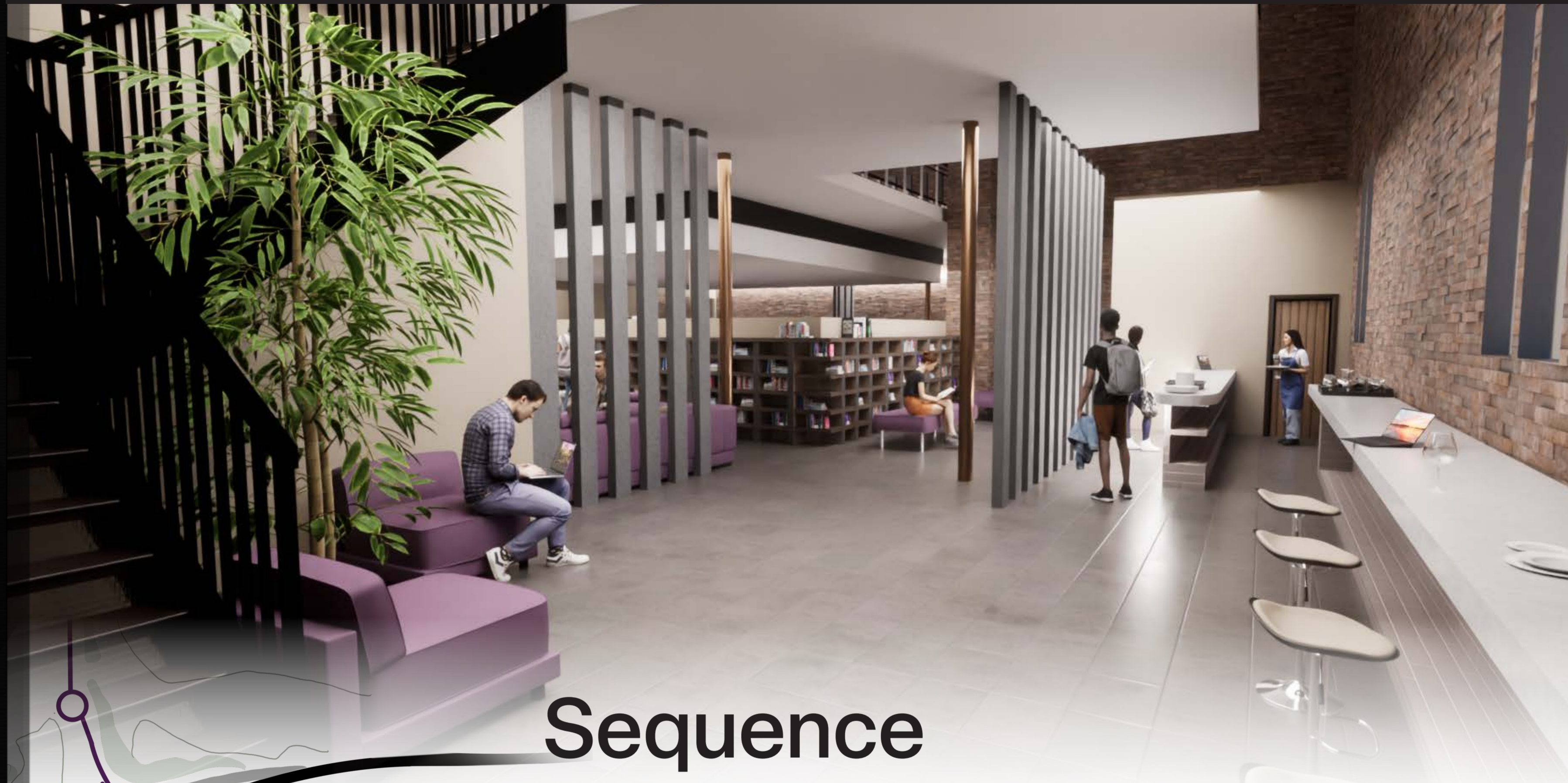


# A Contemporary Working Environment for Methodical Learners

## BRIEF

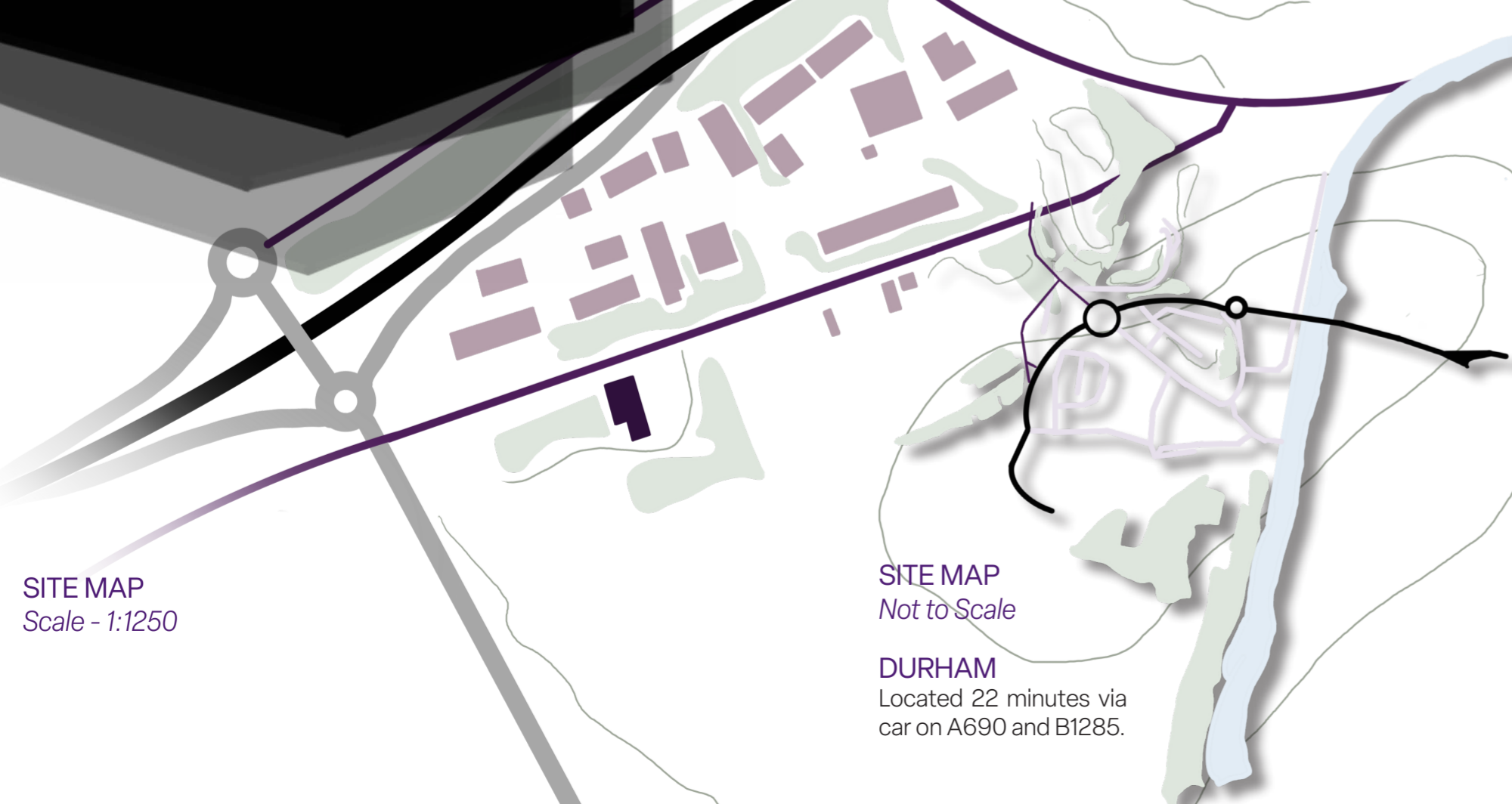
The idea of Sequence is to provide and create a sequential flow for students, to work and study in a much healthier, sustainable and positive environment which will prepare them for future opportunities in the job sector they choose. This motivation has developed the design problem 'How can an intervention be designed to support students of the engineering industry' due to the reoccurring issues in the industry that have collated over time. These issues range from lack of positive work environments for both experienced workers and especially post graduate students, to lack of female role models for the engineering industry which overall creates a grey area for the new generation to feel welcomed into the engineering world.



