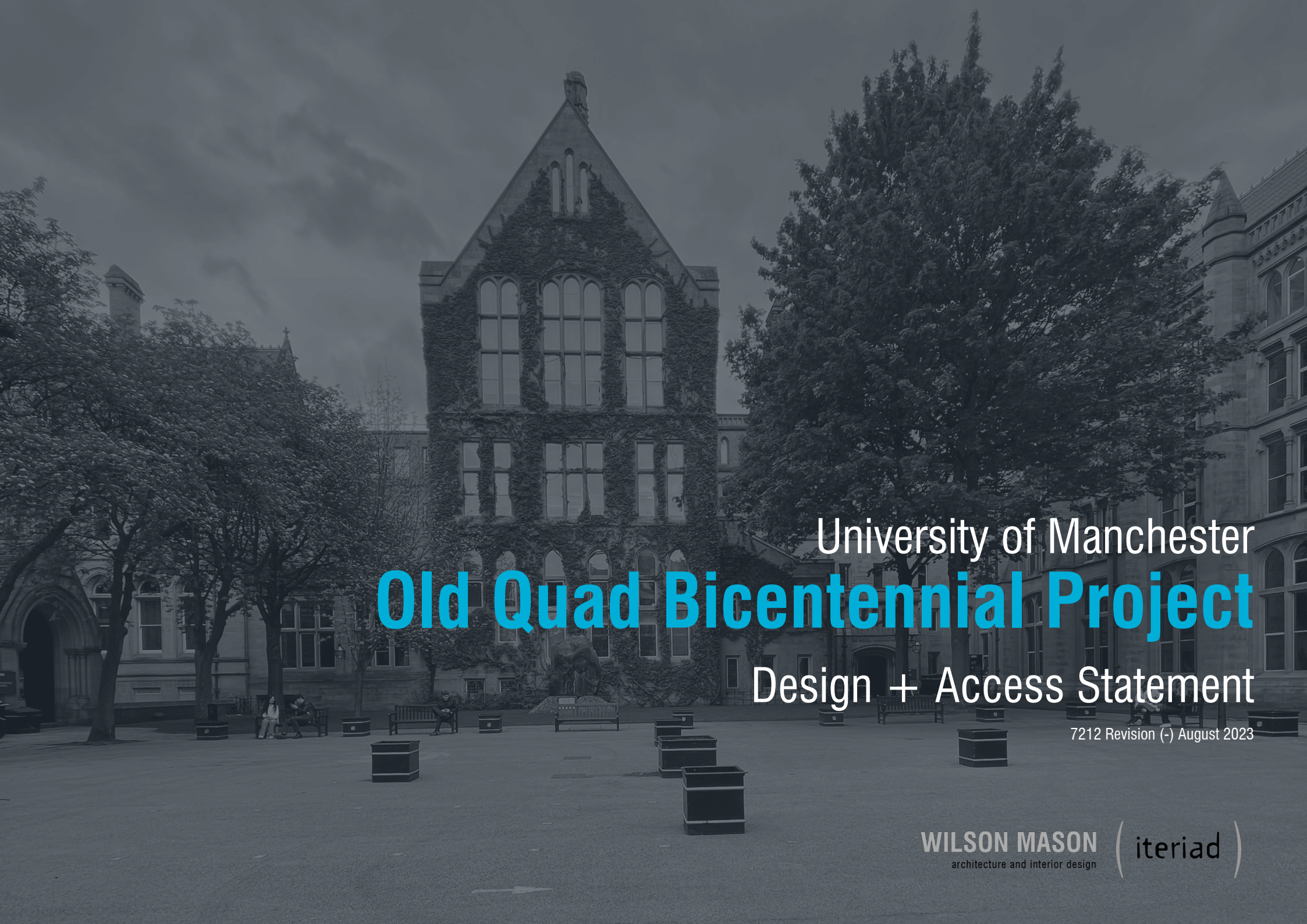


University of Manchester

Old Quad Bicentennial Project

Design + Access Statement

7212 Revision (-) August 2023

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Landscape Architects

30 August 2023

THIS DOCUMENT IS TO SUPPORT THE APPLICATION FOR LISTED BUILDING AND PLANNING CONSENT FOR THE UNIVERSITY OF MANCHESTER'S 'OLD QUAD' PROJECT.

The project is to mark the Bicentenary of the formation of the University of Manchester. The proposal recognises the importance of the the Old Quad renewing the space that has been at the heart of the University of Manchester. The space was formed over a 27 year period, a process which concluded in the early 20th Century with the completion of the Whitworth Hall.

The space has been at the heart of the University, with the buildings defining it comprising; the first parts of a college that became a formative part of the University, elements of Manchester Museum and engineering teaching space, the University library and the University's formal hall. The external space defined by these buildings was never formally planned or delivered the quality that would be for a setting of this nature.

The 'quad' space has been a circulation and access space to the buildings since its formation. It has never been the subject of any overall plan or landscape scheme. Research shows that for the past 70 years or so, the majority of its life it has been used as a car park.

The University of Manchester, have recognised that the space has been undervalued and consider that it is now the time to enhance the Old Quad to give it an appropriate quality to mark the University's 200 years of existence and the look forward to the future.

| Site

| The Site

The Old Quad is located directly off Oxford Road. It is at the heart of the University of Manchester's campus.

Old Quad is located within the a range of Victorian Building that form the original public face of the University. It is set behind the original Manchester Museum Building and Whitworth Hall, through Queens Arch.

The space was as an enclosed “quadrangle” over a period of 29 years from 1873 to 1902. The buildings forming the quad were constructed in the following sequence:

- John Owens Building
- Beyer Building + Manchester Museum (fronting Oxford Road)
- The Christie Library
- Whitworth Hall

Historic mapping and photographs evidence that the erratic glacial boulder located in front of the Beyer Building, has been in situ since the 1880s.

Research into the area has been undertaken through reviewing:

- The University of Manchester's records
- Manchester City Archive
- Historic Mapping - review through National Museum of Scotland and Promap (Ordnance Survey)
- Internet Image searching



| Site
| Historic Context

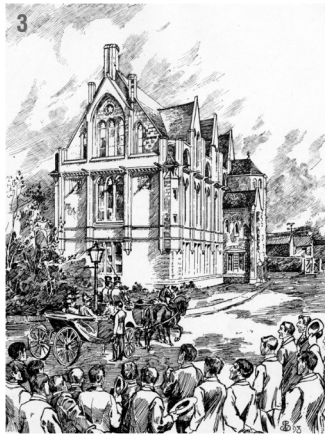
Old Quad developed into an enclosed quadrangle over a period of 29 years from 1873 to 1902. The buildings forming the quad were constructed in the following sequence:

- John Owens Building
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- The Christie Library
- Whitworth Hall

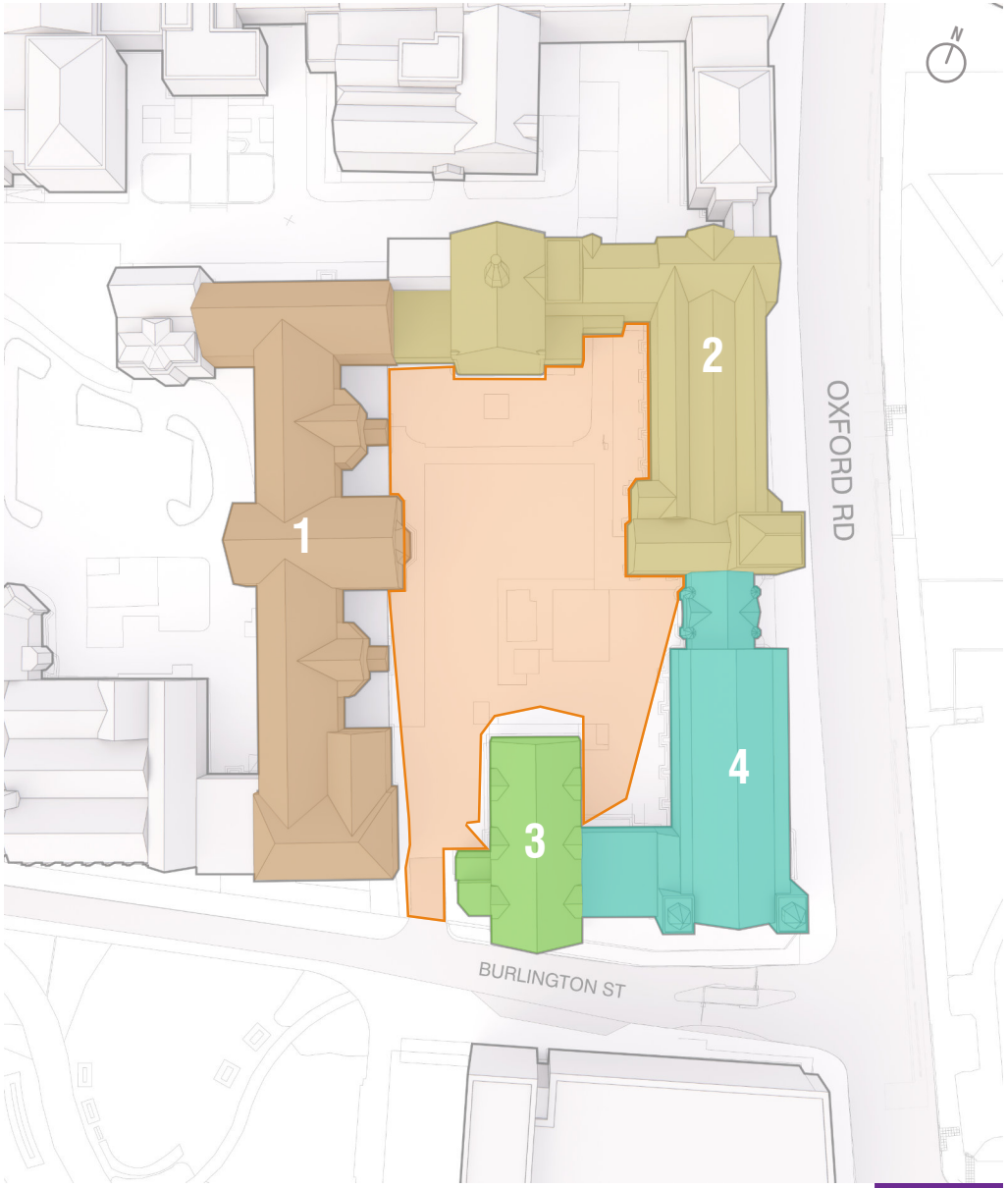
1. John Owens Building - 1873
2. Beyer Building and Museum - 1887
3. Christie Library - 1898
4. Whitworth Hall - 1902









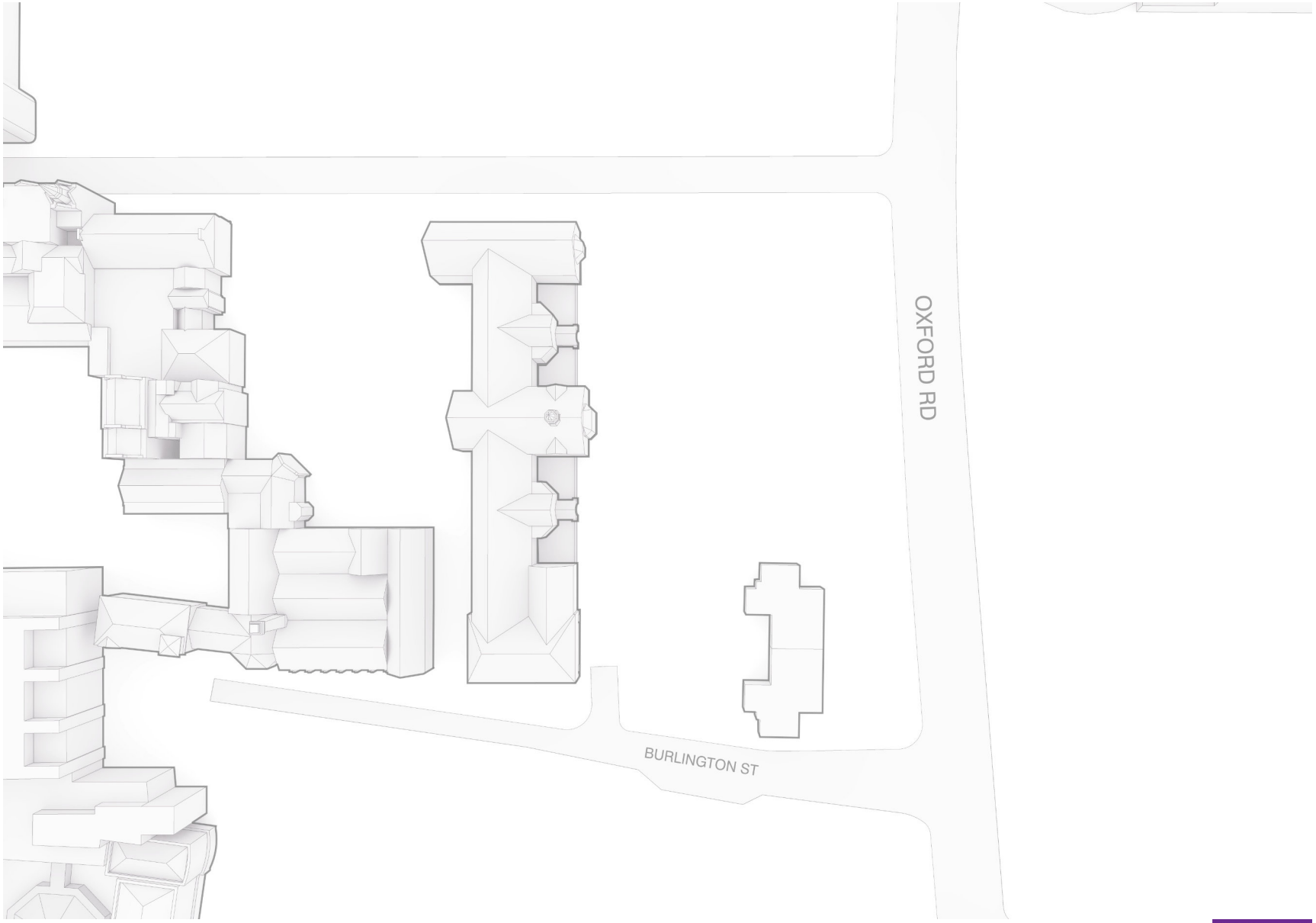


| Site

| Historic Context - First phase - John Owens Building

The first phase of the development was the building that housed John Owens College, now know as the John Owens Building.

Review of contemporary photographs and mapping show that the site was largely cleared of the Villas that had occupied, with one remaining on the south side.

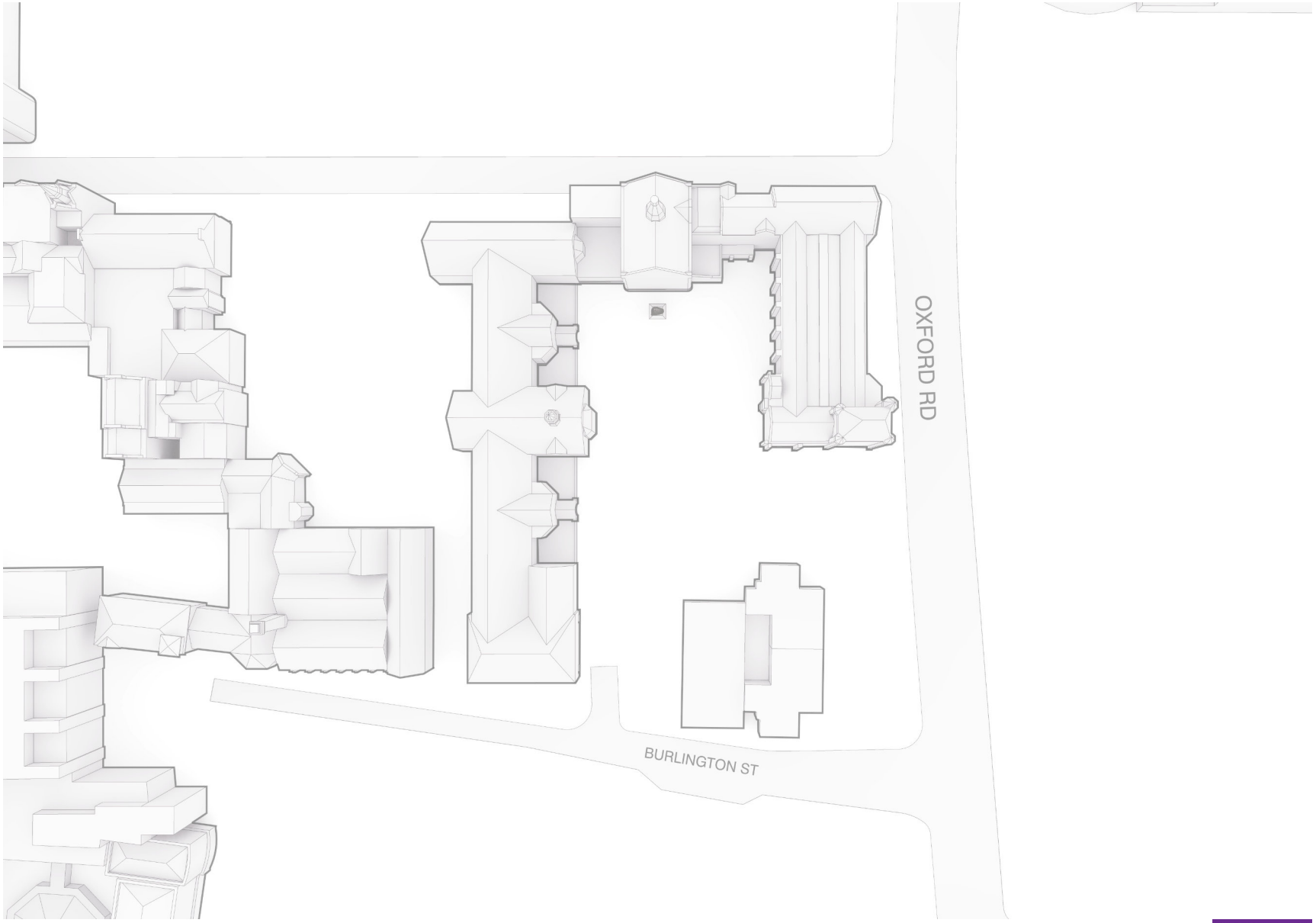


| Site

| Historic Context - Second Phase - Beyer Laboratory + Manchester Museum

The second phase of construction was the creation of the Beyer Building and Manchester Museum.

Review of the mapping of the time shows that a Gymnasium was added to the western side of the retained villas to the south of the site.



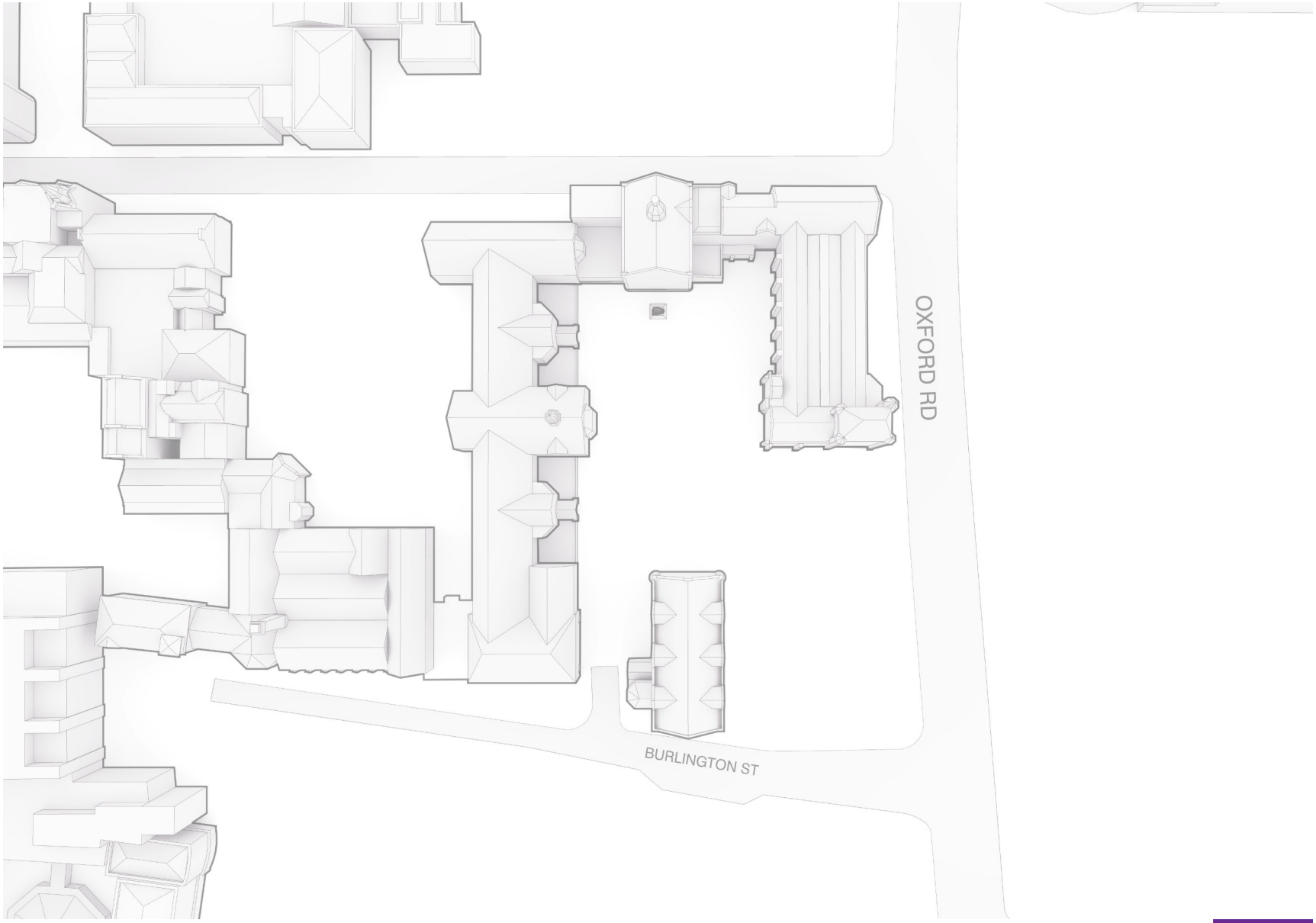
| Site

| Historic Context - Third Phase - Christie Library

The third phase of construction of the building that form the space was the constriction of the Christie library.

