

# RE:CAST

## RELEARNING THROUGH REPAIR

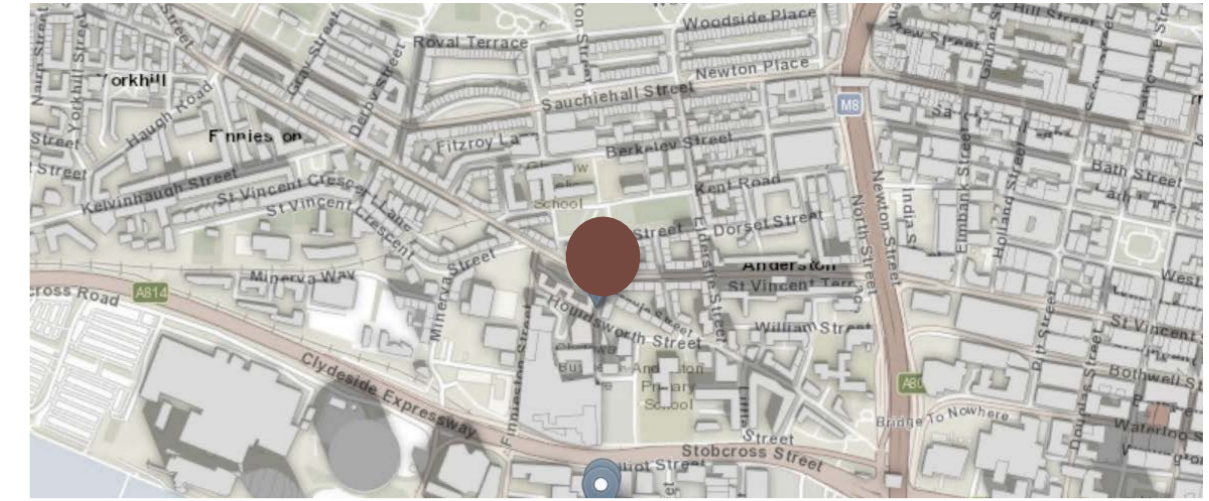
SITE:



William Cook & Sons, Glasgow.



Re:cast - Courtyard entrance



Context

RE:CAST transforms the former William Cook & Sons industrial building into a circular craft hub where repair becomes both a method and a spatial experience. Reimagining a former ironworks as a place for making, experimentation, and material recovery, the project reconnects communities with hands-on lost skills and sustainable practices. Through adaptive reuse, material testing and community participation, circular design principles are embedded within the interior architecture itself. As an educational tool and catalyst for local networks, RE:CAST demonstrates how industrial heritage can evolve and support contemporary forms of learning, collaboration and regeneration, transforming the act of repair into a collective process of relearning, renewal and exchange.



