

BIOPHILIA.

A RESILLIENT HUB



CONCEPT

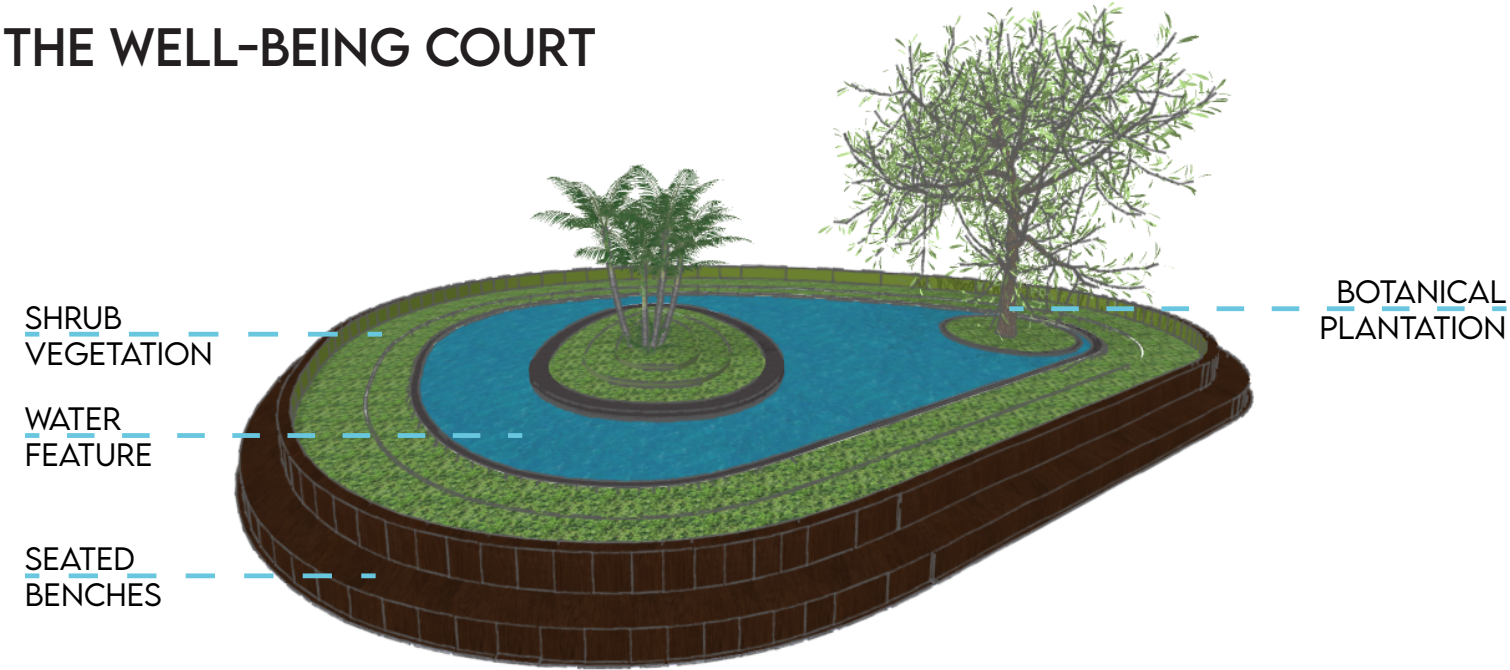
As we all know and have seen, COVID-19 has impacted our lives in ways we could have never imagined. This life changing period of time has introduced a new "normal" that completely changed our perceptions, way of thinking & priorities. Certainly, this impairment is evident to affect the human's quality of life, and opposes the global calls for health and well-being in our buildings. As humans in real life, in Architecture and design, buildings will have to be as resilient as we ought to be. The design approach is to better address the human health and well-being within the framework of resiliency and create a space that reinforce the better social habits we now know we need.

Nature has always been a huge part of the human life since the beginning of time. Surely, it is a vital element to the survival and well-being of humans, as people are always drawn to nature for restoration purposes. From retrospection, the concept of Biophilic Design became a real necessity, more than just a trend. The Biophilic Design prioritizing exposure to nature has proven to be of an important role in enhancing the quality of spaces, reduces stress, boosts immunity, and improves human health and well-being. These are all critical factors in minimizing the negative impacts of the virus and determining how our bodies fight off COVID-19.