Manchester City Archive has drawings dated 1895. These records and an internet search show that there was an intent at that time to join the new library building to the John Owens building with a first floor link corridor, which was never constructed.

The buildings are connected with a below ground service passage, with and adjacent basement space that is accessed from John Owens and abuts the Christie Library building.

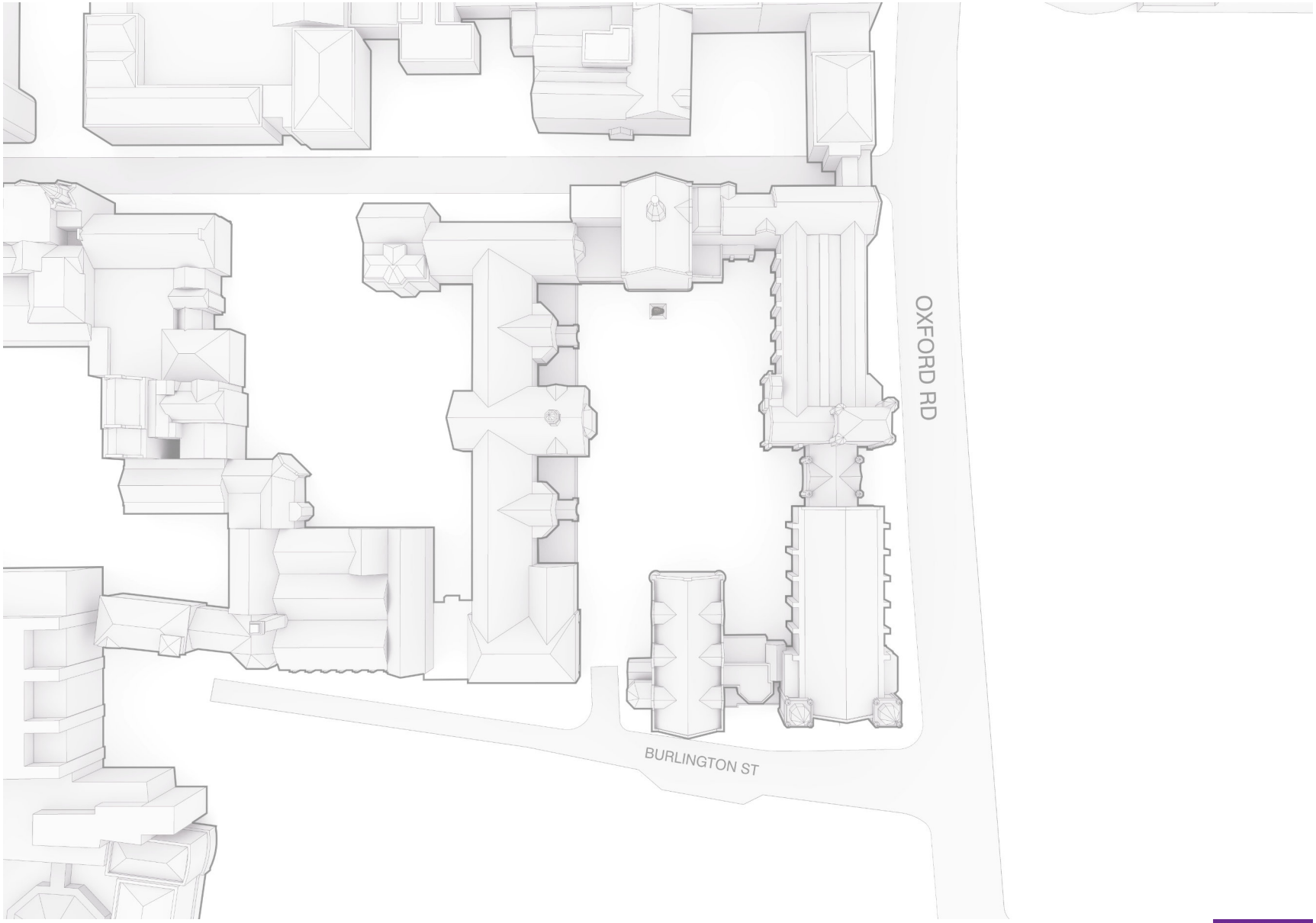


| Site

| Historic Context - Fourth phase - Whitworth Hall

The fourth phase of the constriction was the final element that created the enclosed space.

This is the Whitworth Hall, which is the main ceremonial space pf the University.



| Site Analysis

| Building Axis - Materiality

An axial analysis of the buildings and their features that form the space has been undertaken.

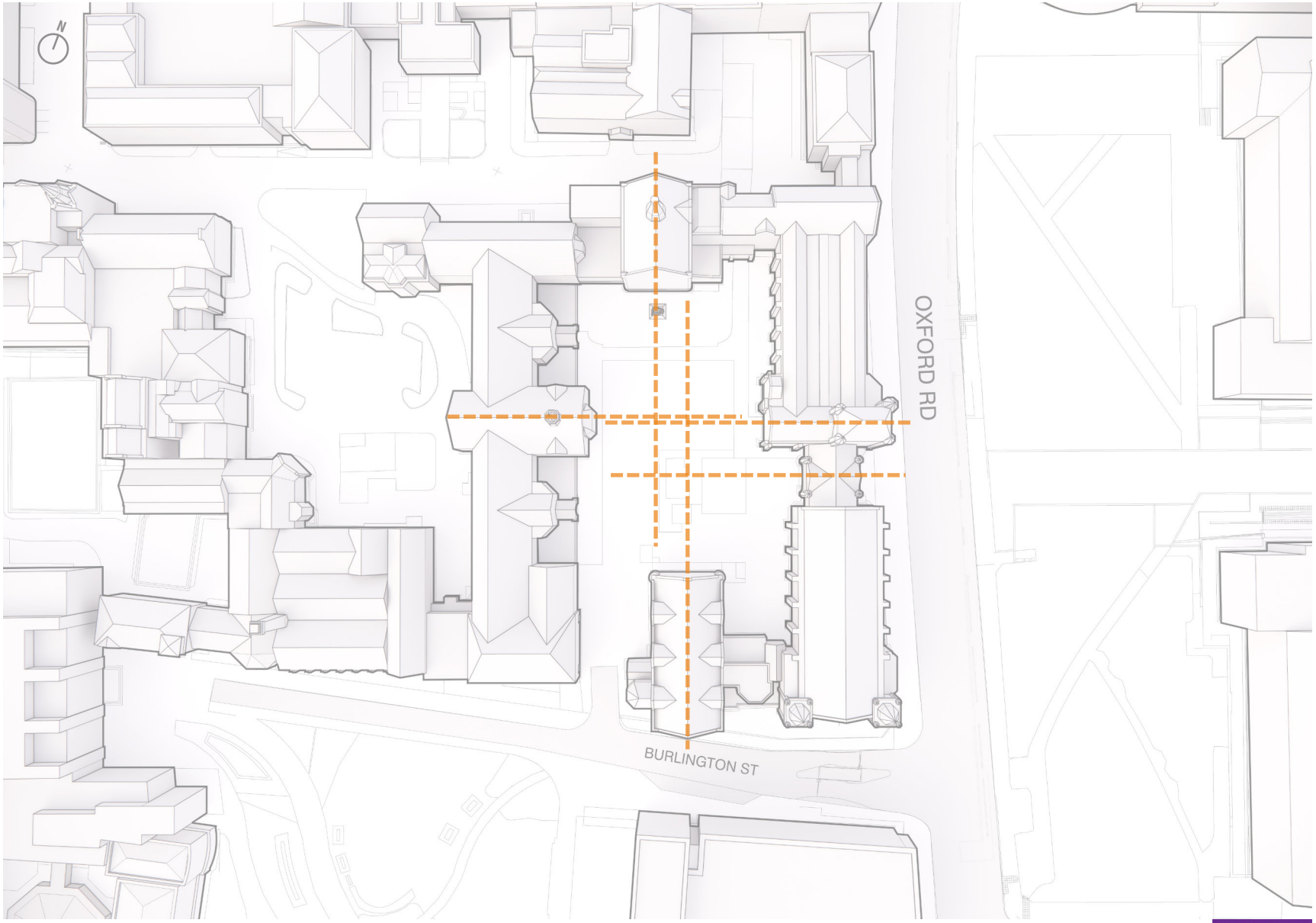
This shows that the buildings were design in a discrete way. That they were each designed as separate individual entities, that do not refer to the building existing across the space or adjacent to them.

This evidences that the space was formed and not designed as a coherent whole with clearly defined axese.

Materiality

The stone forming the buildings round the Old Quad is sandstone.

The appearance of the stone on the buildings varies: Museum, Whitworth Hall and Christie buildings fronting Oxford Road have a redder colour that the Beyer and John Owens buildings, which has elements of grey within it.



| Site

| Historic Context - mapping 1850

RESEARCH

The team have undertaken a search of the Manchester City Council Archive records with regards to the Old Quad. The records found during the search relate to selected buildings that form the quad, but not the space that is the quad.

The archive has a number of photographs of the buildings with the Quad in the foreground. A further search of the historic maps of the area has been undertaken. Some of the maps clearly record the layout of the quad. This has changed over time of with it latterly being used as a car park.

The photographs and maps are the best record of the quad.

Copies of the Historic mapping has been obtained that records the sequence of development and shows the ground level features of the site area. These are shown on the following pages.

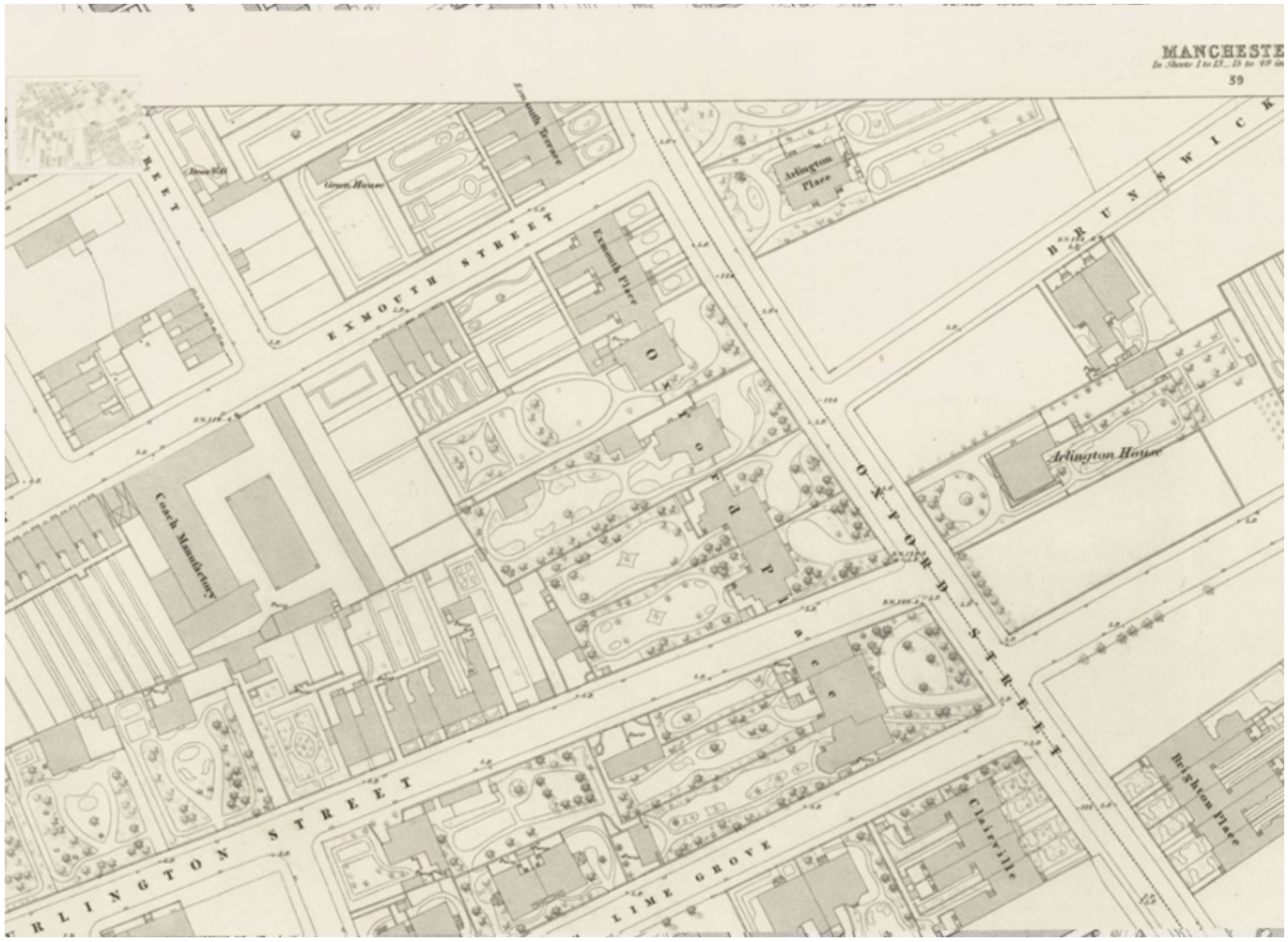
OBSERVATIONS

The space that is the quad has evolved over time.

The photos and research demonstrate the following:

- The glacial boulder in place from crica 1889
- Lawns with compacted limestone gravel 1838
- Hardsurfacing with landscaped mounds 1889
- Completion of the buildings defining the quad 1903
- Quad being all hard / compacted surface 1903
- Quad as carpark, the oak tree visible through Queens Arch 1972

The form, finish and nature of the quad space has evolved over time. The materiality has changed and it is evidenced that none of the current ground finishes are original from the formation of the space, or date beyond the mid 1950s.



Reproduced with the permission of the National Library of Scotland

| Site

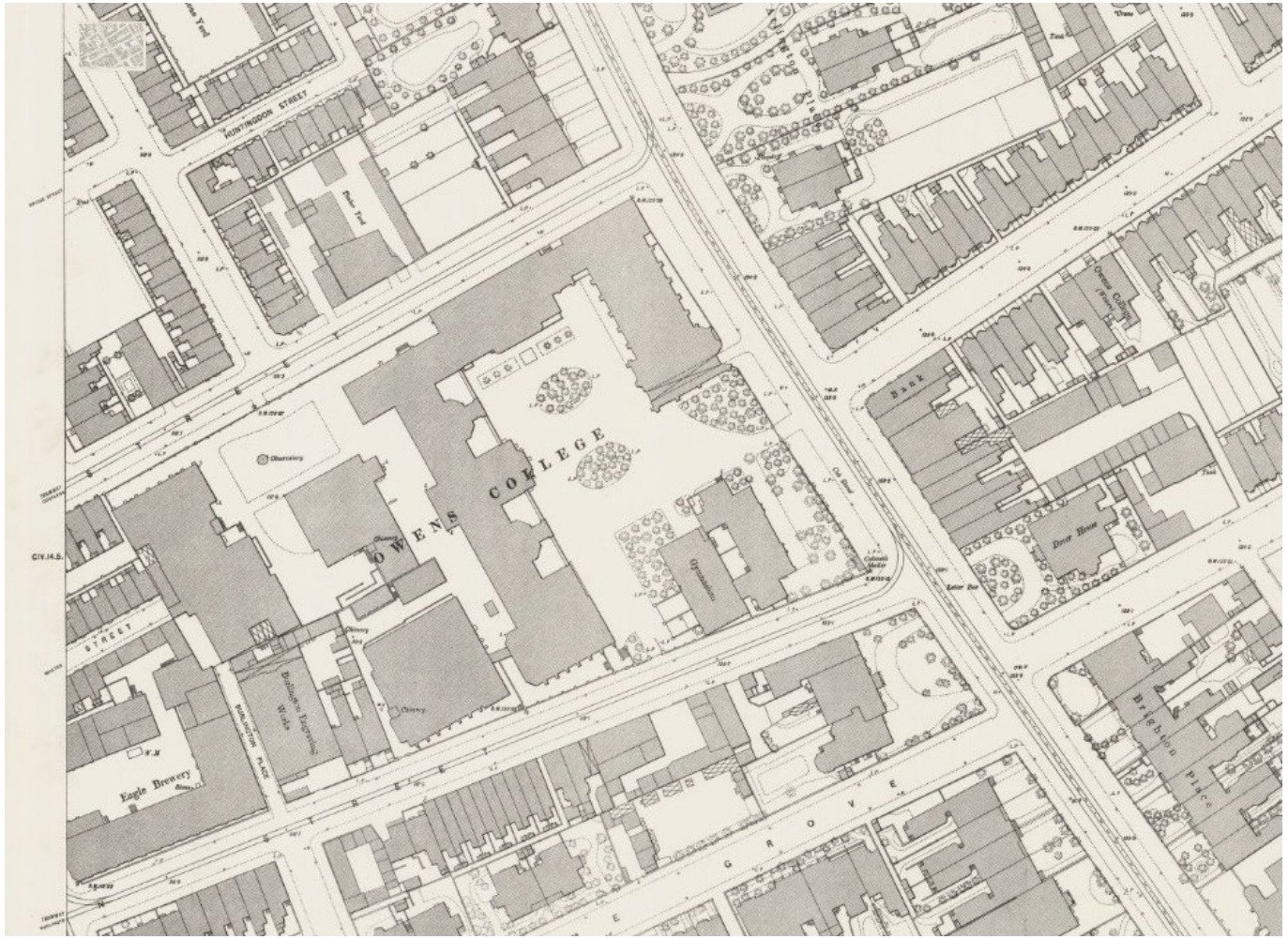
| Historic Context - mapping 1889





Images of the Quad showing the Glacial Boulder in place, before the construction of the Christie Library and Whitworth Hall, 1889.





