Stirling Project Board







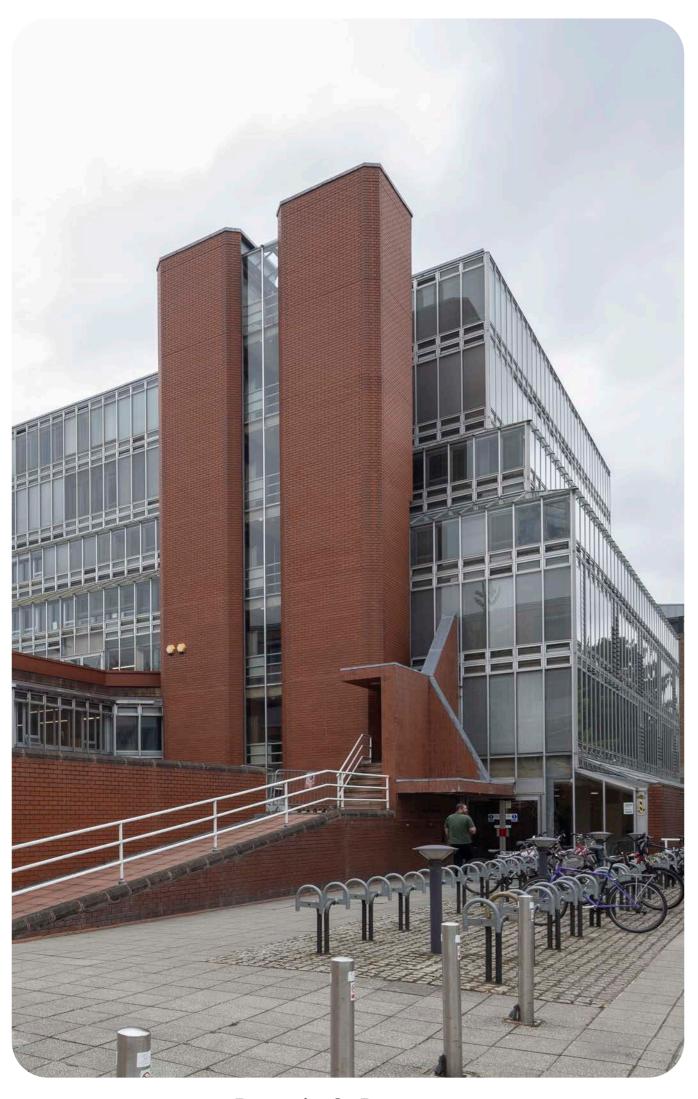
Where we are

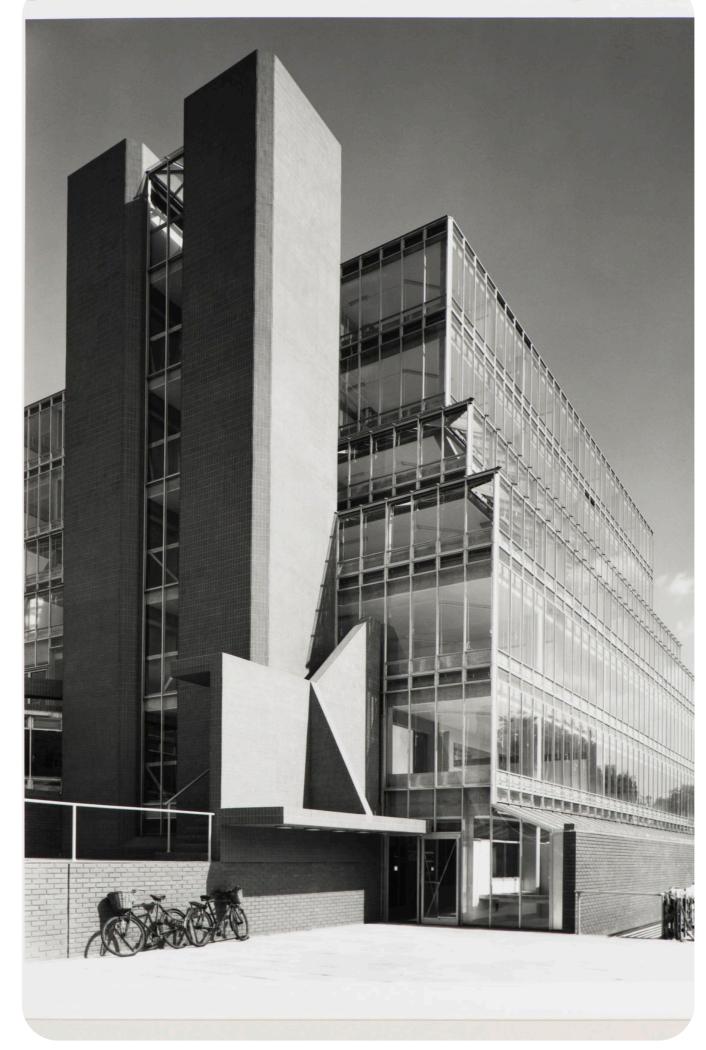
We have recently concluded the spatial design of the project, following a feasibility study in 2022 and concept design throughout 2023. The project is currently going through the University governance process in anticipation of a Planning Submission later this year. The next stage will involve the technical design of the proposals and contractors SDC have been appointed to develop the technical design further.

