



THE ART OF PRECIOUS SCARS

It is estimated that roughly 55,000 to 60,000 people suffer a limb amputation or are born with a congenital limb deficiency in the UK each year. In England there are currently 35 centres delivering specialist prosthetic services and with a rapidly growing population demand for these centers is continually growing.

Located in the heart of Leeds city center is a historic georgian townhouse that was originally built for a British surgeon named William Hey. Hey was a prominent figure not only locally, but also in the wider medical world. Hey reached the peak of his career between 1773 and 1812 however his practice was very different to that which would be acceptable in the modern day. One aspect of this being the anatomy lectures that were performed in front of a public audience, dissecting human corpses. One of these public lectures was performed on the corpse of Mary Batemen, who was sentenced to death after being tried for witchcraft and murder. As Heys' inventions and practices became more well recognised they began naming them after him, these being: Heys saw, Heys ligament and Heys amputation. In reverence to it's past uses, this building will now become a brand new highly specialist prosthetic centre. Amputees who attend the centre will not only be provided with a custom made prosthesis but also the opportunity to learn new skills and transform their perspectives on the term disability.

The city centre location is ideal for a new prosthetic centre due to its accessibility, with close proximity to bus and rail links and car parks adjacent to the site. Accessibility is a key feature for the new site as the majority of the service users will be wheelchair users or have limited mobility. The aim of the new centre is to transform the prosthetic journey. Conventionally an amputee will have a consultation, then return later for a fitting before receiving their prosthesis. The new service will aim to deliver a more empowering journey by focussing on social support, education and promotion of independence. Support groups will be held in the centre's 'social area', allowing guests to share their stories with others who have been through the same thing. Rehabilitation gym classes with specialist therapists will support clients to regain strength and balance and crucially rebuild their confidence. Workshops will enable clients to observe the manufacturing process and an on-site apothecary will allow for browsing and purchasing of herbal remedies to assist with pain relief, wellbeing and self care.

It is reported in medical literature that roughly 30% of amputees suffer from anxiety and/or depression. Changes in body image are known to directly impact mental health and well-being and are a major challenge for people who have undergone limb amputation. An ideology that will be focused on within the centre, is that 'imperfections are what make us perfect'. The psychology that our scars are what tell our stories is portrayed within the art form of Kintsugi, a Japanese art tradition where broken pottery is mended and the cracks are filled with gold. Gold features will be displayed throughout the site and these will pay homage to this narrative and be a constant reminder of each individual's strength and value. The new centre is named The Art of Precious Scars and heralds the start of a new age of prosthetics in the UK.

Scars of the Past

This clay model is a representation of the site, displaying the loss of the west wing which originally stood. The gold recess signifies this while portraying the art form Kintsugi. The piece celebrates the buildings story, a psychology that amputee's should honour.



