

Soup Kitchen with

FOOD PRESERVATION

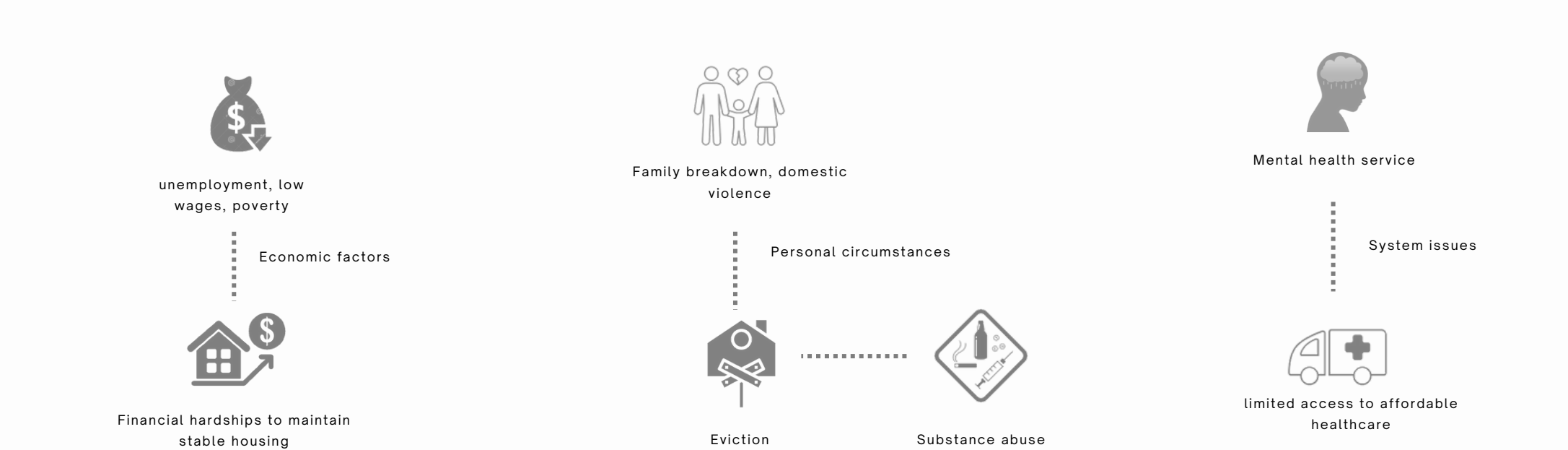
Providing food security and reducing food wastage while distributing nutritious food to those in need and offering job opportunities to homelessness

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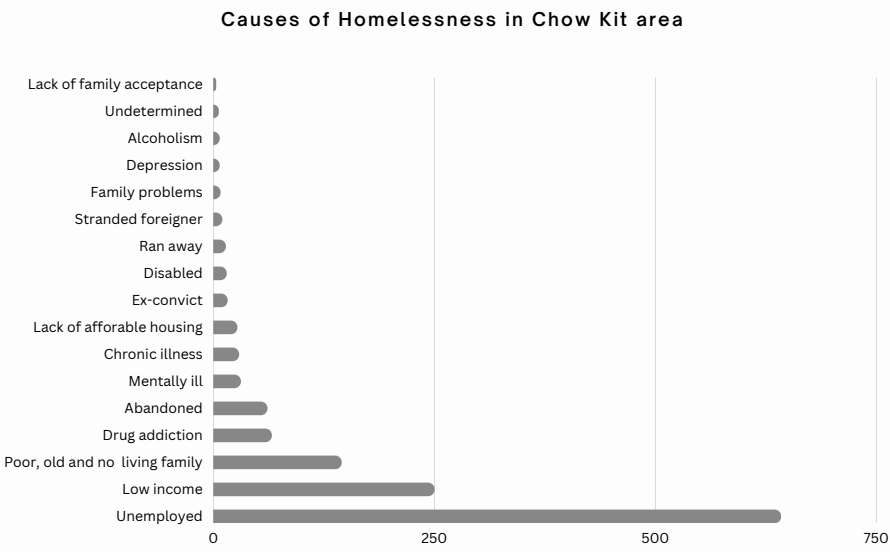
Problem statement - Homelessness

Homeless can be found roaming around the site area, they do not have a stable place to live and are reside on pathways or in other places not intended for human habitation, that is under the trees or at the back alleys. Homelessness can be a complex issue that is associated with various challenges, including unemployment, low income, debt, and chronic illness. When individuals or families experience homelessness, they may face significant difficulties in meeting their basic needs, which can lead to increased vulnerability and potential risks. Factors such as poverty, lack of social support, and limited access to resources can contribute to an increased risk of criminal behavior among some individuals experiencing homelessness.