Adaptive Reuse



Circular Design



Material Experimentation



Community Learning



VISUAL OF THE COURTYARD

## THE RE:CAST PROCESS



COLLECT



REPAIR



EXPERIMENT

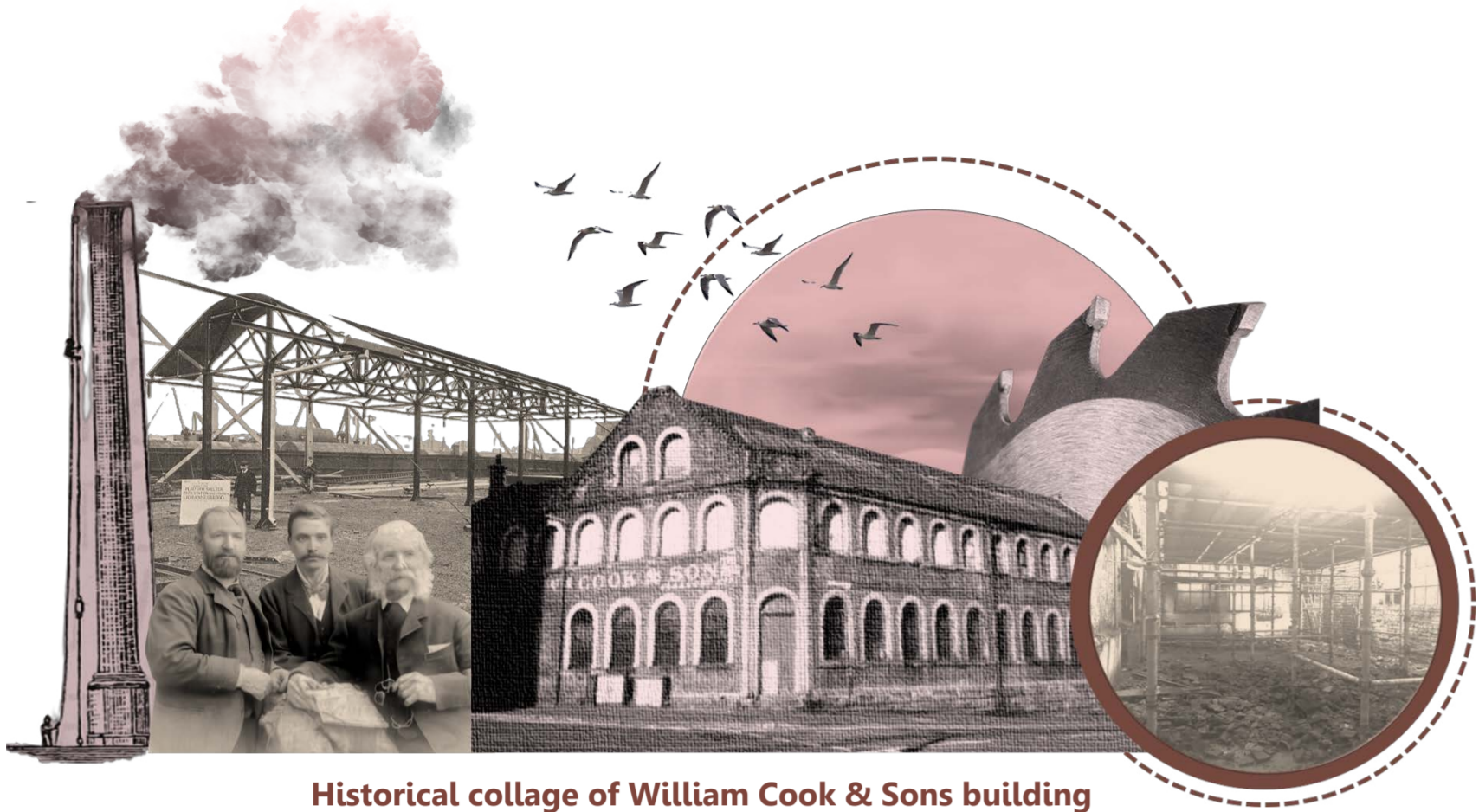


MAKE



SHARE

# FROM INDUSTRIAL PROCESS TO CIRCULAR LEARNING

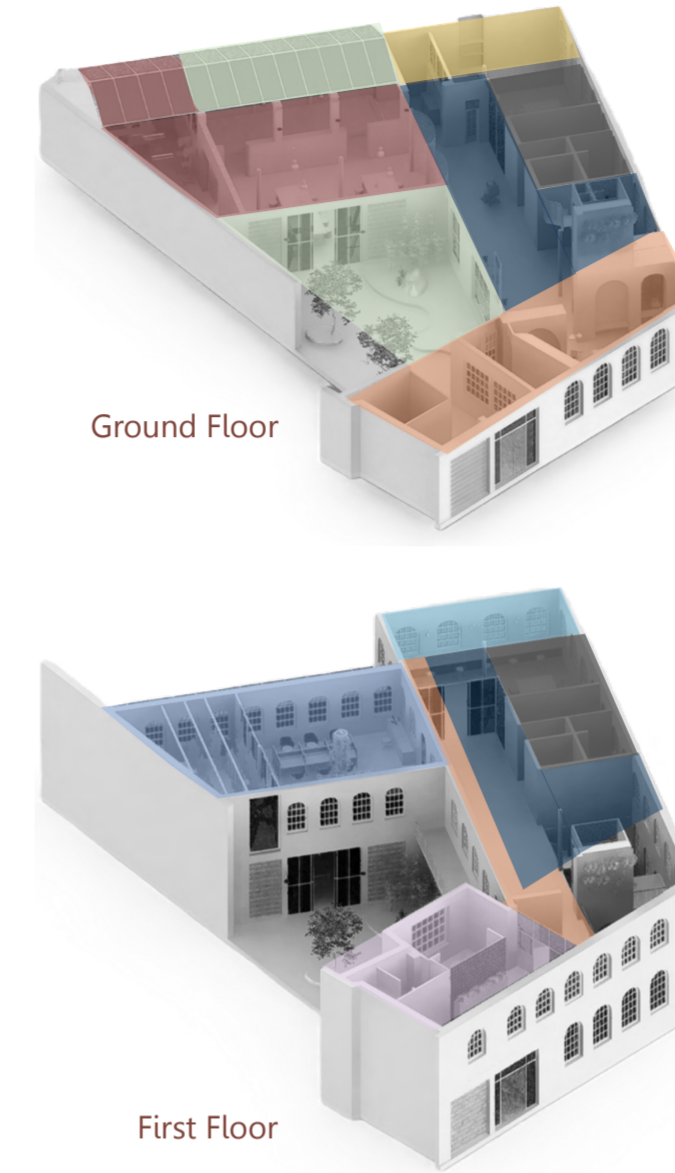


Historical collage of William Cook & Sons building

The former William Cook & Sons ironworks is reinterpreted as a circular learning hub. Historic industrial processes are not erased but translated into contemporary forms of making, repair, experimentation and knowledge exchange.

INDUSTRIAL MEMORY RECASTED AS COLLECTIVE LEARNING

## REINTERPRETING INDUSTRIAL PROCESSES INTO SPATIAL STRATEGY



- GROUND FLOOR: DISCOVER ZONE**
  - Public: entrance, café, info.
  - Courtyard and Garden Pigment
  - Pigment Play Studio
  - Making & Repair workshop
  - Circulation
  - Support: toilets, deposit, bike store
- FIRST FLOOR: RESEARCH + LEARN**
  - Research Lab
  - Testing & Experimentation
  - Office, Staff Room
  - Circulation
  - Support: toilets, deposit, Public: Hall, terrace
- LOFT : ARCHIVE**
  - Material Library
  - Circulation