Grade II Listed Georgian Townhose - Leeds City Centre



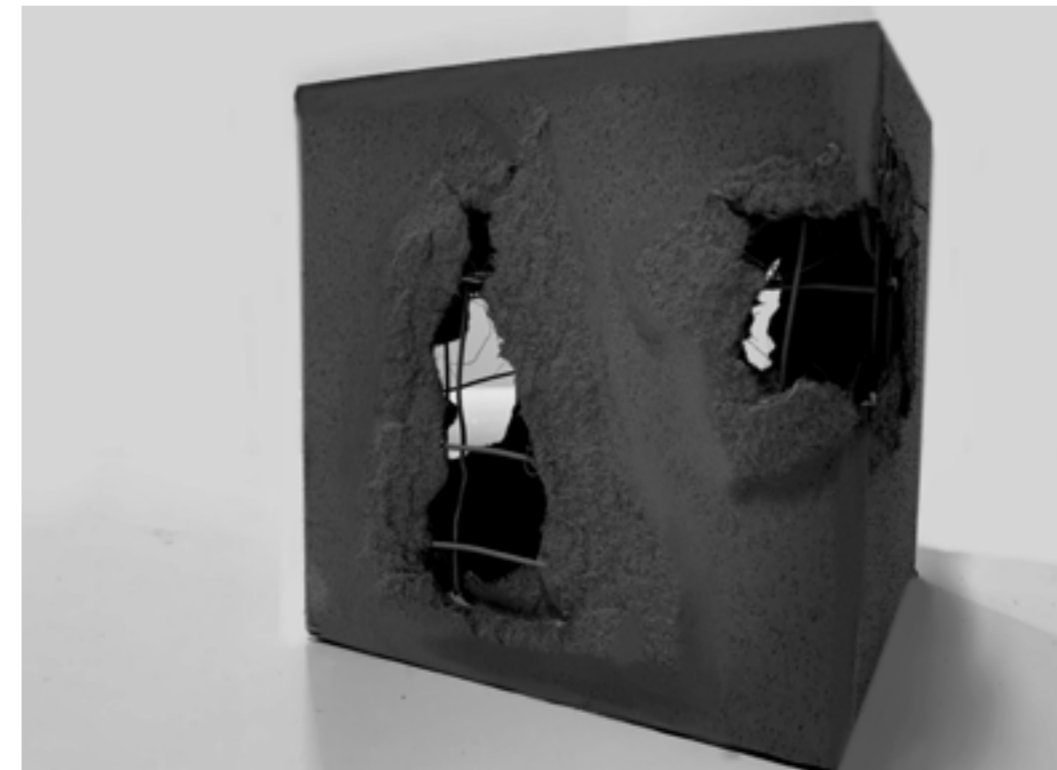
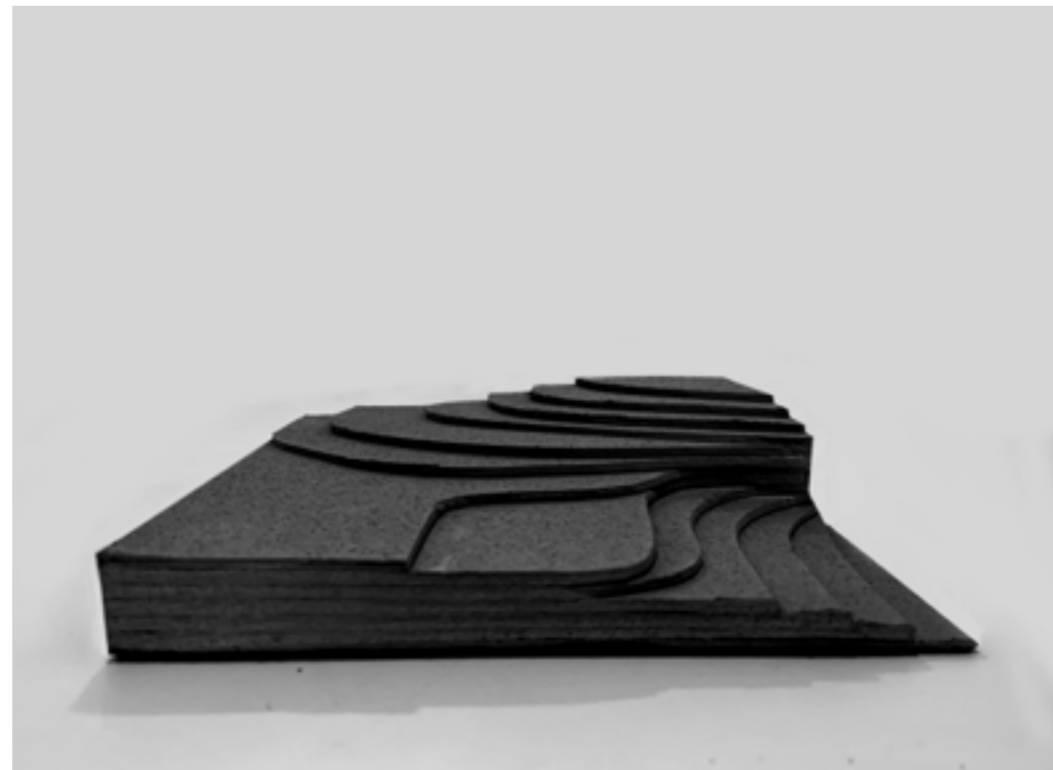
The Broken Form