# Sequence

*A particular order in which a collection of related subjects follow each other.*

SITE MAP  
Scale - 1:1250



SITE MAP  
Not to Scale

**DURHAM**  
Located 22 minutes via car on A690 and B1285.

## SITE CONTEXT

Sequence is to be developed as an intervention within Dalton Old Pump House, Seaham. This location looks to be the best place for a suitable client and user, being Durham University and their engineering students.

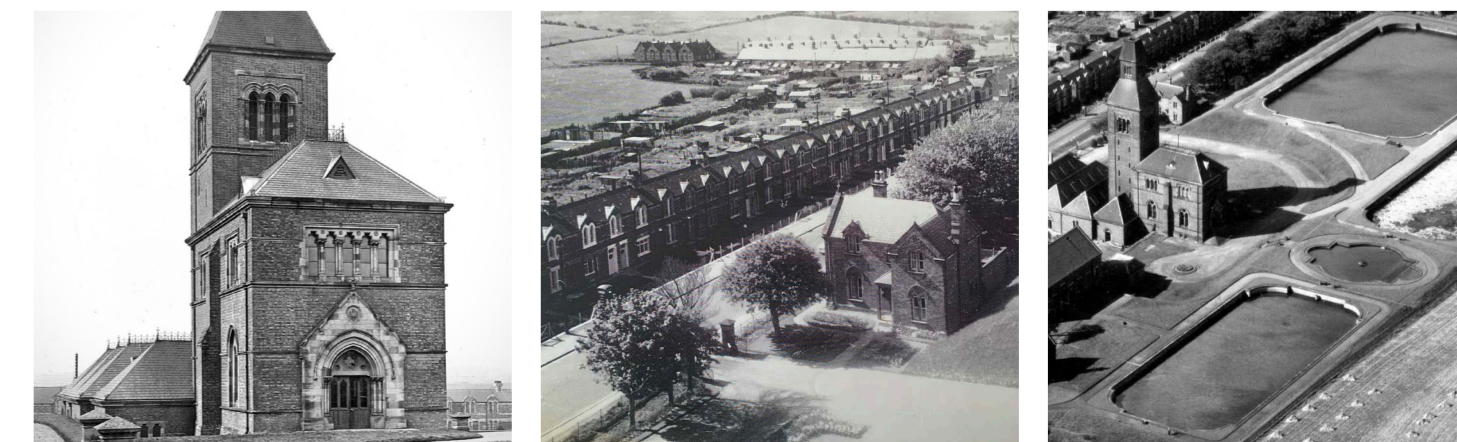
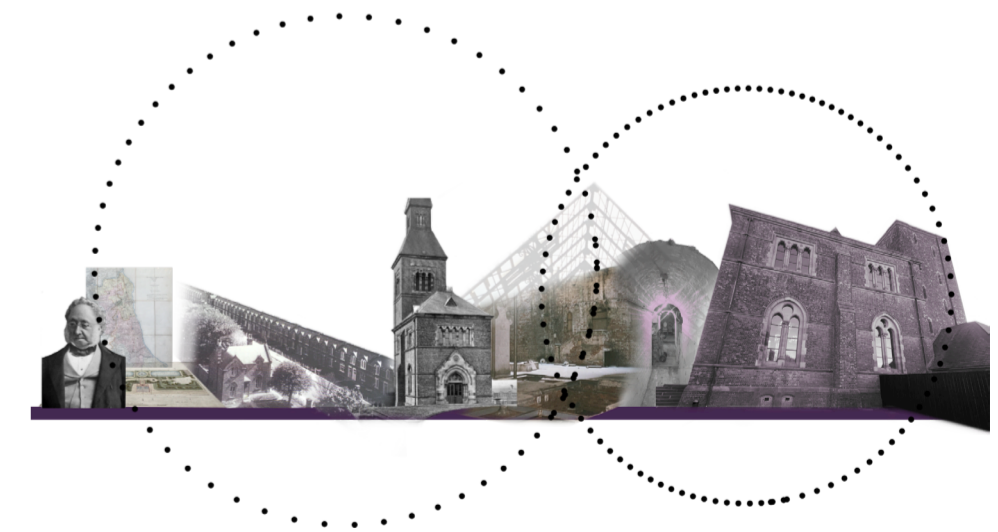
Originally, Dalton Old Pump House (Lady Dalton) was built before World War II in the 19th century from 1873 - 1875 to supply surrounding areas; Newcastle, Sunderland, Durham and more, with water through a limestone base rock and reservoir. The Venetian gothic-style building, supplied surrounding areas with water to provide clean water whilst also improving the domestic plumbing issues during the late 1800's.

