ACCESSIBLE CITY

BY RUBY TURNER

A CIVIC REUSE FOR A CYCLING FUTURE

The urban needs of Oxford have evolved, demanding solutions that are not only environmentally sustainable but also socially responsive. This project re-imagines a malthouse, located at the heart of the city, transforming it into a cycling hub that addresses Oxford's severe congestion and promotes wellness through active mobility. The design encourages cycling as a mode of transport, hobby, and exercise - uniting diverse communities under one roof. This is achieved by integrating a learning workshop, social café, and secure storage, the building supports all cyclists while inviting the broader public into the cycling conversation. Architecturally, the intervention draws inspiration from the bicycle itself; steel furnitecture, perforated detailing, and coloured glass embodying motion and connection. Through thoughtful adaptation, the building's historic character is preserved and reinterpreted, reinforcing the role of architecture in enabling city-wide behavioural change. The result is a vibrant, inclusive space that exemplifies sustainable transformation through creative reuse.

OXFORD RAIL STATION

THE MALTHOUSE

OXFORD CITY CENTRE

THE WESTGATE

HISTORY OF THE MALTHOUSE

The Malthouse was originally built in approximately 1883. Malthouses were essential in converting barley into malt, a key ingredient in brewing beer, especially in the 19th century.

The building originally had large chimneys on top of the tower in the middle where the kilns were connected to. It is assumed this is where a fire, in 1956, occurred, damaging a lot of the building. The main damage was the loss of the chimneys, however, there was a lot of reconstruction on the rest of the malthouse with still noticeable burn marks on the exterior.

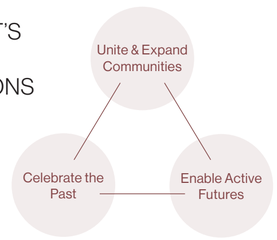
This changed the interior use of the building drastically, and so after the fire, the building was bought by Oxford University. The Malthouse was then converted to office spaces and workshops, currently being used by the University surveyor team.

The location of the Malthouse allows for an ideal place for cyclists to congregate. The site is almost right in the centre of the train station, the westgate and the city centre. All three of these are places of interest for many cyclists, whether they are travelling for work or leisure, making the centre of them perfect for secure lock up, community congregation and much more. Additionally, it is surrounded by both scenic routes and road heavy ones, ideal for practice.

RESPECTABLE TRANSFORMATION

Once an industrial malthouse, the existing building sat underused despite its rich brickwork, layered material history, and proximity to Oxford's cycling networks. Rather than replace it, this proposal revives and re-purposes it — transforming the shell into a cycling hub that unites communities, fosters skill-sharing, and promotes well-being. The design enhances what was already there, working with the building's oddities, natural light potential, and historical texture to form a new kind of public architecture rooted in motion, memory, and access.

PROJECT'S CORE INTENTIONS



WORKING *WITH* THE STRUCTURE

Maintaining the existing character can be challenging at times during reconstruction, however, if you work with the building and not against it, the end result can be an extraordinary piece of architecture. Adding to a historical building can be just as much as an adaptation as taking away, if done correctly. There have been many times in the past where this has been achieved very successfully. For example, the Royal Ontario Museum in Toronto has a rich past that can be studied by the building's architecture. It was first built in 1914 in a neo-Romanesque style, only to be later renovated in an Art Deco inspired form. By 2007, Daniel Libeskind added a multimillion-dollar extension made primarily of glass, aluminium, and steel. This provides the current building with almost centuries of architecture and the different styles. The vast contrast between materials and style work well together as it has become somewhat of a sculpture piece which definitely grabs your attention when walking by.

This is one of the reasons behind the choice of steel being implemented as the furnitecture within the malthouse, as It provides a nice contrast to the brick which shows history through the marks of the fire. Additionally, the use of steel against a historic building represents the different types of architectural styles through the ages.