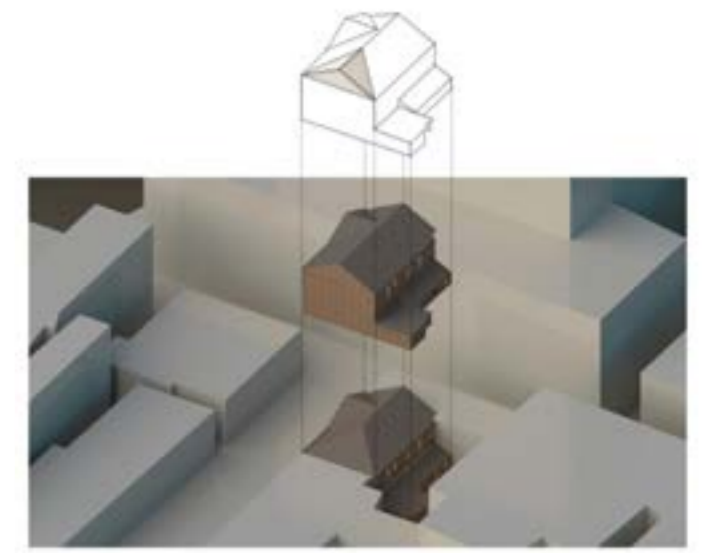
The process of making a prosthetic limb starts with creating a mould of the residual limb. This method consists of wrapping the limb in plaster covered bandages that solidify to create a mould. This piece is a cast of the upper body, displaying the form of a face that appears in fragments on one side and whole on the other. The form represents the 'broken appearance' and highlights that imperfections are what make us unique.

These forms below were created inspired by some of the spaces located in the new prosthesis centre. Spaces including the themes of; gradual inclines, broken forms, partially private areas, viewing opportunities and solid forms.