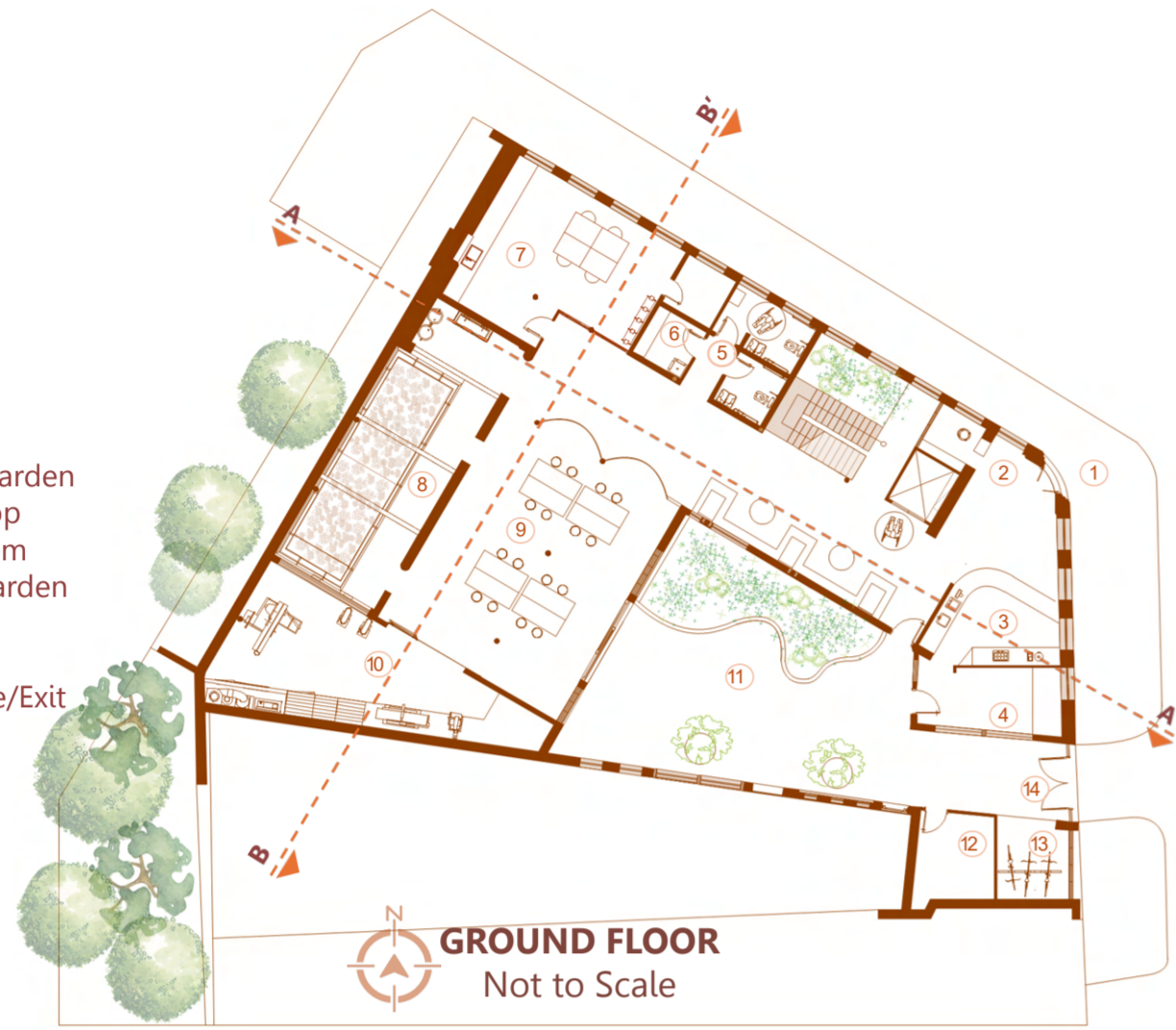
### VISUAL - MAIN WORKSHOP. CIRCULAR PRODUCTION SPACE



The space is designed to be flexible, it serves as the main workshop where repair and making take place. Under the concept of circular design, this open layout can be reconfigured through its adaptable furniture, allowing a wider range of activities to occur in direct connection with the courtyard.

# FROM PRODUCTION TO PARTICIPATION

1. Main entrance
2. Information Point
3. Coffee shop
4. Store Coffee shop
5. Toilets
6. Cleaner Cupboard
7. Pigment Play Studio
8. Flower & Pigment Garden
9. Fix & Make Workshop
10. Tool & Cutting Room
11. Courtyard/micro garden
12. Deposit
13. Bike Store
14. Accessible Entrance/Exit



The Ground Floor reinterprets the building's industrial character as an open and accessible making environment, where repair and craft are brought into public view. Responding to the existing structure, it transforms the space into an active environment for social and knowledge exchange.

The culture of making is no longer hidden, it becomes visible, accessible, educational and collective.



WELCOME



EXCHANGE



REPAIR



GROW



## SECTION A-A' - SCALE 1:75

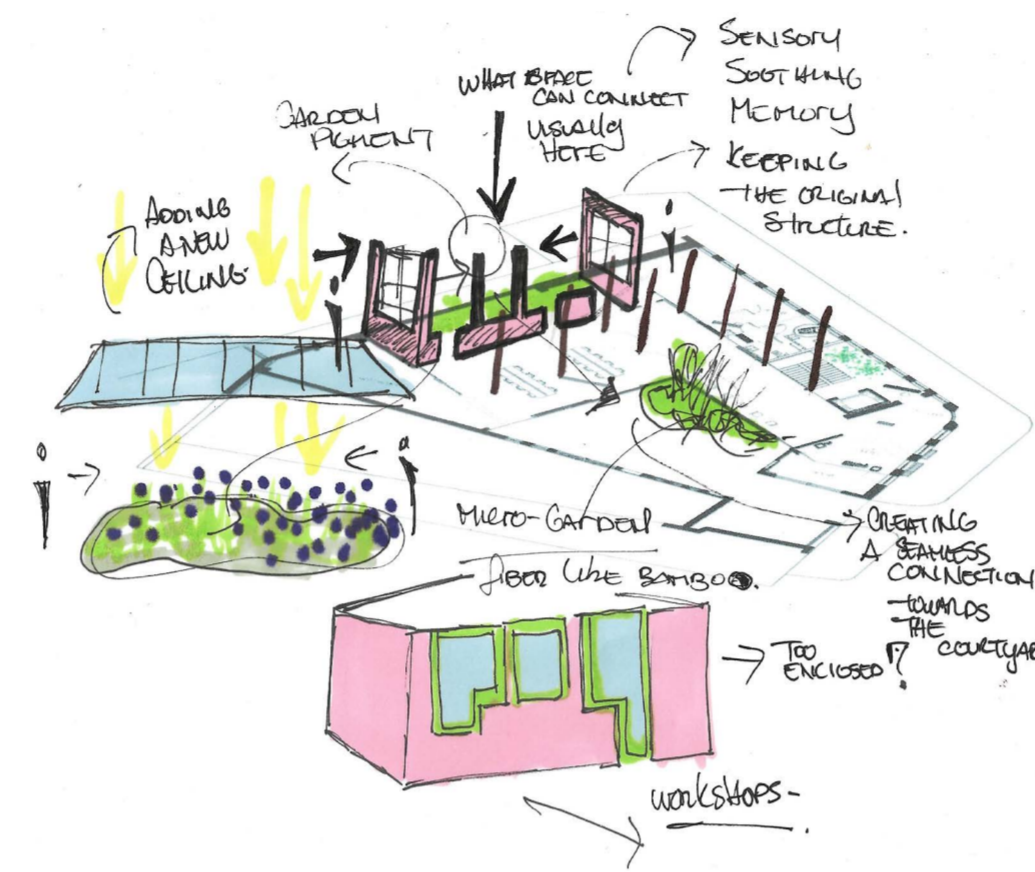
Reveals the project's strategy of visibility and exchange. Visual connections encourage participation, while transparency, permeability and material experimentation transform circulation into a space for learning and observation and collective making.