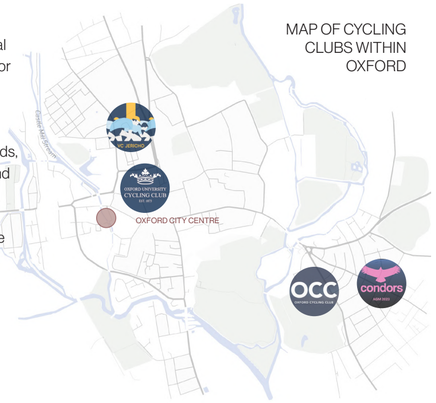
THE ROYAL ONTARIO MUSEUM, *DANIEL LIBESKIND*

CYCLING, LEARNING AND BELONGING

CYCLING AS A CONNECTOR OF PEOPLE AND PLACE

UNITING THE DIFFERENT CYCLING COMMUNITIES

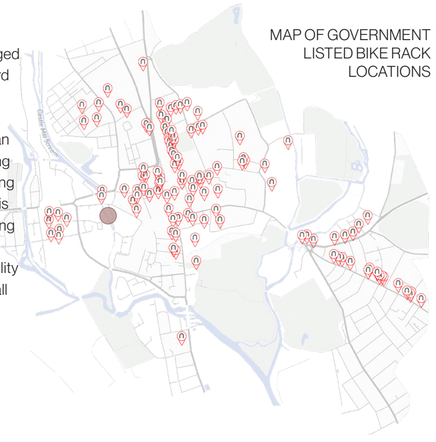
Creating a space for non-cyclists and cyclists of all types is essential in raising awareness of the need for infrastructure and policy change. Therefore it must feel welcoming and encouraging, so that people feel confident in making new friends, exploring the activity of cycling and sharing their experiences. Having a large, open cafe space with continuous benches allows for the expansion and uniting of different communities, in turn creating the voice needed for change.



MAP OF CYCLING CLUBS WITHIN OXFORD

MUCH NEEDED SECURE BIKE STORAGE

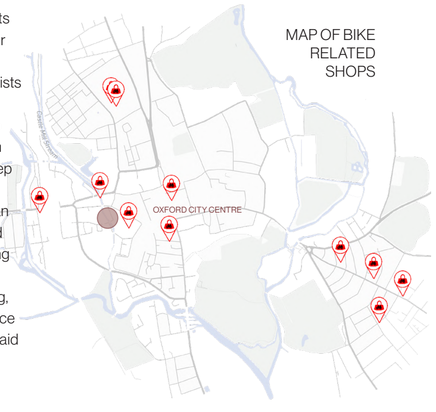
Oxford is full of bike racks which populate the city centre, however, the risk of having your bike damaged or stolen is high. If people of Oxford aren't able to securely store their bike around the city when at work or running small errands then it can heavily dissuade them from cycling altogether. Therefore, implementing a bike storage within this building is essential when encouraging cycling is the aim. The location of this building is also perfect for this facility as it is practically in the centre of all major transportation destinations and start points.



MAP OF GOVERNMENT LISTED BIKE RACK LOCATIONS

A WORKSHOP FOR LEARNING

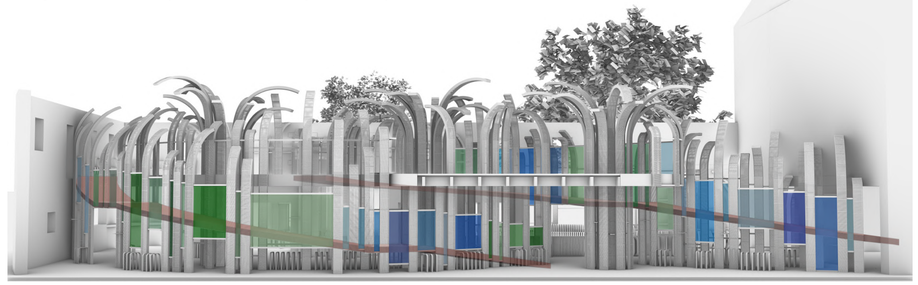
Oxford lacks a place where cyclists can learn to and eventually fix their bikes by themselves. This would come in handy for all types of cyclists and all types of cycling issues. They would of course first have to visit the building and workshop on multiple occasions to develop deep knowledge of specific areas, in turn populating the space. This can increase or even begin new-found confidence in cyclists, encouraging them to continue the activity. The additional areas within the building, such as the bike shop, routes advice area, physiotherapy, etc. can also aid in encouraging confidence.



MAP OF BIKE RELATED SHOPS

ADVOCATING FOR CHANGE

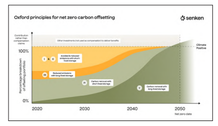
The city of Oxford's current cycling policies and infrastructure are rather outdated in comparison to the Netherlands and even Cambridge, and so there is a need for change. Alongside creating a place which encourages cycling, the bigger aim of this building is to create a broader community to advocate for change. This may include pedestrians and motor users, alongside the cyclists, whoever understands how change can benefit everyone as the entire city is inevitably affected.