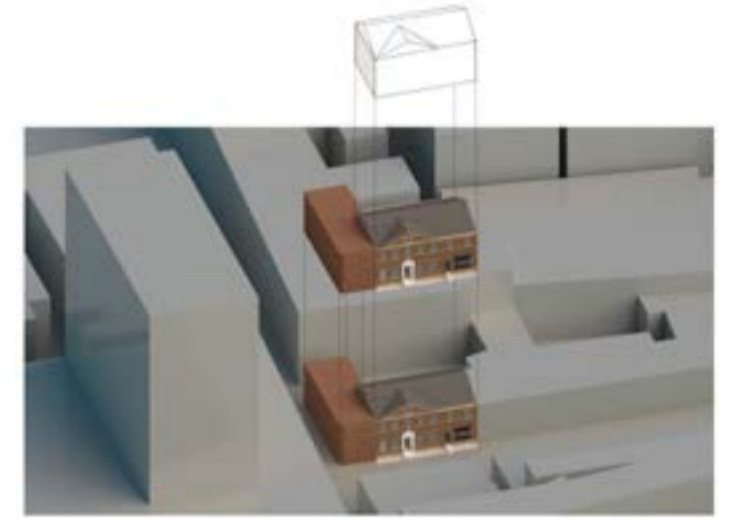
Conceptual Models



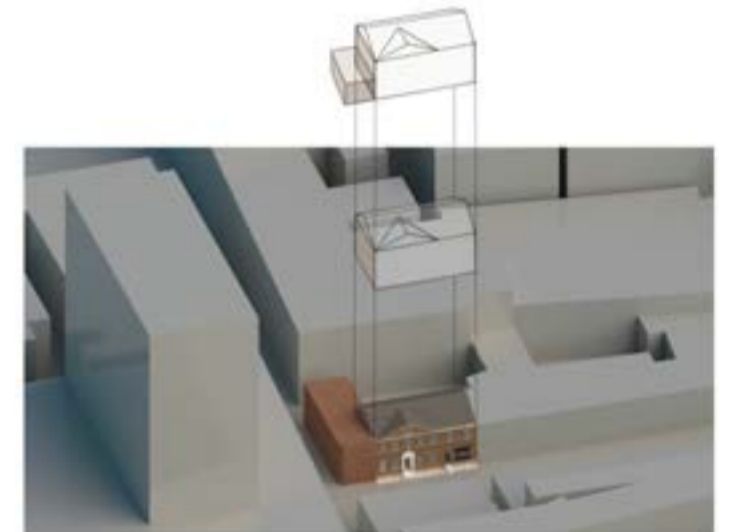
Key Moves



Roof Alteration



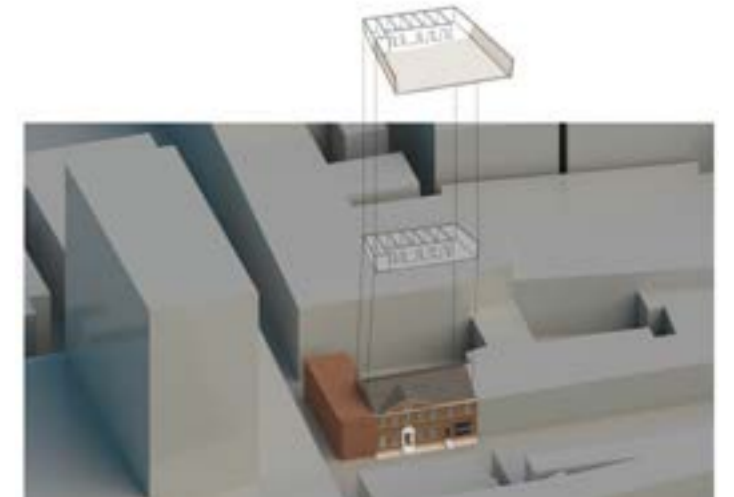
Removal of adjacent building



New extension for guest's

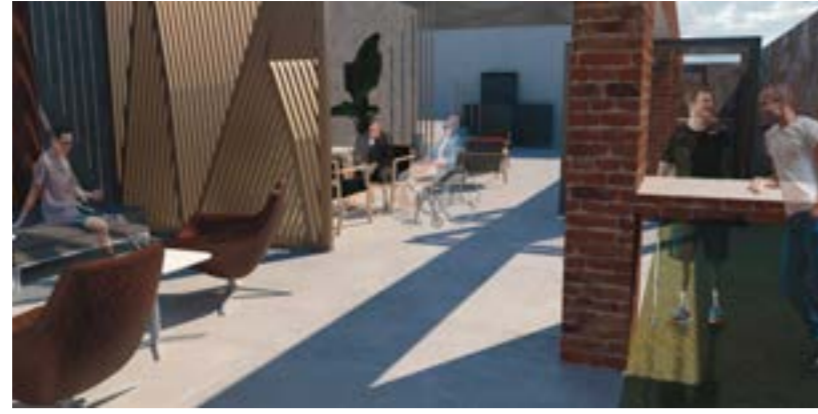


Mezzanine Level workshop



Basment extension

Journey of Spaces/Visuals



Reframing Experiences
Social Space/Support Group



Golden Joinery
Workshop



The Art of Repair
Rehabilitation Gym