# FLOWERS AND PIGMENT GARDEN .

## Light+Heritage Memory.

Located on the ground Floor, the pigment garden reinterprets the former grinding shop as a space for growth, learning and material production. A new Glazed roof introduces daylight, while transparent partitions maintain visual connections between the workshops. The Flowers cultivated on site are transformed into natural pigments, linking heritage, craft and contemporary circular practices.

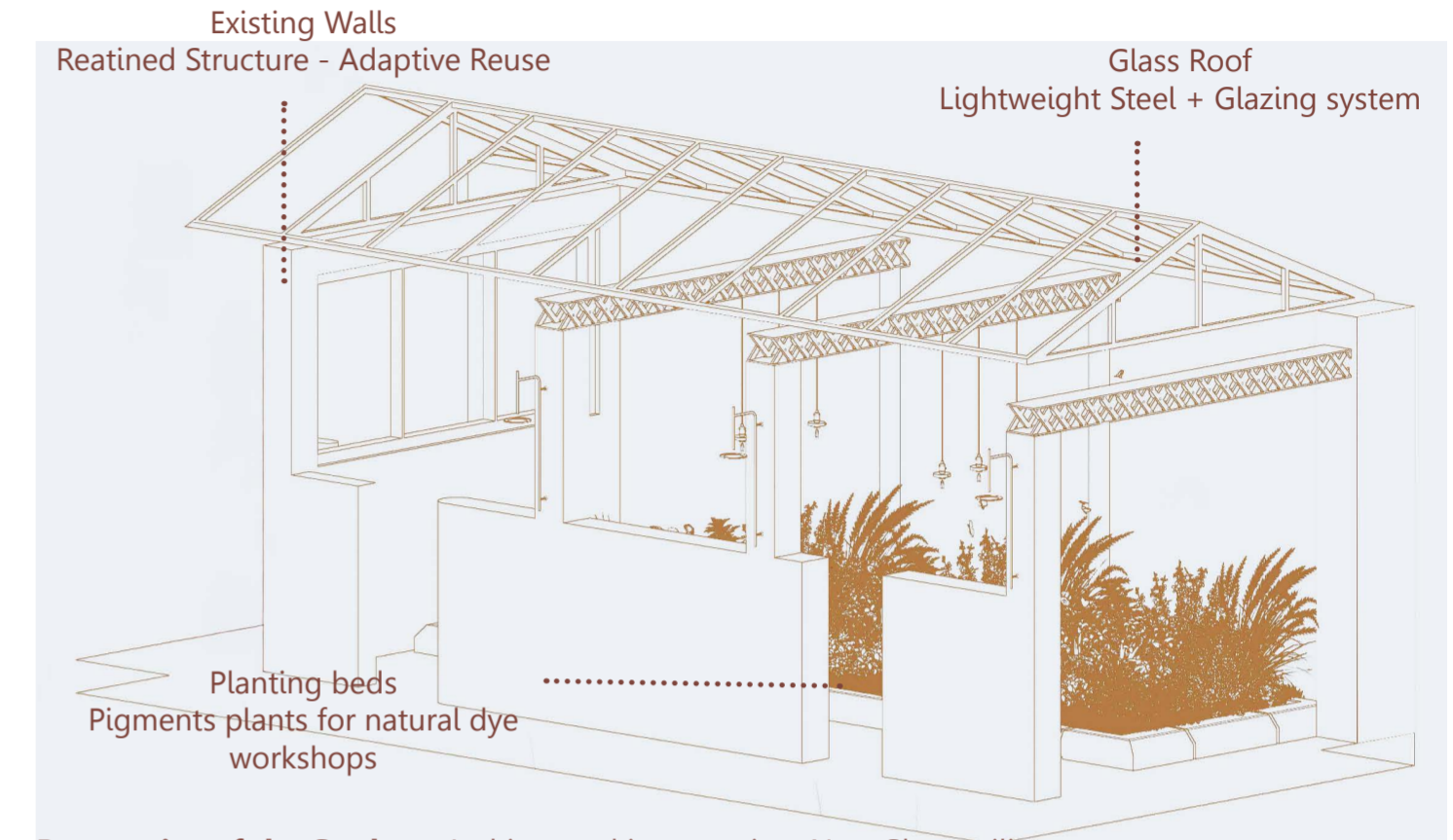
## Reactivating Industrial Space through light, growth and material cycles.