ALIGNING WITH THE CITY'S FUTURE PLANS

A building dedicated to enhancing the cycling community, providing the appropriate facilities for cyclists and encouraging it as an increasingly popular activity or mode of transportation, can only help in pushing the current underway policies, such as 'Oxford Greenways Project', more traffic filters and their 'Local Cycling and Walking Infrastructure Plan'. There has so far been very slow progress and so they could all could benefit from more support behind it. Additionally, the building would aim to increase the cycling community and encouraging the activity, and so this could influence more proposed policies to further develop the cycling infrastructure within Oxford.

The encouragement of a cycling culture within Oxford also aligns with Oxford's aim to become a zero-emission city by 2040, bringing more positive impact to the community.

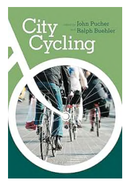


Zero Carbon Oxford

- Oxford's aim to become a zero-emission city by 2040 consists of many key components to achieve this.
- For example, sector-specific targets, ZEZs, active travel promotion, building de-carbonisation, renewable energy adoption and the city council's commitment

POSITIVE COMMUNAL AND ENVIRONMENTAL EFFECTS

In the book, 'City Cycling' (2022), Pucher and Buehler go into detail about how cycling positively effects a community by becoming a key choice of transportation or hobby.



Many of these effects include:

- **Health benefits**
- **Environmental advantages**
- **Economic savings**
- **Reduced traffic congestion**
- **Enhanced urban liveability**
- **Accessibility and mobility**
- **Safety improvements**

'City Cycling' (2022), Edited by John Pucher and Ralph Buehler

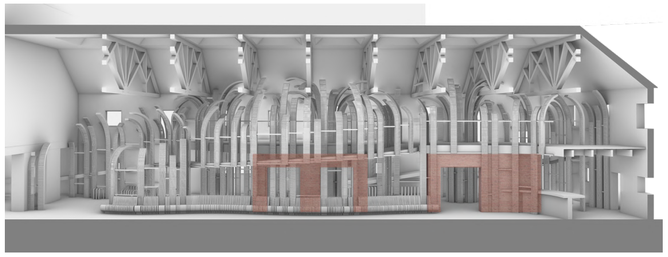
THE WHEEL OF COMMUNITY WELL-BEING

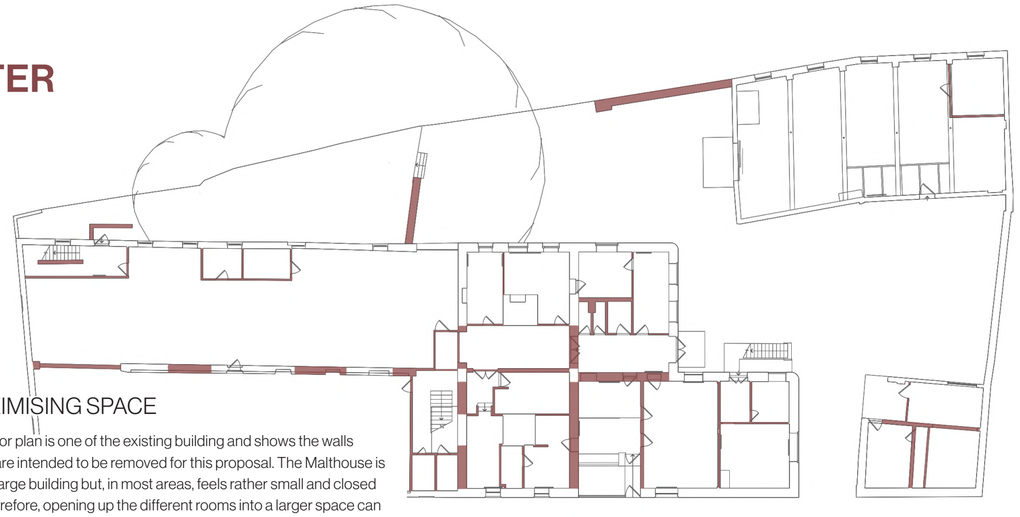
This focuses on six dimensions which are important when it comes to positively development or improving a community. The main six highlighted are social, environment, economic, cultural and political, all encompassing different aspects of their own. It was designed to enable a place/project to contribute, and continue to contribute throughout its life, to the well-being of a community. This can be applicable in multiple aspects of the proposed cycling dedicated building.