Reproduced with the permission of the National Library of Scotland

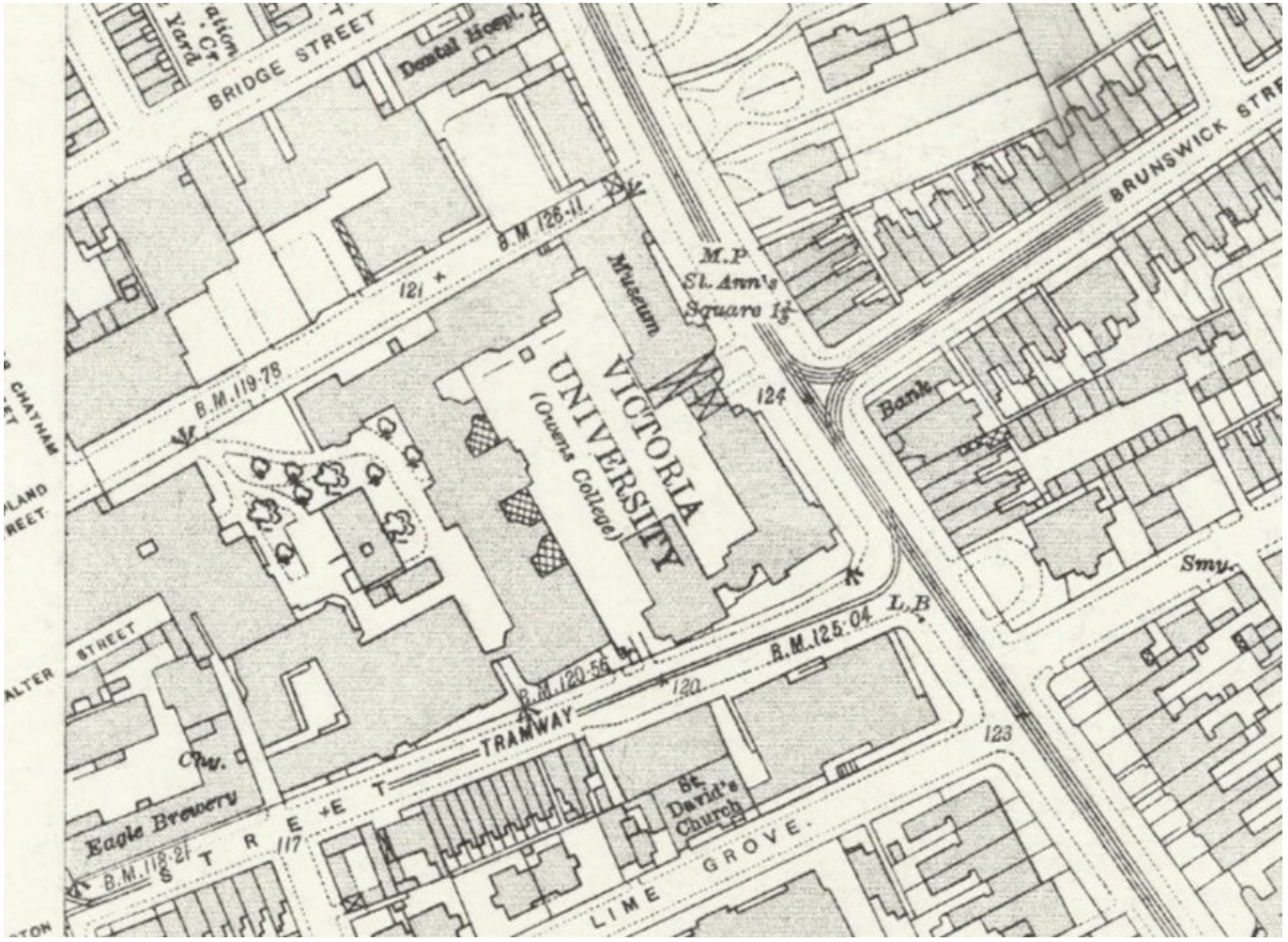
| Site

| Historic Context - mapping 1915





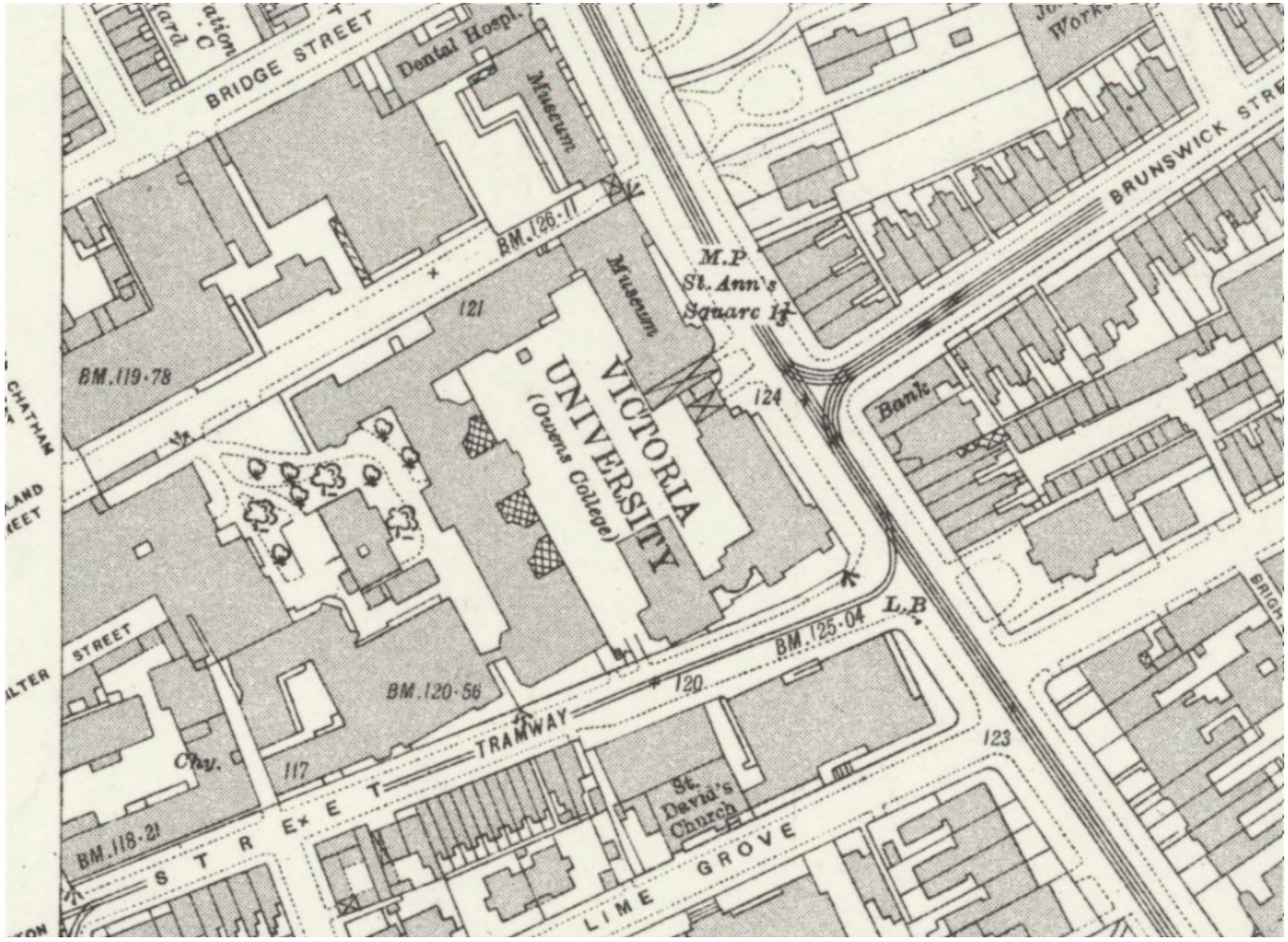
Image from City of Manchester archive - dated circa 1903 - erratic boulder in place



Reproduced with the permission of the National Library of Scotland

| Site

| Historic Context - mapping 1935



Reproduced with the permission of the National Library of Scotland

| Site

| Historic Context - mapping 1955-1965

Current arrangement shown.

The space has been as Car Park since the early / mid 1950s.

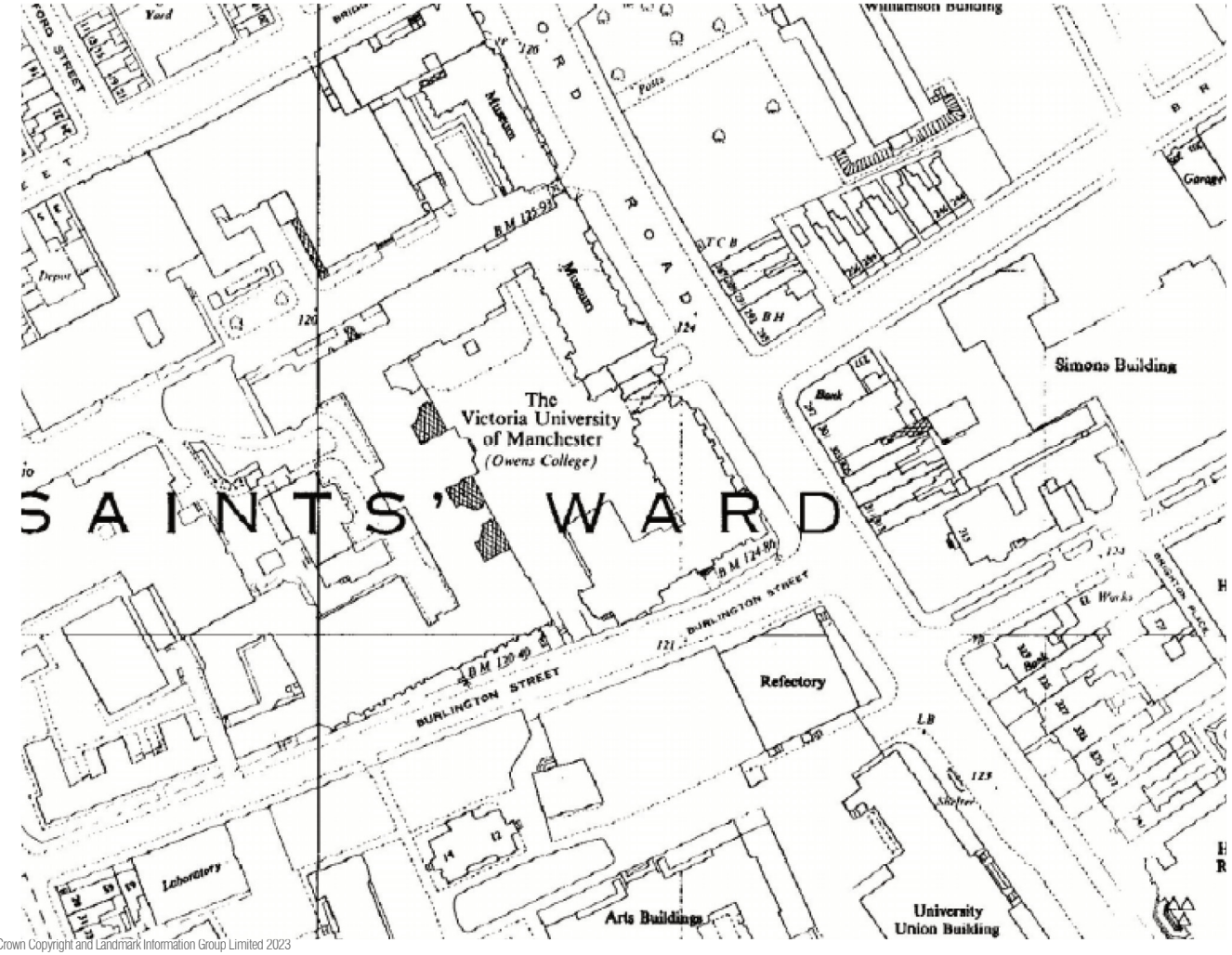
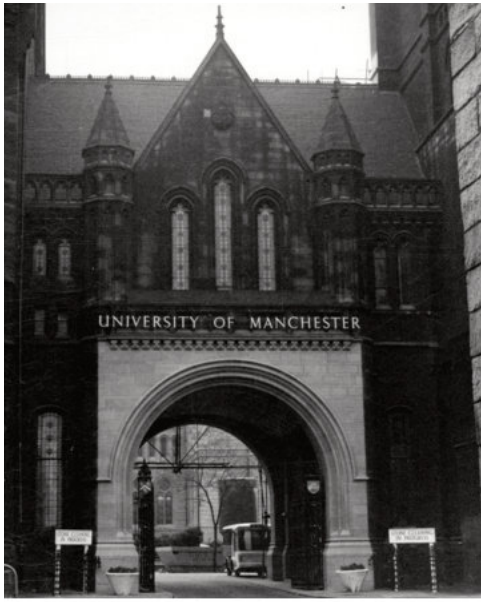


Image: Crown Copyright and Landmark Information Group Limited 2023

| Site

| Historic Context - mapping 1977-1990





The images are dated as 1972, the Queens arch has been cleaned as the trial for the facade cleaning

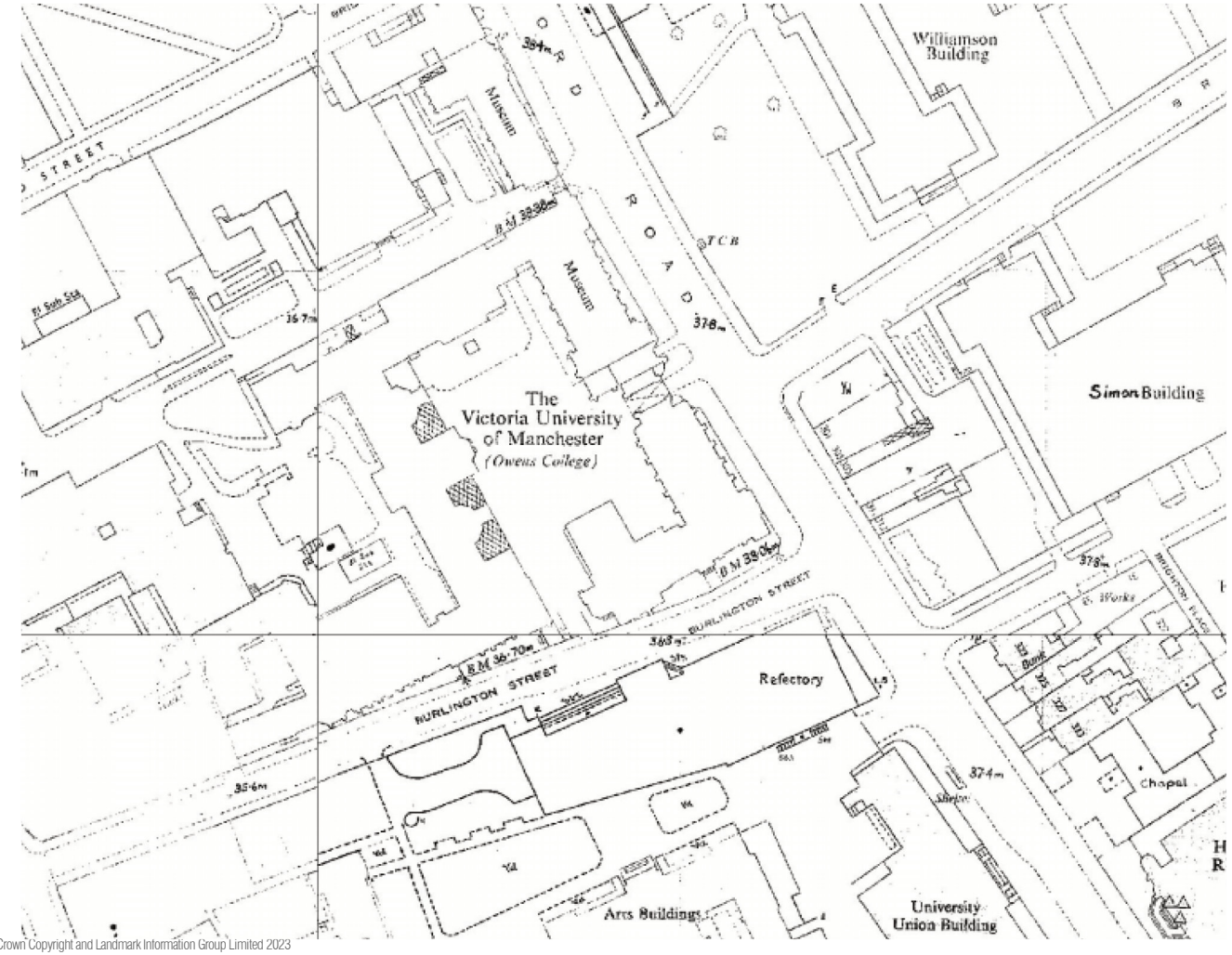


Image: Crown Copyright and Landmark Information Group Limited 2023

| Site
| Photographs

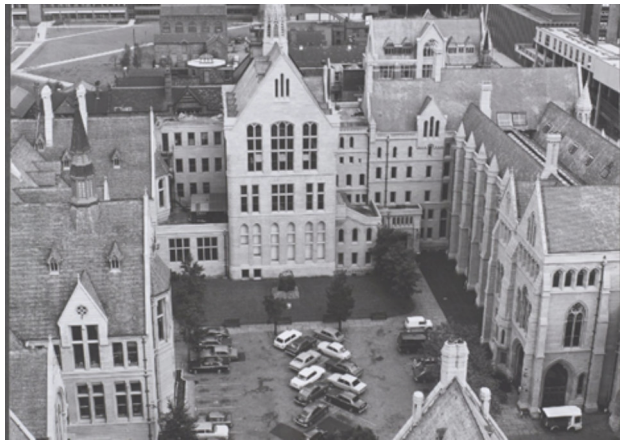
The Quad can be seen to be in the same arrangement as it has been since the early mid 1950's.

It has been used as a Car Park for the 70 year period since then.

The area to the north, in front of the Beyer Building, has been lawn.

The rest of the surfacing and planting has eveolved / changed in that time.

These images are showing the buildings round the quad following their cleaning in the early 1970s.





| Site
| Contemporary Photographs

The Quad remains in the same arrangement as it has been since the early / mid 1950's.

The hardstanding that formed the surface of the Car Park is in place and the paving and lawn lines remain as first illustrated in the 1950's mapping.

The internet and archive search provided photographic evidence that it has been in continuous use as Car Park since that time.

The same photographs show that during this 70 year trees have come and gone, planters have appeared and surfacing has been changed.

The character of the space that is known as Old Quad is currently determined by

- mature and semi mature trees
- the surrounding buildings

The following pages contain contemporary photographs which show the space and the mature trees set within it that give it its current character.