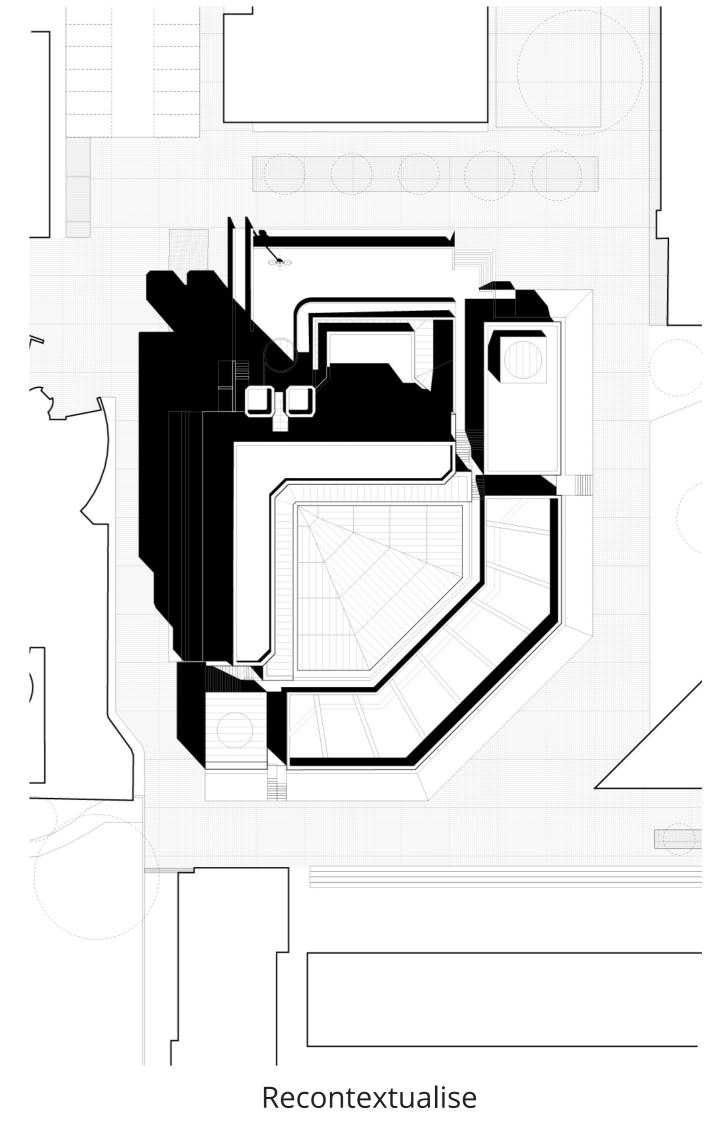


Vision

"The project aims to repair and enhance an iconic 20th Century building. It will create a flexible and inspiring space, responsive to the University's ever-changing requirements, that breathes new life into the building and its academic community, for the next 100 years."

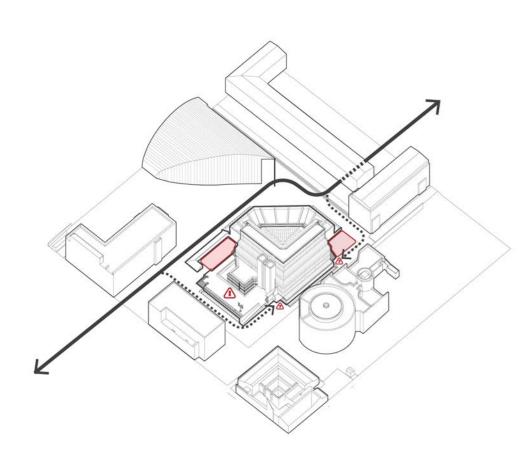




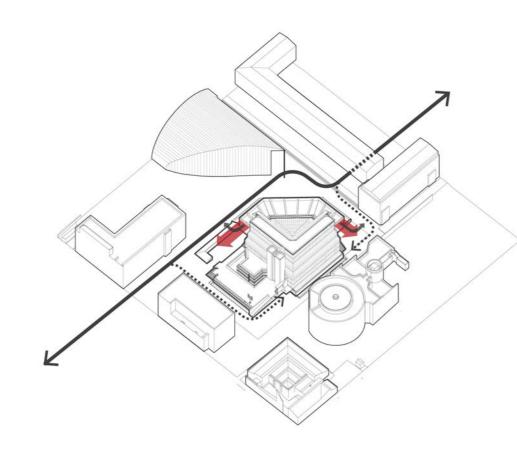


Repair & Restore

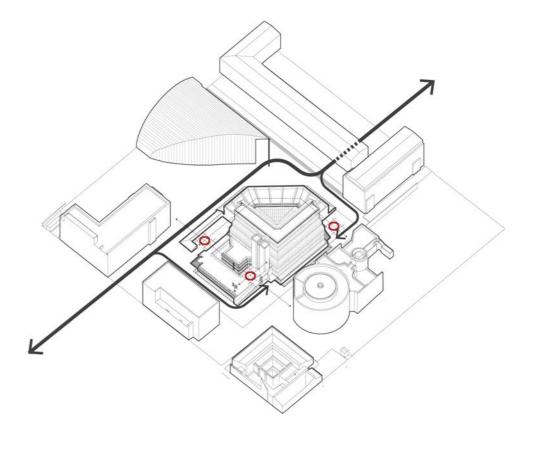
Reinstate & Reuse



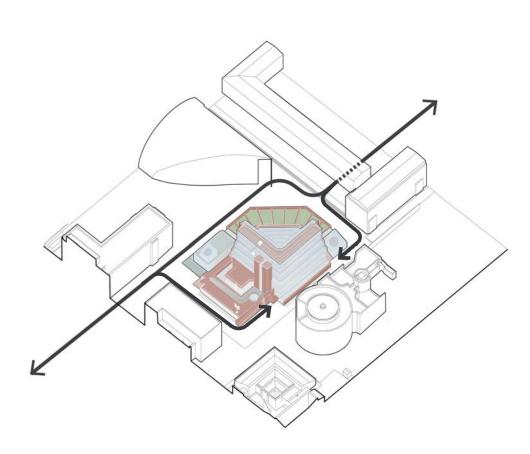
Preserving existing routes and entrances