The old Grinding Shop



Photographs of actual condition of the Grinding shop



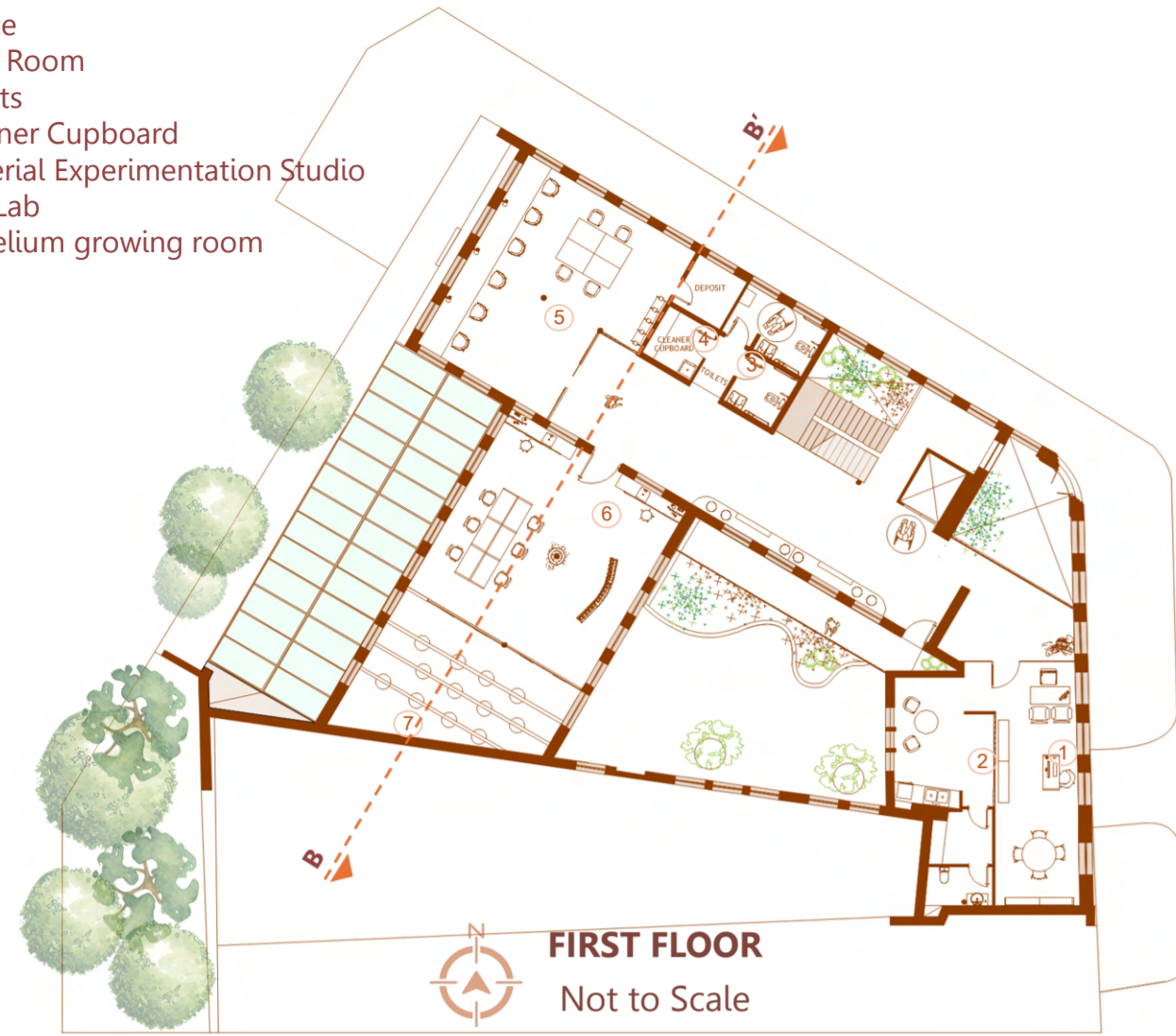
Perspective of the Garden - Architectural intervention: New Glass ceiling



VISUAL- FLOWERS AND PIGMENT GARDEN

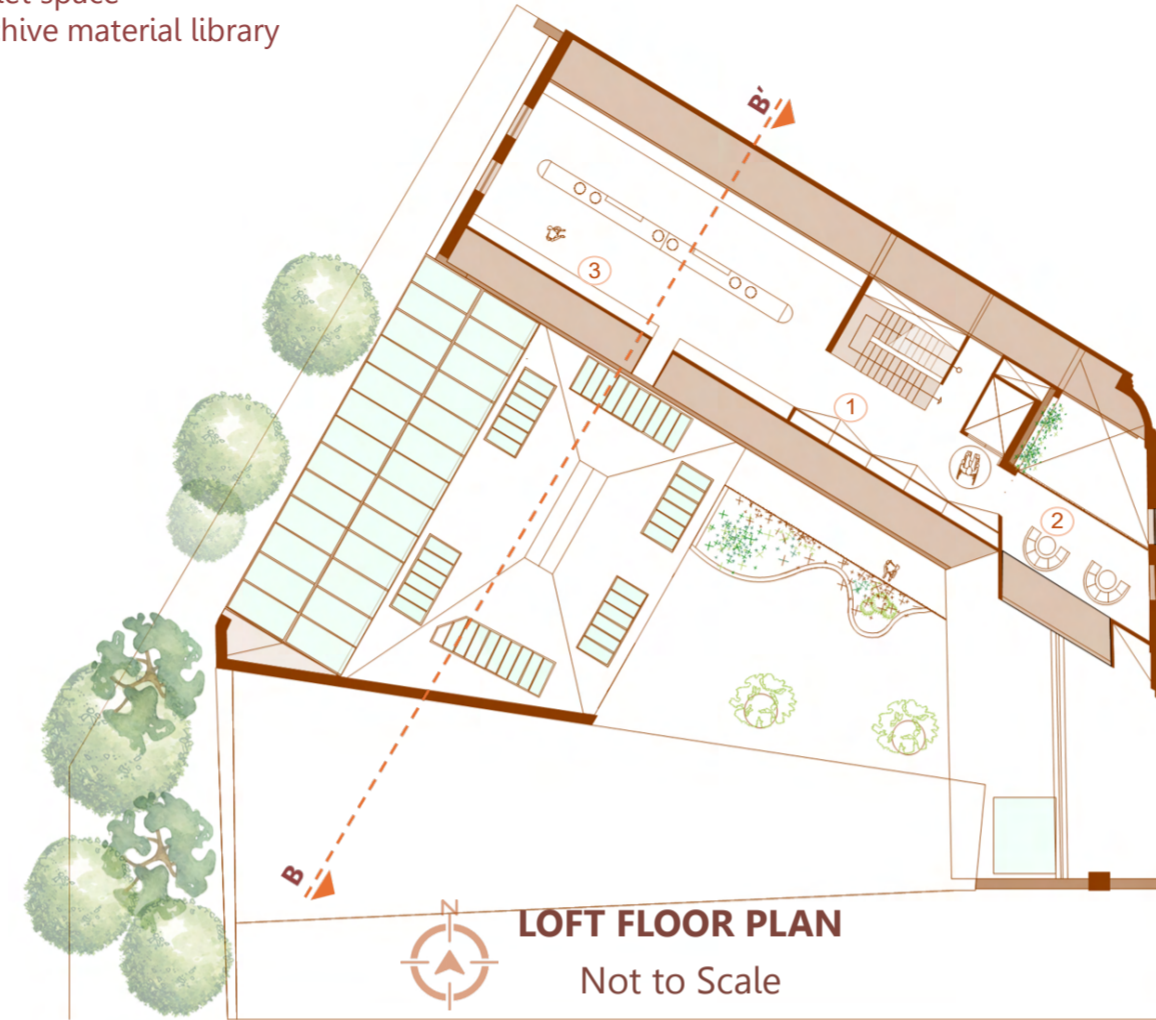
# GROWING MATERIALS - FROM TESTING TO TRANSFORMATION

1. Office
2. Staff Room
3. Toilets
4. Cleaner Cupboard
5. Material Experimentation Studio
6. Bio-Lab
7. Mycelium growing room