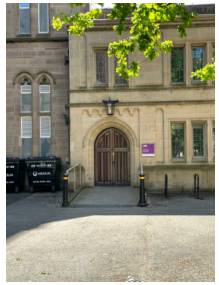












| Site

| Contemporary Photographs







| Site

| Contemporary Photographs







| Site

| Contemporary Photographs







| Site Analysis

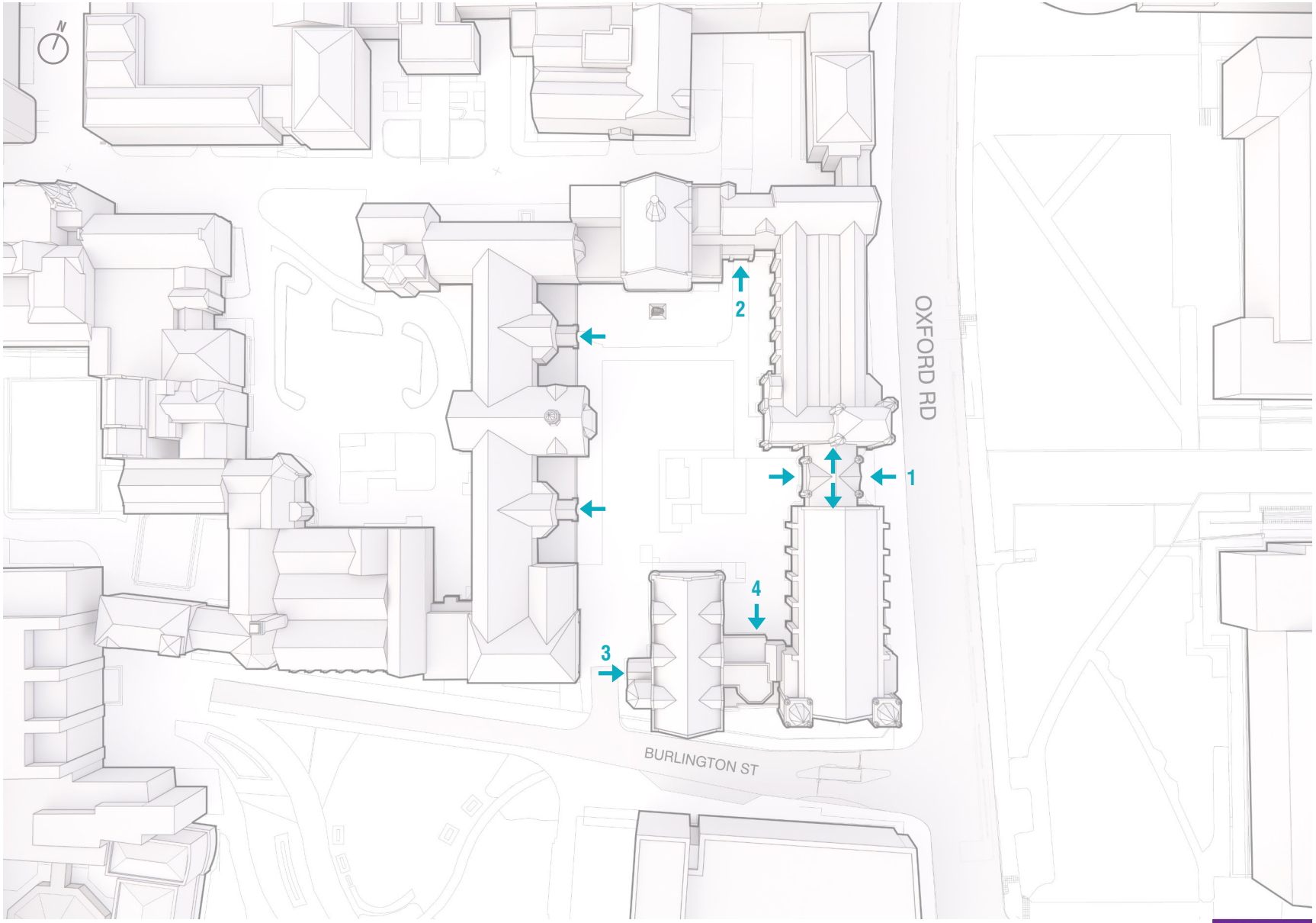
| Main accesses











| Site Analysis

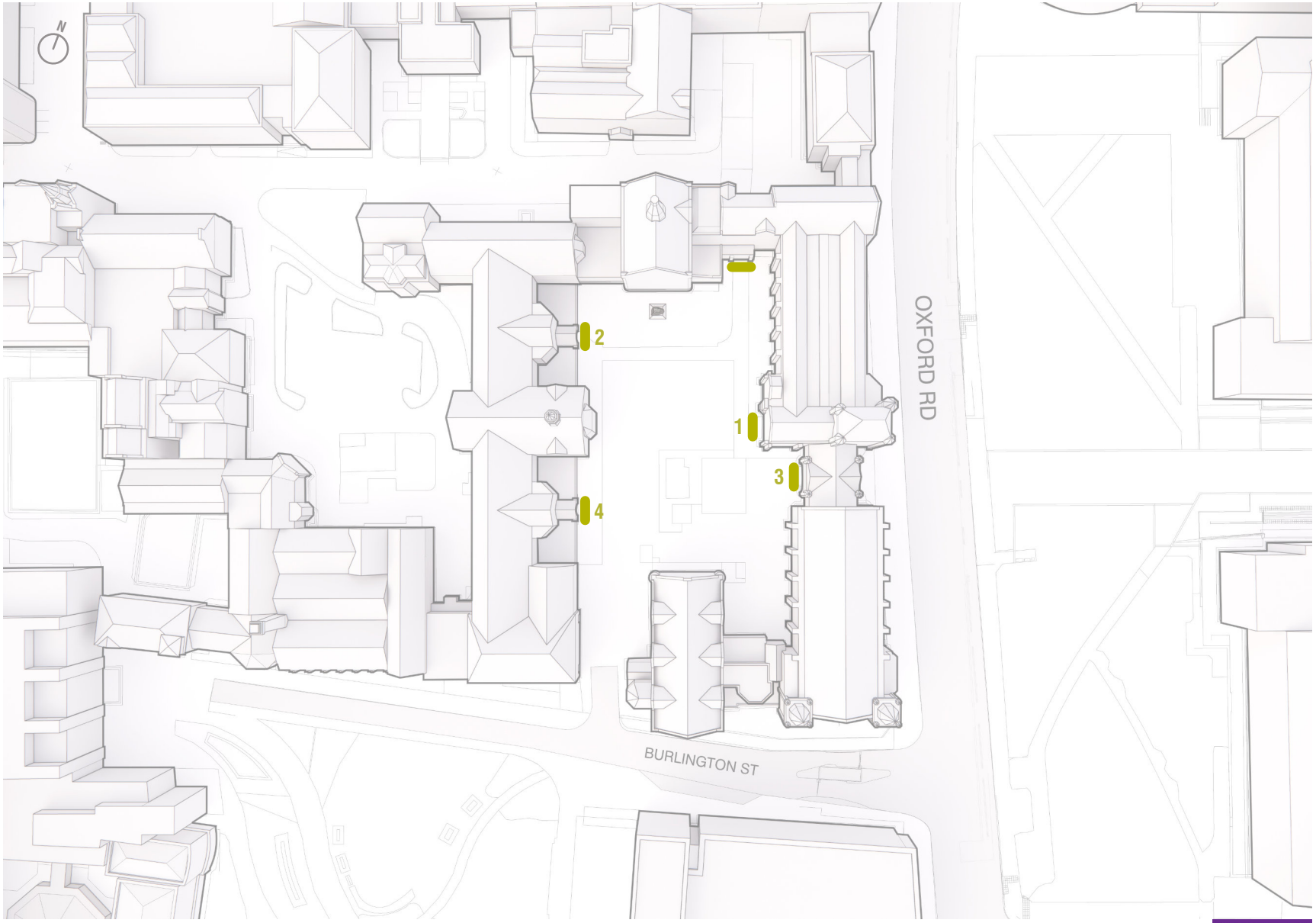
| Perceived access











| Site Analysis

| Disabled access & lift location

The analysis of the space and the buildings that form it has identified that the building floor levels vary round the space.

The external space appears level, however the levels vary by upto 75mm across the space.

The ground floor level within each building is different and therefore has a different relationship with the finished surface within the space.

Whitworth Hall and The Christie Library were designed to have multiple step access. Whitworth Hall's principal accesses are from Oxford Road and Burlington Street. These are around 7 steps.

The John Owens, Beyer and Christie building all have lifts located within them.

The accesses to the buildings and the lifts within them for the Beyer and John Owens buildings is through purposeful designed entrances.

The accessible entrance at to the Whitworth Hall and the Christie Library is via a door set within the link between the two buildings .











| Site Analysis

| Inclusivity - Disabled access & lift location

Inclusivity

The analysis carried out evidences that the usable entrances, perceived entrances and inclusive access to vary. The project will address within the constraints of the environment of the listed buildings.

This is to be achieved through:

The landscape design; which recognises the desire line routes to the entrances. This frames and guides people to them.

Improved levels; to the inclusive entrances, easing access for mobility impaired building users.

Lighting; to highlight the entrances and footpath, easing way finding during the darker months.

Accessibility

John Owens accessible entrance is through the entrance set closest to the main circulation through the space.

It is accessed via sloped paving at 1:143

Beyer Building's accessible entrance is the principal building entrance.

It has a level access.

Whitworth Hall / Christie Library share an accessible entrance. This is the only wheelchair access to Whitworth Hall. Access to the hall is via the lift located within the Christie Library, and back across the link at first floor level.

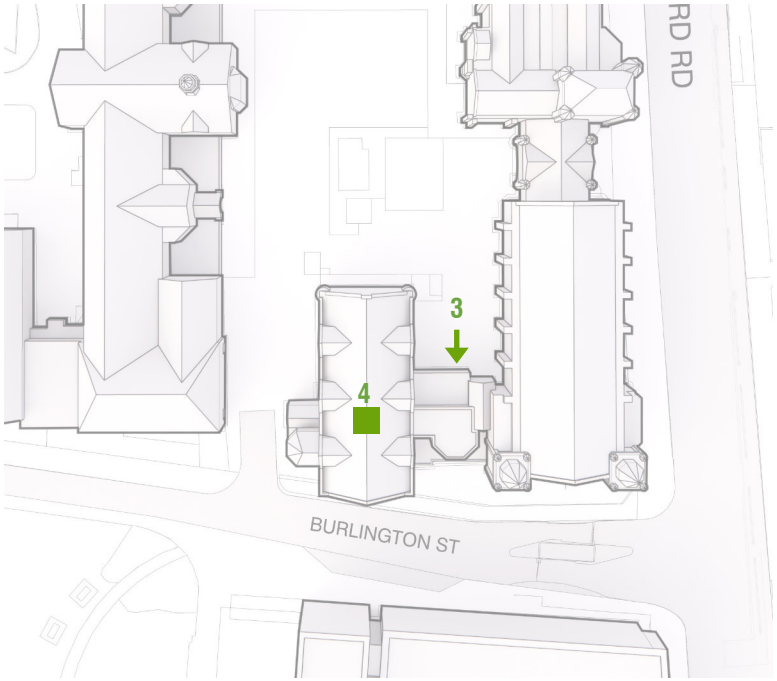
The access is a 1:12 ramp.

Project proposal

The project has been tasked with considering accessibility. An analysis of the areas round the buildings and the relative levels of the building has concluded that the existing disable accesses are as well placed a possible given the context of the listed buildings, and the way the levels within them varies

The accessible entrance wheelchair entrance to the Whitworth Hall can be improved by extending the length of the ramp to reduce its gradient to make it a slope rather than a designated 'ramp'.

This removes the need to provide handrails and ground level upstands to provide a compliant solution.







| Site Analysis
| Features

Old Quad has established features that are retained and highlighted by the project.

These are:

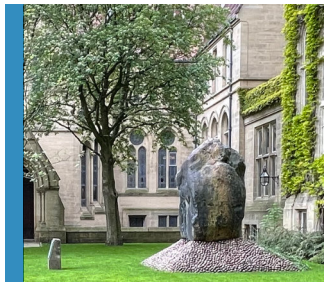
- The Boston Ivy
- The Glacial erratic boulder
- The Cenotaph
- The Heritage plinths

Design recognition

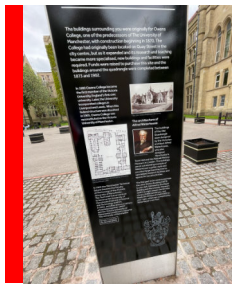
All of these features have been in place for differing periods of time. Each has been considered within the development of the design, and is has shaped its development.

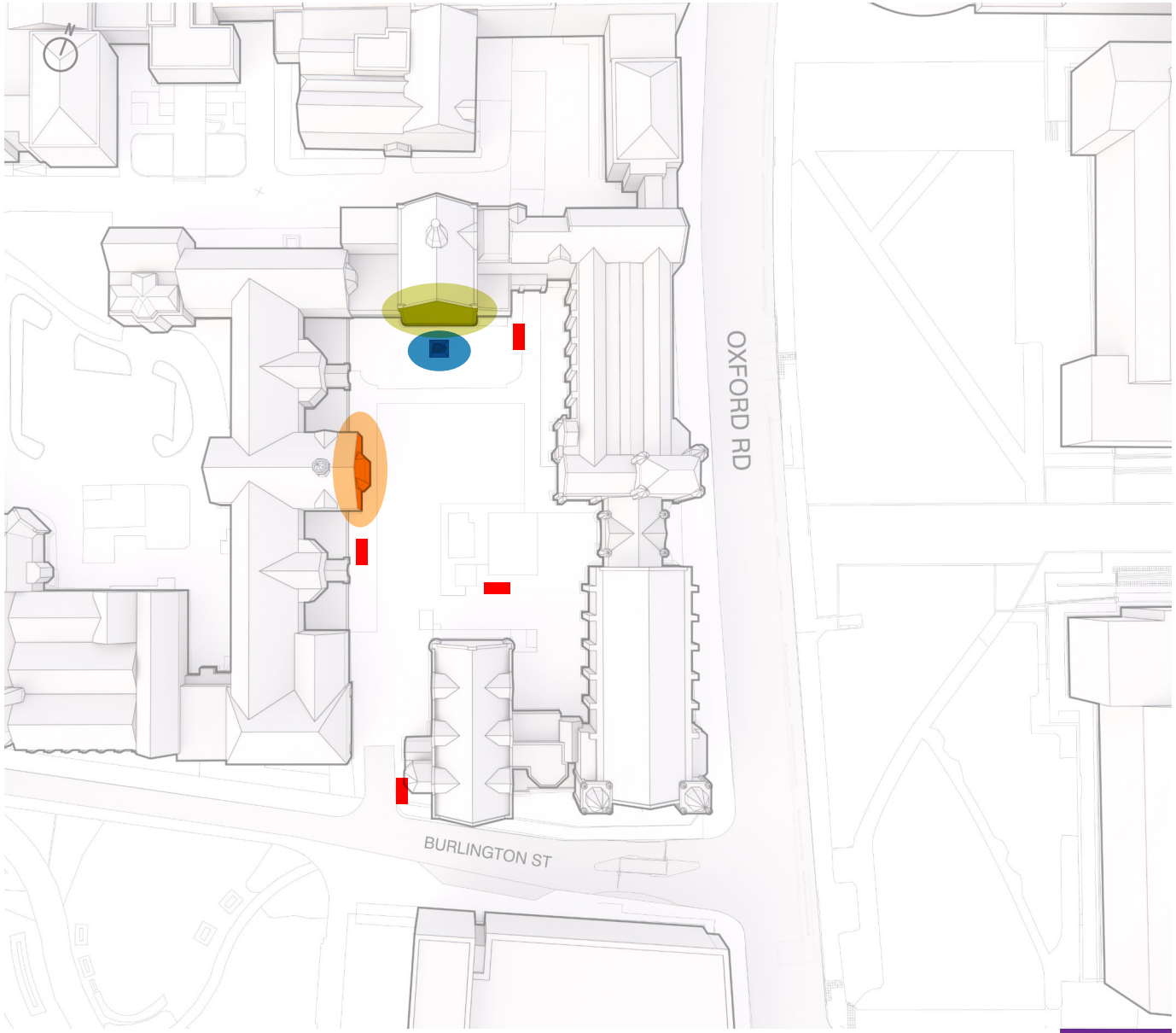
The Glacial erratic boulder has been insitu since the 1880's and will be retained in place. It's status is enhanced through the creating of a new 'formal' space with the boulder and the Beyer building gable featuring the Boston Ivy at one end of it.











| Site Analysis
| Existing Trees

The trees within Old Quad are an important part of its character. The mapping and photographs suggest that they have been planted in the period since the second world war ended in 1945.

The species to be found within the Old Quad are:

- Oak
- Whitebeam
- Field Maple

The trees are all to be protected and retained.

The trees do create issues associated with dropping of sap and leaves. Where possible these will be addressed by the project through the use of smaller more textured paving.











| Design

|

THE DESIGN

The project is to enhance the Old Quad and provide an innovative and exemplar landscaped solution. This is to focus on:

- Environmental sustainability
- Retains and enhances the existing trees
- Promotes bio diversity
- Providing a landscape / planting solution that ' differentiates' it from the surrounding campus landscape areas
- Is maintainable
- Is accessible
- Addresses currents and contemporary security considerations
- Providing a lighting scheme to enhance the buildings and meet operational and functional requirements for all seasons

The design has to continue to support the functions and maintenance of the building that define it, by allowing:

- delivery access to Whitworth Hall and the Christie
- maintenance access to the facades of the enclosing buildings

Considers inclusivity and accessibility

Retains the information boards - giving historic context

Facilitates a range of uses - from day to day quiet space to large party graduations

Is complete no later than 30 May 2024

Additionally the stakeholders have identified that:

Due to a weight limit Fire Brigade access to the buildings forming the quad is from Oxford Road, with the tenders not entering the quad.

The quantities of waste bins currently located within the quad can be reduced.

SURVEYS, CONSTRAINTS AND CONSIDERATIONS

There are ashes interred within the area of Old Quad.

A weight limit exists on the access from Burlington Road due to a below ground duct. This is 2 tons.

A full topographic survey of the surface of the space and the elevations of the buildings that form the quad has been undertaken

Design Considerations
Environmental Sustainability

THE UNIVERSITY OF MANCHESTER'S THREE CORE GOALS ARE: RESEARCH AND DISCOVERY, TEACHING AND LEARNING, AND SOCIAL RESPONSIBILITY. THESE GOALS ARE PART OF THE UNIVERSITY'S STRATEGIC PLAN. ENVIRONMENTAL SUSTAINABILITY IS CONSIDERED PART OF MEETING THE UNIVERSITY'S SOCIAL RESPONSIBILITY CORE GOAL.

The strategic plan sets the University of Manchester's priorities for the first five years of their journey towards their vision in being recognised globally for the excellence of their research, learning and innovation, and for the benefits they bring to society and the environment. The strategic plan has been built around the three core goals, and defines supporting themes and key measures of success.

In celebrating the University's Bicentenary this project is considered by it's stakeholders as a way of demonstrating the University's commitment to its future defined within it's strategic plan.

The University of Manchester's Sustainability Strategy 2023-2028 was approved by the University's Board of Governors in 2023.

This Environmental Sustainability Strategy seeks to achieve the commitments as a contribution to the University's "Our Future's" goals and priorities. All of these commitments and associated actions will support delivery of the UN Sustainable Development Goals, these are delivered through the University's core goals of:

- Research and Discovery
- Teaching and Learning
- Social responsibility

Sustainable decision making within the University of Manchester Operations, is embedded within the systems and processes across the University through considering:

Construction and Refurbishment
Embed sustainability into all construction, refurbishment, and maintenance activity, working towards zero carbon and the removal of other environmental impacts.

Risk and Climate Resilience
Build climate risk awareness and resilience into all our activities.

Responsible procurement
Ensure that our purchasing activity and practices support our environmental, social, and economic priorities.

Resource Management
To drive efficiency and embed whole life cycle considerations into decision making and operations.

Travel and Transport
Reduce the impact of our travel and transport decisions on people and the environment.

Valuing Nature
Our campus is an environment where people and wildlife thrive together.

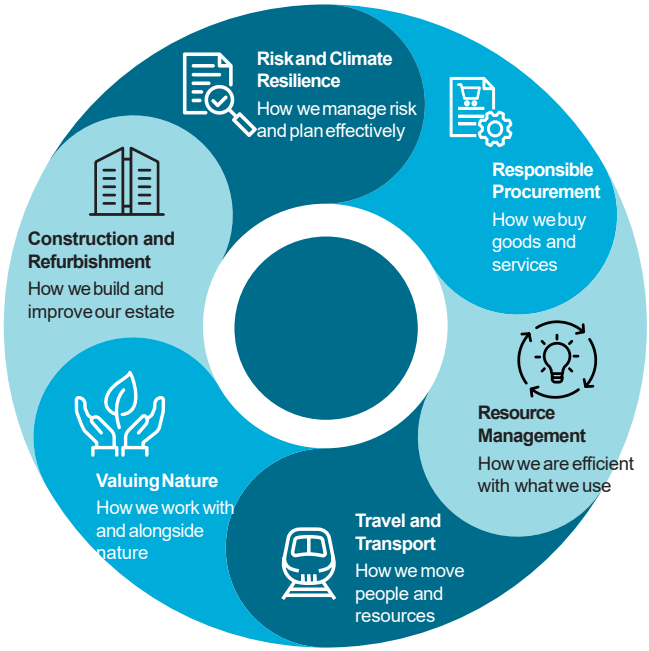
THE OLD QUAD BICENTENNIAL PROJECT

The Old Quad Bicentennial project will address these through the following:

Construction and Refurbishment
Existing materials (York stone paving) will be lifted reworked and relaid; new materials will be assessed for and specified on the basis of their embodied carbon content, the use of alternative, non plastic packaging by suppliers will be specified.

Risk and Climate Resilience
consideration of changing and more significant weather patterns, within the plant and drainage specification and design

Responsible procurement
new materials will be assessed for and specified on the basis of their embodied carbon content, the use of alternative, non plastic packaging by suppliers will be specified.



Resource Management
Existing materials will be reused, high quality long life natural materials will be specified, assessed for the embodies carbon content

Travel and Transport
Locally sourced materials will be used, TEAMS used where were possible to reduce project related travel. Consultants with carbon awareness have been selected.

Referencing Historic Landscape Design

The history of the Old Quad space is one of many layers.

Prior to the development of the Alfred Waterhouse designed John Owens, Beyer, Christie and Whitworth Buildings, the space was occupied by a series of substantial Victorian villas with large, organically shaped gardens.

The Old Quad space itself would originally have been open on the eastern side to Oxford Road as the John Owens building was constructed first (1873). The Beyer and Museum buildings were built next (1887), then the Christie (1898) and finally the Whitworth Hall (1902) to enclose and complete the Old Quad as the space we see today.

On review of historic imagery and mapping of the space, it is apparent that the public realm has frequently changed form and has only ever been designed as a transient space for movement, not serving a specific purpose other than to provide access to and around the buildings. This is most apparent in its current form as a hard surfaced car park.

The timescale in which the Old Quad buildings were constructed between spanned the late Victorian and very early Edwardian eras. British landscape, public realm and garden design in the late Victorian era was becoming increasingly about a response to the prior industrial movement and the overcrowding and poor conditions that arose from it.

The requirement to create 'Urban Lungs' within our cities brought Victorian innovation in garden design to a wider public, particularly through urban public space.

This movement increased the importance of planting and trees within public spaces, providing a space to access and enjoy nature, while appreciating the inherent benefits of these elements.



Victorian villas with large, organically shaped gardens, c.1850. *Reproduced with the permission of the National Library of Scotland*



The Old Quad on completion of the John Owens building, c.1875. The landscape design includes a curved edged lawned space and tree planting.

The Arts and Crafts movement was also heavily influencing garden design in the late Victorian era. These gardens combined structured layouts with more natural planting philosophies, using borders of colourful planting mixes.

Based on its heritage and the University's aspirations, the design of the Old Quad creates an 'Urban Lung' with references to the late Victorian and early Edwardian design theories which existed as the buildings were being developed.

