

Current housing is unsuitable, inflexible and expensive, creating rising issues in affordability, social separation and loneliness. These all have adverse effects on society, creating large costs, and impacting our quality of life. This model aims to change the preconception of housing, and inform future development, by providing an intergenerational living system. It creates the opportunity for individuals, who struggle with the challenges of living alone, be a part of a bigger community where knowledge, skills and experiences are shared.

I chose this project due to my aim as a designer, to make spaces more inclusive to all, no matter the users age or ability. I wanted to focus on the issues surrounding housing specifically, due to having a first hand understanding of the correlation between housing and health, and the issues current housing can create for all ages, especially the elderly. Therefore I wanted to use my platform, to propose solutions which can better all individuals and inspire for the future.

https://www.youtube.com/watch?v=opUPoCd7Xcc





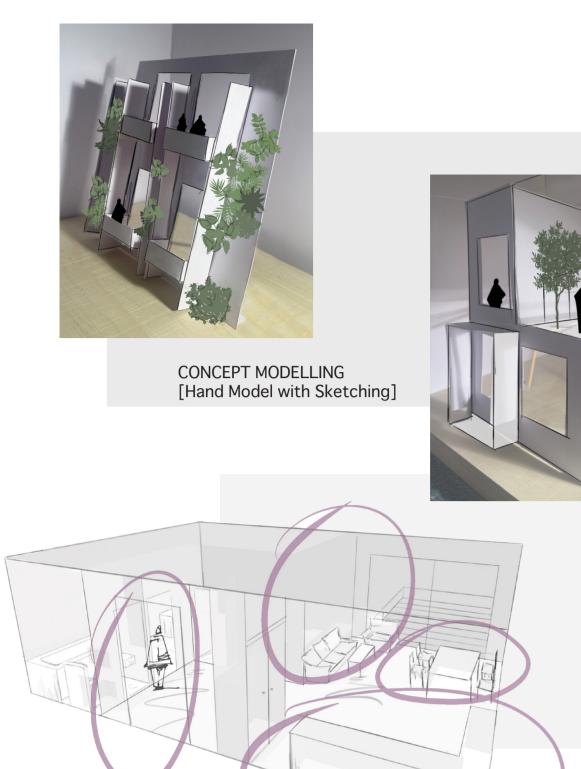
RENDER : GROUND FLOOR [REVIT]



RENDER : SECOND FLOOR [REVIT]

RENDER : PHASES [Twinmotion, Photoshop]





MODULAR APARTMENT DEVELOPMENT [Hand Drawing]

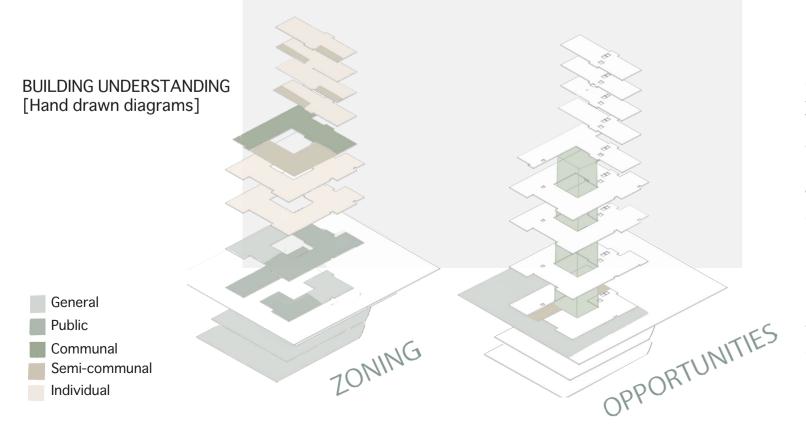
TYPICAL

PROPOSED - GENERAL

**PROPOSED - DISABLED** 



FLOORPLAN OPTIONS [Hand drawn diagrams]



## DEVELOPING CONCEPT

Building an intergenerational model that reimagines living, brings together a number of key concepts. Intergenerational interaction, accessible design, collaboration, mutually beneficial spaces and the vision to reach and inspire. In order to create spaces that targeted all these goals, it was important for me to explore a range of design concepts to test what was most effective.