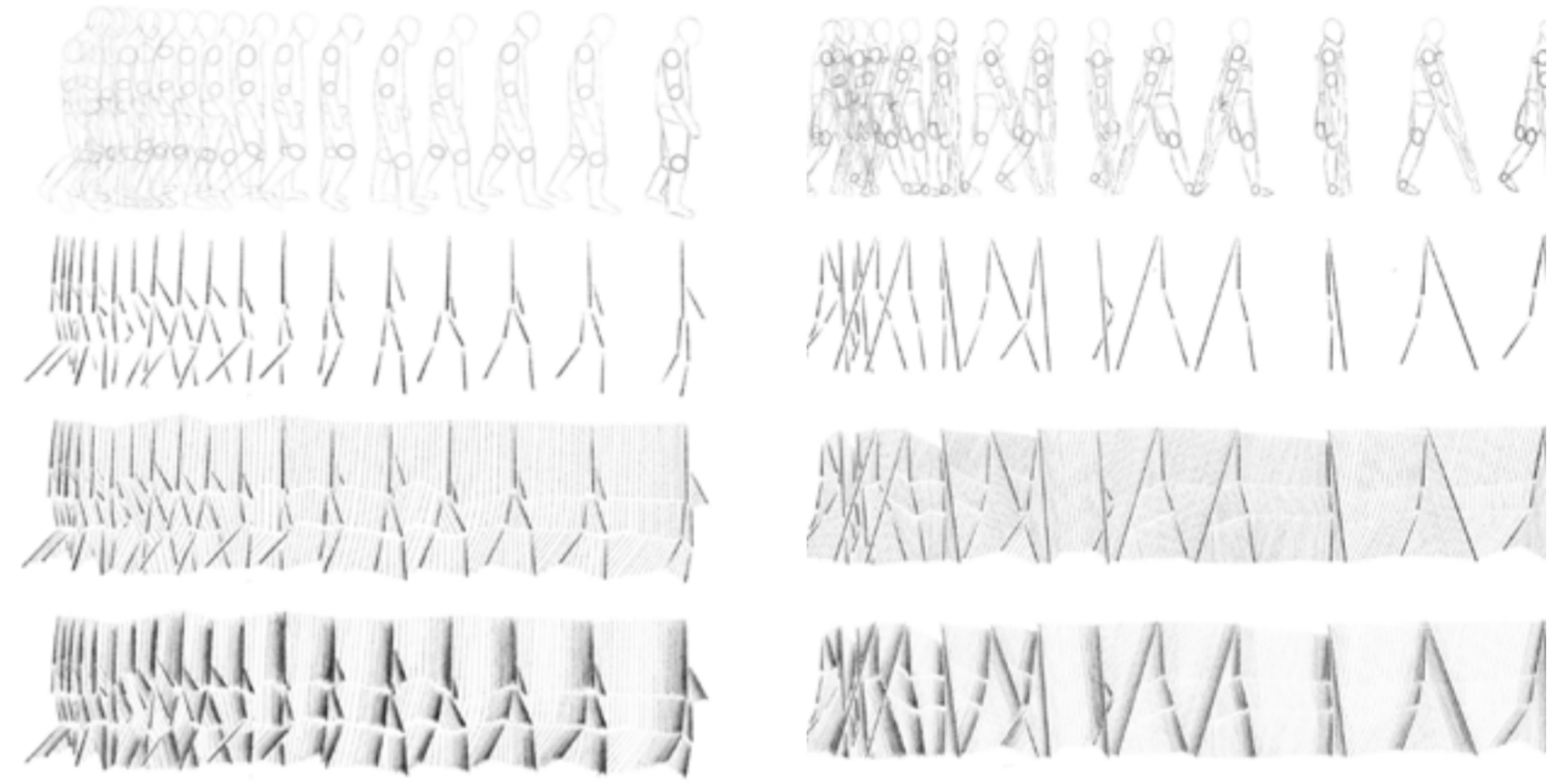


The Surgeon's Lounge
Back of House Staff Area



Herbal Harmony
Apothecary Shop

Process Diagrams



The process diagrams above look into abstract forms that are created as we walk. Creating two sets, one of which displays the abstract form of a person walking and the other displays an amputee with a lower limb loss walking with crutches. The forms have been turned linear, to inspire future design ideas.