Opportunities to address space need and egress

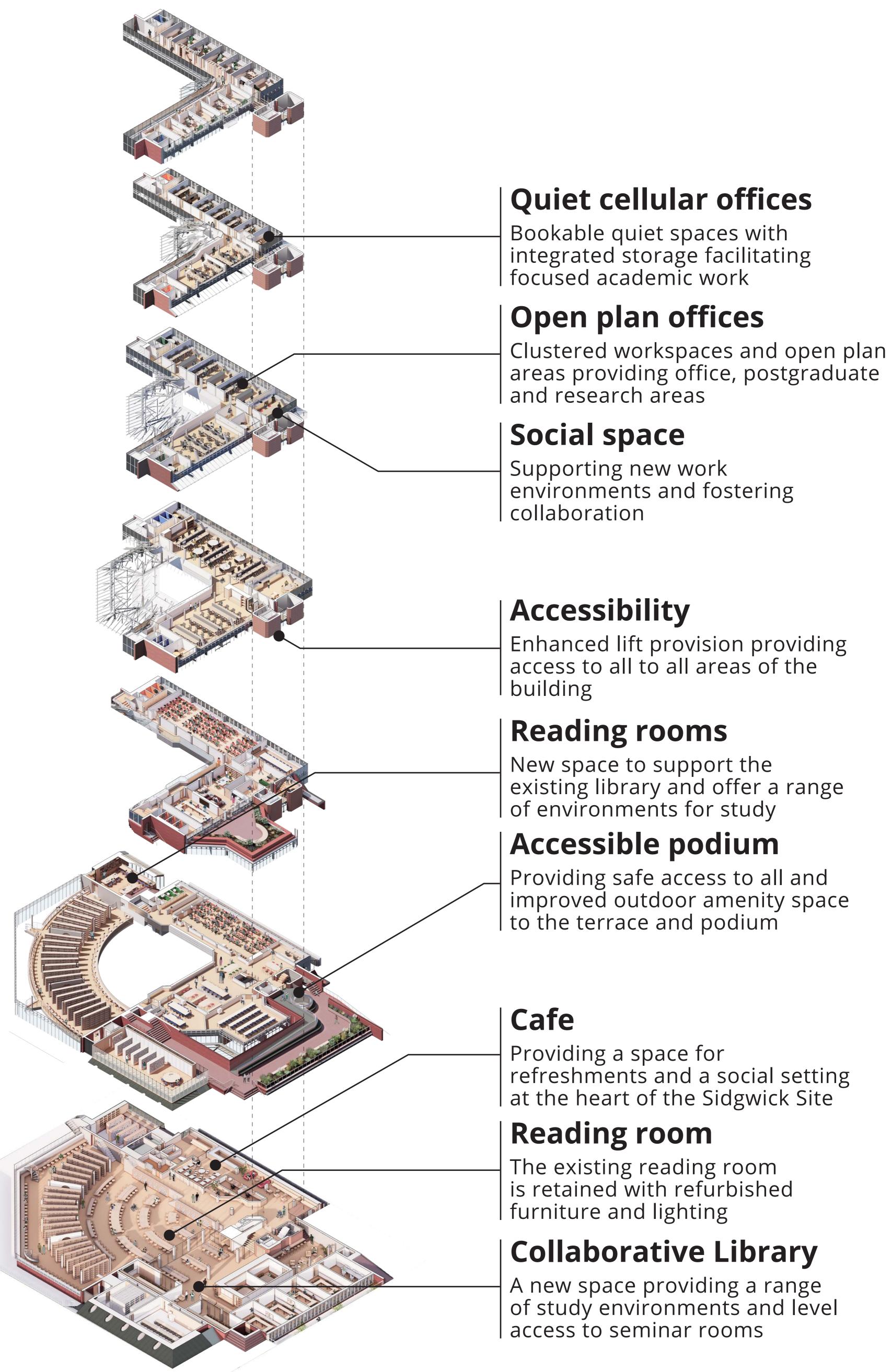


Anchoring interventions



Emerging proposals

A 21st Century facility

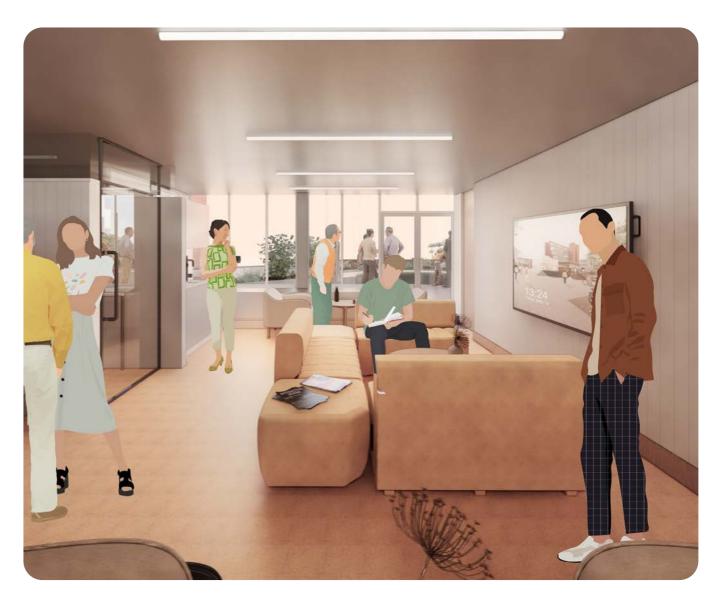




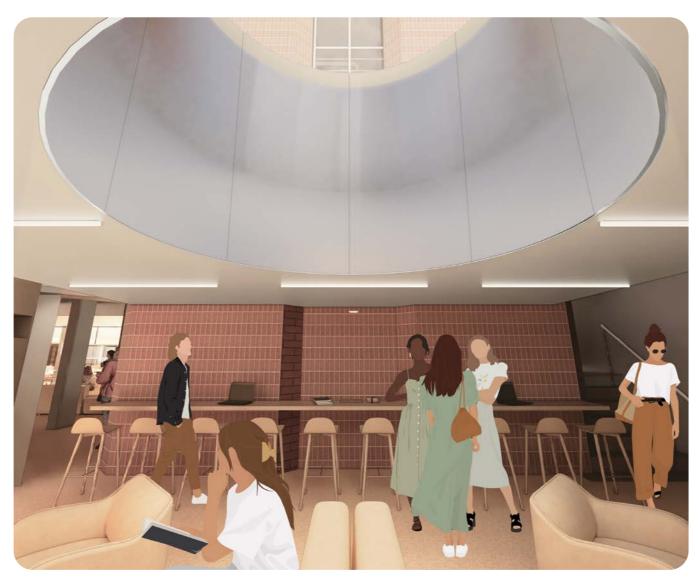
A range of learning environments

A facility fit for the 21st Century

Interior upgrades will create a range of learning and work environments from vibrant social spaces to individual quiet study areas. Lighting and acoustic performance will be improved and new furniture selected to provide comfort. The use of design classics and a muted palette of materials will allow the architecture to remain the focal point of the restored building.