When it comes to the social aspect, the cycling building aims to create a welcoming sense of community resulting in support systems and socialisation. The building's goal is to encourage cycling as a largely used mode of transportation, resulting in positive environmental effects. Cycling is an affordable mode of transport compared to others and more within the city would decrease road maintenance costs, proving positive for the economy. Promoting cycling more as a fun, healthy and accessible activity can encourage positive attitudes towards cyclists, enhancing the current cycling culture within the city. Lastly, cycling can give many people a sense of ownership, if they cant drive for example, and can become an activity integrating people into the culture of the city.

MAINTAINING AND ENHANCING CHARACTER

ARCHITECTURAL INTERVENTION & ADAPTIVE REUSE STRATEGY





MAXIMISING SPACE

This floor plan is one of the existing building and shows the walls which are intended to be removed for this proposal. The Malthouse is a very large building but, in most areas, feels rather small and closed off. Therefore, opening up the different rooms into a larger space can change a lot about the atmosphere and feel of the environment to one of welcoming and acceptance, a key value within this project.

Additionally, keeping some of the existing internal walls is an important part of respectably maintaining the buildings historical and architectural character. This is why parts of the middle wall will be kept, also due to it separating the two areas. Having sections of this wall, as shown on the left, can create a sense of intrigue as to what's within the next space and keeping the unity throughout the building, whilst keeping the functions of the room separate.

EXPOSING THE ORIGINAL MATERIALITY

The original brick texture is exposed throughout the building in this proposal to reveal more character and create a warmer atmosphere. This creates quite a different environment to one with stark white walls, one that can be complemented by the further use of materials, such as steel and similar reddish tones.

FULFILLING THE COURTYARD'S POTENTIAL

The courtyard of the existing building currently has steps up to a level, a metre higher up, within the courtyard to level back out with the street. However, my proposal is to lower the ground of the courtyard in between the benches to maximise the space and allow for easy access around. This then means that the ground level within the building will then be level with the courtyard, where there is currently a level up, once again providing easier access. This also provides a greater opportunity to work with the existing building, maximising the space using the proposed furnitecture and adaptations you can see on the left.

Tidmarsh Lane Windows Elevation

Riverside Windows Elevation

MAINTAINING CHARACTER

The existing windows on the Malthouse, have an oddness to the, one which should be kept even when changing them. This can be done simply by keeping their existing location, and just enlarging and connecting them in different directions. In regards to the simplistic elevations, the red is the bricks which will be removed and the green is what will be blocked up and as you can see, the red outweighs the green, meaning bricks may just be relocated. As you can somewhat see below, even with expanding the windows to enhance natural light, they in keep with the existing oddness of the building.

MAXIMISING THE VIEW OF NATURE

Increasing the size of the windows allows for more outdoor nature to be visible to the people sitting inside, especially looking out onto the courtyard. The section below highlights the views of nature, being the trees and added plants along the benches which can be openly viewed by sitting on the benches facing the courtyard.
Nature is a big motivation for many cyclists as it is extremely beneficial for your mental health, as well as the obvious physical health. There is a surprising amount of nature around the site which can only be enhanced and focused on by expanding the windows.

FACING THE NATURE

Many of the benches, if not all, that you will find along suburban cycle routes, face the best view of nature surrounding them. Cyclists will often take a break during bike rides to have some food or a drink, which is essentially what my design and bench positions are inspired by. They face the best view of the site, including both greenery and the river, which brings the ability of making you feel as though you are not currently within a city centre, really emphasising the effects and benefits cycling can bring.

ENHANCING NATURAL LIGHT

Enhancing the span that natural sunlight can reach within the building can really elevate the experience of the place. Adding roof lights to the newly flat roof elegantly allows light through to every space. Opening the frame up on the inside at an angle enhances the amount of space the natural light reaches, optimising the function to its full capability as you can see below. Due to the sun path, as demonstrated on the left, light will constantly be flooded into the building and the courtyard will be highlighted in the evenings, creating the perfect sunset view, ideal for the end of a day of cycling whilst being within the city.

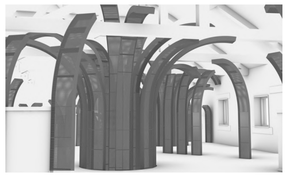
MATERIAL INNOVATION

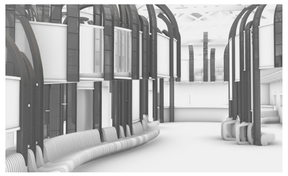
INTEGRATING NEW AND EXISTING STRUCTURES

INFLUENCE FROM THE BIKE ITSELF

As well as complementing and reflecting the character of the existing building, this proposal pulls heavily from the purpose itself. Many of the materials chosen for this project have been influenced by the bike, especially the continuous use of steel.