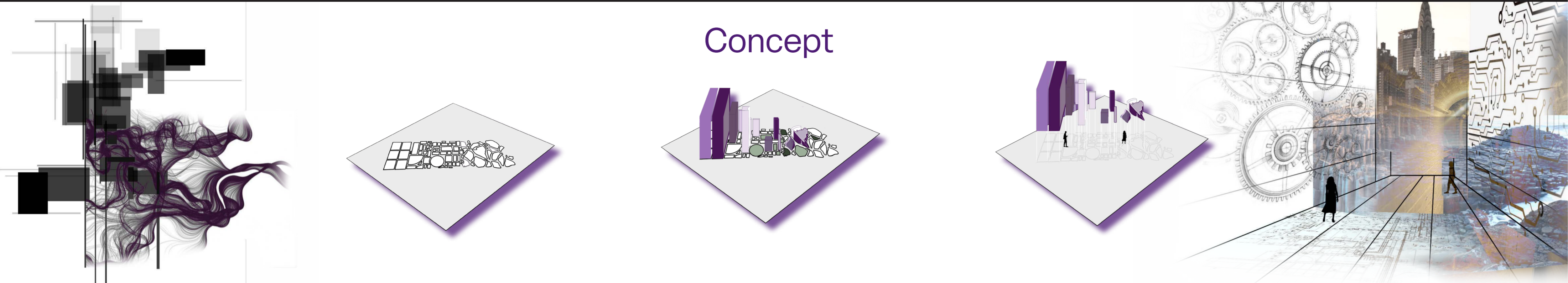
## CLIENT

Looking at the building analysis and location of Dalton Old Pump House, the Client needed to be thoroughly considered. The University of Durham has been contracted for Sequence's client as they are known to be a leading research centre for engineering.

## USER

The client will be the University of Durham and they will be offering Sequence as a retreat experience for the users, who are the students. The overall experience will allow undergraduate and postgraduate students to enhance their engineering skills for future employment whilst being accompanied by professionals who will be able to support their work and education.