Research + Learn + Experimentation

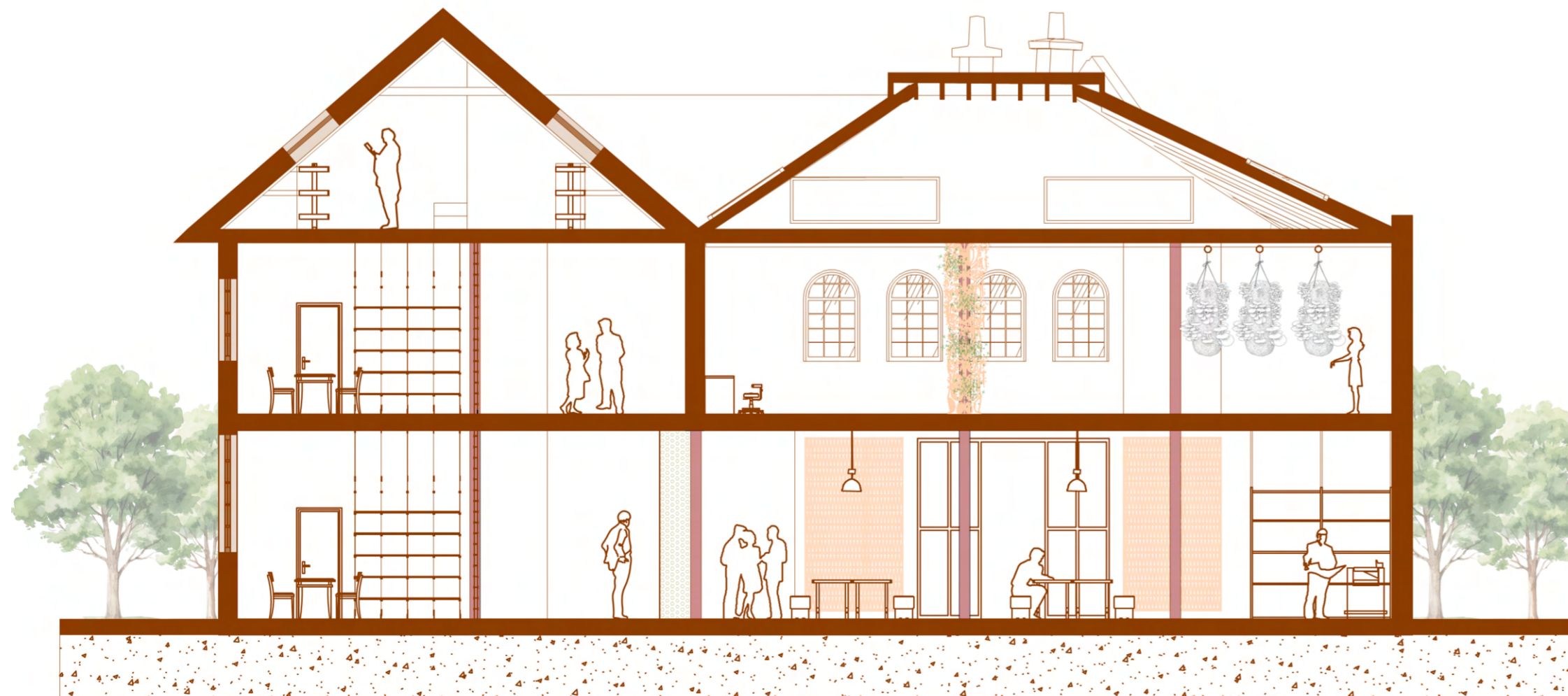
1. Material frames gallery
2. Quiet space
3. Archive material library



Material Library + Archive

The first floor contains the bio-lab, mycelium grow room, and material testing spaces. Located within the higher building volumes, these areas support experimentation and hands-on learning, making material development visible throughout the project. A new balcony intervention strengthens the relationship between interior and exterior, reinforcing visual connections between the interior and the courtyard.

The loft becomes a space that supports material experimentation through the materials archive. Responding to the challenges of height and existing structure, the design introduces a shelving system that adapts to the irregular geometry of the roof.