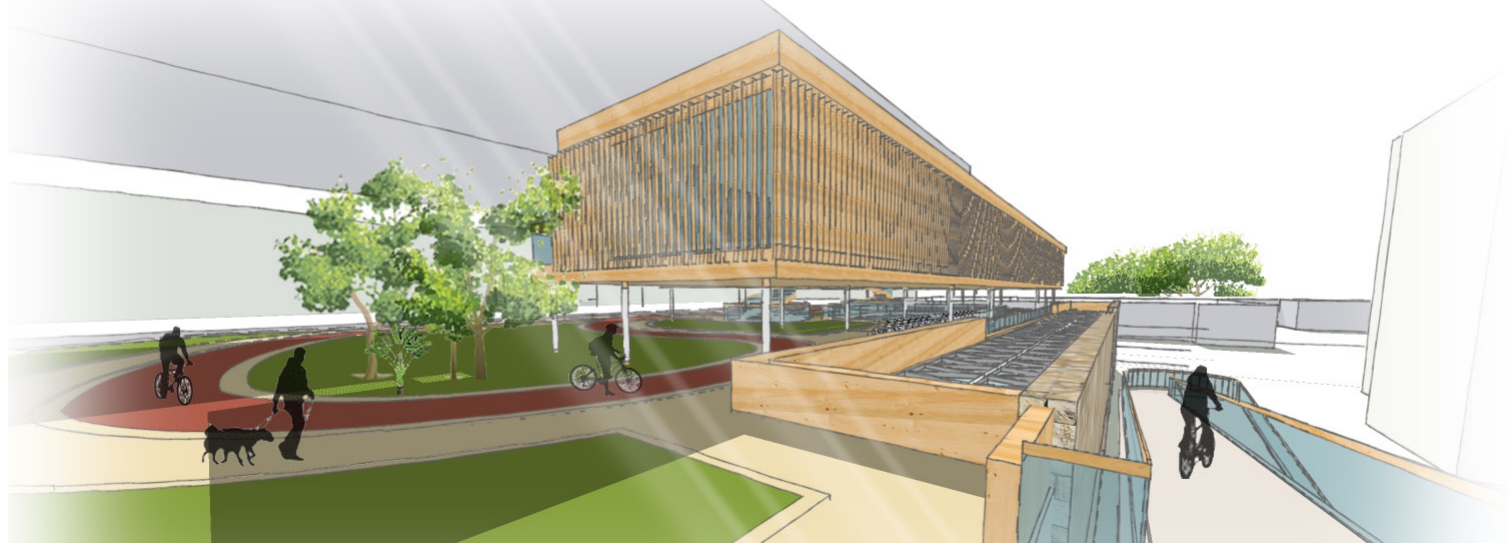
The Biophilia Building follows the Biophilic Design concept patterns including **Environmental Features** (water, air, sunlight, plants, and natural materials) - **Natural Shapes & Forms** (shapes representing elements from nature) - **Natural Patterns & Processes** (central focal point & bounded spaces) - **Light and Space** (natural, filtered & diffused light. These patterns are mainly shown in the main spaces (The Well-being court, coworking pods, residential units & roof). All these pervious patterns are to lead to **Place-Based Relationships** (achieving a sense of security, ownership & belongingness) and ending with **Evolved Human-Nature Relationships** (Security & protection, Affection & attachment) ensuring on the inherent human relationship to nature.

The Biophilia Building Consists of 4 levels where the lower ground L01 floor remains as a public exhibition along with adding the main well-being atrium court directly exposed to the sunlight. A skylight was added to the roof level to ensure direct connection with sun and to enable air ventilation. The upper ground floor L02 will be a co-working space with private pods and shared meeting spaces for those looking to escape from home or office with a the main atrium for people to overlook and enjoy the main court. L03 will be the existing roof with adding a cycling track to ensure a healthy activity without close interaction between people while enjoying the existing roof greenery and overlooking the court through the skylight operable windows. Then L04 will be dedicated for residential units for people to rent and use. These units will be elevated through stilts columns and wooden structure with open terraces & shared livable spaces.