Just as a bike frame supports motion and structure with minimal material, the steel in my design serves both functional and expressive purposes. Additionally, the material complements the existing atmosphere of the building's exposed brick, representing a new age, whilst working with one holding historical meaning, feeling and significance to the city of Oxford.



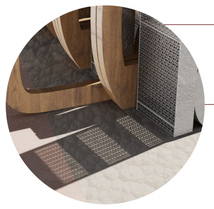


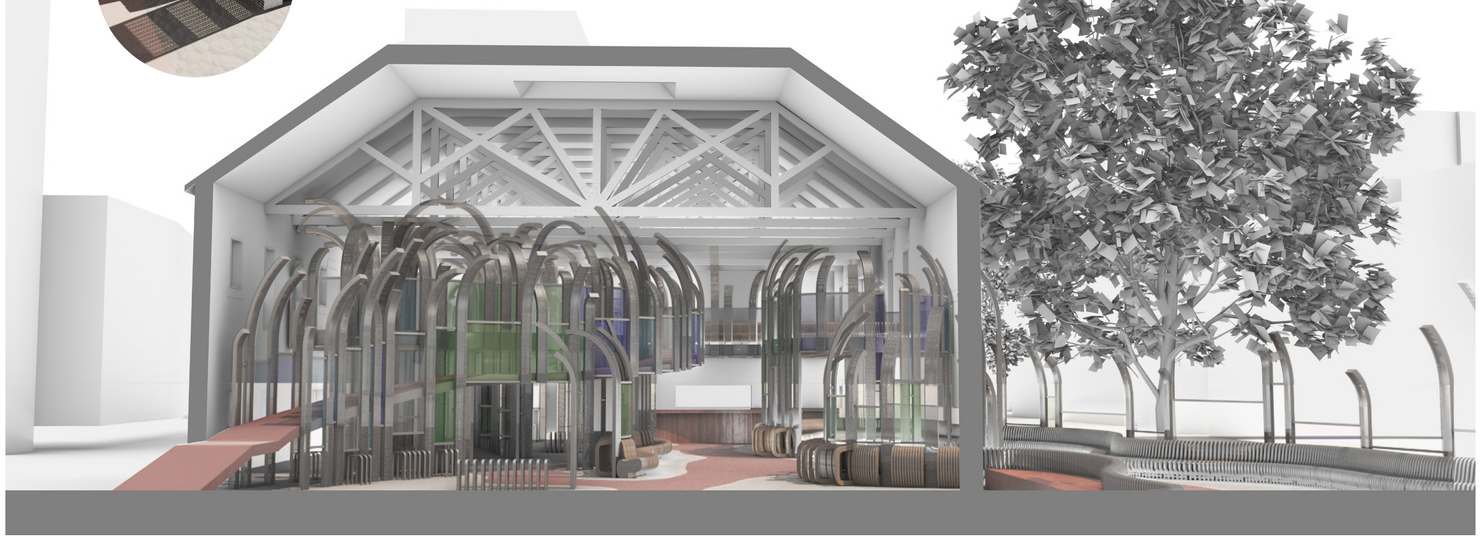
FLOWING STRUCTURE

Although this structure acts as a key part of the support for the mezzanine on first floor, it more importantly acts as a continuous use of furnitecture throughout the building. It flows through the floors, walls and additional structures (such as the trusses) to create a workshop area, innovative bike storage and the frame for comfortable seating. This structure can be added to and changed daily by visitors as bikes can be secured both vertically and horizontally for storage, adding colour to the otherwise grey form.

PERFORATED STEEL

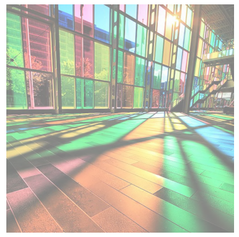
Perforated steel was chosen as a key material in the furnitecture to subtly reflect the design language of bicycles. Components like bike pedals, gear rings, and even frame details often feature holes or cut-outs to reduce weight while maintaining strength. Similarly, the perforations in the steel panels help to lighten the visual and physical load of the structures, while also allowing light and air to pass through. Similarly to the decision to keep parts of the internal walls of the building, this allows for separation of different areas, providing some levels of privacy, whilst maintaining the intrigue in seeing what's within the next space.