Issue at Chow Kit - Homelessness

A study found that unemployment, low-income and old age without a living family were the top three causes of homelessness – making up 75% of all respondents. The challenges of securing a job and keeping it is weighty. Other factors such as the lack of education, persistent poverty and the lack of support adds weight to the struggle



Although the number of homeless in KL has reduced significantly due to various shelter homes operated by the government, it is still quite common to run into needy and homeless people when walking around Chow Kit.

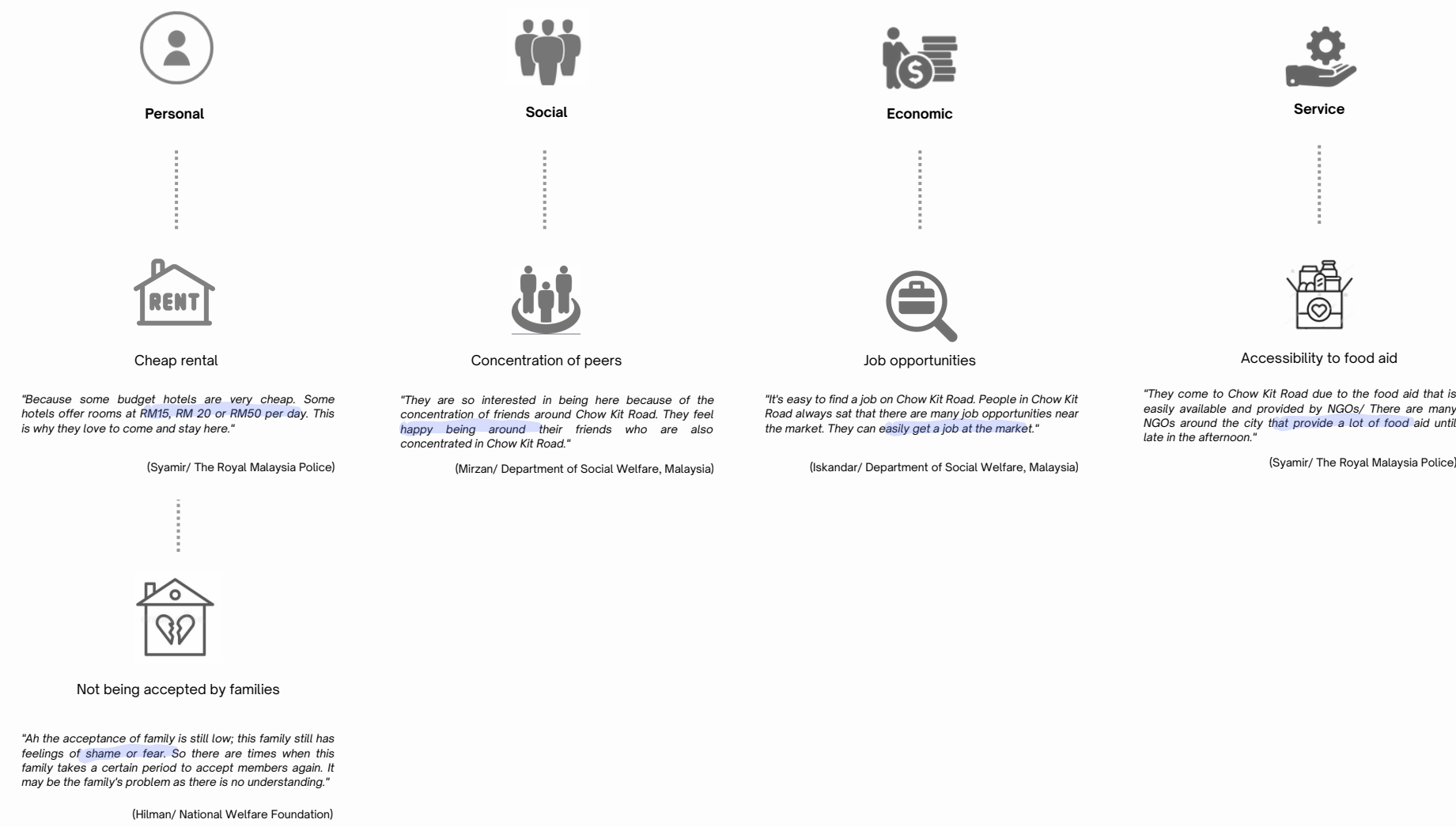
If you take a stroll around the district between 5.30pm and 6.30pm, you will notice long lines of the needy receiving a free meal from various non-governmental organisations (NGO) such as Pertubuhan Kesihatan Dan Kebajikan Umum Malaysia (PPKUM) and Kechara Soup Kitchen (Kechara).

PPKUM has been distributing free breakfast, lunch and dinner to 120 people since the first MCO came into effect in March 2020.

According to him, the number of homeless in KL has reduced significantly due to the shelter homes, especially during the Covid-19 pandemic.