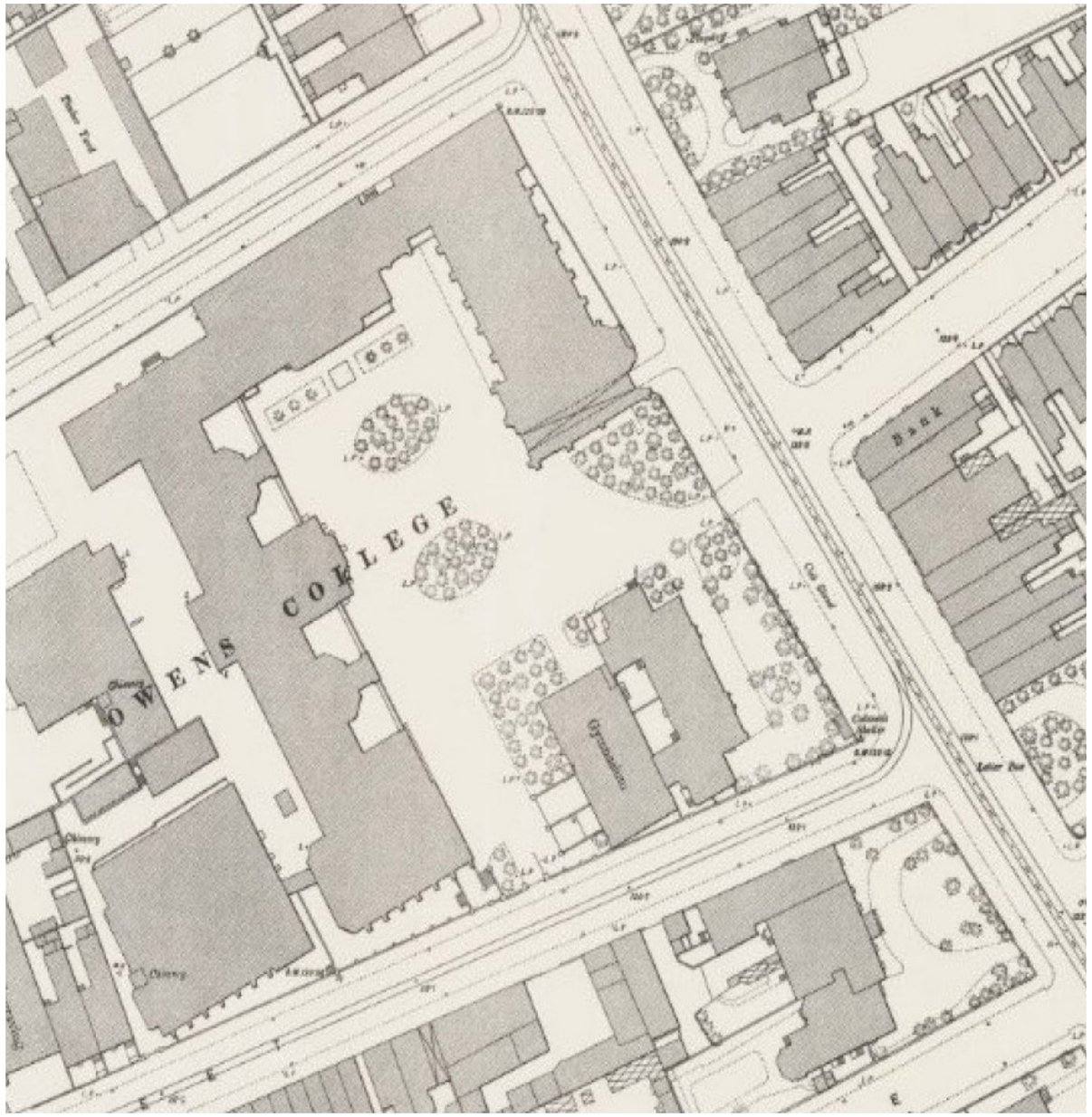
The design should be formed to create a modern, forward thinking space in terms of current technologies, sustainability innovations and wellbeing initiatives, but it should be done in a way which reflects and represents the heritage of the space, giving historic justification to the developing design.

The design team has undertaken in-depth research into how similar spaces of the same era would have been formed, while also referencing the Universities aspirations for the space.

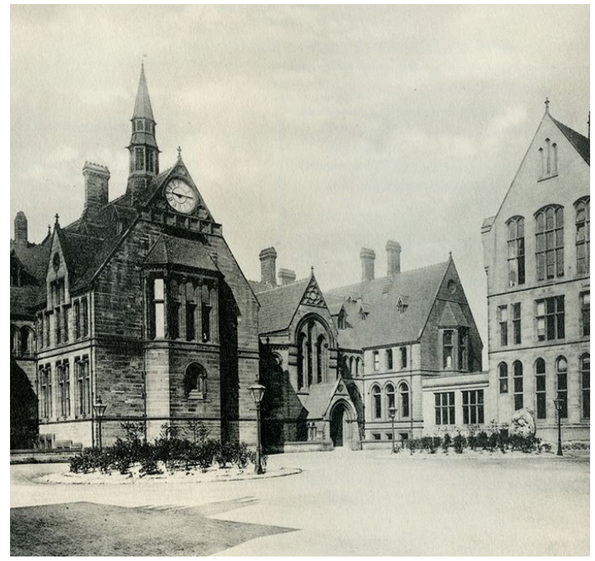
The brief is to create a space which could act as a garden, while also accommodating large volume events such as graduation ceremonies, but always in an approach which is appropriate, respectful and enhancing of the significant historic buildings.

The retention of existing mature trees and planting of additional valuable species at a lower level will create a green heart space which will draw in visitors, students and staff.

One of the key aims in attracting people into the Quad is to bring further exposure to the world class architecture within. The landscape will be designed, not to draw attention away from the buildings, but to frame and curate the very best views of the architectural surroundings and to encourage people to spend time in the space to fully reflect on its significance.



The Old Quad following completion of the Beyer building and Museum with elliptical planting beds, c. 1889. *Reproduced with the permission of the National Library of Scotland*



The Old Quad following completion of the Beyer building and Museum. The landscape design includes two elliptical planted areas.

Historic Landscape and Public Realm design references to be carried forward within the Old Quad proposals:

- The thing that makes this a world class space is the architecture. We need to ensure that the landscape response is appropriate and enhances the architecture, never detracting from or suppressing views.
- The inclusion of lawn was very important within Victorian garden and public space designs, providing open green space. This should be represented within the Old Quad.
- Areas of planting which could be highlighted and celebrated for a specific reason, often their rarity, colour or origin were a Victorian feature. This can be reflected in the developing design.
- Curved or elliptical forms have been used consistently throughout the timeline of the space. This design cue could be taken forward in the proposed design.
- The Arts and Crafts method of creating strong, structured layouts with more naturalistic planting could be referenced to provide a semi-formal design with more natural planting forms, addressing both the formality and structure of the space and the University's aspirations to create a multi-functioning garden.

While many key design references will come from the heritage of the Old Quad space, the design team have also reviewed other similar significant spaces which possess the design cues identified in our historic research.

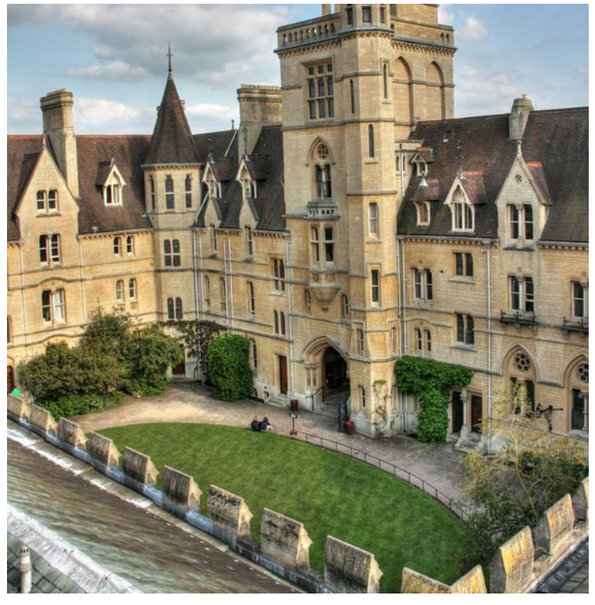
The use of curved or elliptical form within formal heritage spaces is a common design tool to accentuate the formality of the architecture and enhance flow through the spaces, removing corner cutting.



Radcliffe Camera, All Souls College and New College Quads, Oxford. Use of elliptical forms.



New College Quad, University of Oxford



Balliol Quad, University of Oxford. Elliptical form and low level soft landscape accentuating the architecture

Spaces with identified and designed-in desire lines will remove the issue of pedestrians cutting across lawned or planted spaces.

The use of desire lines is also a key tool in bringing emphasis to and highlighting building entrances.

The concept of the parterre has been used for hundreds of years in gardens and public spaces to bring a formality which ties in to the surrounding architecture, while allowing planting freedom in the bed it contains.
This theory can be applied to the Old Quad to allow us to achieve the University's ambitions in relation to sustainability and biodiversity, while also maintaining the formal base for the heritage architecture.



Jubilee Quad, University of Liverpool. Enclosed by three Grade II listed buildings



Jubilee Quad, University of Liverpool. Enclosed by three Grade II listed buildings

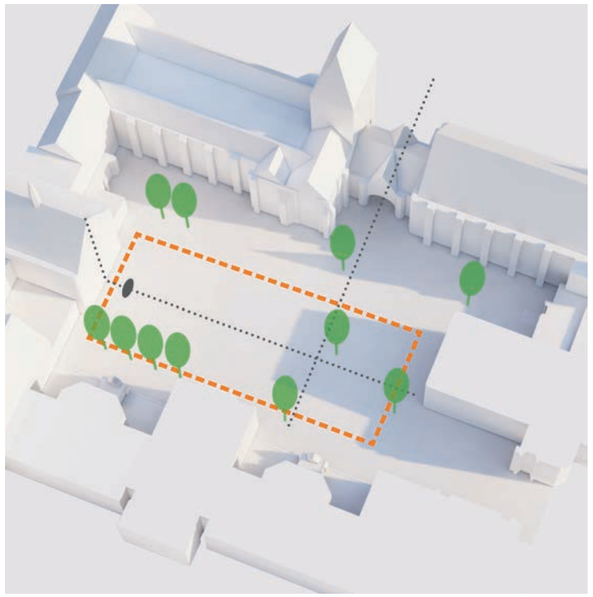


A modern interpretation of a Victorian era parterre with Arts and Crafts type planting

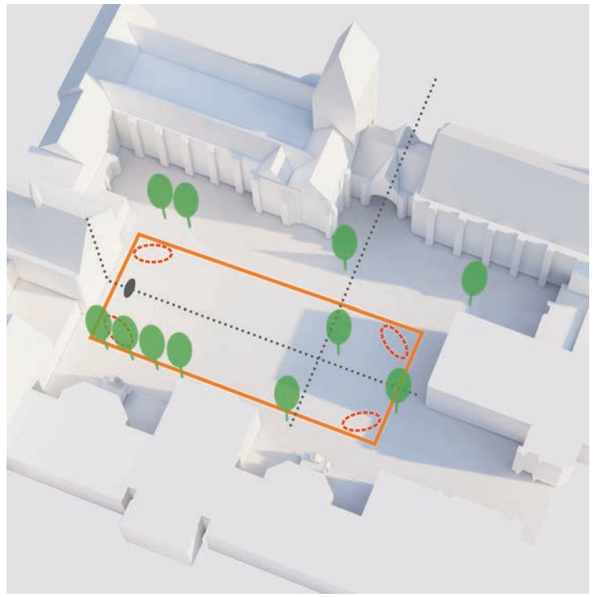
The Evolution of the Design

Through initial site analysis and concept development, the evolution of the design has led to the current proposal, the Ellipse. The outline stages of the concept development are highlighted in the images on this page and described below:

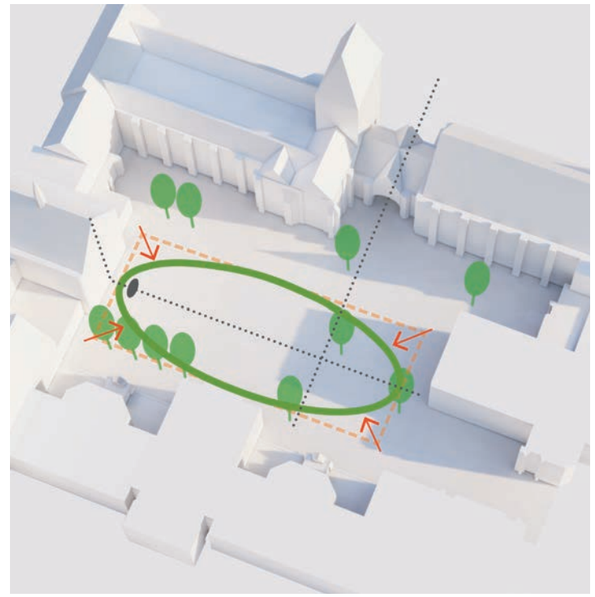
1. Key axial lines are defined by significant architectural elements, the Queens Arch (the main gateway into the site) and the Beyer Building frontage, which is the most imposing and identifiable facade on the Old Quad. Existing trees were highlighted and fixed to ensure they were incorporated into the design thinking. The existing glacial boulder, an important heritage element is retained in place. A core space is defined.
2. The core space is initially rectangular, creating 'dead space' in the four corners.
3. The corners are removed, but the axial lines retained, creating the form of the Ellipse.
4. Key movement and desire lines are identified on the plan based around site visit experience and feedback from users. These incorporate movement from the Queen's Arch to all building entrances off the Old Quad. The Old Quad is developed to be a space with high levels of soft landscape. It is essential that desire lines are identified and represented to ensure users of the space do not need to create their own routes through soft landscaped areas.
5. Desire lines are defined by soft landscape areas. The theory of the formal internal / informal external Ellipse if formed. The centre of the ellipse provides flexible, accessible lawned space for gathering and events. The informal spaces outside the Ellipse forms smaller, more intimate seating and gathering spaces in semi-naturalistic planting.
6. The design is enriched with additional layers of design development, including planting, hard landscape materials, street furniture and artwork.



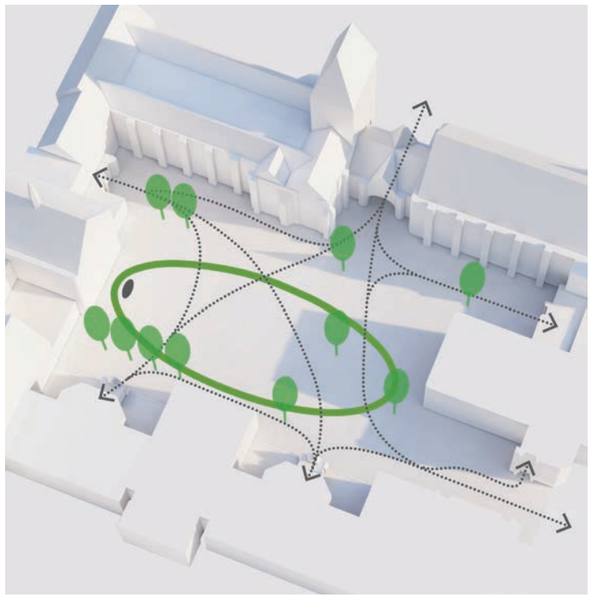
1. Identify key space and existing feature alignment



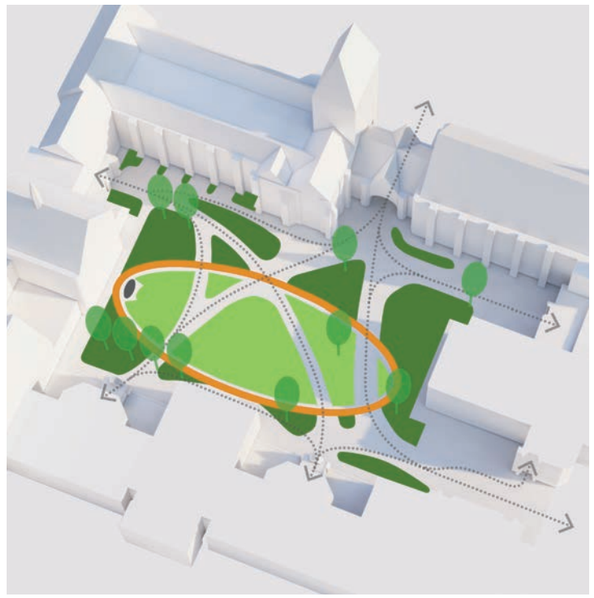
2. Review efficiency and functionality of space



3. The Ellipse is formed to remove remote corners and create an inclusive central space



4. Desire lines identified and highlighted



5. Desire lines defined by lawns and planting



6. Design development and enrichment

Historic & Architectural References

The concept design for the Old Quad has been developed to draw upon the history of the space and form strong reference to its architectural context.

The buildings currently create the visual identity of the space, requiring a design which enhances the connection between the people using the Quad and the architecture. The design forms a setting to emphasise the architecture, care has been taken to ensure it does not detract.

One of the key considerations of the design was to create strong lines of sight throughout the space to frame and enhance the views of the surrounding buildings. The existing mature trees within the space were used as elements to begin creating these architectural views.

The design removes dense mid-level vegetation which previously blocked views across to John Owens when entering through the Queen's Arch. It is important for the design to provide as much visual connection with the buildings as possible, particularly on entering the site.

The main pedestrian routes within the Old Quad flow toward building entrances. The design has key circulation areas to guide the eye toward significant architectural moments.

The development of the Ellipse design was to create a stone form which, when standing within the centre of the space, would form a direct visual connection to the surrounding building plinths. This design tool which allows us to create a space with a large amount of low level planting, and when within the central lawned space views back toward the historic architecture underlined by stone mitigating the naturalistic aesthetic of the planting.

The paving within the Ellipse will be made up of new and reclaimed stone. The new paving stone pattern references the facade stonework detail of the John Owens, Beyer, Christie and Whitworth buildings (as shown on the top left photograph on this page).

This brings an additional layer of historic connection between the proposed design and the heritage of the space. The reclaimed stone, taken from the existing Yorkstone within the space, will form the base paving of the Ellipse. This will bring a direct connection between the people sitting on the Ellipse and an element of the material heritage of the space.



Referencing the facade stonework of John Owens, Christie and Whitworth Buildings



Movement routes used to highlight important aspects of the architecture



The design has been developed to highlight key architectural and historic elements of the Quad



Mid-level vegetation removed to open up eye-level views throughout the space

The planting design has been developed as a modern reference to key influences within the era of Old Quad's formation, between 1873 - 1902.

Late Victorian public spaces were developed to become 'Green Lungs' within built up cities following the Industrial Revolution. The Old Quad provides us with the perfect setting, with established mature trees, to recreate and reinforce this space as a modern 'Green Lung'.

The Arts and Crafts movement brought structured spaces with naturalistic planting which, when combined with historic 'parterre' concept, brought the idea of structured green spaces within the Quad, enclosed by a low, formal hedge. Within the design proposal, is a modern version of the historic principal of a formal enclosing edge allowing more flexibility and natural form within the planting bed itself. The formality of the outer edge responds directly with the formality of the architecture.



Bodrhyyddan Hall, Rhuddlan, Wales. Formal parterre garden



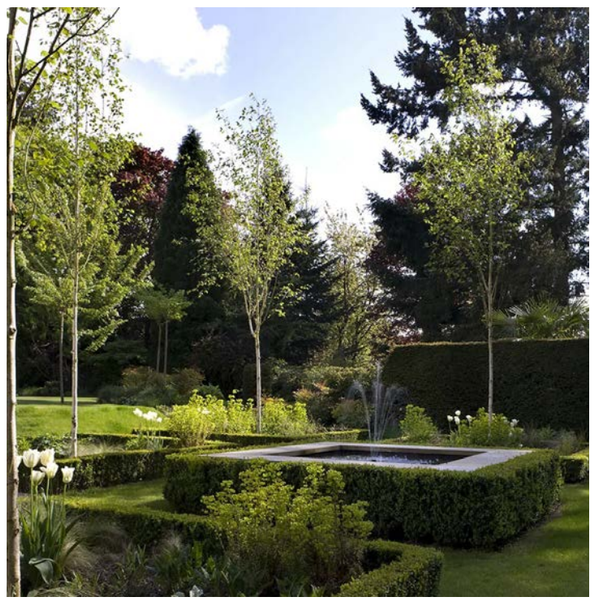
Victorian era parterre garden



A modern interpretation of a Victorian era parterre with Arts and Crafts type planting



A modern interpretation of a Victorian era parterre with Arts and Crafts type planting



A modern interpretation of a Victorian era parterre with Arts and Crafts type planting

Concept Masterplan



Legend:

1. Queens Arch
2. Museum Building
3. Whitworth Hall
4. Christie Building
5. John Owens Building
6. Beyer Building
7. The Old Quad Ellipse
8. Central Formal Lawn
9. Existing Boulder on Raised Plinth
10. Beyer Building Boston Ivy Facade
11. Feature Seating / Interpretation Ellipse
12. Structured ornamental planting
13. Habitat Creation Opportunity
14. Informal Seating Space
15. Bench Seating to Museum Building
16. Cycle Parking
17. Accessible Parking Spaces
18. Accessible Drop-off Bay
19. Bin Storage
20. Delivery Drop-off Bay
21. Wayfinding / Signage Opportunity
22. Photo Opportunity

N

The Old Quad’s Core Materials



Sandstone



Granite



Wood

Hard Landscape - Surface Types



Key

1. Granite sett mix
2. New sandstone
3. Reclaimed sandstone
4. Resin Bound Aggregate



1. Granite sett mix



2. New sandstone



3. Reclaimed sandstone



4. Resin Bound Aggregate

1. Granite sett mix





Current specification:

Supplier: Hardscape

Product: Granite mix
40% Magma flamed
40% Yellow Rock bush hammered
20% Barleycorn flamed

Finish: as above

Size: 100x100mm

Laying pattern: Stretcher bond

Origin: China



Magma flamed



Yellow Rock bush hammered



Barleycorn flamed

2. New sandstone





Current specification:

Supplier: Hardscape

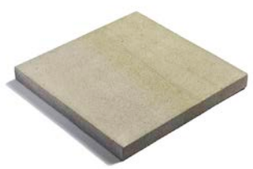
Product: Mixed Colour Pennant

Finish: Sawn

Size: 300mm wide x 900 / 600mm long and 100mm wide x varying lengths

Laying pattern: Stretcher bond

Origin: Gloucester, UK



Mixed Colour Pennant Sawn

3. Reclaimed sandstone





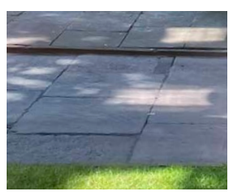
Current specification:

Supplier: Sourced from existing stone within the Old Quad. Hardscape provide a 'Paving Refresh' service to re-purpose lifted / relaid paving.