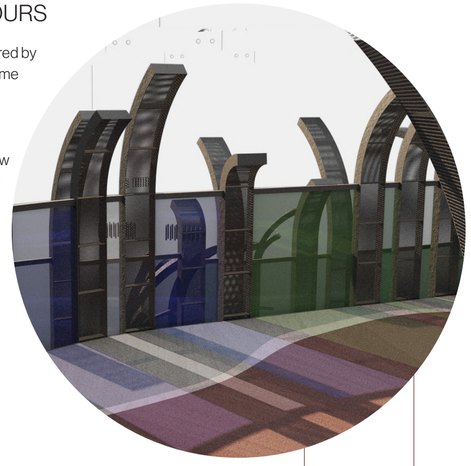




COMPLEMENTING COLOURS

The addition of colours in general is inspired by the wide range of colours which bikes come in, and which will inevitably fill the space. However the specific choice of colours came down to how they would reflect on the flooring and exposed brick, in turn how they'd affect the atmosphere. As you can see, the blue and green do so rather elegantly, proving to be a great addition.



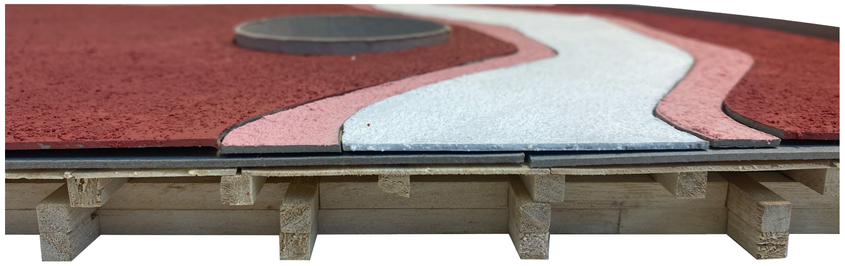


ELEVATED ATMOSPHERE

As sunlight passes through the glass, it casts tinted reflections across the perforated steel surfaces, creating dynamic shadows and ever-changing patterns that animate the interior. This interplay softens the industrial feel of the steel while adding depth and visual interest. When combined with the coloured flooring, designed to mirror cycle lanes, the result is a layered, immersible environment where materiality, light, and movement work together to celebrate the essence of cycling in a more atmospheric and engaging way.

The coloured glass really elevates the environment as opposed to if it were just the perforated steel. The mixture of the two shadows work extremely well together, creating an elevated atmosphere.

This was a very large reason for creating a flat roof and adding roof lights, to really emphasise the effect the glass can have on an area and make sure the glass is performing to its best abilities, using natural light and not just artificial.



USING OUTDOOR FLOORING *INSIDE*

Rubber crumb flooring is typically used as an outdoor material in playgrounds, sport facilities and many public areas. It has many positive qualities, including being highly resistant to cracking, chipping, or wearing out over time, absorbing impacts well and thus reduces damage from dropped objects or heavy use. Additionally, it provides a soft, cushioned surface, reducing strain on joints which is ideal for areas where people walk, cycle, or stand for long periods, and can create a slightly bouncy effect when layered properly. It also allows water to drain through rather than sitting on the surface, thus creating a non-slippery flooring, great for if wet bikes are passing over.

Along with the many positive benefits listed above, using this flooring inside gives people the impression that they can enter the given areas with their bikes without worrying about breaking rules or norms. People were supposed to be able to pass through the Westgate, in Oxford, with their bikes, however, it was found that the difference in flooring made people assume that they weren't allowed.

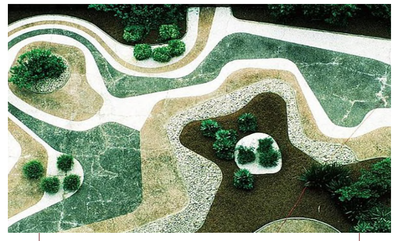
SIGNIFICANCE TO CYCLISTS

The use of the colour red and similarly the material relates to the cycle lanes implemented in The Netherlands, the most exemplary country when it comes to cycling culture. These cycle lanes are often separated from the rest of the road, ensuring safety and ease, but their more prominent attribute is their stand out colour. The use of the red makes a bold statement, and would be especially useful within Oxford, in terms of making a statement.