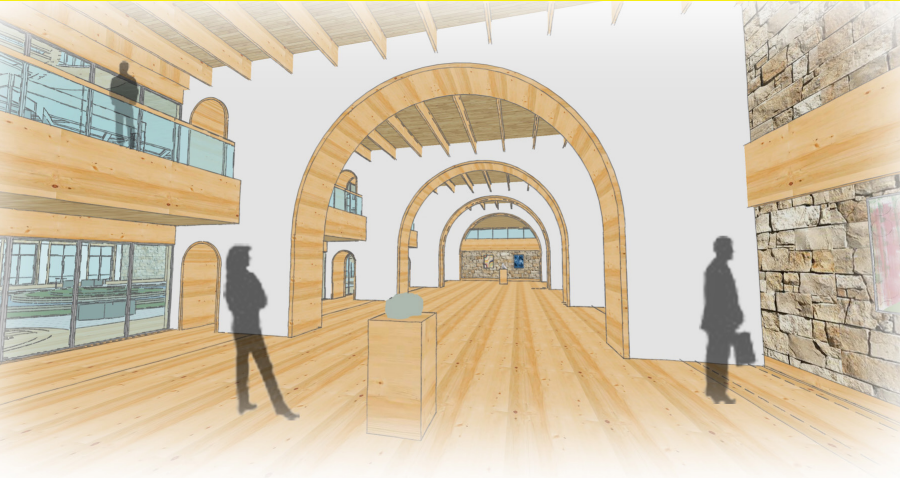
THE WELL-BEING COURT



CYCLING TRACK



EXHIBITION GALLERY



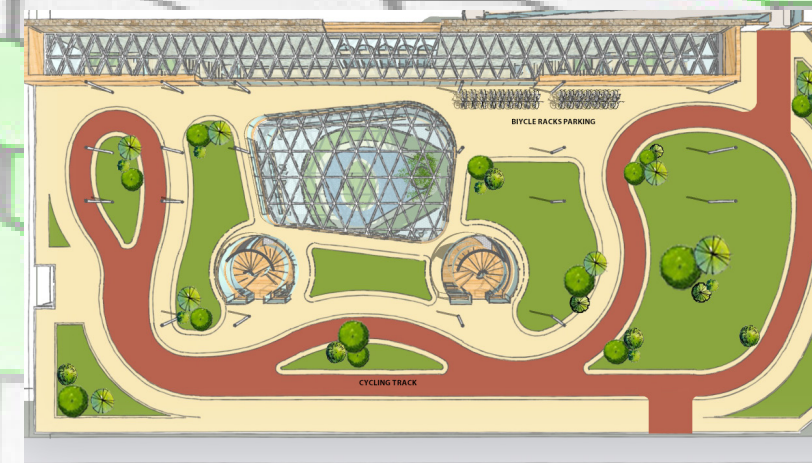
CASCADING STAIRCASES



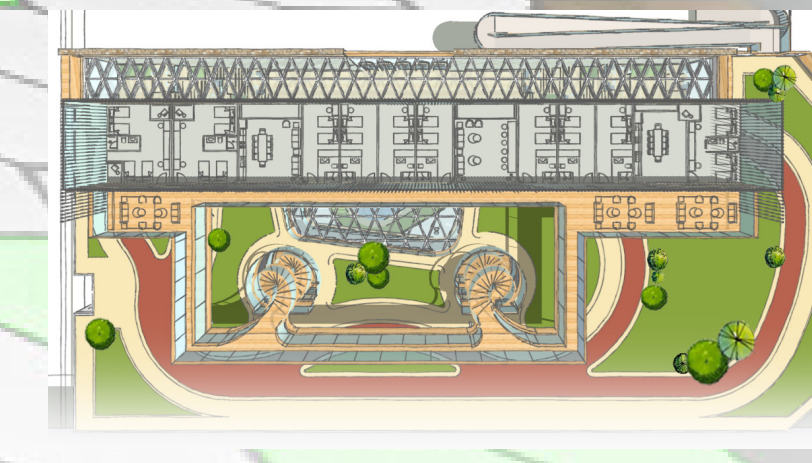
L01 - EXHIBITION HALL + WELL-BEING COURT