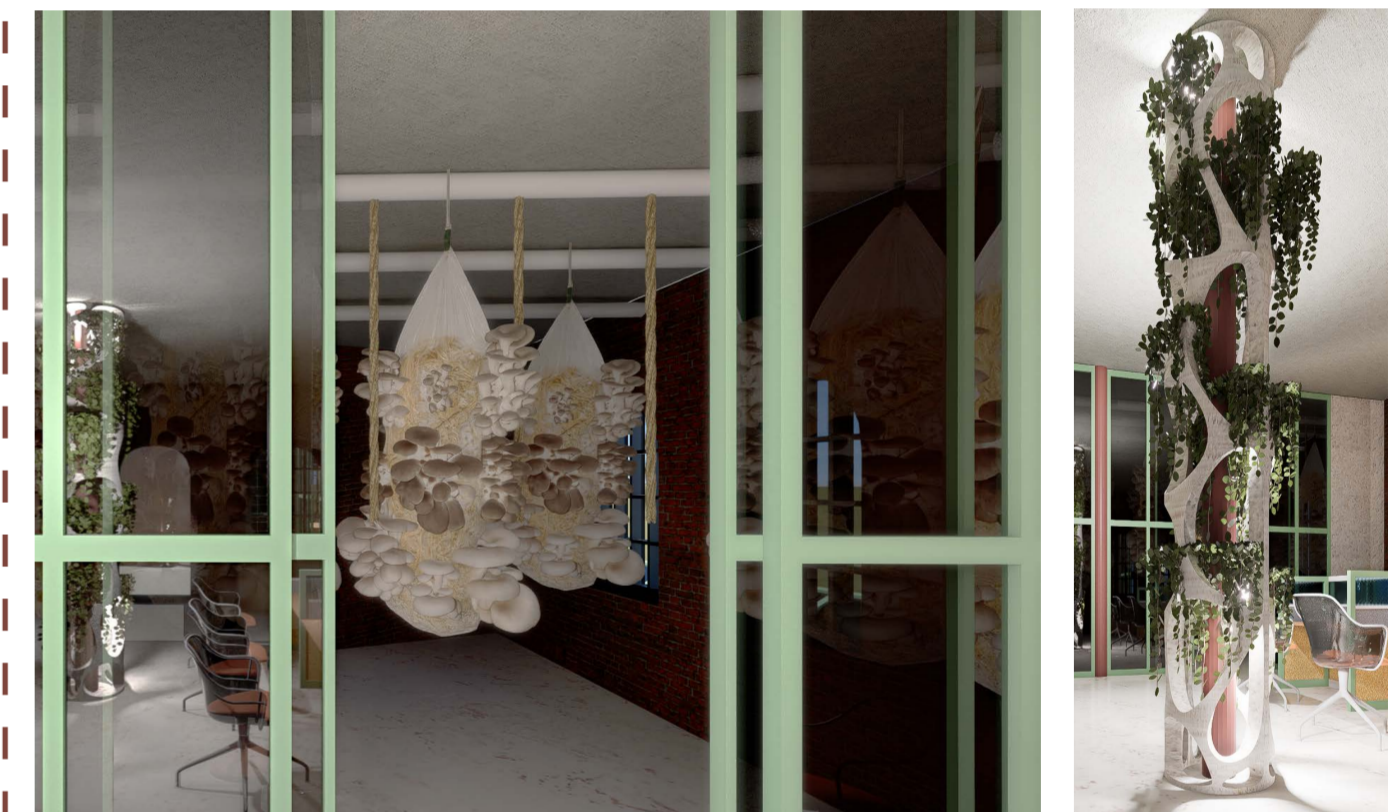


SECTION B-B' - SCALE 1:100

The section illustrates how research and making are integrated within the same structure. It reveals the spatial strategy that enables circular craft practices.

## THE BIO-LAB

The bio-lab introduces mycelium as a living material system integrated within the architecture of the building. This space supports controlled growth, testing and experimentation. The vertical mycelium structures act as both spatial and material elements, making the process visible to users. This approach redefines materials as an active evolving component.



A - GROW - Mycelium Growing Room , B - APPLY. Mycelium Column

## The Bamboo Garden - Living material Source.



Located in the courtyard, the bamboo Garden provides a renewable fibre resource for material experimentation and mycelium composite production.

# RECASTING MATERIALS.

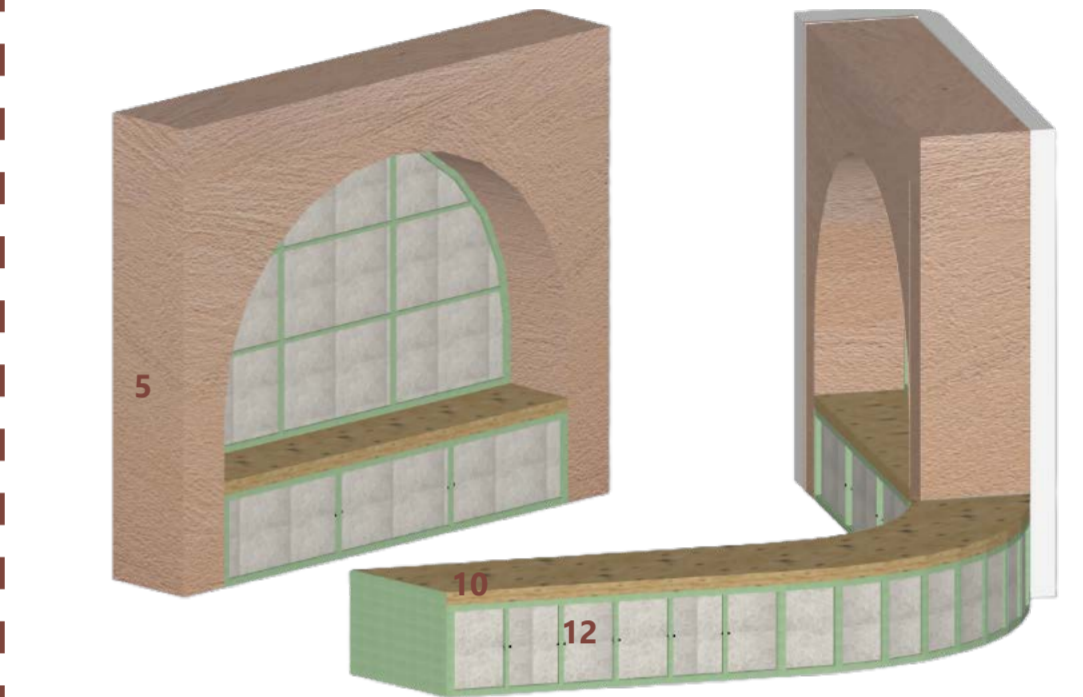
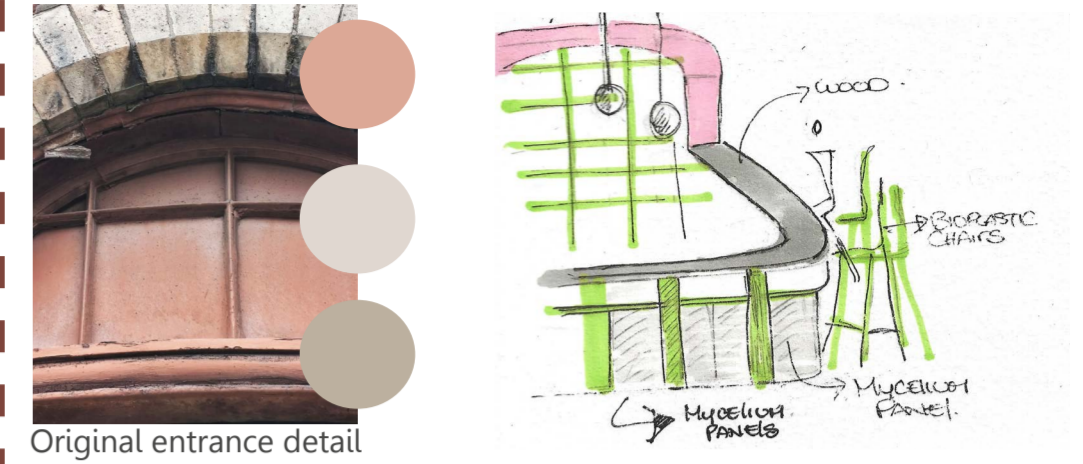
RE:CAST redefines materiality, treating finishes not as static applications but as dynamic participants in an ongoing cycle of repair, experimentation, and reuse. Most existing elements of the building were retained, while reclaimed and bio-based materials were strategically introduced to activate the space as a live environment for learning and hands-on making. By embedding material testing, recasting, and fabrication within the daily life of the building, the project establishes a visible circular economy where resources, knowledge, and skills are continuously exchanged between community, craft, and research.