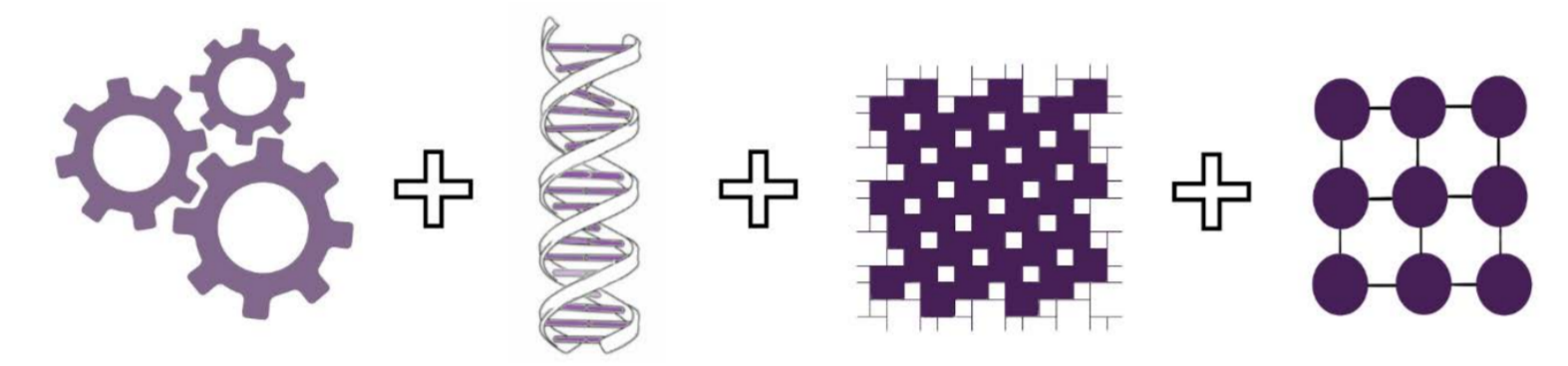




# Concept

## Design Approach

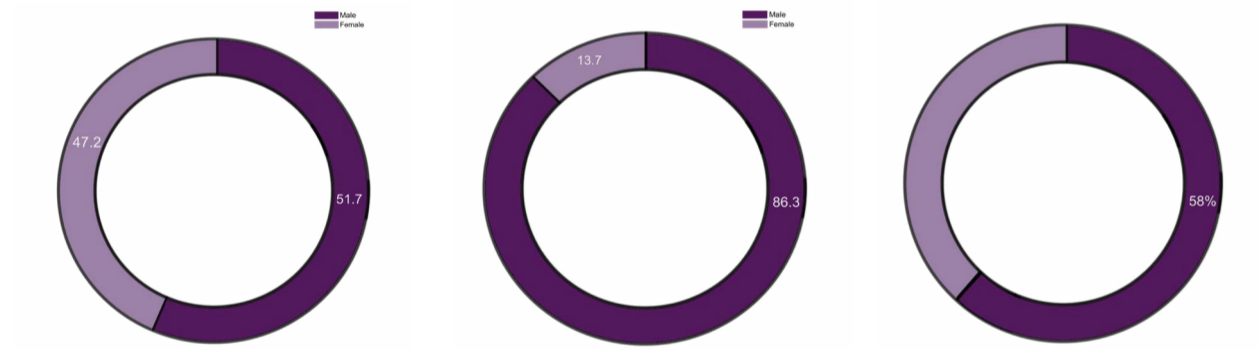
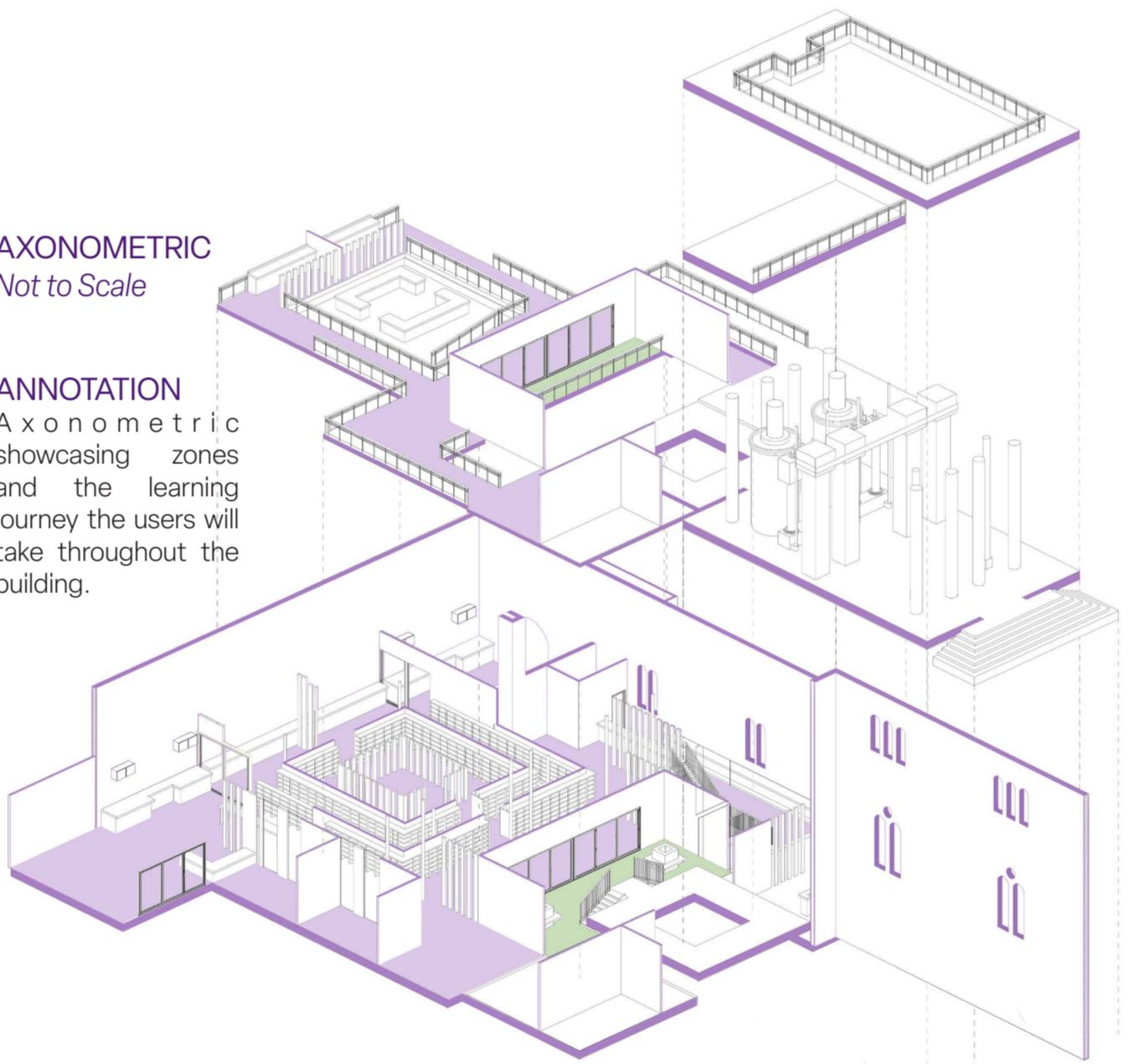
**PROBLEM STATEMENT**  
 Engineering demands are consistently rising because of the lack of career ambition for younger people in the new generation due to the absence of supportive workplaces. The avoidance of post graduate engineers pursuing careers within the industry increases pressure on current engineers in the industry which develops into a high stress-induced environment with no support system.