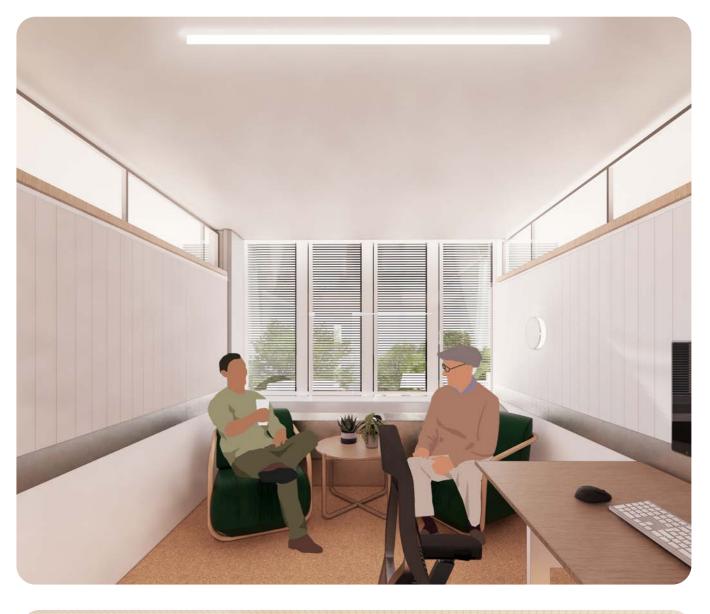














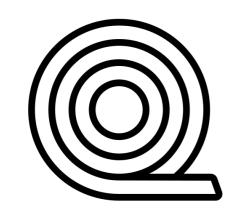






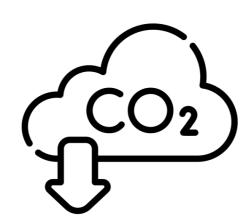


A low carbon approach



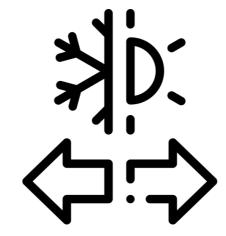
Fabric first

- -Glazing upgrades
- -Shading considerations
- -Internal wall insulation



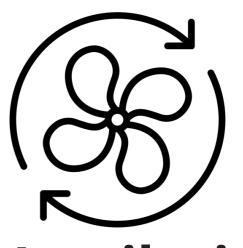
Zero gas

- -Electric pumps
- -Heat recovery
- -Potential renewables opportunities



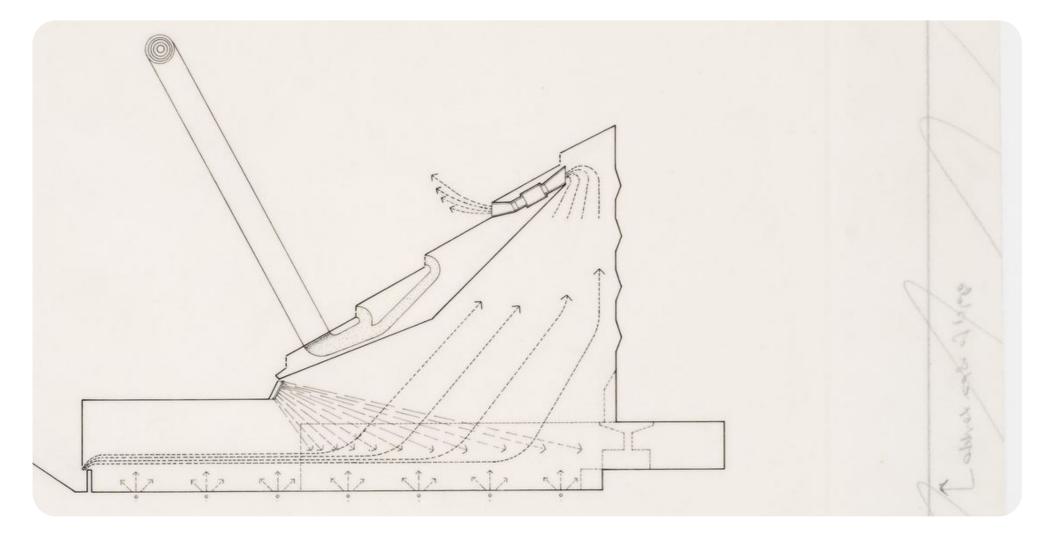
Climate control

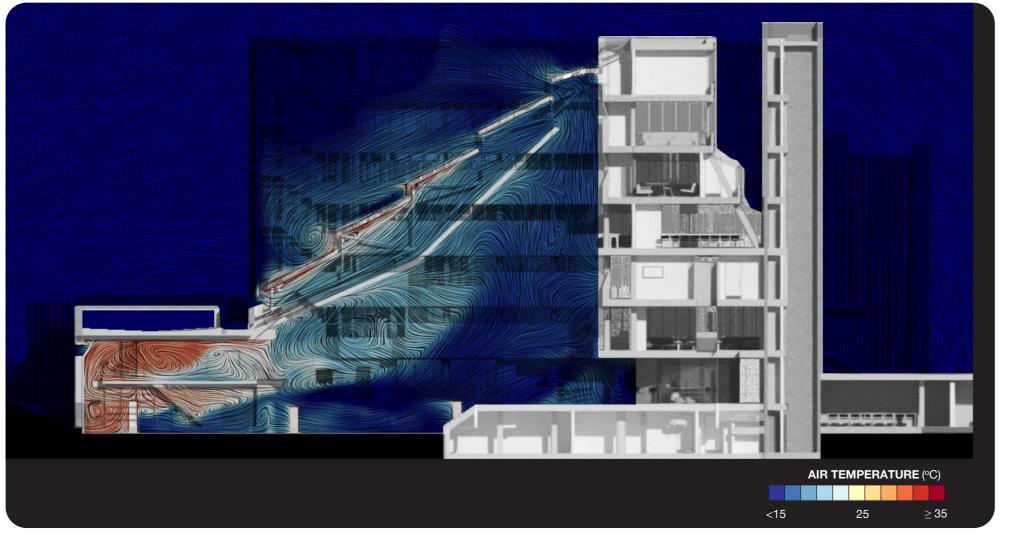
- -Active heating & cooling
- -Passive summer purging
- -Night purging via louvres



Ventilation

- -Fresh air via louvres
- -Existing stair utilised to extract stale air
- -User operable louvres





An evidence led, whole building approach

James Stirling had ambitious proposals to harness the twin layers of glass making up the reading room roof to draw hot air up and out of the building, but the fans installed at high level were too noisy for the sensitive library below.

Using modern digital simulation tools, proposed improvements to both the facades and heating and cooling systems have been studied extensively to ensure the refurbished building will provide a comfortable environment for occupants.