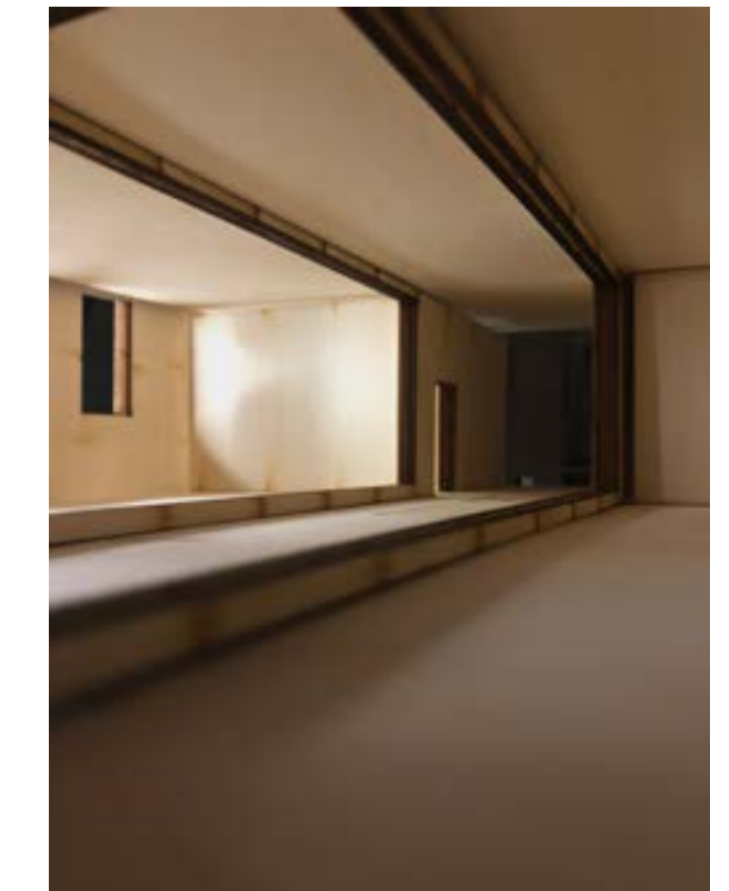
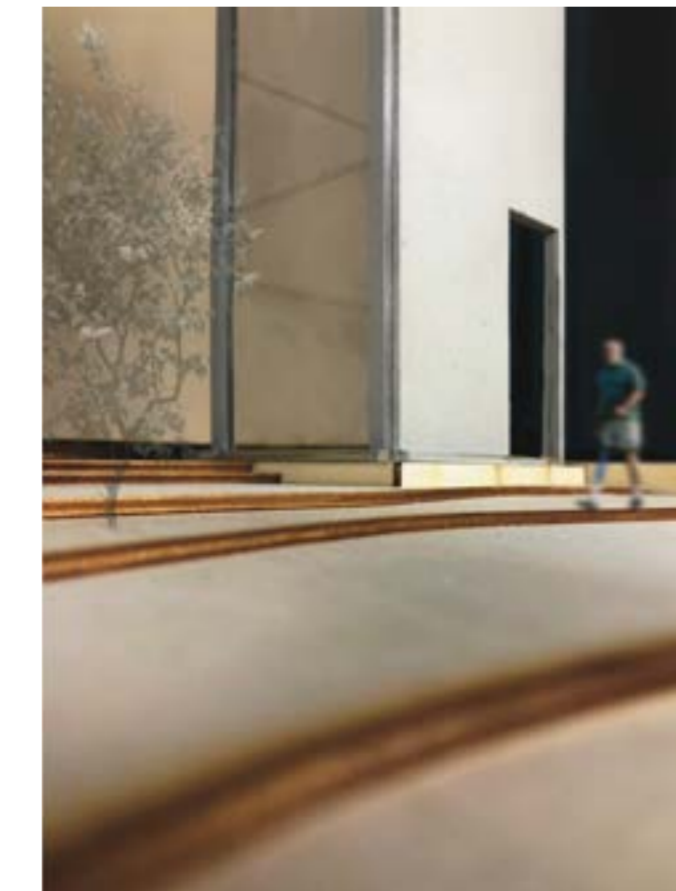
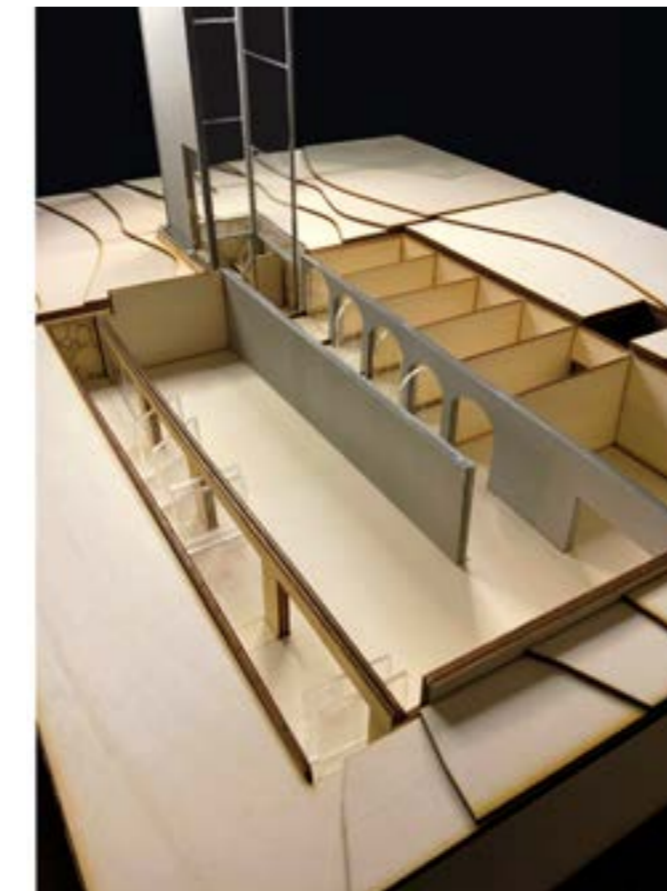
External Visuals