But, he said some of the homeless still preferred to live on the street as going into shelter homes made them feel like they have lost their freedom.

Causes of individuals being homeless in Chow Kit area



How to help (in general)



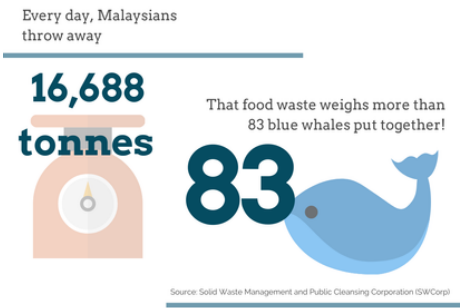
Why Soup Kitchen

1 Inability to afford a meal



The uncertainty of the next meal and the inability to have nutritious well-balanced meals are the problems faced by poor families with low income jobs. Single mothers living in Kuala Lumpur struggle on a daily basis to put meals on the table, let alone nutritious meals; hungry university students who have moved from their villages to study in cities going hungry and hungry children in rural areas waiting for the next good meal.

2 Food waste



Out of the total food waste, 3000 tonnes was still edible food and if rationed well and properly channeled, it is believed that it could feed 2 million people, 3 meals a day

3 Begging for food

Finding food was a challenge. Sometimes he would wander into restaurants, begging for scraps and leftovers from other people. Nowadays, there are organisations which distribute food – all around Chow Kit and Masjid Jamek alone, there are groups which distribute food to the homeless. But during Adni's time, he could only rely on individuals who would reach out from their cars to give him food.

What did he do with his clothes? Inevitably, he had to sell them for his money ran out as quickly as he earned it. All he had left was the clothes he wore for the four months that he was homeless and his mother's batik and scarf inner to remind him of her and home.

As for the other homeless people, they would sometimes scavenge through the rubbish looking for items thrown out by wholesalers. Items such as shoes, decorations and ornaments were good enough to be sold at a much lower price around Petaling Street – enough to earn a few dollars to buy some food. The money could also be used

Homeless people find it challenging to look for food when there is no NGOs distributing free meals for those who needed.

Food aids nearby



PERTIWI Soup Kitchen
A Community Outreach Effort

established and managed by



"PERTIWI Soup Kitchen project was established to provide regular meals at various locations around Kuala Lumpur on a regular basis."

Aim and objectives:

- To distribute basic pre-packaged healthy meals and clean water 4 nights a week in inner-city neighbourhoods where various recipient groups are located.
- To raise awareness of the number of hard-core poor in our city.
- To encourage corporate and media sponsorship, and regular volunteer participation to feed the hungry.
- To operate the programme in a sustainable manner that will enable it to serve an increasing number of people.

Delivery location and frequency:

- The areas served are Chow Kit, Kota Raya and Masjid India on Sundays, Mondays, Wednesdays and Fridayirs. Between 550-750 packets of food are served each night at 6.30pm (for about an hour while finish serving).

Program- Soup Kitchen with Food Preservation

Soup Kitchens a non-profit organization or a charitable institution that collects and distributes food and other essential items to individuals or families in need. The primary goal of a soup kitchen is to combat hunger and food insecurity within a community. It operates by gathering donated food from various sources such as farmers, manufacturers, retailers, and individual donors. Partner agencies distribute the food to people facing food insecurity, ensuring they have access to nutritious meals. In addition to providing immediate food assistance, many soup kitchens also offer programs and services to promote long-term food security, such as nutrition education and job training.

Aim

- to alleviate hunger and food insecurity within a community
- to gather a diverse range of nutritious food items to address the immediate needs of those experiencing food insecurity
- to reduce food waste by rescuing surplus or unsold food that would otherwise be discarded
- to educate the public, policymakers, and the community about the realities of hunger, the factors that contribute to it, and the importance of addressing the root causes of food insecurity
- to provide job opportunities to the people who needed

Program advantages



reduce food insecurity and hunger



provide nutritious food



minimize food waste



acting as learning platform



providing job opportunities

Program outline



Food distributing
Distributing local Malaysian food while providing enough nutrition to those who needed



Food trading
Exchanging surplus fresh and cooked food items to optimize the distribution of resources, reduce food waste via food preservation



Food preserving program
Preserving the nutritional value of local foods and providing extra food aids to the target users



Preserved food selling
Selling their own goods after the food preserving program, allowing an income for other essential items