Their shape within the proposed building takes influence from Robert Burle Marx' work. His soft geometric flooring create a slightly warmer message, ideal for within a building which intends to welcome all types of communities and thus needs a comforting atmosphere.

COMPLEMENTARY MATERIAL

The warm red tone of the rubber crumb flooring subtly echoes the earthy hues of the exposed brick, creating a visual and material continuity between old and new. This tonal harmony respects the building's character, reflecting a key principle of creative re-use: enhancing the past through sensitive, purposeful intervention.

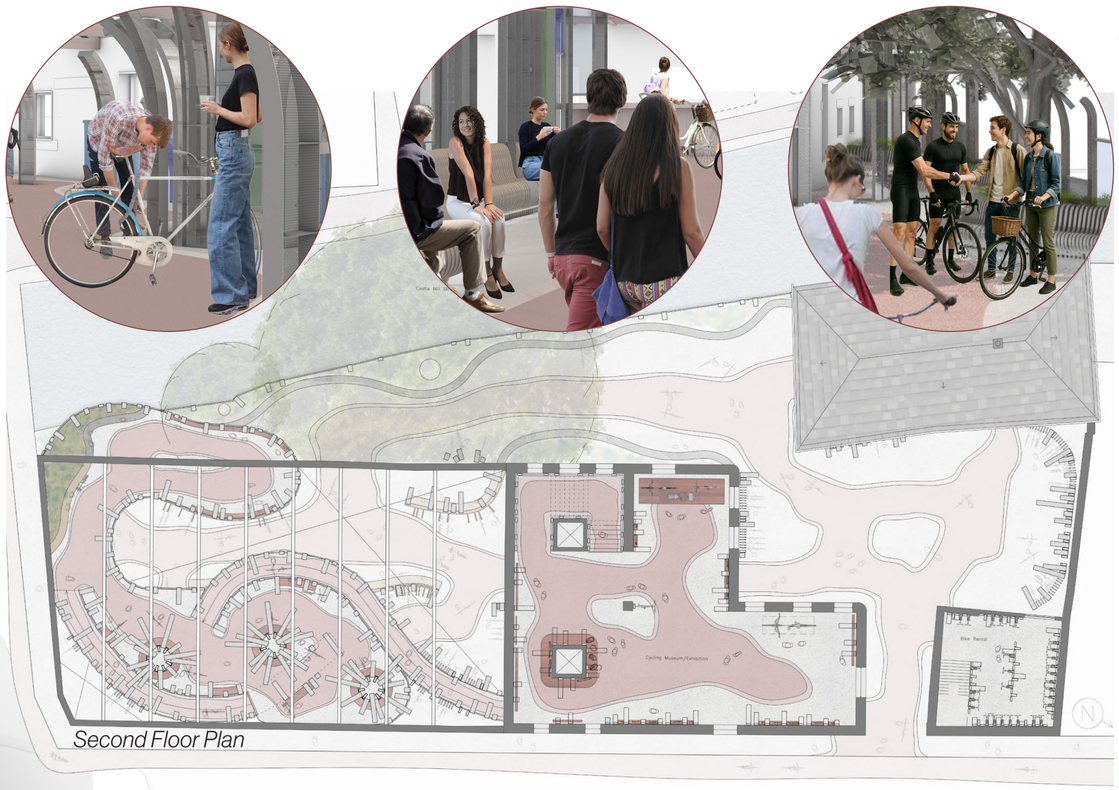


ROBERT BURLE MARX

Ground Floor Plan

SPACE FOR GENERATIONS

SUSTAINING SOCIAL, ENVIRONMENTAL, AND ARCHITECTURAL FUTURES



Second Floor Plan

A CATALYST FOR CITY-WIDE CHANGE

This project was designed not just as a building, but as a lasting public asset that actively supports the well-being, learning, and connection of its users over time. By creating an inclusive space where cyclists of all kinds can gather, repair, learn, and rest, the building becomes part of the city's long-term social infrastructure.