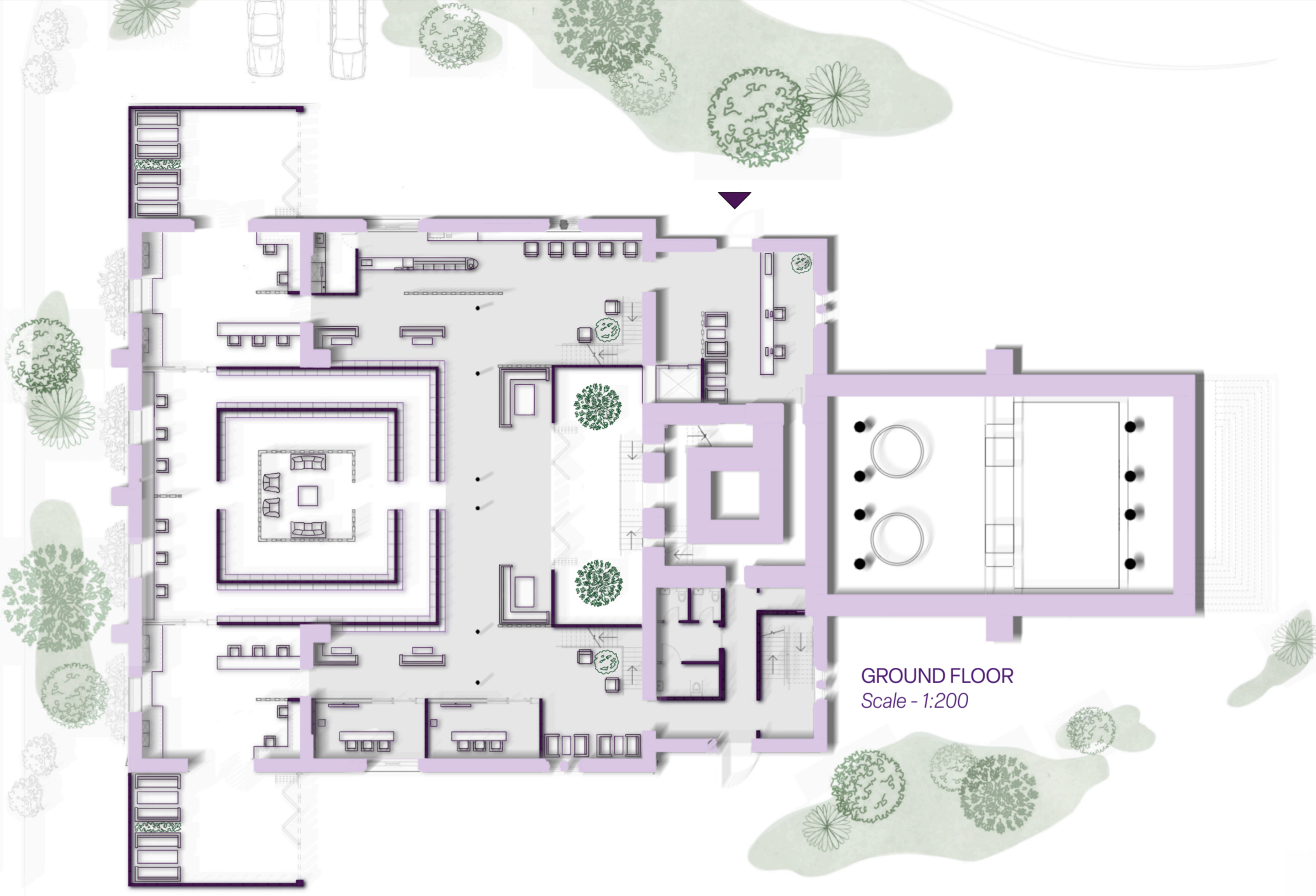
Process in which engineers study in to create a structured and well processed project outcome.

### AXONOMETRIC Not to Scale

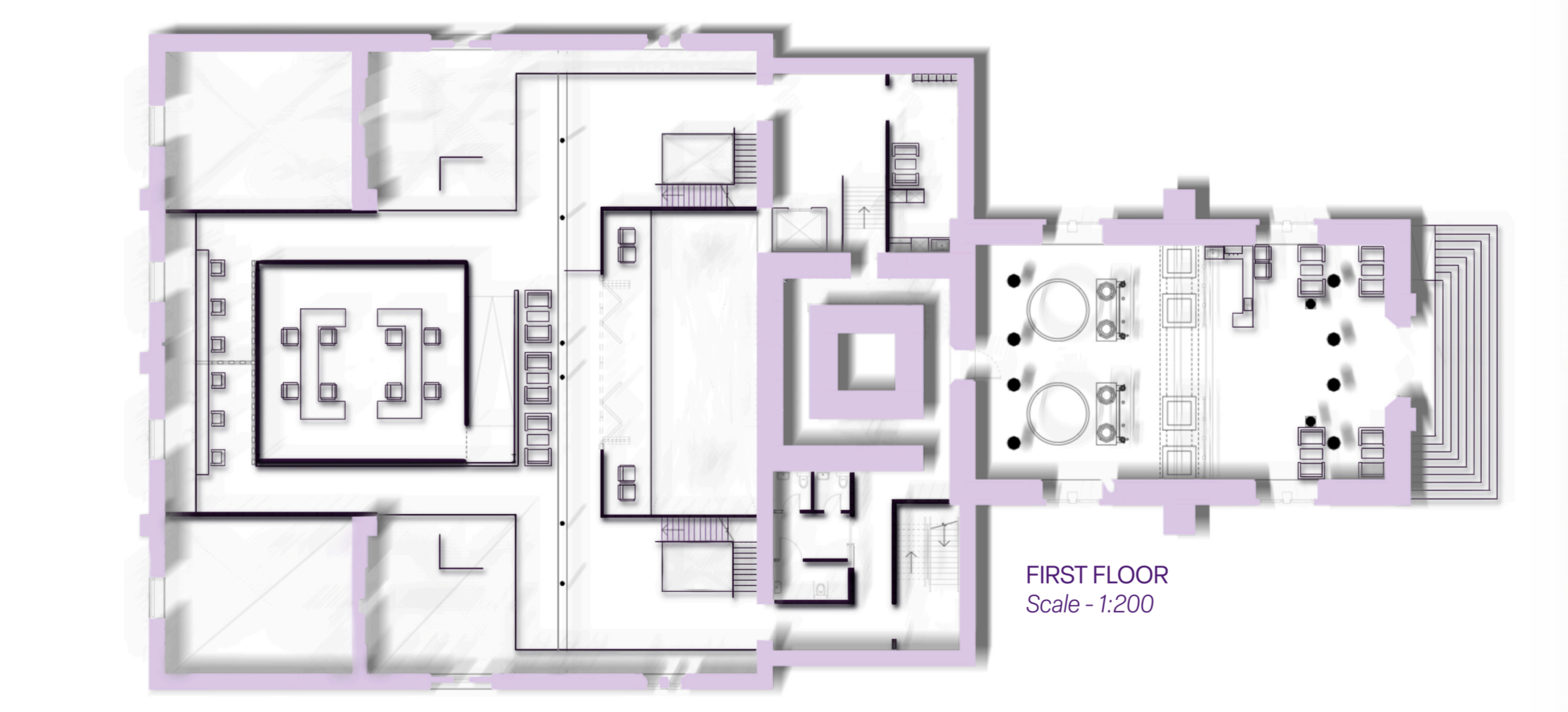
**ANNOTATION**  
 Axonometric showcasing zones and the learning journey the users will take throughout the building.



Number of students graduating with first degree at Durham university.  
 Difference in gender dominance in industry.  
 58% increase in women interested in engineering.