Mending with Gold
Corridor

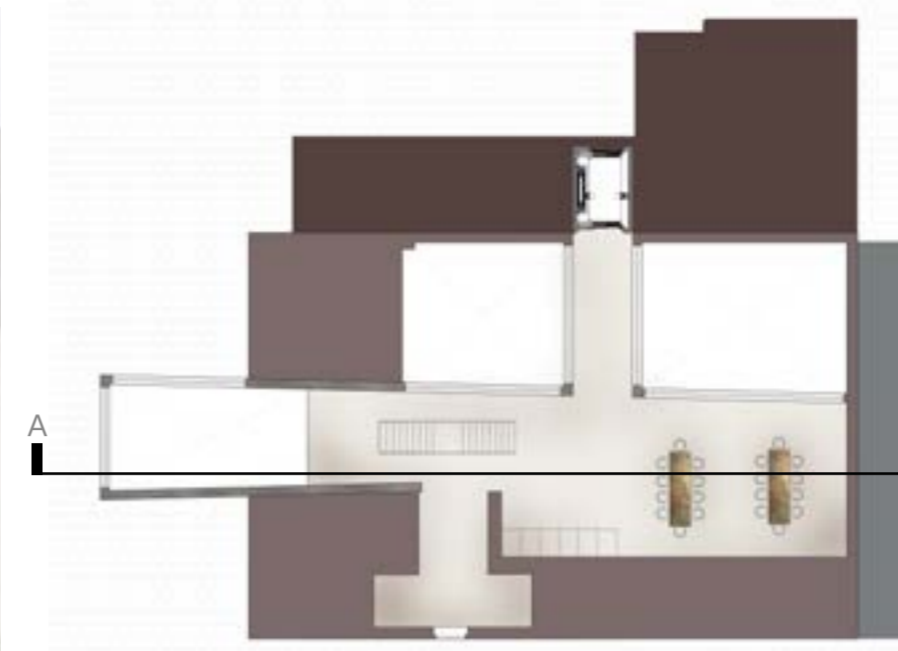


Final Model





Section AA



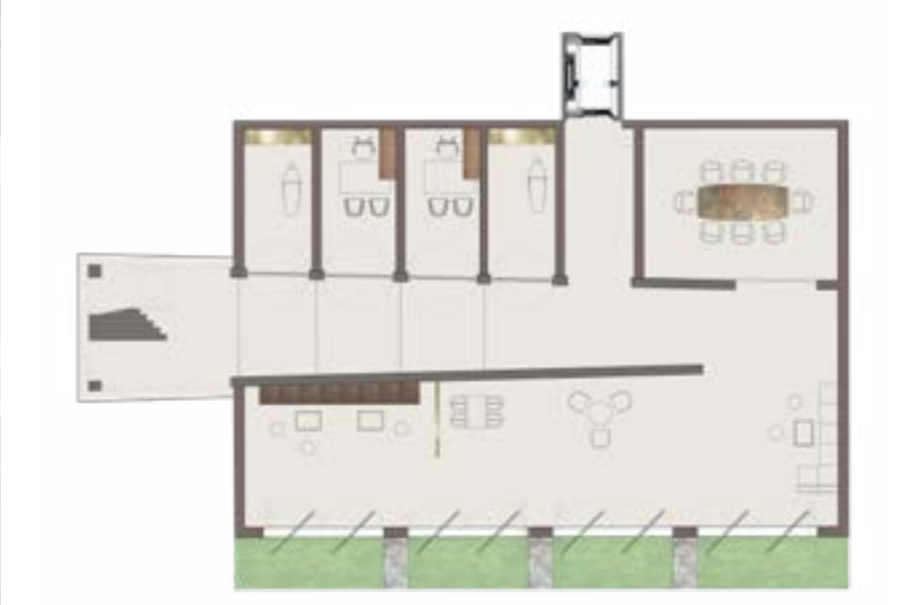
Second Floor Plan



First Floor Plan



Ground Floor Plan



Basement Plan



West Elevation

Front Elevation

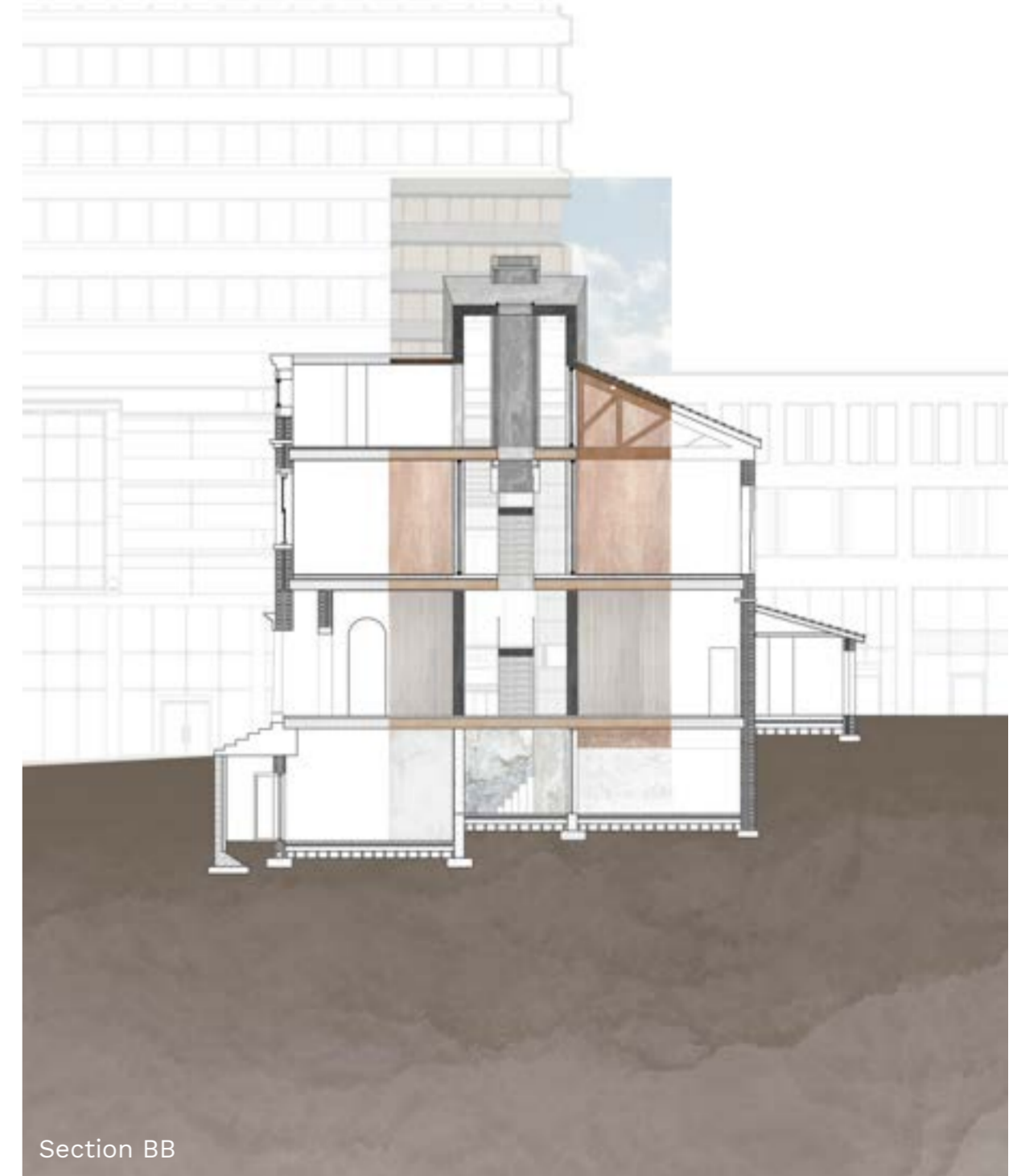


East Elevation

Rear Elevation



Ground Floor Plan with Surrounding Building Context



Section BB



Retaining Wall Section



Roof Detail Section



There are a lot of things to consider when it comes to the materiality within the building. Starting with the basement level, clinical consultation rooms will be located. These areas must be kept sterile and clean for each patient. For this durable smooth surfaces and wipeable fabrics will need to be considered. A material with high corrosion resistance, formability, strength, reliability and hygiene will be needed for any working surfaces. While a waterproof fabric will be considered for any upholstery in these areas. Moving up to the ground floor level, this is where the workshops are situated. The workshops will house large machinery that can also be very loud. Materials that will dampen some noise are to be considered. The workshops will also be working with materials that may spill on the floor, for this a durable waterproof flooring suitable for heavy commercial areas is needed. The rehabilitation gyms on the first floor will need to have a flooring suitable for a gym space installed, being soft under the foot. A flooring that is shock absorbent to reduce any injuries within the space, this flooring will also need to be easily cleanable. Soundproofing should also be considered for these spaces. The staff area on the second floor is quite flexible with the materials that can be used. This area would be a break area for staff, a place where they can have a rest between working. With there being additional sky lights in this area, a tinted glass might be considered to reduce how harsh the lighting in that area. Overall the materiality of the building should include a range of materials, incorporating the gold colour to follow the Kintsugi art form; Colours and textures that complement the new precast concrete insertion; and materials that enhance the existing materials of site including red brick and sandstone.