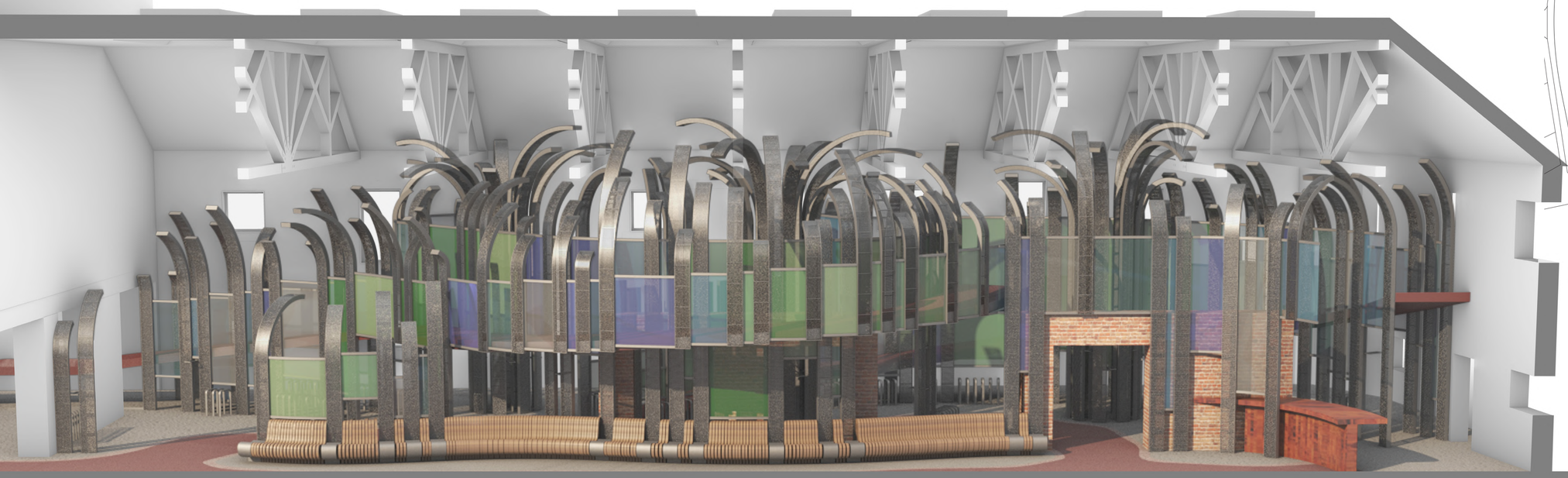
The inclusion of a self-service workshop empowers people with practical skills that grow over repeated visits, while the social café and open layout encourage shared stories, advice, and friendships. Importantly, the design also welcomes non-cyclists, allowing the space to spark wider cultural change around active transport and healthier living.

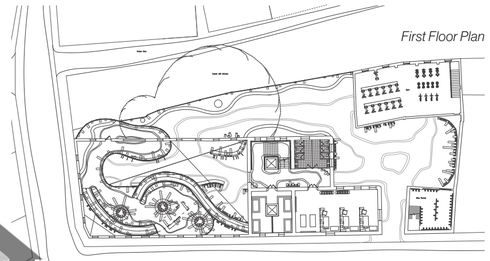
Located at the centre of Oxford's large transport network, the building stands to influence behaviours across generations, offering a permanent platform for a more connected, sustainable, and wellness-driven urban future. Its long-term value lies not only in the reuse of materials and structure, but in the reuse of space for community purpose.

As cities continue to search for low-impact, high-value public infrastructure, this project offers a replicable framework for creative reuse that centres people, not just preservation.

My design uses sustainably sourced red mahogany timber in a structural grid, paired with innovative cardboard benches, both exemplifying creative re-use. The timber grid not only provides strength and warmth but also highlights the beauty of responsibly harvested materials. The cardboard benches showcase how unconventional, recyclable materials can be transformed into durable, functional furniture.

This material approach reflects a strategic and thoughtful transformation of the existing building, respecting and reinterpreting its architectural and cultural history. By embedding sustainable materials within the original structure, the design honours the narrative of previous occupation while creating new, meaningful spaces. This balance between preservation and innovation demonstrates how sustainability and design can breathe fresh life into historic envelopes and support new, sustainable uses.





First Floor Plan

PAST STRUCTURES, FUTURE PURPOSES

This project demonstrates how underused structures, often overlooked due to awkward geometry or outdated layouts, can be respectfully transformed into meaningful public spaces. By working with the building's existing character rather than against it, the design brings new life through light, material, and function. The approach is intentionally simple, people-focused, and flexible: a design that adapts to its context while staying true to the building's story. More than just a cycling hub, it becomes a model for how cities can creatively reuse their architectural past to support healthier, more connected futures. In doing so, it shows that thoughtful, strategic reuse is not only sustainable, but socially powerful.