A heritage appropriate approach

A significant design challenge is how to retain the crystalline form of the building whilst significantly improving the performance. The current proposals seek to retain similar framing to the existing building with upgrades to double glazing. Due to the building's orientation, there is a need to provide further shading which will take the form of horizontal blinds between the glass layers, mimicing the existing venetian blinds.



Improving accessibility

Access for all

The proposals will resolve access for all users to all areas of the building. The current building is split across many levels which makes access difficult, with existing stairs, ramps and lifts not fit for purpose. By upgrading existing lifts and providing new lifts and ramps, access to the building is equitable for all users.

Providing an environment for all

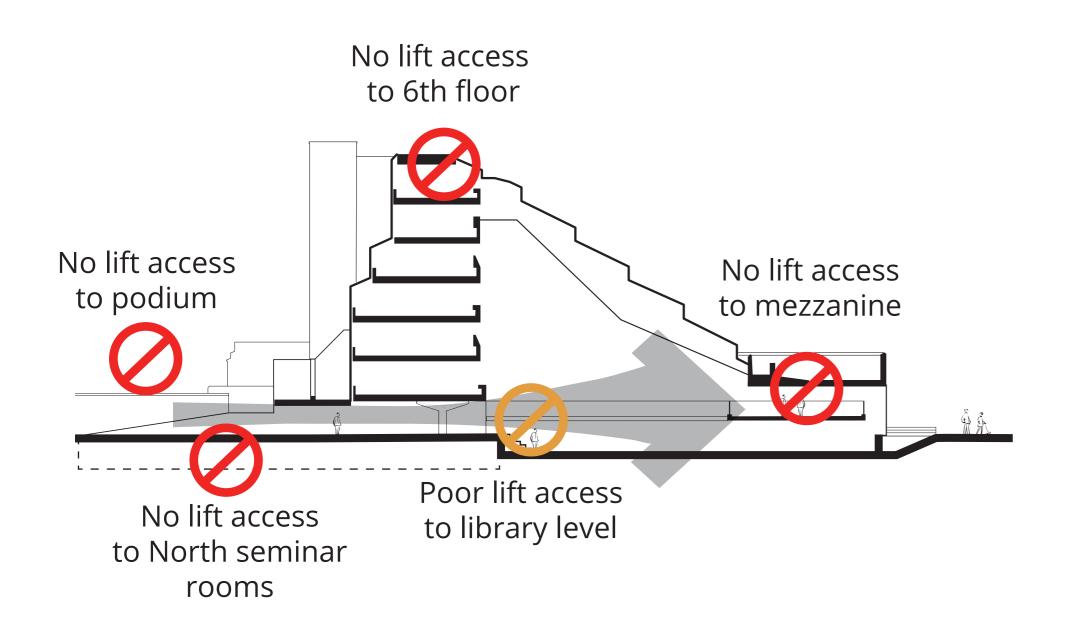
The refurbishment will provide a range of learning environments suited to the needs of all, from quiet, private study spaces to vibrant social spaces. Considerations of users' physical and mental needs through the use of acoustics, lighting, ergonomics and colour will ensure all users are able to find a place that works for them.



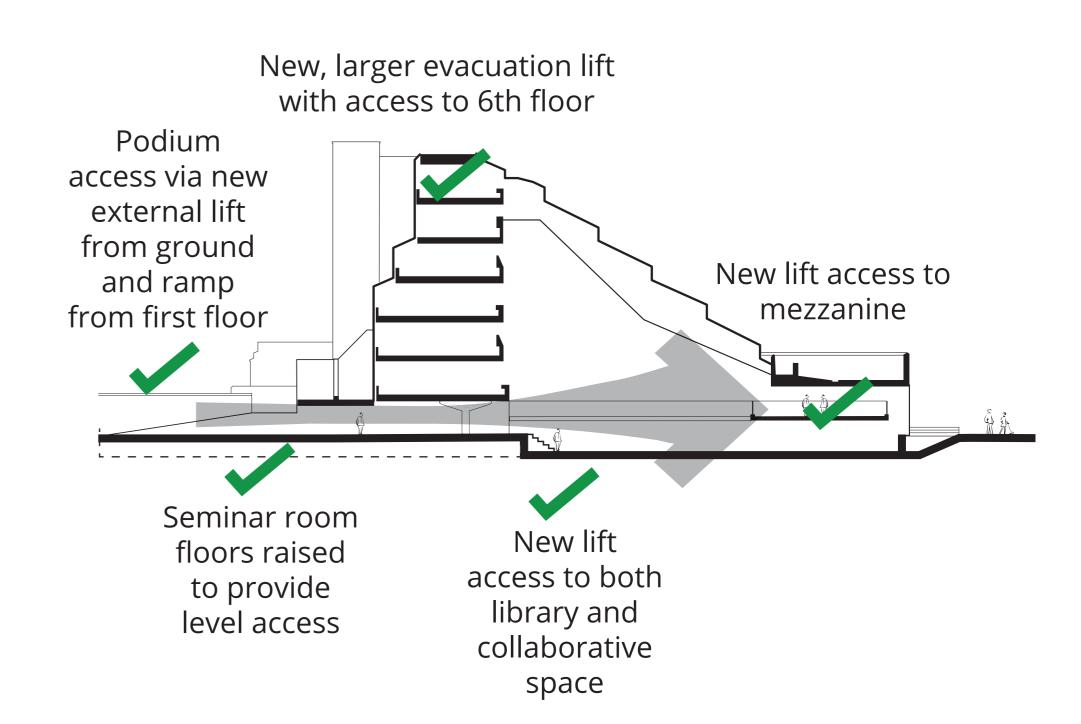




Current access



Refurbished access



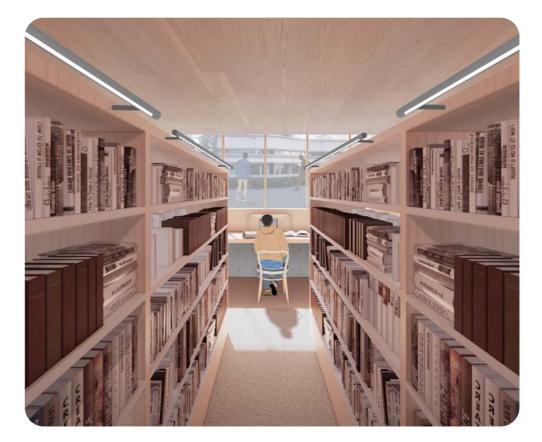
Supporting the future of the Sidgwick site