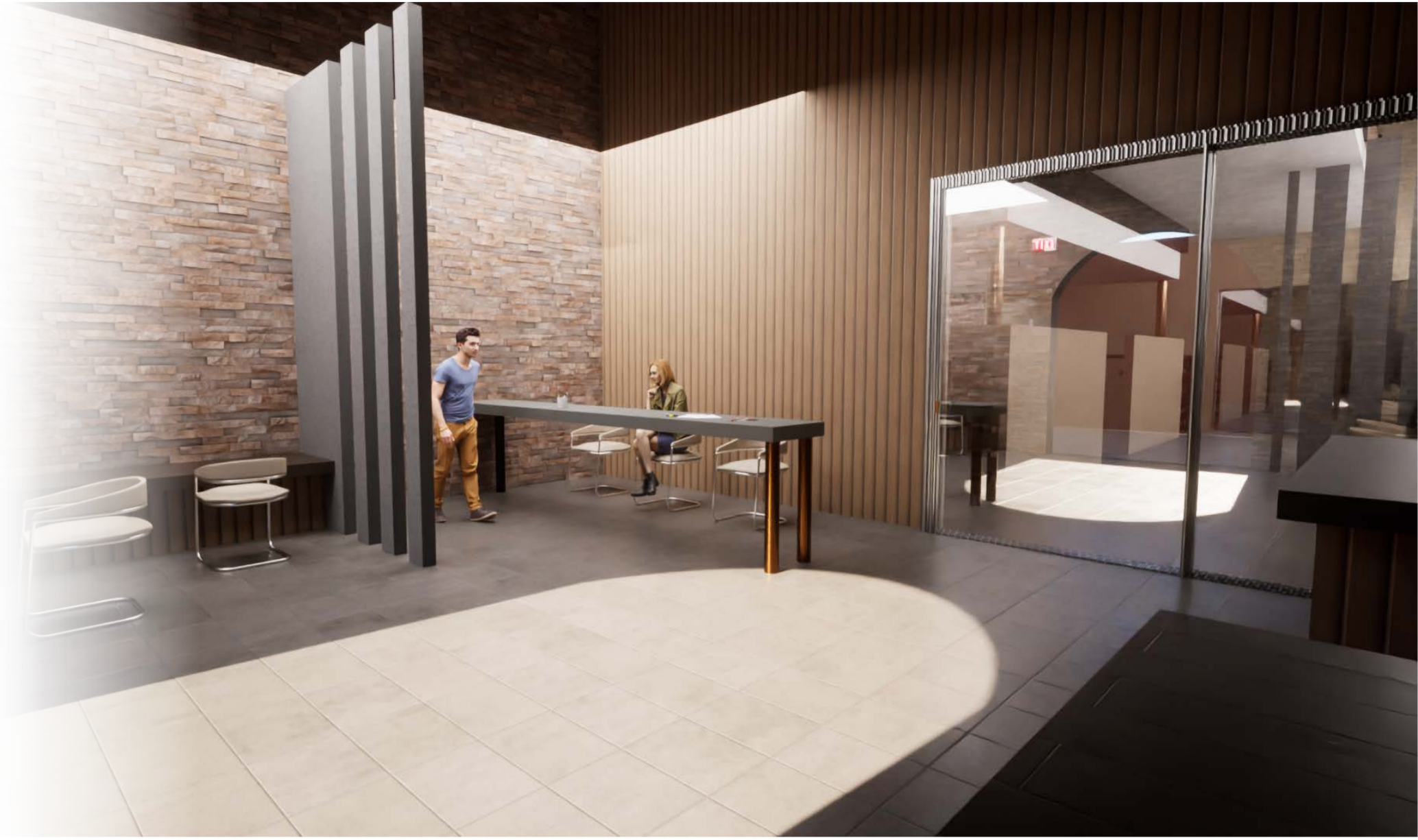


GROUND FLOOR  
Scale - 1:200



FIRST FLOOR  
Scale - 1:200

## Levels of Design

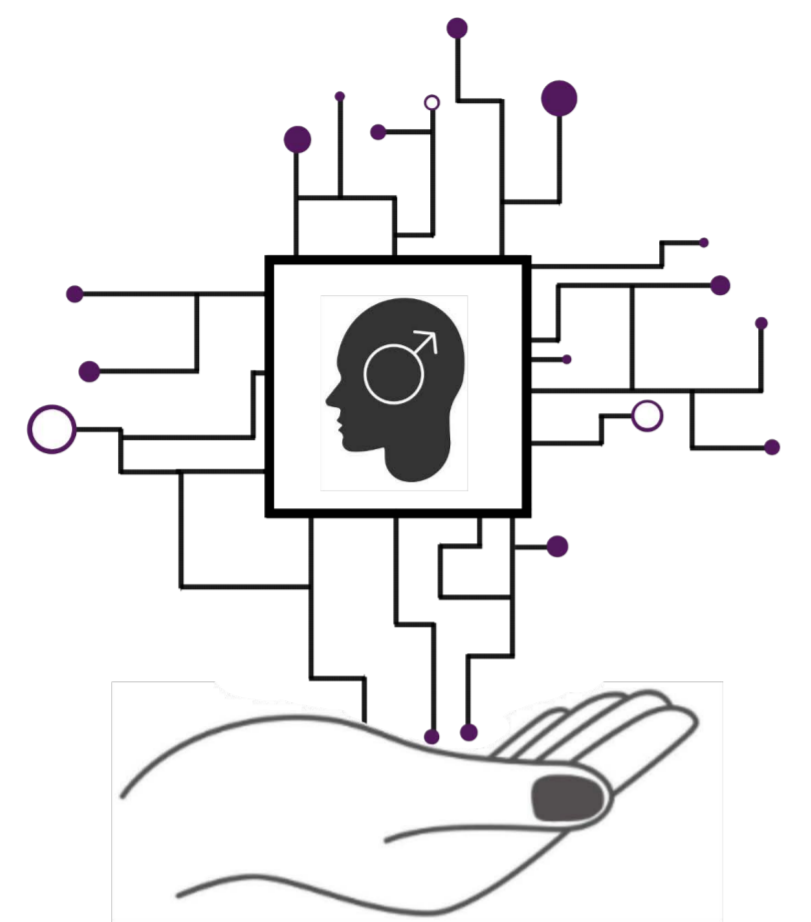
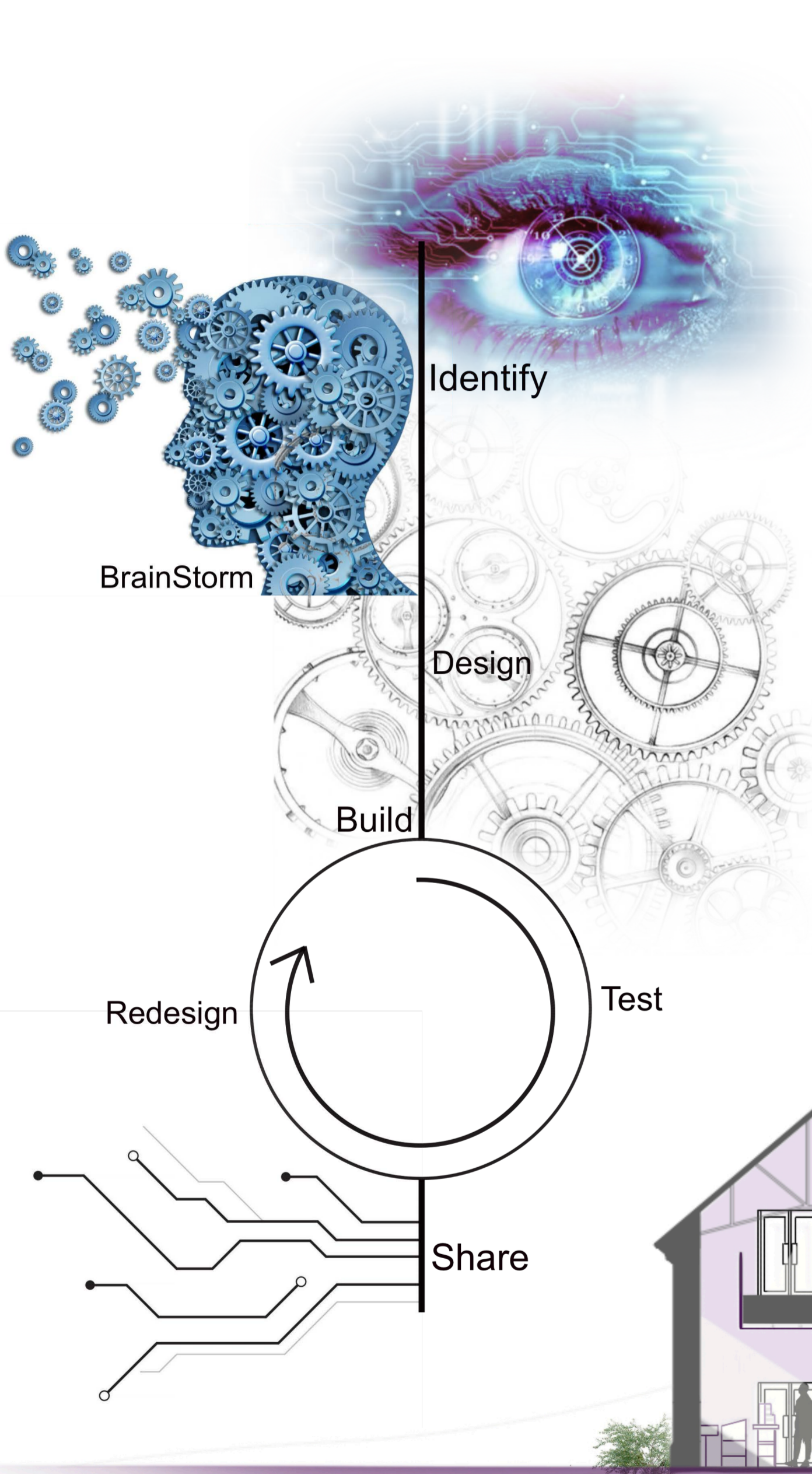


**MECHANICAL AND ELECTRICAL ENGINEERING WORKSHOPS**  
 Ground Floor workshop spaces are located either side of the library space with new builds extending out for extra seating space of which are complimented with bi-folding doors for external access during warmer temperatures. Each workshop hosts workbenches with storage space for equipment and plenty of circulation space for students.