Product: n/a

Finish: To be re-finished to provide necessary anti-slip properties

Origin: Original origin unknown



Existing sandstone reclaimed and re-purposed

4. Resin Bound Aggregate



Current specification:

Supplier: Sureset

Product: Resin bound aggregate, Winter Pearl 6mm

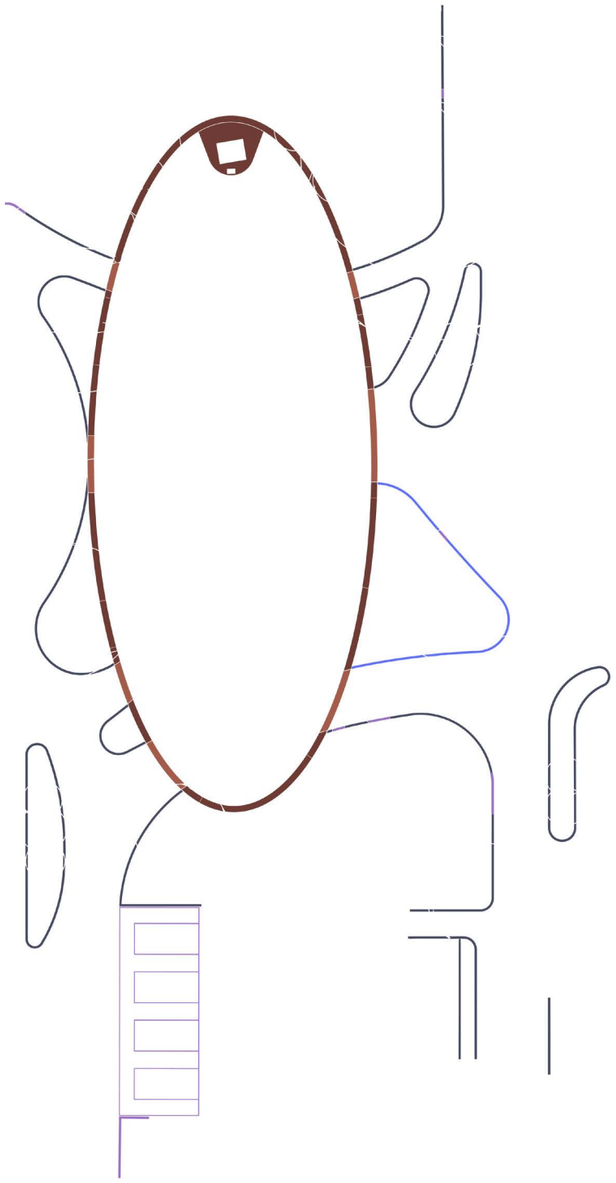
Finish: n/a

Origin: tbc



Winter Pearl 6mm

Hard Landscape - The Ellipse and Edging Materials



Key

1. Granite ‘Ellipse’ seat wall
2. Granite ‘Ellipse’ flush
3. Granite edging (50mm upstand) with flush access as required
4. Granite edging (300mm upstand)



1. Granite ‘Ellipse’ seat wall



2. Granite ‘Ellipse’ flush



3. Granite Edging (50mm upstand)



4. Granite Edging (300mm upstand)

1. Granite ‘Ellipse’ seat wall



Current specification:

Supplier: Hardscape

Product: Silva Montemuro Cinza

Finish: Flamed

Origin: Portugal



Silva Montemuro Cinza
flamed

2. Granite ‘Ellipse’ flush



Current specification:

Supplier: Hardscape

Product: Silva Montemuro Cinza

Finish: Flamed

Origin: Portugal



Silva Montemuro Cinza
flamed

3. Granite Edging (50mm upstand)



Current specification:

Supplier: Hardscape

Product: Yellow Rock

Finish: Bush Hammered

Size: 50mm upstand (above adjacent ground level)

Origin: China



Yellow Rock bush hammered

4. Granite Edging (300mm upstand)



Current specification:

Supplier: Hardscape

Product: Yellow Rock

Finish: Bush Hammered

Size: 300mm upstand (above adjacent ground level)

Origin: China

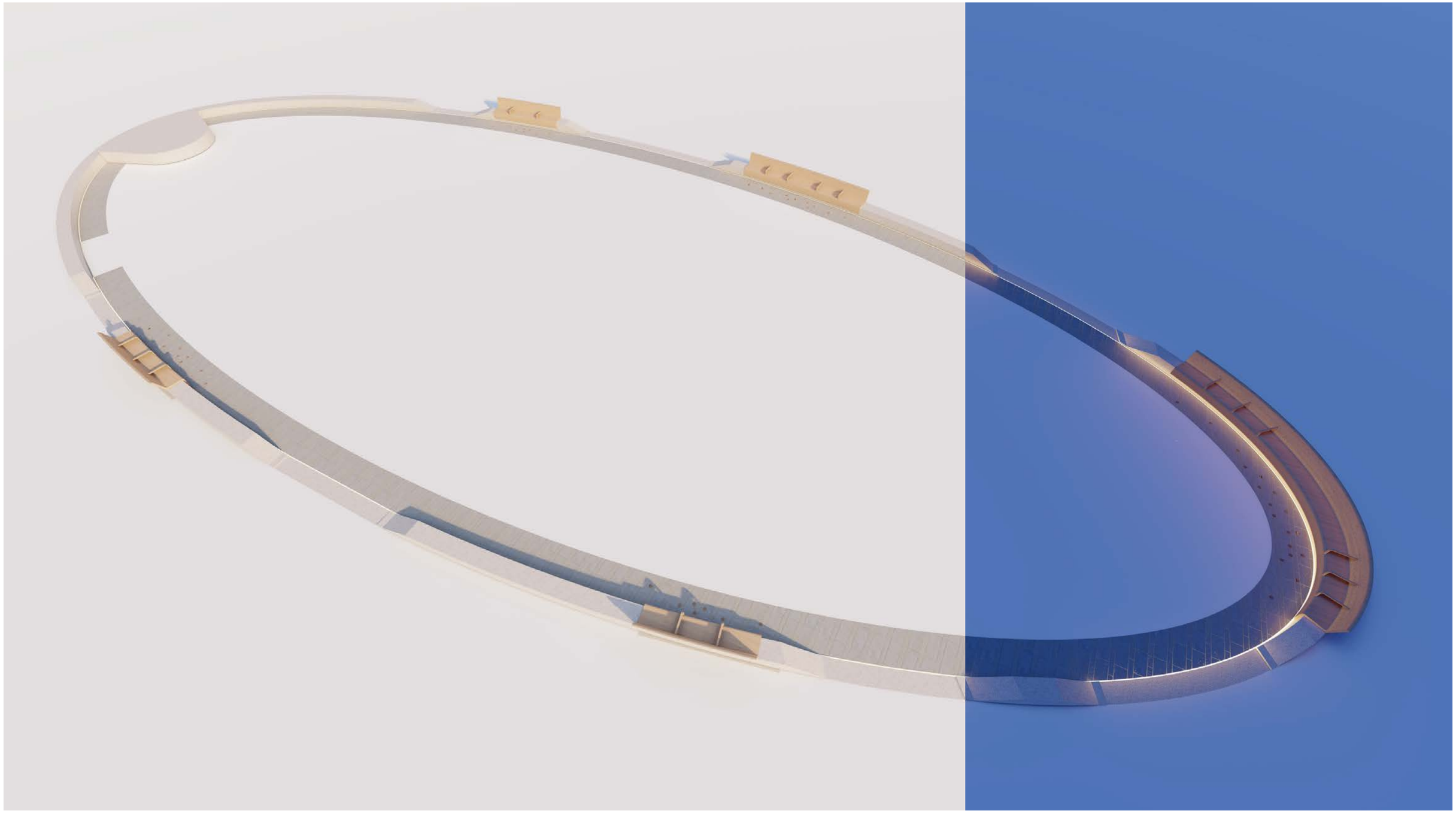


Yellow Rock bush hammered

Material Samples



Seating and Furniture - The Ellipse







Timber slats - natural finish



Timber slats - natural finish



Timber slats - natural finish weathered



Timber slats - natural finish



Existing campus example



Existing campus example

Timber Classification system

Durability class	Designation	Timber life(worst case)	Examples
1	Very durable	25+ Years	Tropical Hardwood, Teak, Opepe
2	**Durable**	**15 – 25 Years**	**UK Grown Oak**, Ekki, Iroko, Other Topical Hardwoods
3	Moderately durable	10 – 15 Years	Douglas Fir, Walnut
4	Slightly durable	5 – 10 Years	European Elm, Scandinavian Pine, Larch
5	Not durable	0 – 5 Years	Beech, Ash, Balsa

Seating and Furniture - Glades and Alcoves





Seat type 1



Natural stone seat

Current specification:

Seat Type 1

Supplier: Logic Bespoke

Product: Plateau seat 580mm

Finish: UK grown oak with powder coated legs

Origin: UK

Natural stone seat

Supplier: Hardscape

Product: Mixed Colour Pennant

Finish: Sawn top, natural sides

Size: 450mm high x 500mm wide x 500mm long

Origin: Gloucester, UK





Current specification:

Bench Type 1

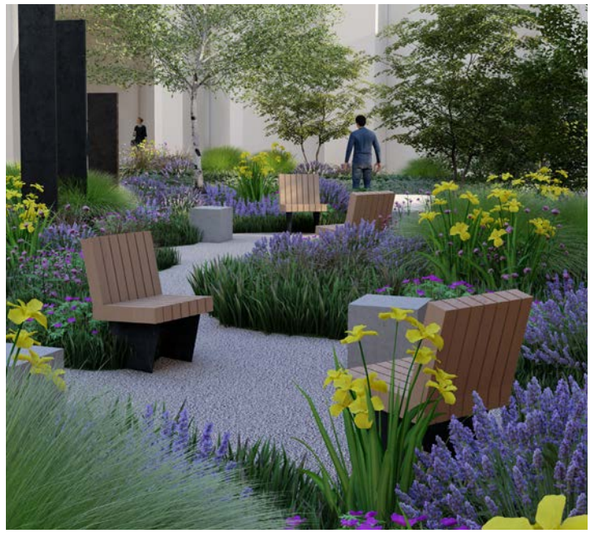
Supplier: Logic Bespoke

Product: Plateau Bench 2380mm

Finish: UK grown oak with powder coated legs

To include armrests

Origin: UK



The Glades

The Glades are a series of smaller, informal seating opportunities within areas of planting throughout the Old Quad.
These spaces provide grouped individual seats which offer a variety of seating opportunities for quieter, more reflective time in the Quad.



The Alcoves

The alcove bench seating is located in the Whitworth Building recesses to the north of the site. These longer benches with backrests and armrests offer views from the perimeter of the Old Quad looking into the space.



Reclaimed sandstone



New sandstone





Granite ‘Ellipse’



Granite sett mix



Resin bound aggregate

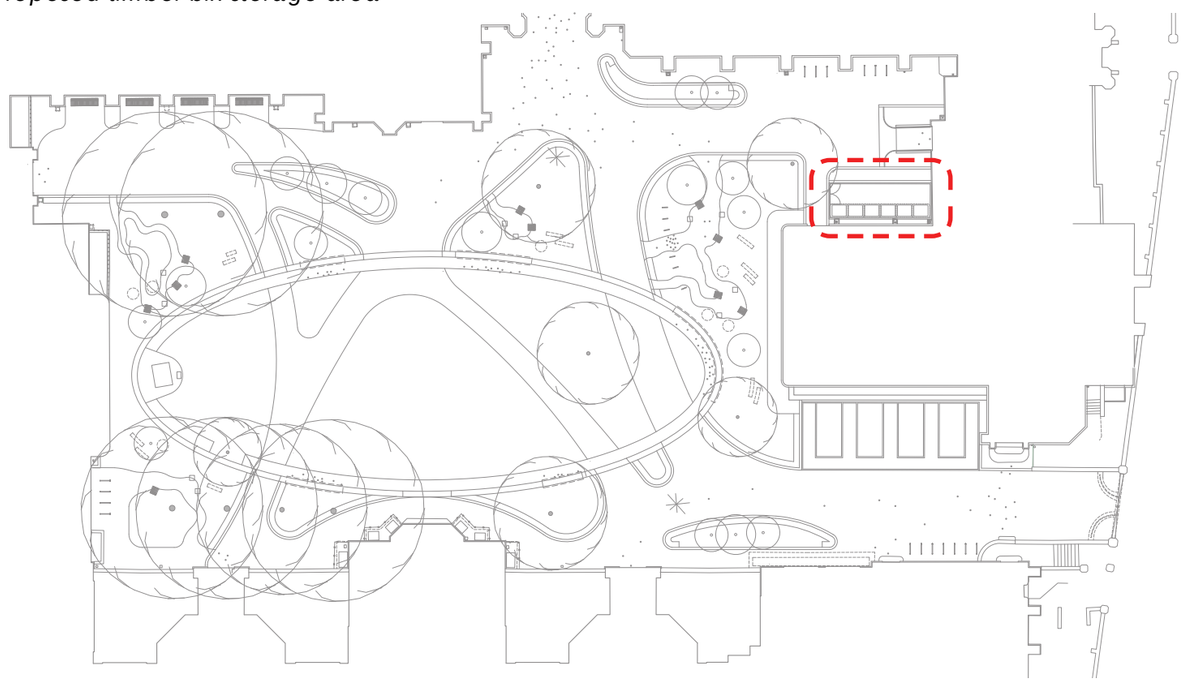
Seating and Furniture - Bin Store Enclosure



Existing Christie access / servicing space



Proposed timber bin storage area



Seating and Furniture - Cycle Parking



Stainless steel ‘Sheffield’ type stand



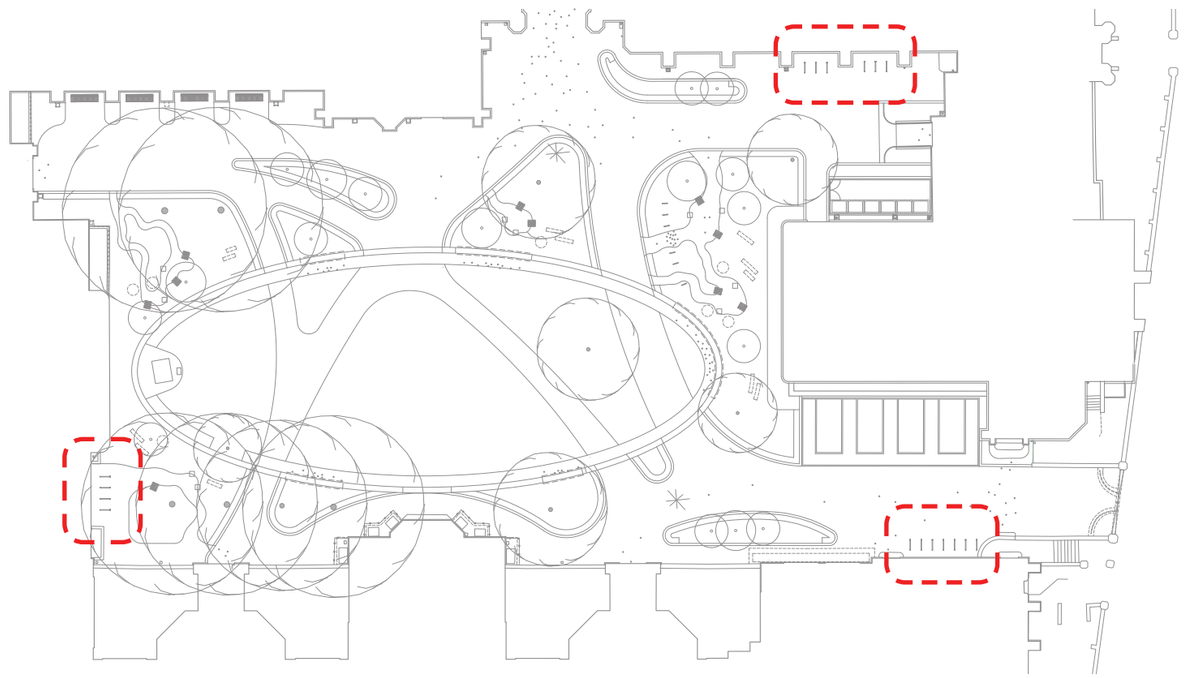
Mild steel flat bar stand



Stainless steel flat bar stand



Existing campus example



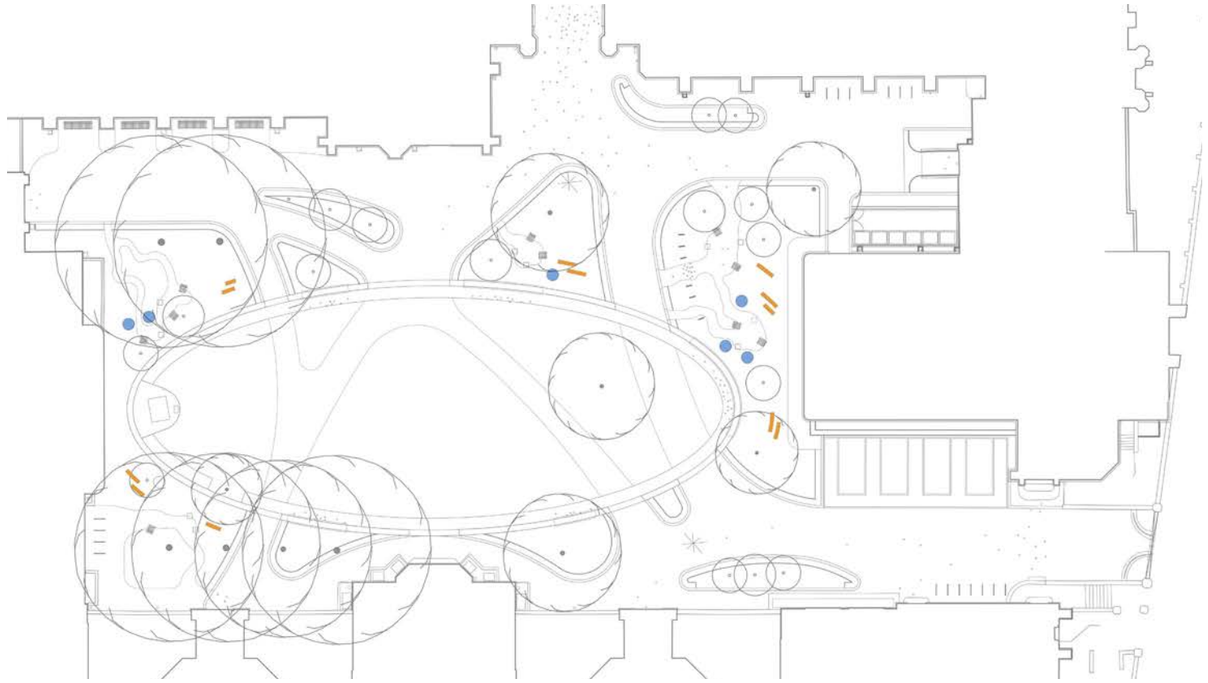
Ecological Features

Key ecological features identified throughout the design engagement and development phases have been habitat creation opportunities, in the form of log piles and water pools.

Any habitat creation opportunities will need to be appropriate to the heritage setting of the Old Quad. We need to ensure that these features are incorporated into the design but in a sensitive way.