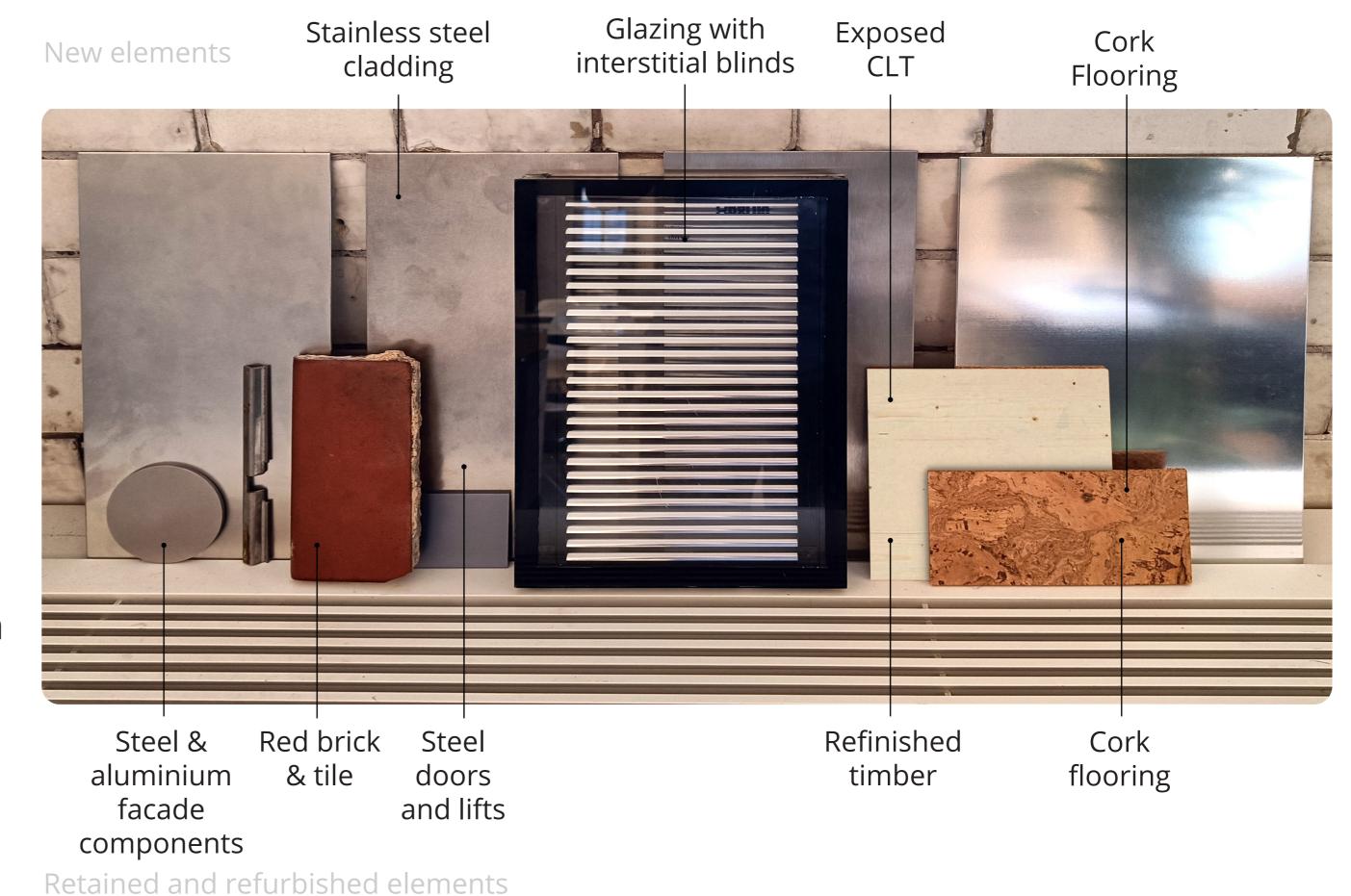






New elements

To support the area displaced by the provision of new ventilation and heat recovery systems within the basement, two new pavilions are proposed at either end of the 'bookstack'. These high value additions will provide new library and reading spaces, support enhanced escape and accessibility whilst supporting the servicing of the existing building. Their massing, form and materiality take their cues from the existing building whilst utilising low carbon construction. Materials have been selected for their whole life cycle carbon, robustness and end of life recyclability.



Planning

Consultation to date

The project team have worked with external heritage stakeholders to ensure that the proposals are an appropriate, conservationled approach to the Grade II* listed building. Further consultations have taken place with sustainability and accessibility officers to ensure the proposals are in line with current planning policies.







Sustainability

The building will meet BREEAM Excellent, a certification ensuring the building meets key sustainability criteria. The zero-gas approach will help to meet the University's own absolute zero targets and additional consultation has been undertaken to improve the wellbeing of occupants by incorporating key sections of the WELL standard. A pre-refurbishment audit has been undertaken to identify potential reuse or recycle opportunities for any fabric to be removed.