**CIVIL ENGINEERING WORKSHOP**  
 The Civil Engineer workshop is to be situated on the first floor to allow for easy circulation and journey through the building. Connection is created via the balcony separation. This creates margins through the design.

# Understanding the benefit of the Journey

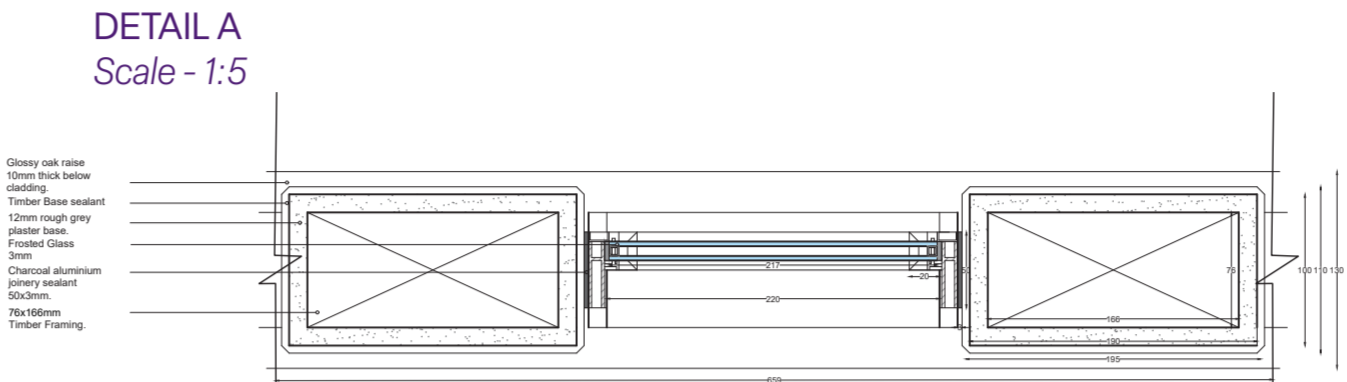


**FIRST FLOOR COURTYARD**  
When looking at connecting all spaces and keeping a cohesive design it is important to implement a courtyard similarly to the ground floor for mental health support and promotion of healthy work environments.