L02 - COWORKING SPACES



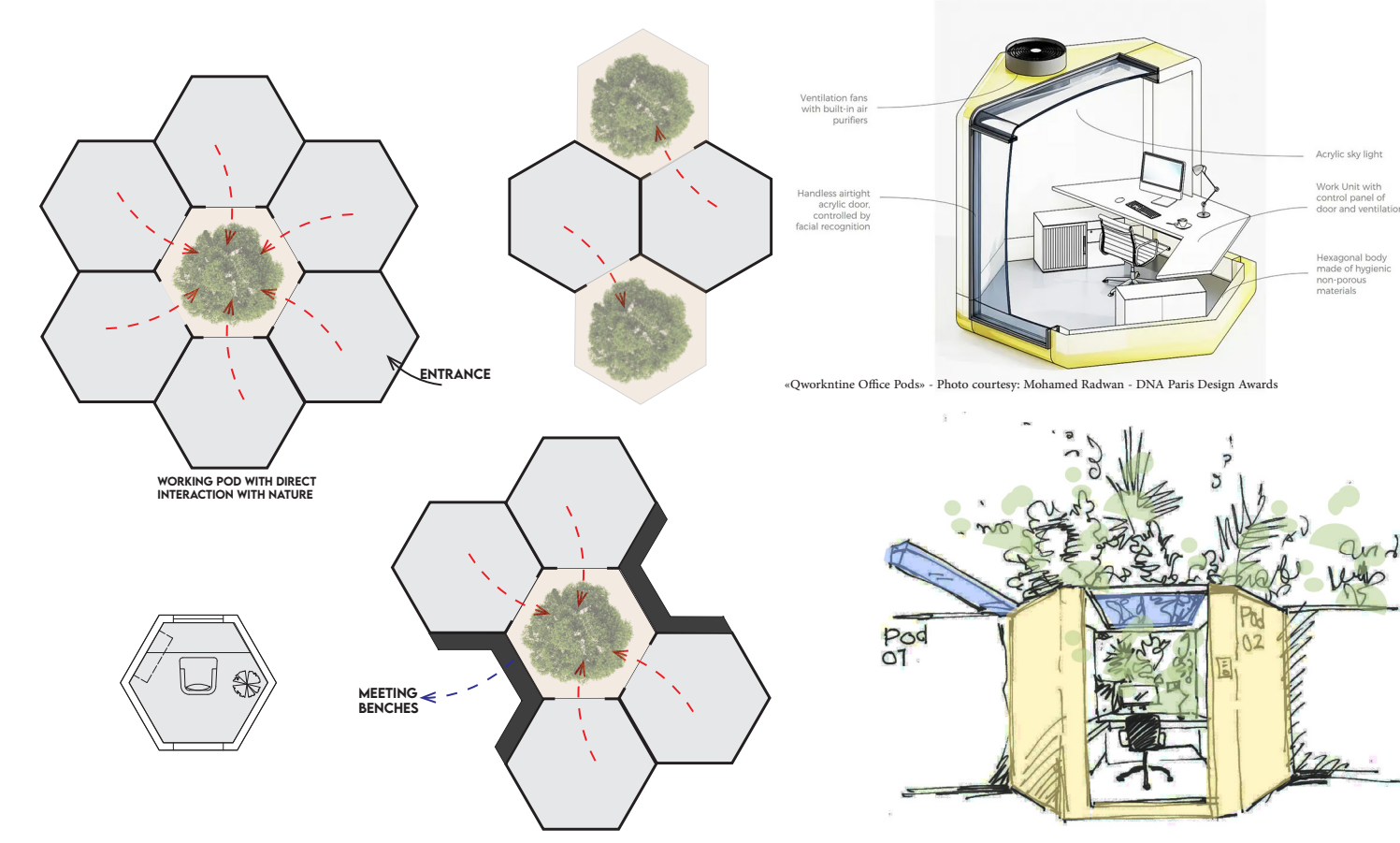
L03 - GREEN ROOF + CYCLING TRACK



L04 - RESIDENTIAL FLOOR

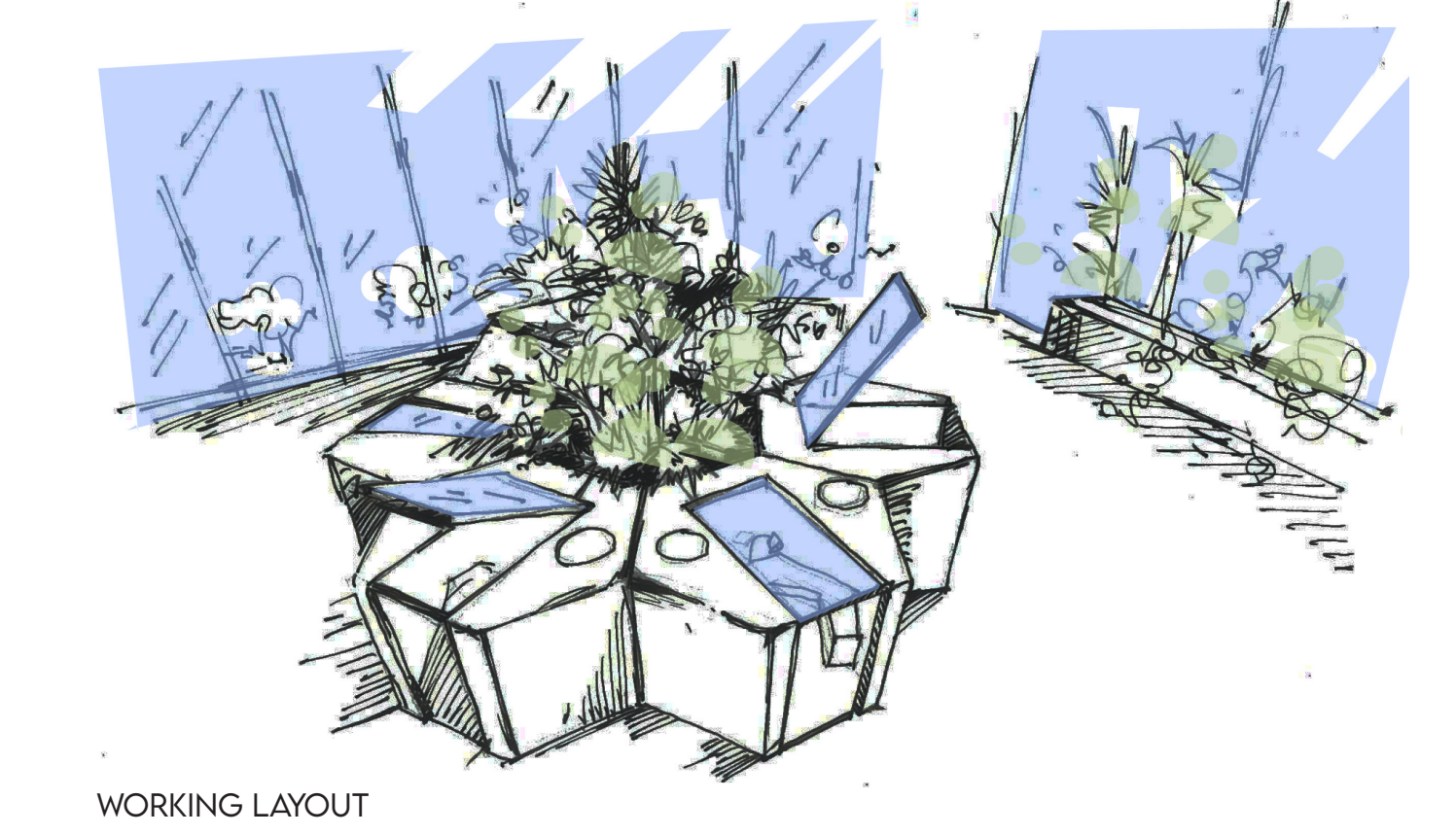
CO-WORKING PODS

The workspace pod is an air tight system which provide safety and protection within the work place. Its geometry is a natural shaped hexagonal hive, overlooking interior greenery. The pod is made of hygiene friendly non-porous materials that can be easily cleaned and disinfected to avoid contamination with built-in air purifiers.