One of the key design features included in the scheme was Modular design. I tested how the apartment layout could be modular, to allow for easy adaptation between residents moving in or out. This provided the ability for the residents to design their spaces how they wanted, including a layout to best suit their needs with little effort, such as height adjustable worktops which can be adjusted for the user before they move into the space, therefore not requiring them to do anything

Facilities and layout was also another important aspect that required consideration for connecting the different users. Facilities are available for a wide variety of needs, including support for everyday activities such as shopping, communication and finance. The project includes a 'rent scheme', which enables the resident to work in the building in the shops on the ground floor or with the organisations in the Innovation Hub and the money earned is contributed towards their rent. This further supports the affordability aspect where the spaces are inclusive to all.

After analysing existing living models, I created a concept for PHASES which combined the benefits of each. Typical mass housing has a larger sense of individuality, with little support for the residents. This is a large issue for mental and physical health risks. Co-living, on the other hand, has a large sense of community yet little option for privacy or individuality. PHASES is a hybrid model which ensures the users' individuality is maintained yet provides the opportunity for collaboration when they desire. The users have ownership over how they live, a concept new to living models. By placing communal spaces inbetween individual spaces, it encourages interaction, and I also used the existing building opportunities to aid this, such as the internal courtyard extending the height of all floors.



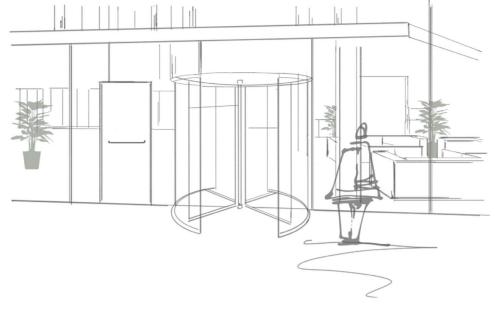
RENDER : INNOVATION HUB [Twinmotion]



CONCEPT COLLAGE [Photoshop, Hand Drawing]

## DEVELOPING CONCEPT





SKETCH : ENTRANCE [Hand Drawing]

SKETCH : COURTYARD [Hand Drawing]

IT M			



SKETCH : MAIN ATRIUM [Hand Drawing]

Creating a building which enables all ages to use at ease, required some key considerations. Firstly, the location needed to be accessible by all, therefore a site which had wide access by all transport options was chosen. Parking was also included with 80 parking spaces available. The circulation around the building was also essential. All circulation routes are wheelchair accessible, including door widths, with accessible lifts located at either side of the building. There is a clear circulation route around each floor which connects to the circulation lifts and stairs to avoid confusion, with consideration into signage design and location.

A model that involves so many users, required me to gain an understanding of their needs and propose solutions that can aid their real life struggles. I used surveys to gain an understanding of the perspectives of the different age groups, why they would want to live in a space as proposed and what they would require if so. Furthermore, extensive research into the key concepts were essential. One issue faced was the important aspect of the building being Intergenerational. You can't expect everyone to interact if their surroundings don' t aid this. Highlighting communication is one aspect yet ensuring this is the reality of the space is another. I carried out research into the best design methods for facilitating interaction and incorporated these strategies into the design.