Log piles will be included in a sculptural form within the planting beds as shown within the images on this page.
They will blend into the naturalistic planting within the deeper planted areas an mimic clump forming species. The aim of the design is for the log piles to be very discreet, while providing ample habitat for invertebrates.

Small pools are to be included within the scheme to provide an element of drinking / washing water for birds and invertebrates. These pools will be approximately 1m in diameter and relatively shallow, these would not be classified as ponds.
It is important that the pools provide habitat enhancement but do not encourage breeding biting insects.
Pools will be located within deeper planted areas to discourage access by pedestrians. They will be discreetly positioned but with some visibility from the secondary seating areas.





Ornamental log piles (credit Nigel Dunnett)



Example of a small pool at RHS Bridgewater

Art, Interpretation and Wayfinding - The Ellipse and Paving Elements

The integration of artwork into the scheme can greatly enrich the space and help in telling the story of its heritage and current meaning.

As the regeneration of the space is a celebration of the 200 years of the University, it may be that a timeline of it's history is incorporated into the Ellipse, or elements which represent the 25 Nobel prize winners.

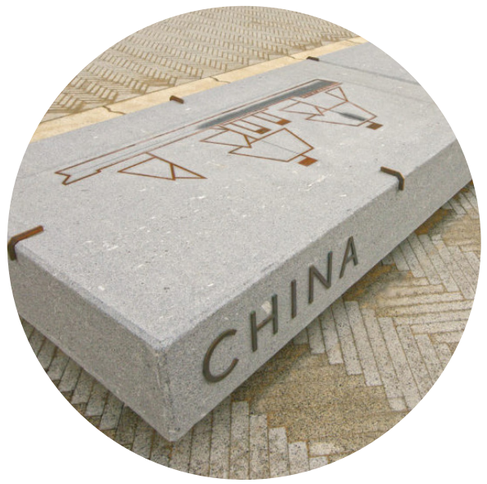
Opportunities for integrated artwork at different scales are available throughout the space, but primary areas which would have the most impact would be the surfacing and the central ellipse.

Integrated artwork will be developed with input from University of Manchester stakeholders to ensure the most relevant and inspirational solution is achieved.

The integrated artwork will be developed with subtlety to ensure no visual detraction from the architecture surrounding the space.



Sand blasted / metal inlay



Sand blasted / metal inlay and metal pinned



Sand blasted / etched



Sand blasted / metal inlay

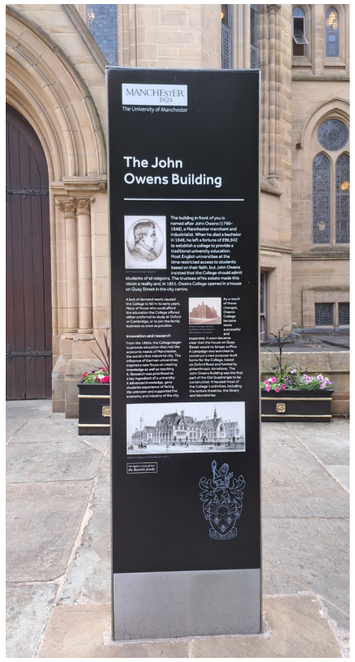


Inlaid bronze elements in paving

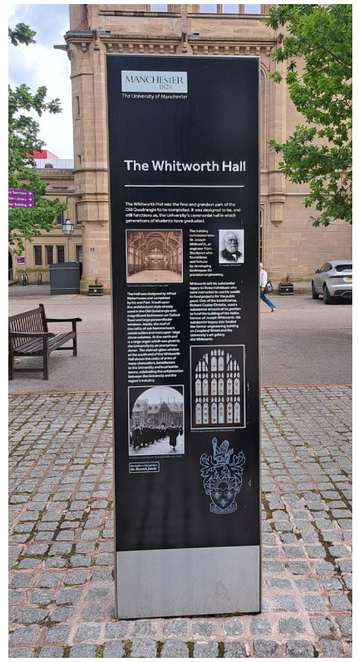


LED strip light - spill lighting

Art, Interpretation and Wayfinding - Heritage Plinths









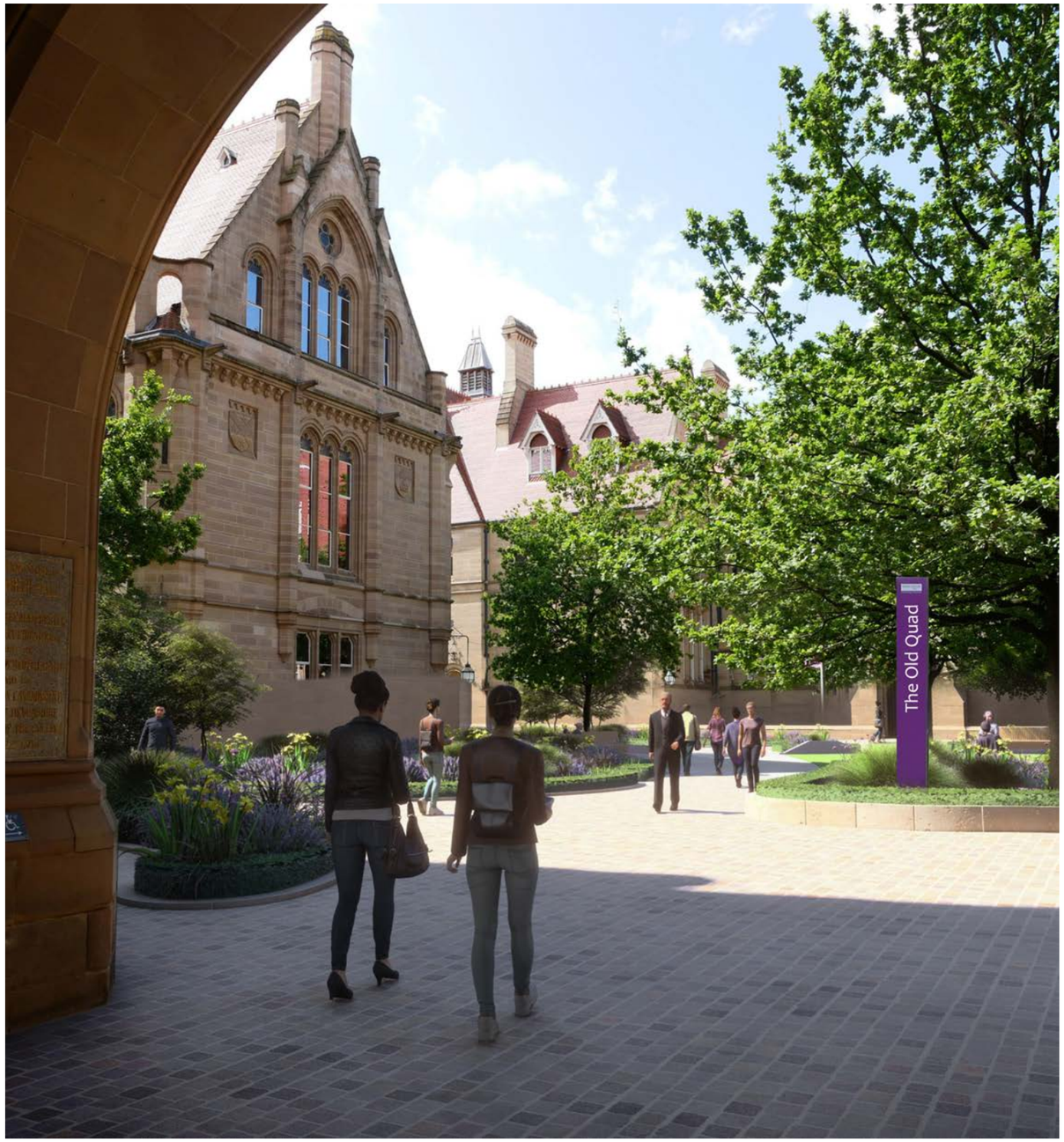


Existing heritage plinths to be relocated within proposed design (Old Quadrangle / Whitworth Hall plinth double sided)

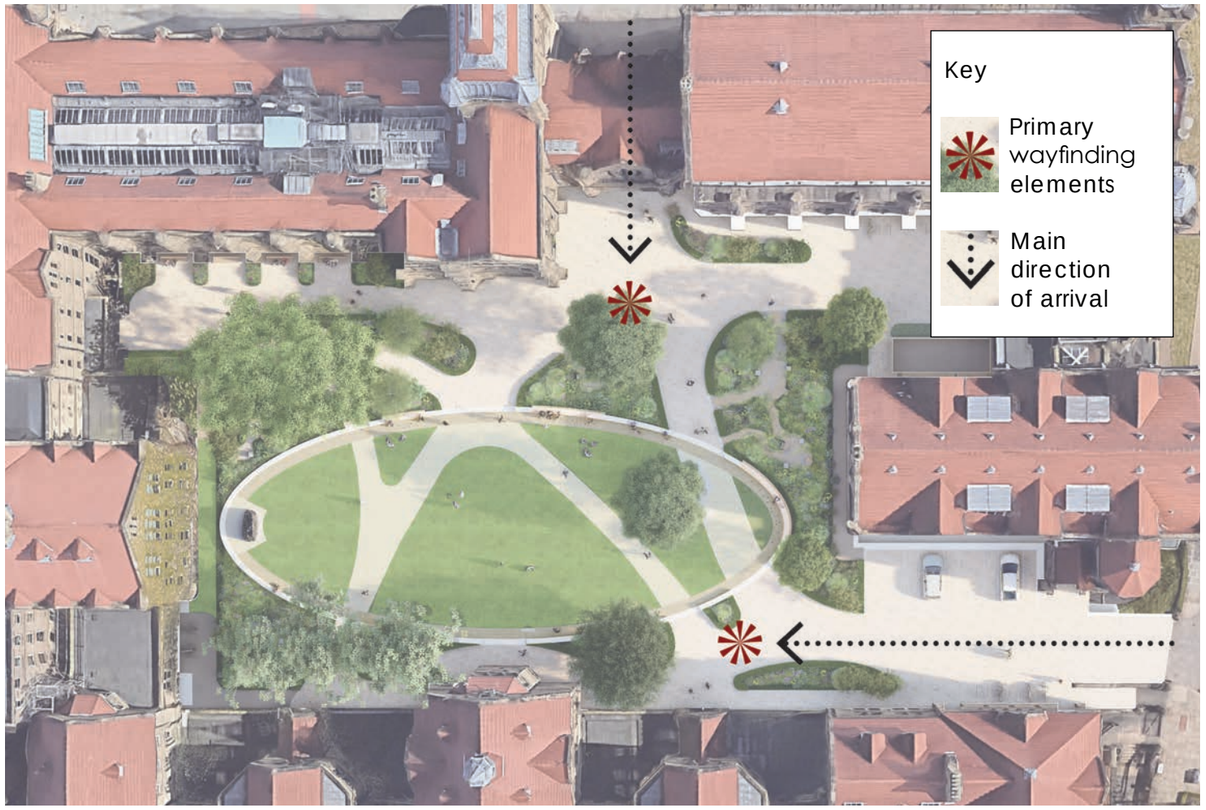


Plan of relocated heritage plinths

Art, Interpretation and Wayfinding - Wayfinding



Proposed UofM plinth signage to Queen's Arch entrance



Plan of relocated key wayfinding point



Existing Old Quad wayfinding to be incorporated at Burlington Street entrance



Illuminated feature wayfinding

Soft Landscape

Planting Palette - Species Spotlight

It is essential to the success of the scheme, and the identity of the University that the Old Quad carries the right high quality appearance throughout the year. This is a space that will function through all seasons.

Due to the large percentage of the space which will be soft landscape, to create the University heart garden the Ellipse is designed around, we need to ensure that the soft landscape has full seasonal appeal.

The planting design will incorporate species with spring, summer and autumn flowering periods, multi layered textural foliage, both deciduous and evergreen, scented foliage and flowers and stem / bark interest.

The intention of the design is to wrap the planting beds in low, semi-formal hedges to give a consistent appearance from the outside, while the plants within the beds flower, develop and undertake natural succession.
This hedge warp will form a modern 'parterre', allowing more freedom and creativity to the planting design within the beds while maintaining a neat, high quality exterior.

All plant species on the project will be selected for a value that they bring to the scheme.
Each species will add to the overall biodiversity and ecological benefit of the project, be it in relation to attracting pollinators, creating habitat structure or cover, or the ability to grow in specific conditions, allowing us to maximise greening.



Scabiosa atropurpurea
Sweet Scabious

Height: 0.5 - 1m
Position: Full Sun
Hardiness: H5 (-15 / -10)
Value:
- RHS Plants for Pollinators
- Semi-evergreen foliage



Thymus praecox
Mother of Thyme

Height: 0.1m
Position: Full Sun
Hardiness: H4 (-10 / -5)
Value:
- RHS Plants for Pollinators
- Drought tolerance
- Groundcover
- Evergreen



Cornus kousa
Kousa Dogwood

Height: 4 - 8m
Position: Full Sun / Partial Shade
Hardiness: H6 (-20 / -15)
Value:
- Unusual and attractive flowers and fruit
- Excellent autumn colour



Lavandula angustifolia 'Hidcote'
English Lavender

Height: 0.5 - 1m
Position: Full Sun
Hardiness: H5 (-15 / -10)
Value:
- RHS Plants for Pollinators / AGM
- Evergreen foliage
- Scent



Stipa capillata
Slender Feather Grass

Height: 0.5 - 1m
Position: Full Sun
Hardiness: H5 (-15 / -10)
Value:
- Tufted feathery foliage / wind movement



Stachys byzantina
Lamb's Ear

Height: 0.1 - 0.5m
Position: Full Sun
Hardiness: H7 (< -20)
Value:
- Carpetting groundcover
- Evergreen perennial
- Silver, wooly foliage



Salvia nemorosa
Woodland Sage

Height: 0.5 - 1m
Position: Full Sun / Partial Shade
Hardiness: H7 (< -20)
Value:
- RHS Plants for Pollinators / AGM
- Drought tolerance
- Scent



Catananche caerulea
Cupid's Dart

Height: 0.5 - 1m
Position: Full Sun
Hardiness: H5 (-15 / -10)
Value:
- RHS Plants for Pollinators / Award of Garden Merit



Molinia caerulea
Purple Moor Grass

Height: 0.5 - 1m
Position: Full Sun / Partial Shade
Hardiness: H7 (< -20)
Value:
- Grows in dappled shade
- UK native



Baptisia australis
Blue Wild Indigo

Height: 0.5 - 1m
Position: Full Sun
Hardiness: H7 (< -20)
Value:
- RHS Award for Garden Merit
- Drought tolerance



Valeriana officinalis
Common Valerian

Height: 1 - 1.5m
Position: Full Sun / Partial Shade
Hardiness: H4 (-10 / -5)
Value:
- Grows in dappled shade
- UK native



Fagus sylvatica
Beech (Hedge)

Height: Cut to 0.6m
Position: Full Sun / Partial Shade
Hardiness: H6 (-20 / -15)
Value:
- Semi-formal edge to planting areas
- UK native

Lighting

The Old Quad space will be used throughout the year and will need to be safe and secure during both summer and winter months. This puts emphasis on the integration of quality lighting within the space to ensure clear visibility when required.

As well as base functionality, the incorporation of better overall lighting brings an important opportunity to emphasise key elements of the proposed design and highlight the historic building facades.

A lighting design for the Old Quad, is being developed that considers the space and the buildings that define it. This will also provide lighting that addresses the University 's operational considerations, including security and way finding.

Feature lighting within soft landscape is to be developed and could emphasise the importance of the green infrastructure within the space, including bespoke features within planting and tree uplighting, whilst considering the impact on wildlife.



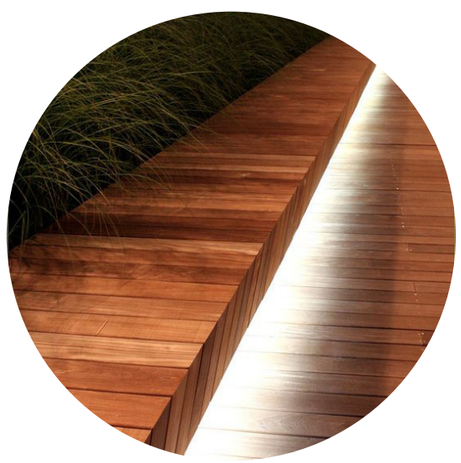
Indicative lighting arrangement for the Old Quad



Existing lanterns to be retained



Feature lighting to highlight Ellipse



Seat highlight lighting



Low height bollard lighting to footpaths



Low height bollard lighting to footpaths


CLEAVER & WAKE
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MUSEUM
WHITWORTH
JOHN OWENS
JOHN OWENS
MUSEUM
QUEENS ARCH
CHRISTIE
JOHN OWENS



Aerial view of the existing Old Quad (Aerial imagery from Google Earth)



Aerial view of the proposed Old Quad design (Aerial imagery from Google Earth)



Aerial view of the proposed Old Quad design (Aerial imagery from Google Earth)



Aerial view of the proposed Old Quad design illustrating the connection to Brunswick Park and Gilbert Square (Aerial imagery from Google Earth)



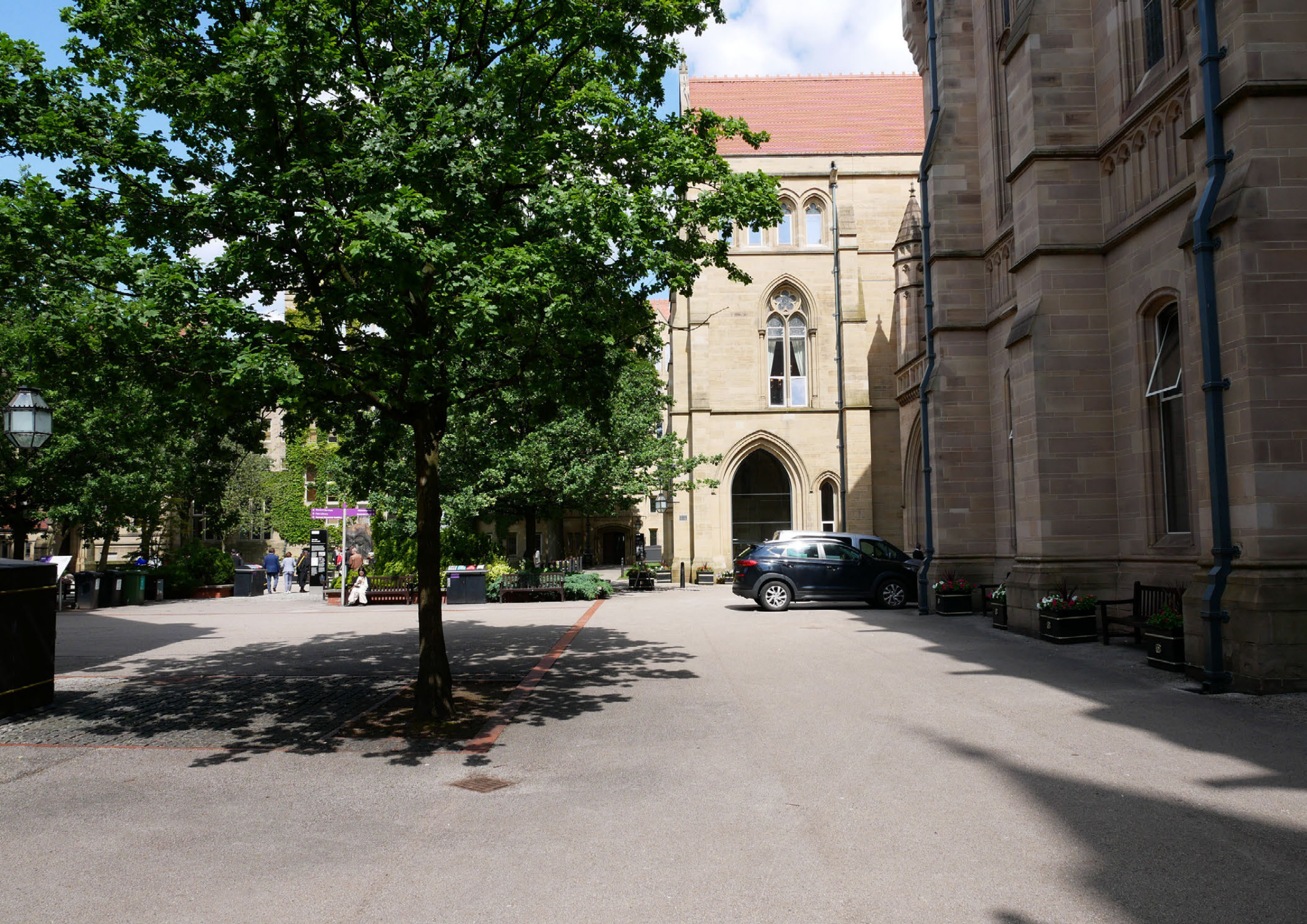















GRADUATION
Graduation
& Disabled entrance
Christies




Main Library
Samuel Alexander Building



























| Design Consideration

| Roof Maintenance Access

The Old Quad provides access to the facades of the buildings that surround it. The team have engaged with the University of Manchester's Facilities, Maintenance and Compliance (FMC) staff who manage this.