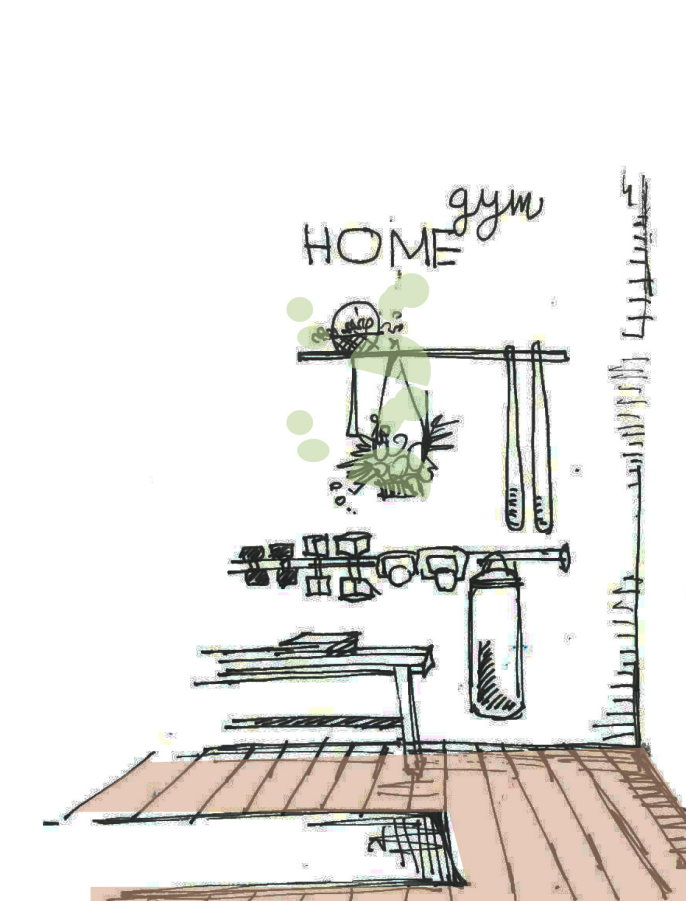


PODS VARIATION

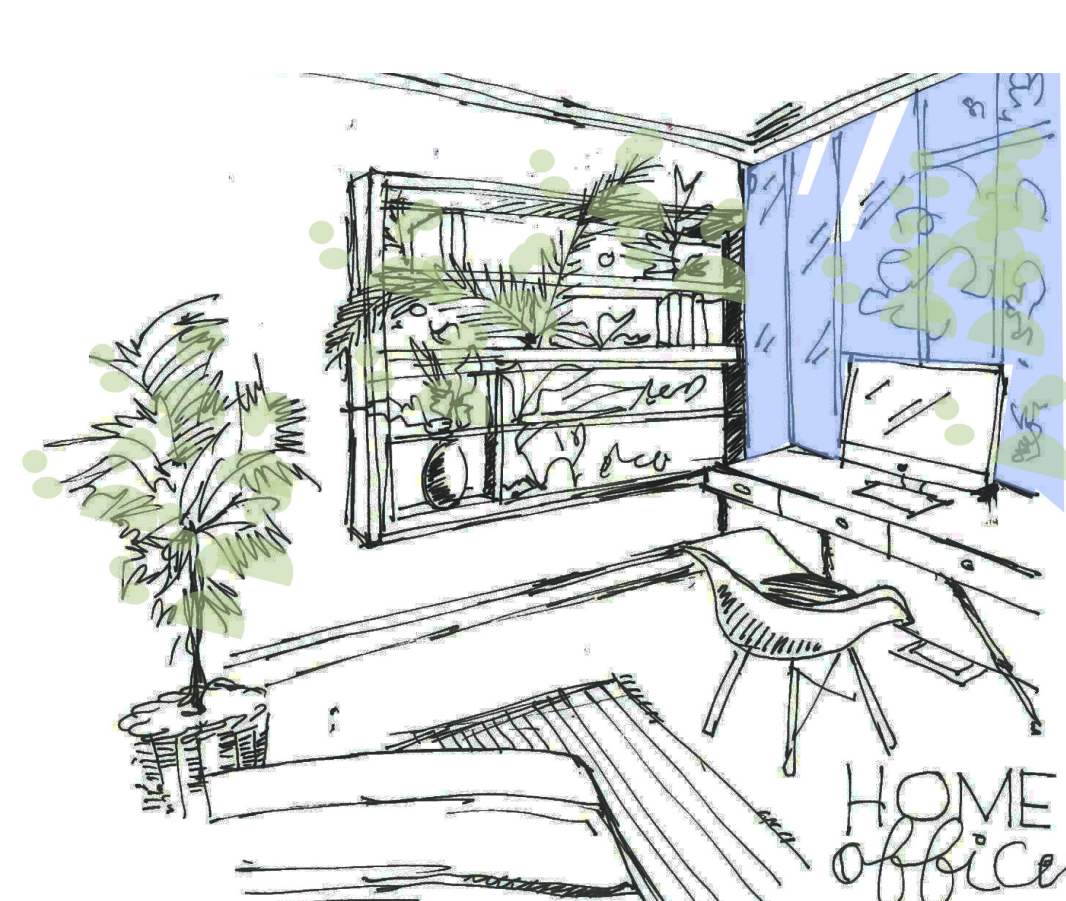
POD INTERIOR EXPERIENCE



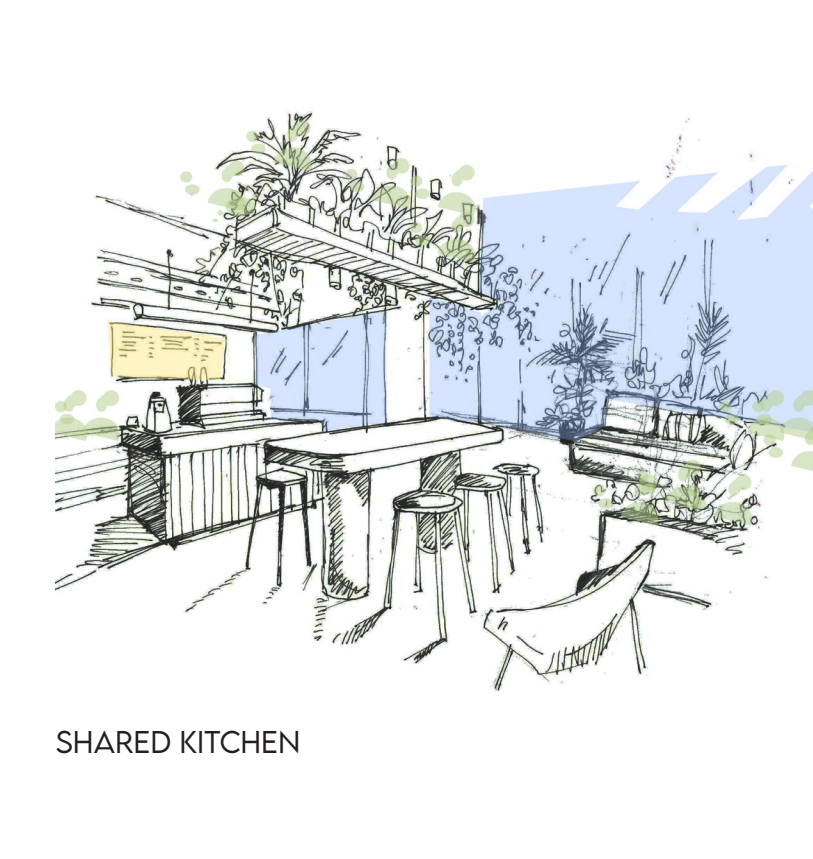
WORKING LAYOUT