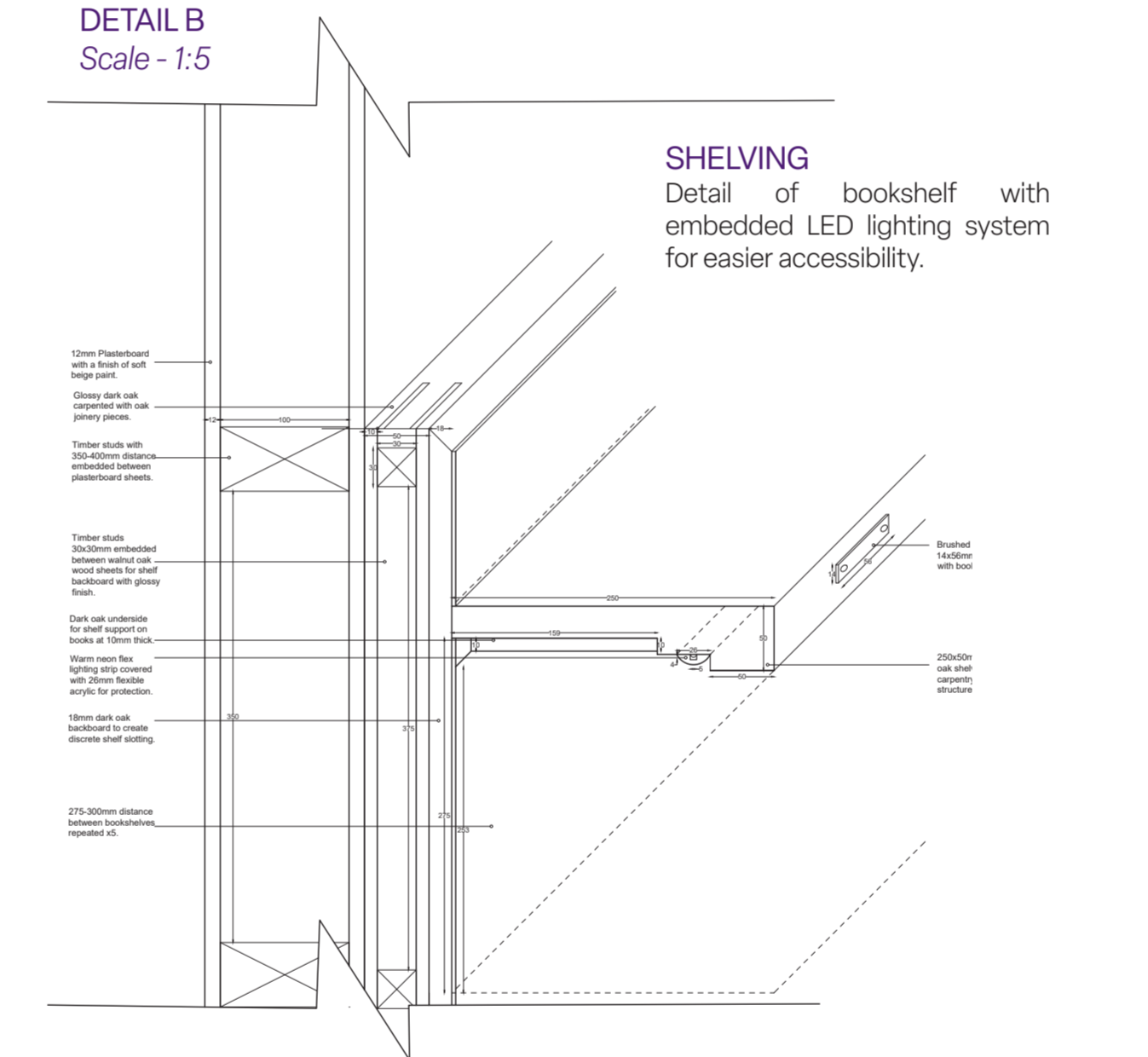


**GROUND FLOOR COURTYARD**  
Courtyard implemented to promote healthy break room environments with access points through to the chimney area.

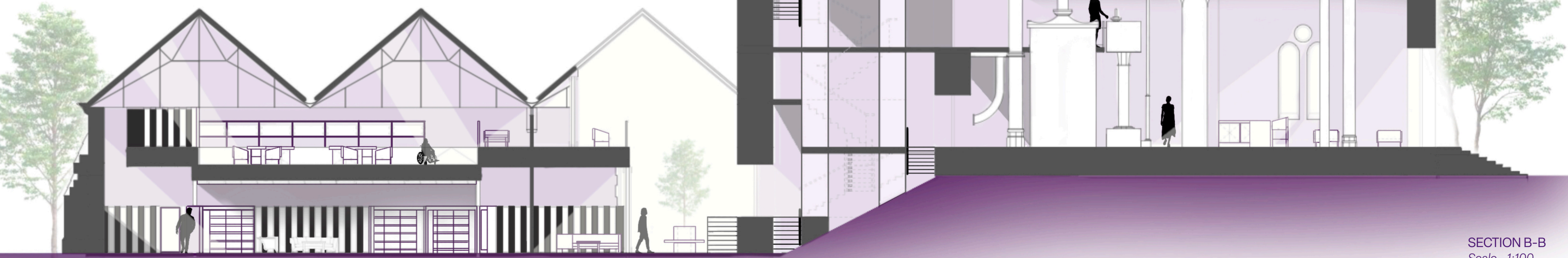
# Detail Components Implemented by Design



**CLADDING**  
Detail of systematic cladding, used to create separations throughout the space.



**SHELVING**  
Detail of bookshelf with embedded LED lighting system for easier accessibility.



**SECTION B-B**  
Scale - 1:100