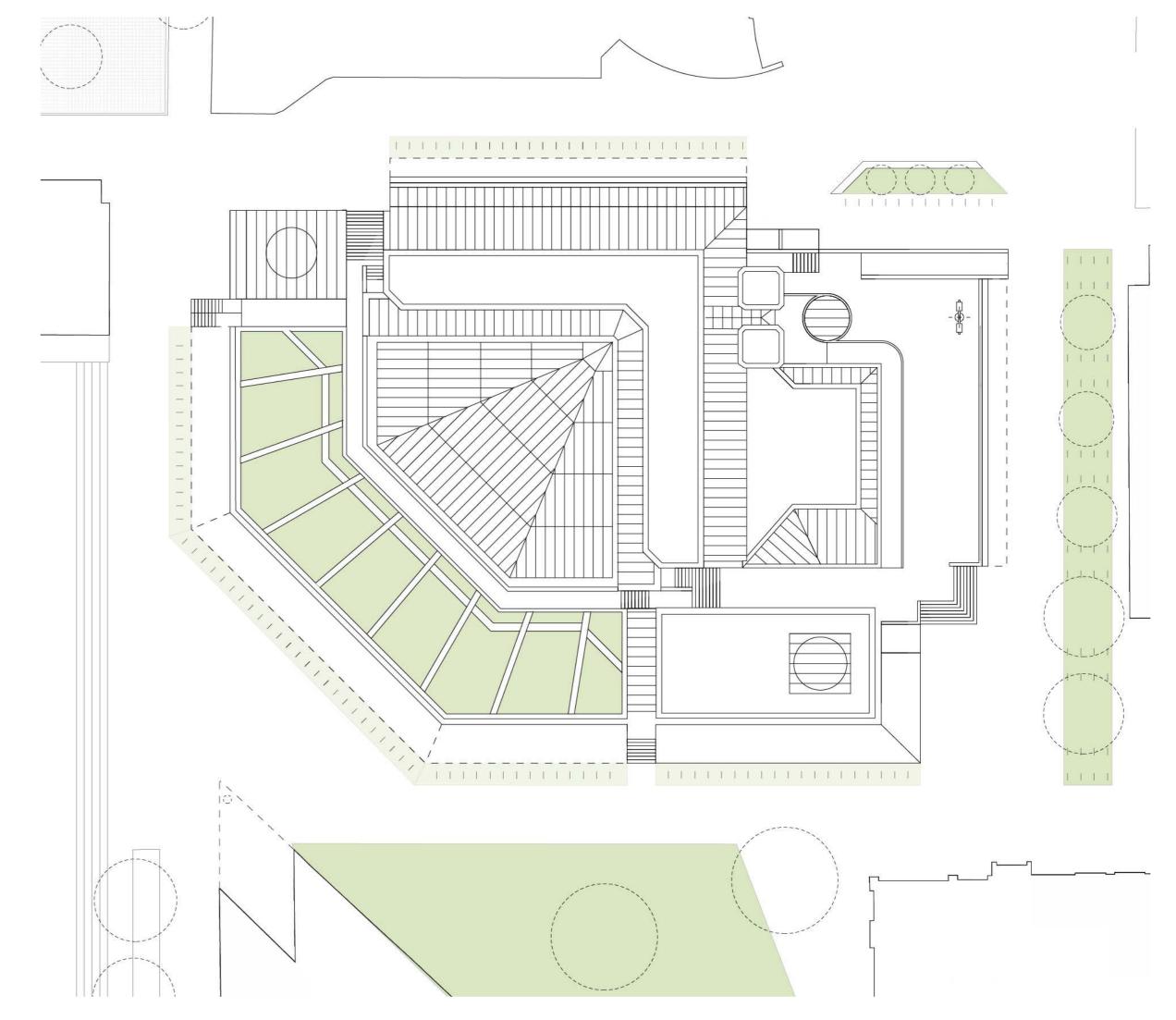


Landscape & biodiversity

Whilst the existing structure of the building has limitations, the project will improve biodiversity through the introduction of sedum roofs to the 'bookstack' volume and planters to the various terraces. Cycle parking will be installed with permeable paving, improving water management.

Cycle parking

The project team understand the importance of cycle parking and its proximity to the Stirling building entrances. A transport assessment has been undertaken to ensure that proposals provide a sufficient uplift in cycle parking to cater to the enhancement in occupancy numbers. A net gain of 56 cycle spaces is proposed around the building perimeter and additional secure cycle parking for staff proposed at the eastern edge of the Sidgwick site behind the Faculty of Law.

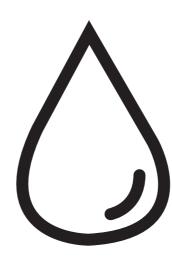


Planning



Noise

An initial noise survey has been undertaken to understand the current noise levels around the site and how the proposals may contribute to this. The refurbishment requires the installation of some mechanical equipment and this has been assessed to ensure any noise generated by this sits within prescribed limits.



Water use

The proposals will utilise existing sewer connections for both surface water and foul water. Whilst rainwater harvesting isn't viable due to the limitations of the existing building, new, efficient santiary fittings will be installed throughout to reduce water usage. The installation of a sedum roof to the bookstack will help to attenuate rainwater.



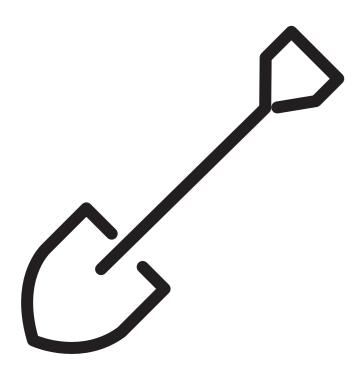
Transport

As the building sits within a pedestrianised zone, vehicular parking is not affected by the proposals. There is a significant impact to cycle parking due to upgrades to the existing railings and the siting of the new pavilions. A transport assessment has been undertaken to identify the required number of cycle spaces and further work is being undertaken to identify suitable location for these in proximity to the building.



Lighting

Proposals for new lighting specifically avoid contribution to light pollution and focus on targeted lighting. New controls will be installed to reduce energy usage. Existing task lighting within the main library will be relamped with LEDs to ensure a conservation-led approach.



Archaeology

An archaeology assessment will be undertaken to manage the risk to the project and ensure contractors undertake the work in a compliant manner. As a refurbishment project, the extent of excavation required is very limited to support the new build elements and connect back into the main building.