Regular maintenance access is required to gutter levels and rainwater down pipes of all buildings forming the Old Quad, and the Beyer building gable to prune the Boston ivy.

Drone surveys of the higher and concealed roof levels are undertaken on an annual basis to establish condition and identify areas requiring maintenance work.

The project team have been provided with a range of MEWPs that are used for this purpose. These typically weigh 20 metric tons and are 2.5m wide by 4m long. They change proportion when in operation.

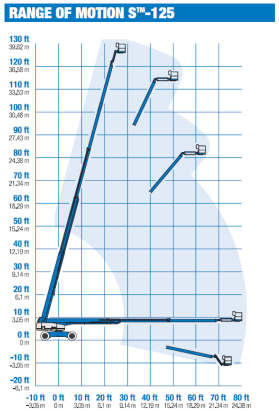
The access to Old Quad for these is from Oxford Road, through the Queens Arch due to the weight limit on the access from Burlington Street.

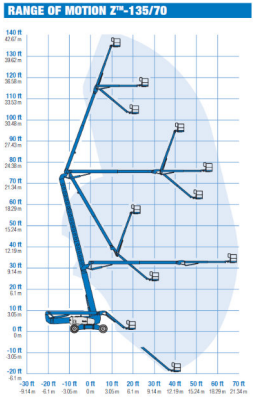
The University also use a 'lightweight' spider MEWP in order to work round the weight limit on the access from Burlington Street. The spider MEWP is used for access to the higher levels.

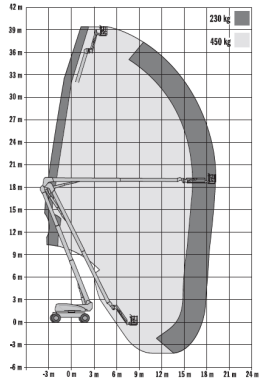
The use of MEWP within the courtyard is enable by the use of ground plates to spread the imposed load to limit / mitigate against damage to the surface below.

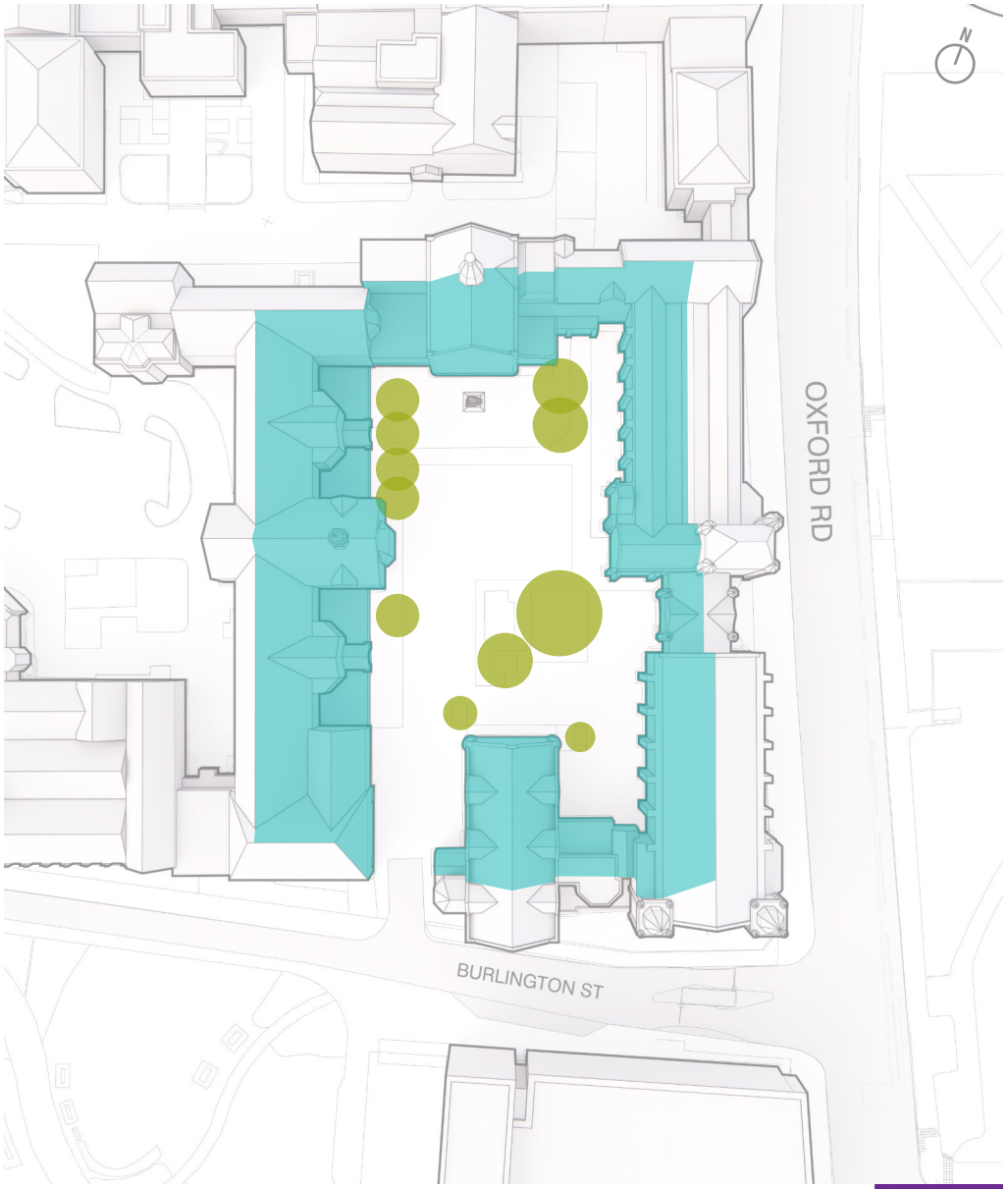
The diagram adjacent illustrates the roofs accessed from the Old Quad. Details of the MEWPs used to undertake the elevated access have been received from the University.

This information has been used to assess the needs for access that the Bicentennial project has to address. This has then been overlaid on the concept design and reviewed with the University FMC staff, and their comments gained to shape the proposal.







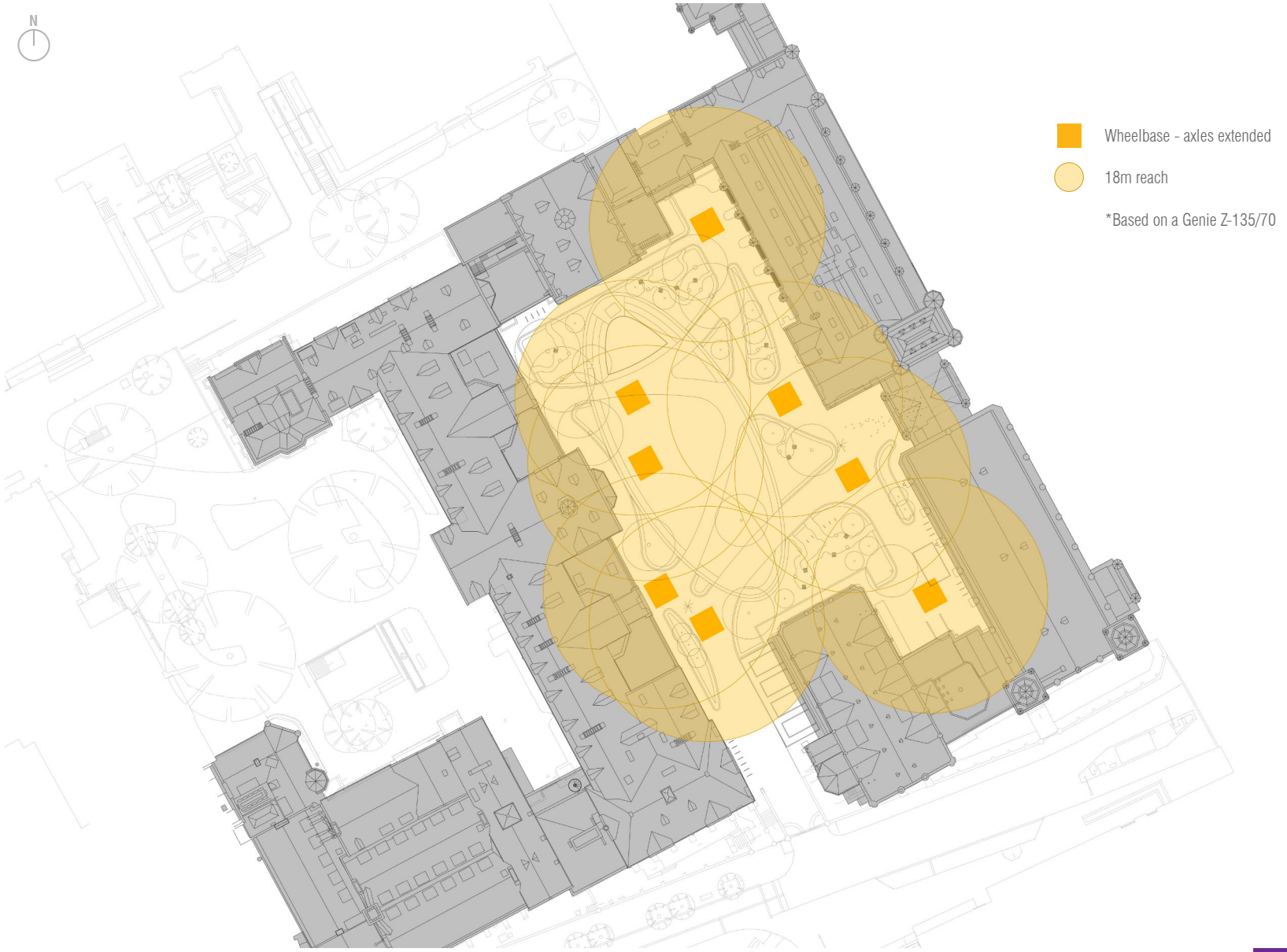


WILSON MASON architecture and interior design

iteriad

| Appendix C

| MEWP Access Proposal



| Design Considerations
| Vehicle Access

Vehicle access to the Old Quad is restricted.

This is due to the presence of a basement and service tunnel under the access from Burlington Street. A result of this is that a 3 ton limit has been defined in order to protect and prevent damage to these structures.

FIRE FIGHTING ACCESS

The weight limit to the Burlington Street access means that there is no access for fire tenders within Old Quad. The agreed arrangement is that in the event of a fire they park on Oxford Street or Burlington Street.

SERVICE ACCESS

The service access to Whitworth hall and the Christie Bistro is that vehicles over the 3 ton limit access the area through the Queens arch.

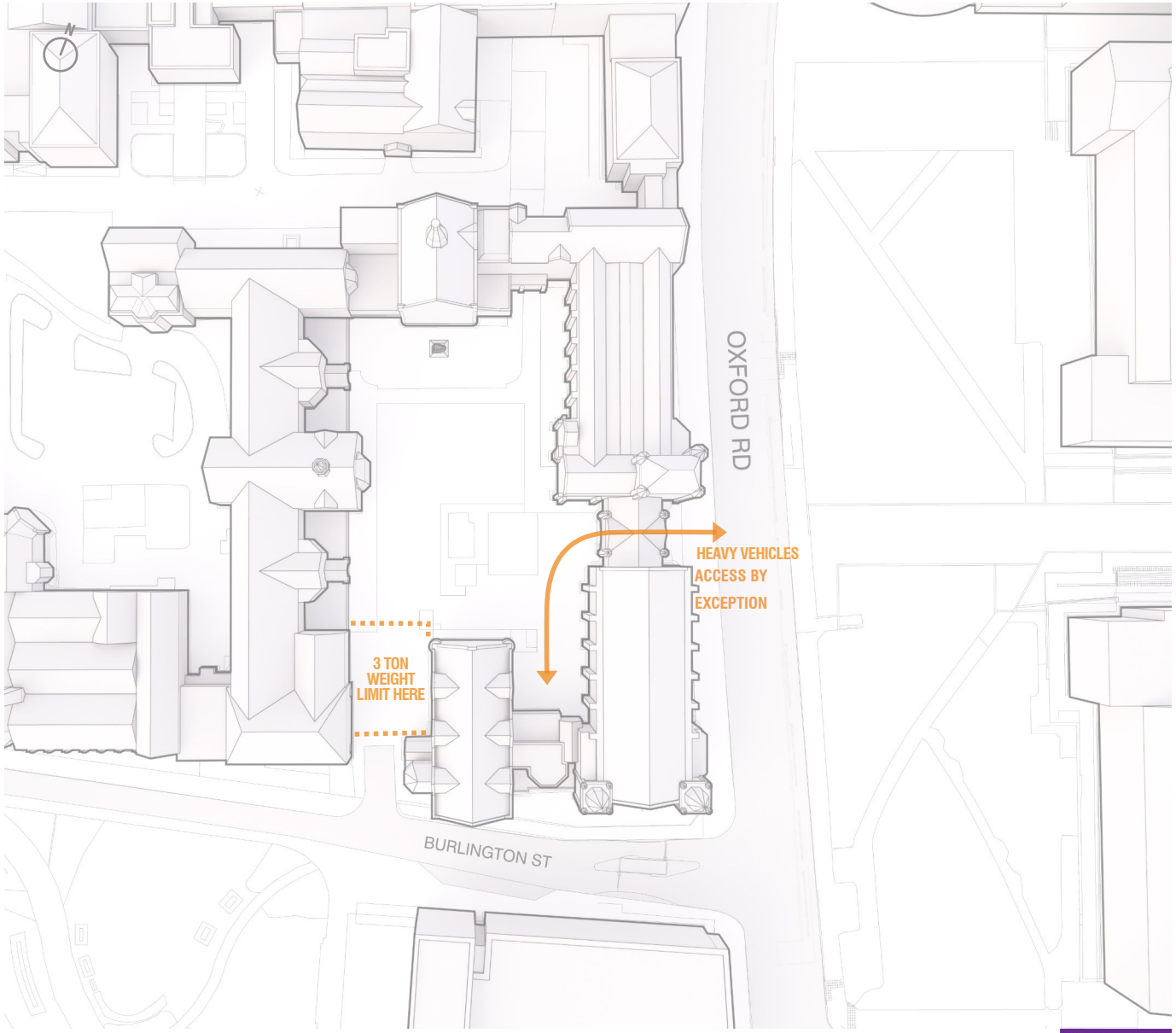
The entry point to the buildings is the door to Old Quad within the link between the two buildings.

The bins are taken to Burlington Street to be emptied.

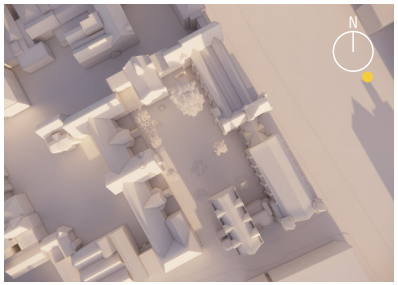


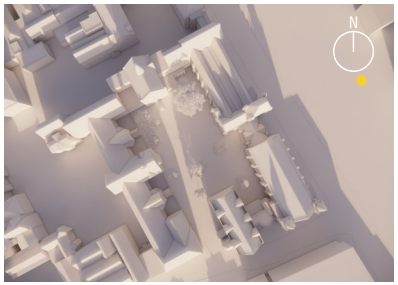


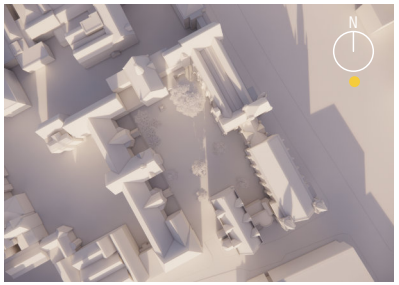


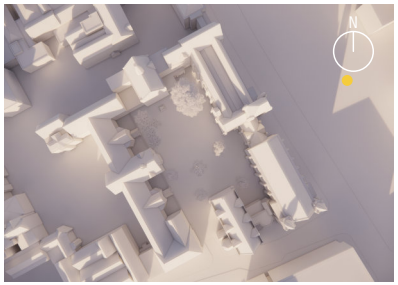


| Design Considerations
| Seasonal Solar Shading

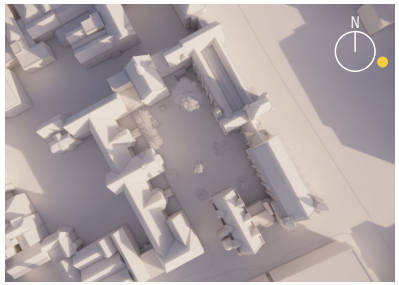

Winter 1000 GMT

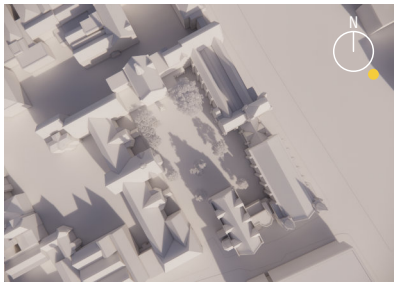

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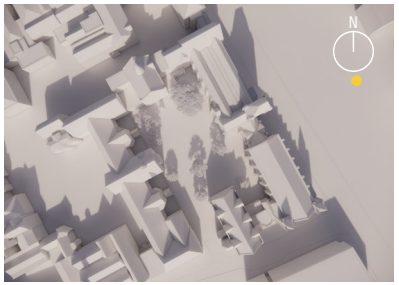

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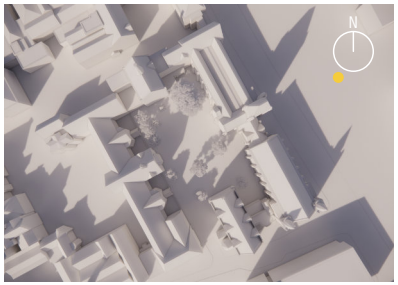

Winter 1300 GMT

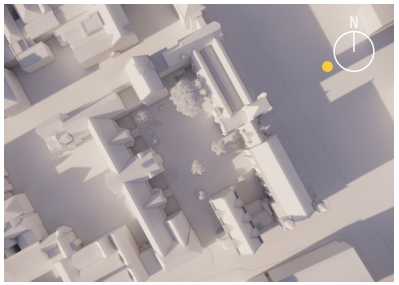

Winter 1400 GMT

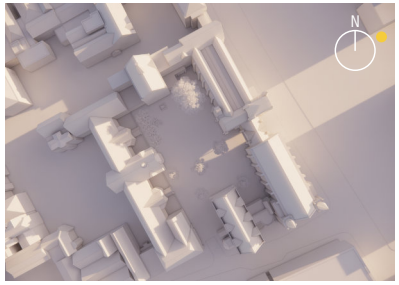

Spring Equinox 0800 GMT

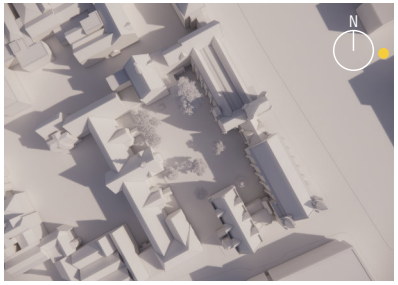

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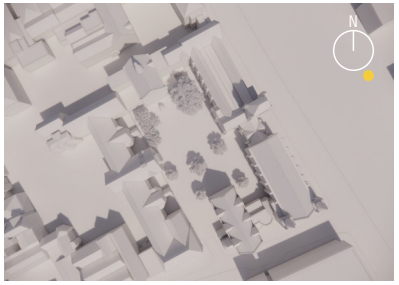

Spring Equinox 1200 GMT

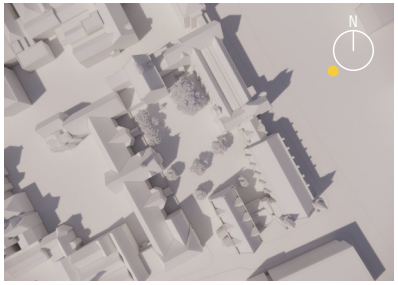

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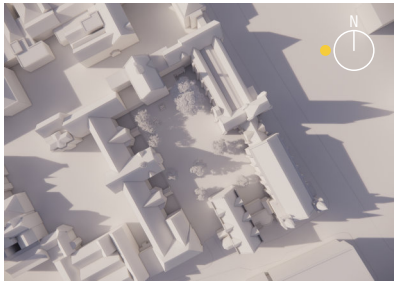

Spring Equinox 1600 GMT


Summer 0600 BST


Summer 0900 BST


Summer 1200 BST


Summer 1500 BST


Summer 1800 BST

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