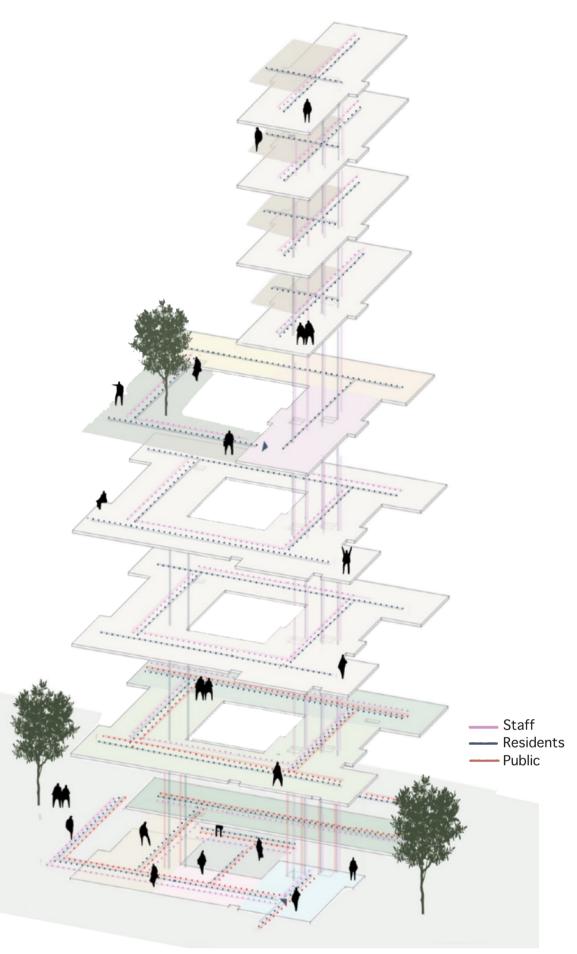


DIAGRAM : CIRCULATION [Hand Drawing]

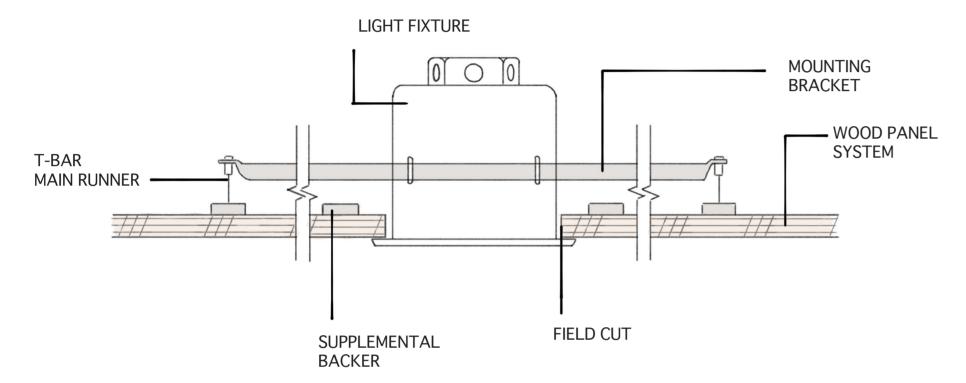


SITE MAP : LOCAL ACCESS [Hand Drawing, Photoshop]

## **TECHNICAL DEVELOPMENT**

The technical aspect of the project is one which enabled me to further make the inclusive aspect a reality. Consideration was taken into the services incorporated, including Lighting, Heating and Ventilation requirements and Materials to ensure minimised mobility requirements for the users. For example, The communal spaces have been designed with non - slip flooring and features such as adjustable lighting for a choice of light temperature and brightness. The spaces aim to create a calming environment, suitable for elderly users. There are also no interchangeable height levels in the communal spaces, with consideration into ensuring no risks of trip hazards.

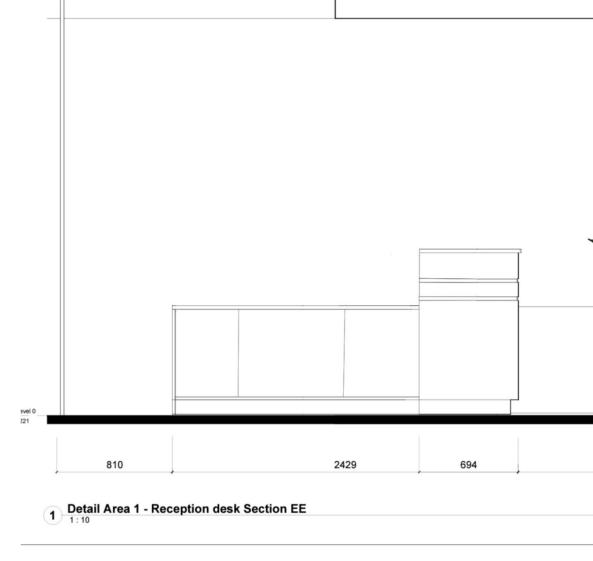
All spaces were designed in accordance to Accessible Living requirements as stated in the Building Regulations Part M.