During refurbishment

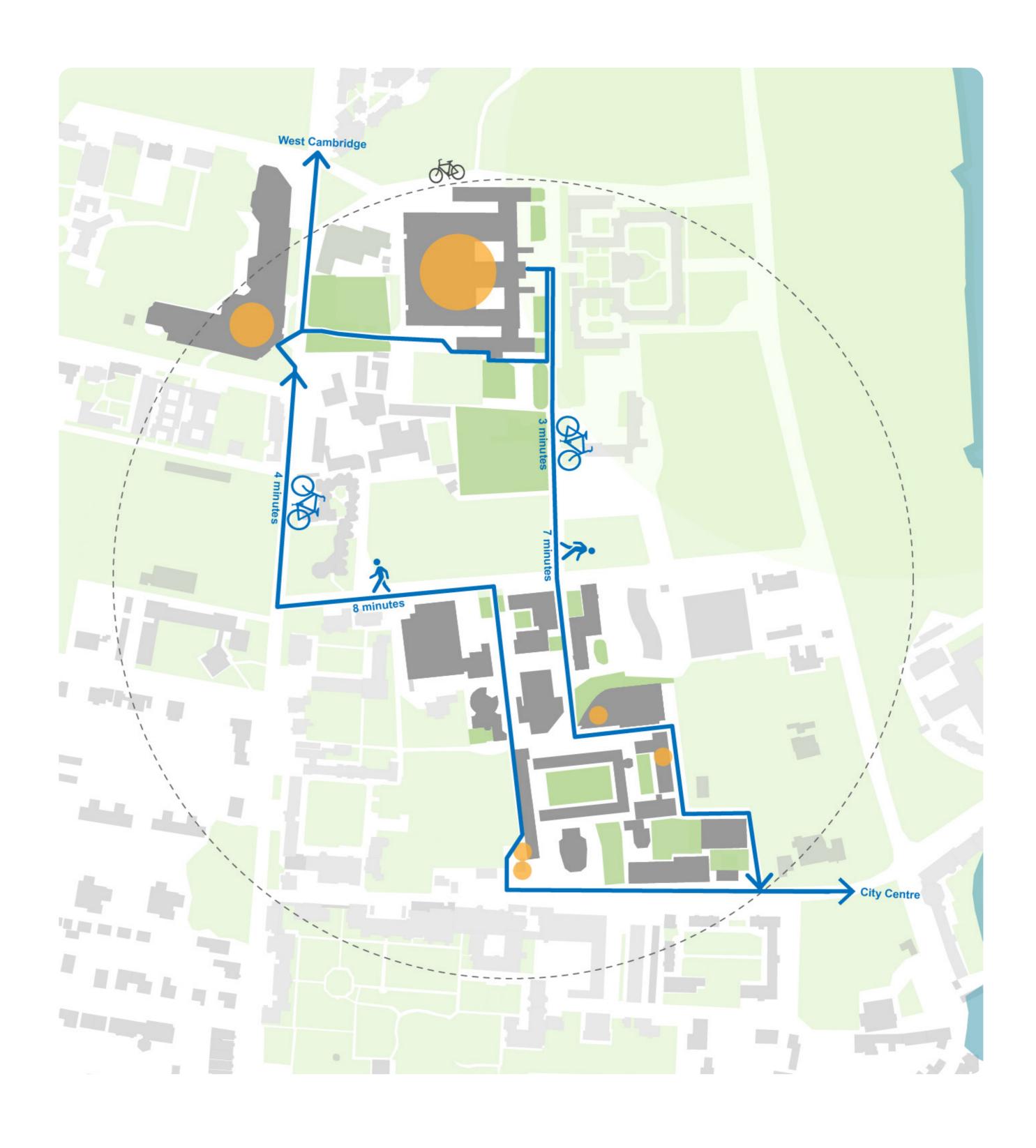
A connected experience

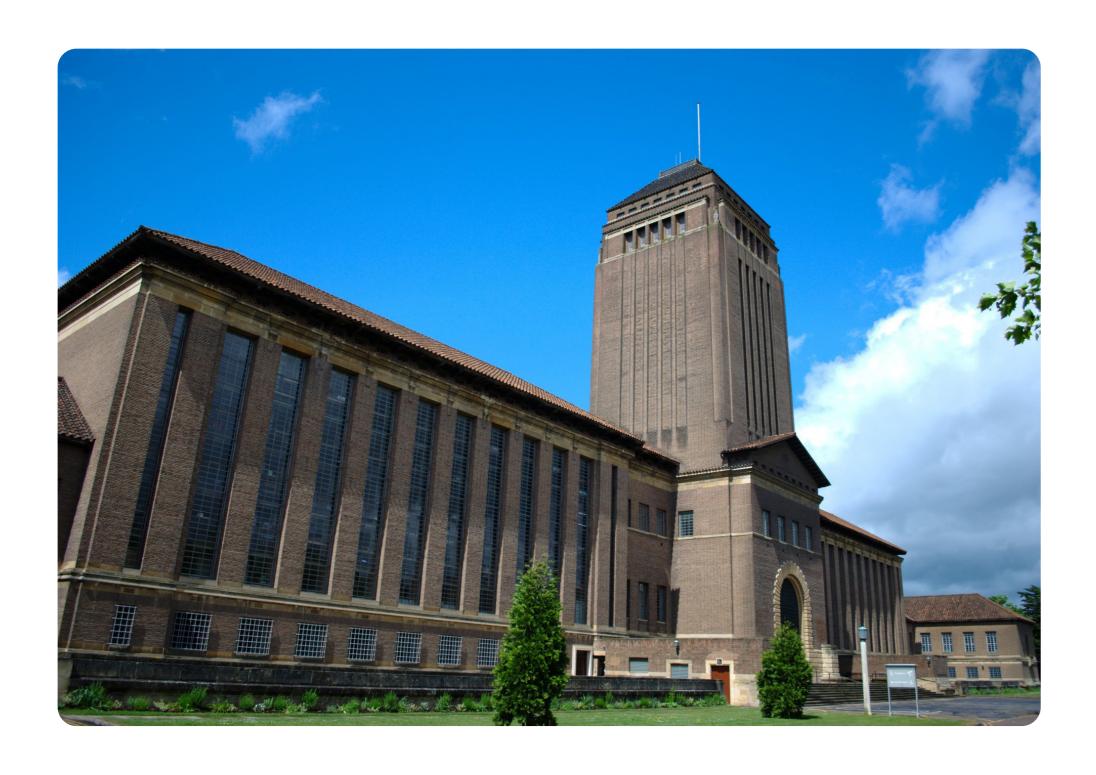
To ensure a high quality student and staff experience during the refurbishment works, a number of sites have been identified in proximity to the Stirling building to provide library, seminar, study and work space. These spaces are primarily within Criminology, Law as well as in other temporary facilities on the Sidgwick site, with some activities a short walk or cycle from the Sidgwick site. Sidgwick Lodge will be repurposed as an identity space for History to ensure there is a single point of contact on the Sidgwick site.

Existing spaces will be reconfigured or redecorated to ensure high quality spaces are maintained throughout the refurbishment period.

The Seeley Library

An area within the University Library has been earmarked to house the existing collections, with browsable bookstacks and areas to read, situated in proximity to the Reading Room in a similar sized space.











Your feedback

Submitting your feedback to us

We have engaged with key stakeholders and representatives throughout the design process and are now seeking views from the public on the current proposals to ensure the design reflects the needs and aspirations of a diverse audience.

The feedback from the exhibition will be fed into our future design work ahead of the planning submission later this year.

Please share your thoughts using the QR code.