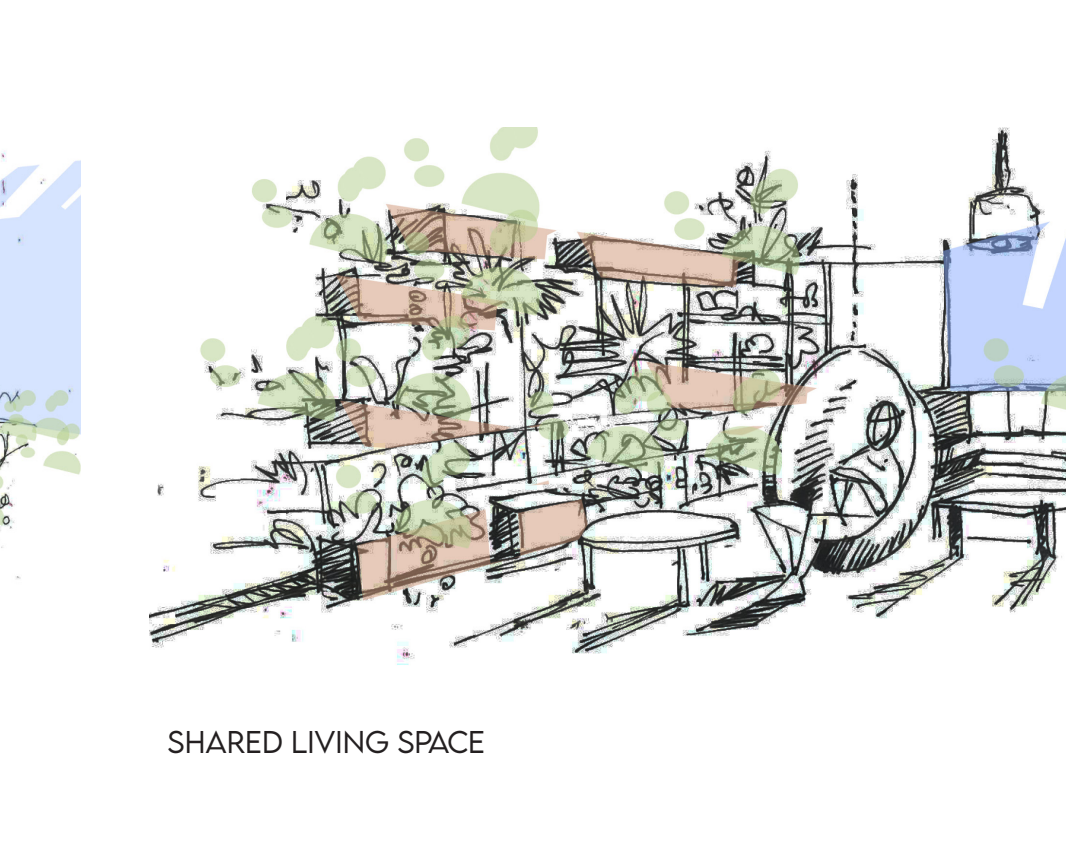
HOME GYM



HOME BEDROOM & WORKING SPACE



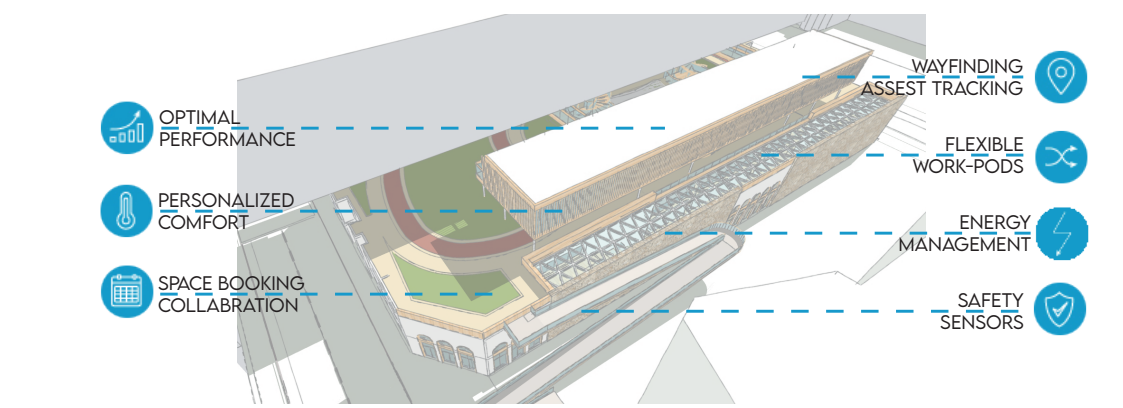
SHARED KITCHEN



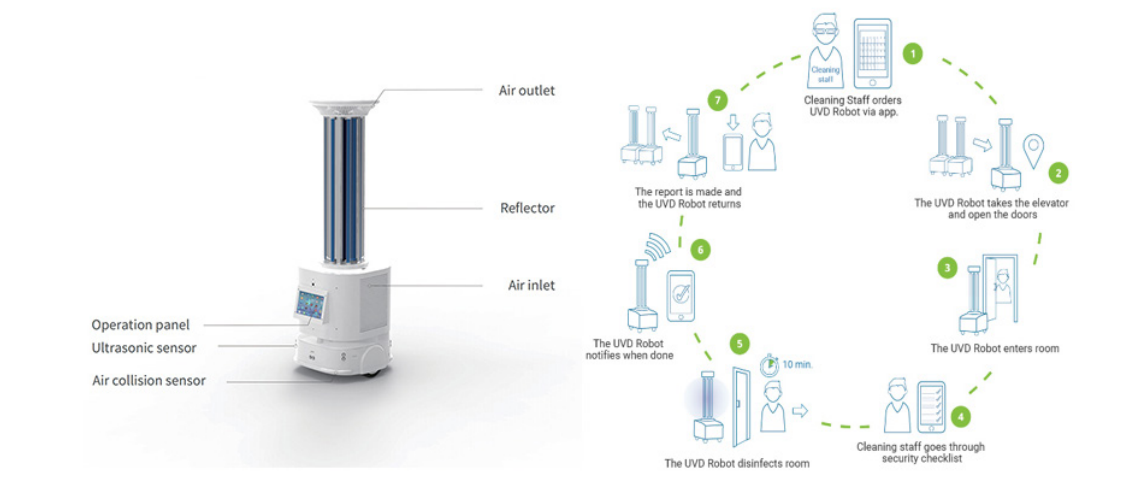
SHARED LIVING SPACE

SMART SYSTEMS

Digital Twin Technology will be used to monitor performance, detect issues, simulate building experience, and provide full access into the building without the need for physical interaction.