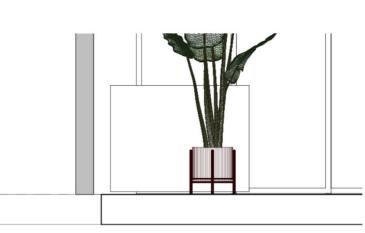
DETAIL - INTEGRATED LIGHTING (1:5) [Hand drawn using Morpholio Trace]



CUSTOM SEATING ISOMETRIC [Hand created using Photoshop]









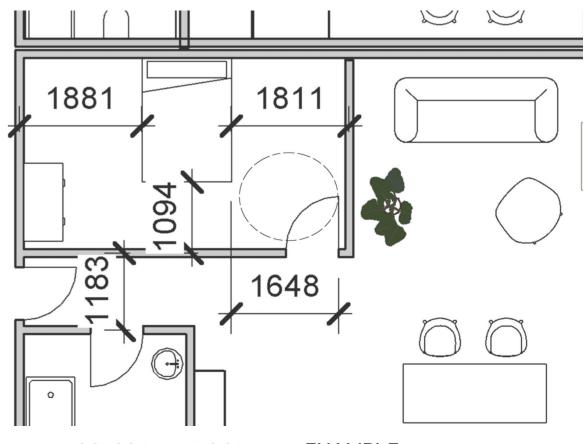
**RENDER : ENTRANCE** [Twinmotion, Photoshop]

RENDER : CUSTOM ACCESSIBLE DESK SECTION [REVIT]



RENDER : SIGNAGE [Twinmotion, Photoshop]

RENDER : SECTIONAL LIGHTING [REVIT, Photoshop, Hand Drawing]



ACCESSIBLE FLOORPLAN EXAMPLE [REVIT]

## FINAL SCHEME

The scheme has a focus on inclusivity, adaptability and a wider vision. The ground and first floors are open to the public, providing spaces where the residents can meet other people from the area, build connections and create advertisement of the scheme. The residential levels are located over 6 floors, providing over 60 affordable apartments to those in need of more support and a design more specified for themselves. This is achieved by each space containing the modular ability for the users to use them how they desire and to best suit their own needs.

Creating spaces that are able to accommodate all users, no matter their age or disability is the future of design and should be addressed more widely in every sector. All the spaces have had a modular consideration to include features that are adjustable to meet the various needs of the users. By creating inclusive spaces, not only the users in need of these design changes will use the features provided. All the users in the scheme will make use of these and therefore this makes the users in need feel more welcome, included and brings all the users together in a building that views all users equally.



FINAL PRESENTATION MODEL 1:200

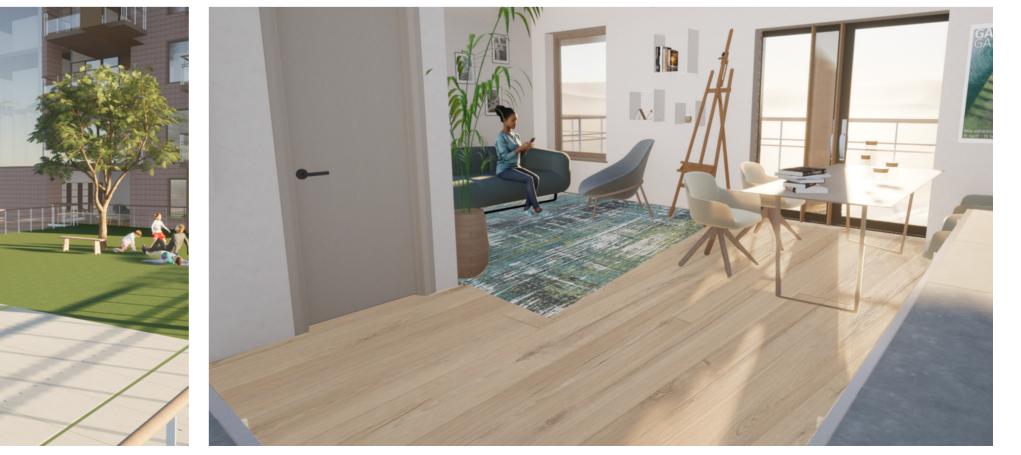




RENDER : MAIN ATRIUM [Twinmotion, Photoshop]

RENDER : ROOFTOP [Twinmotion]





RENDER: APARTMENT [Twinmotion, Photoshop]