## MATERIAL STRATEGY IN RE:CAST

- RETAIN.** Preserve existing elements.
  - REPAIR.** Extend material Life through craft.
  - RECAST.** Transform waste into new spatial components.
  - REGENERATE .** Introduce bio-based and renewable materials.
  - RELEARN.** Use Materials as tools for collective learning.
1. 316 Stainless Steel Perforated Sheet
  2. Peach Clay Plaster
  3. Concrete
  4. Existing red Brick
  5. Curved Arm Dome Wall Light
  6. Ralph Clear Glass Grand Pendant.
  7. Glass Block Wall
  8. Celosia Brick Wall
  9. Natural Clay Finish Wall
  10. Timber - Sottish Larch
  11. Linoleum flooring
  12. Mycelium composite Acoustic Panel
  13. Recycled Wood Chipboard

## STRATEGIC APPLICATIONS



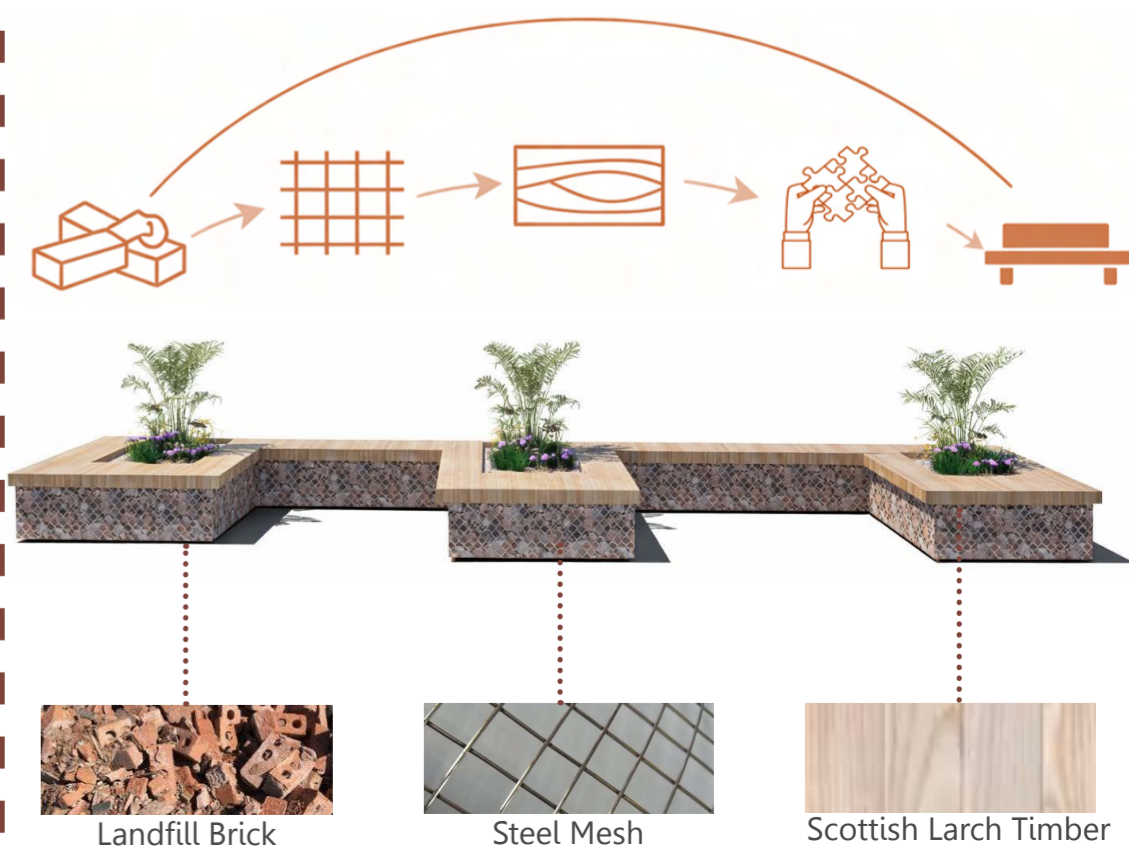
Inspired by the building's industrial character, custom cafe furniture combines reclaimed and bio-based materials with contemporary detailing



**Mycelium Composite Wall Panel + timber - Workshops.**

Mycelium panels are developed as a low-carbon material systems, demonstrating how waste-based biomaterials can be integrated into interiors environments.

### Custom Bench - Ground Floor



**SOCIAL HALL** This transitional space is positioned between the workshops and the main circulation node, allowing activities to become visible and accessible while encouraging observation and participation. Its partitions and recast furniture reflect the project's aim to shift craft from hidden production to a shared public experience.