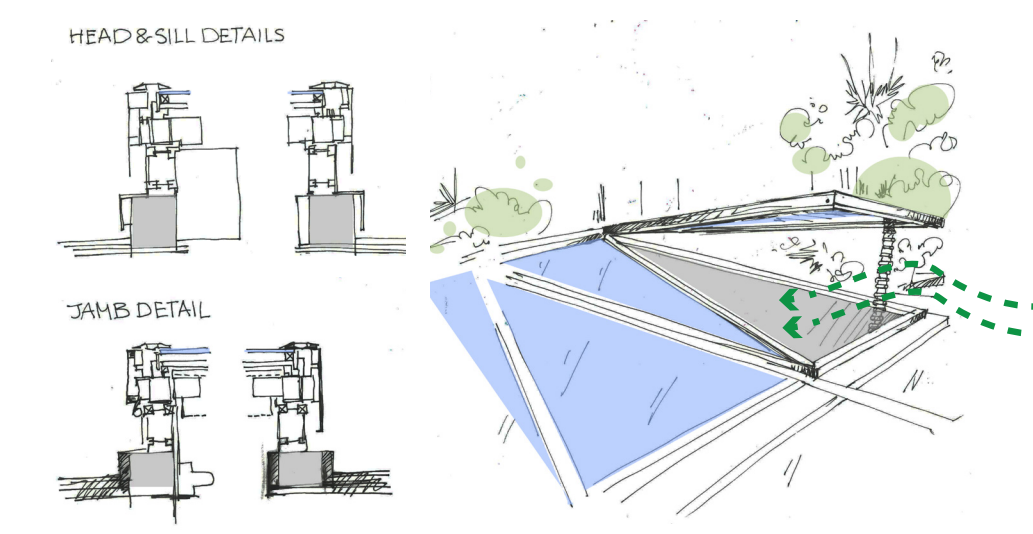
Disinfection Robots A self-driving robot that can disinfect and kill diseases, viruses, and bacteria in the environment.



OPERABLE SKYLIGHT

The mechanical skylight ensures the light and space pattern with direct interaction with natural light and fresh air. The mechanism operates in many possibilities including venting, retractable, and 90° operable. These units can be operated manually or can be motorized and equipped with sensors for automatic operation.

The skylight bring the warmth of the sun and light up the main central space while also providing a means for heat & bacteria to escape and air ventilation. All of which are extremely rewarding to the psychological, physical and mental well-being of the building users.

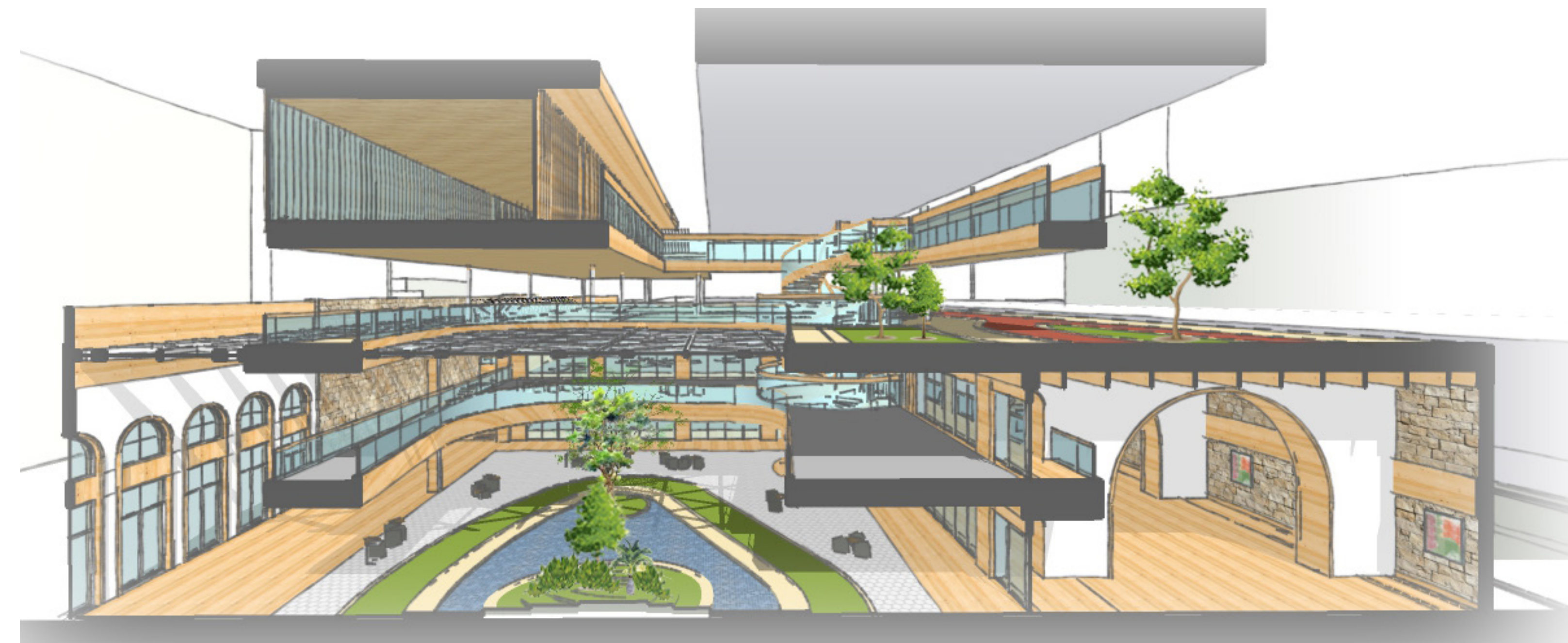


BUILDING MATERIALS

The materials selection was based on materials driven from nature, low embodied energy materials, stone brick made out of construction waste & reusable epoxy along with leaving most of the existing materials to ensure circular economy.



ATRIUM ALONGWITH CASCADING STAIRCASES



3D SECTION