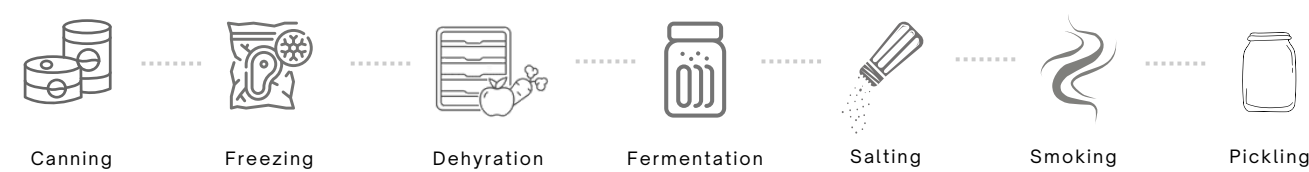


Food nutrition exhibition
Providing educational and interactive opportunities on nutrition and preservation

Main Program- food preservation

Food preservation refers to the techniques and processes used to extend the shelf life of food by preventing spoilage, inhibiting the growth of harmful microorganisms, and maintaining the nutritional quality of the food. It helps to ensure food safety, reduce food waste, and provide access to a variety of foods throughout the year. It is an important approach to addressing homelessness and food insecurity due to various benefits food preservation has for homeless people.

Examples of food preservation methods:



Findings:

Natural preservation: Food waste reduction and shelf life extension

Food waste elimination
Meanwhile, Kerry has made food waste elimination a top focus and is empowered to do so by investing in its food protection and preservation portfolio.

Lamers says that waste elimination also has an important role in cost reduction, further driving the interest in shelf life protection and extension.

To support the industry in seeing the impact they can have by extending the shelf life of food with a deeper dive into meat and bakery products, Kerry launched its Food Waste Estimator last year, which, Lamers says, has led to some "great lightbulb moments in the industry that support the return on investment in reformulation."

Lamers observes that natural products without preservative ingredients or processes can create a lot of unintended food waste. "As an industry, we have a role to help consumers prioritize their needs in a sustainable way for them and the planet."






Natural preservation solutions can maximize the overall food experience for consumers.

Could frozen foods help reduce food waste?

With more than one billion tonnes of food wasted every year and a growing global population, devising ways to combat food waste is of the utmost important. Darcy Simonis, Food and Beverage Segment Network Leader at ABB, believes frozen foods hold the answer.

Food and beverage manufacturers understand that they must reduce food waste to improve profitability and their environmental impact. Freezing preserves food for long periods of time, particularly as food can be frozen either directly at the source or once it has gone through processing. This flexibility to preserve perishable food at the source is crucial across the globe. For example, in developing countries it is estimated that up to 50 percent of root crops, fruits and vegetables are wasted due to improper transportation and storage.

Benefits of preserved food for homeless people:

-  Longer shelf life
 - makes food more suitable for storage and distribution to homeless people
 - reduces the risk of food spoilage
-  Nutritional value
 - provide essential vitamins, minerals and protein, helping to meet the dietary needs and contributing to overall health
-  Convenience and portability
 - Pre-packaged allows a quick and convenient source of nourishment
 - easy to carry and consume when they do not have immediate access to cooking facilities
-  Food security
 - Ensure a stable supply of food that helps address hunger and provides a reliable source of sustenance at all time

Why preserving food:



Local Malaysian preservation method:



Local Malaysian preserved food:



Tempeh is a staple in Malaysian cuisine and is made from fermented soybeans. The soybeans are cooked, inoculated with the mold *Rhizopus oligosporus*, and allowed to ferment, resulting in a firm and cake-like product. Tempeh is a versatile ingredient used in various dishes, such as stir-fries, curries, and as a meat substitute.



Tapai pulut is a traditional Malaysian dessert made from glutinous rice. The rice is soaked, cooked, and then mixed with a starter culture that contains molds, yeasts, and bacteria. The mixture is allowed to ferment, resulting in a sweet and slightly alcoholic dessert. Tapai pulut is often enjoyed on its own or used as an ingredient in other desserts.



Various fruits are dried in Malaysia to preserve their natural sweetness and flavors. Dried fruits like mango, pineapple, banana, and jackfruit are popular snacks and ingredients used in Malaysian desserts and cooking.



Pickled vegetable or fruit is a food item that has been preserved by immersing it in a solution of vinegar, water, salt, and often other seasonings or spices to extend the shelf life of the food while imparting a unique flavor and texture.



Fermented sauces are integral to Malaysian cuisine, adding complexity and unique flavors to dishes. They are often used as condiments, dipping sauces, or as key ingredients in various recipes, showcasing the diverse and rich culinary heritage of Malaysia.

What is special about the program

- Individuals are able to earn money from selling goods



Trade



Preserve



Sell

- Individuals are able to gain knowledge and raise awareness



Acting as a
learning platform



reduce food insecurity
and hunger



minimize food waste

- Individuals are offered with job opportunities and positions

Food collection
and distribution



loading goods



help with food
inspection



food distribution

Food nutrition
exhibition



information desk



exhibition setup



tour guide/ assistant

Food preserving
program



assistant/
preparation team



packaging and
labelling team

How to make tempeh:



1. Soak the beans for overnight and rinse off a couple of times with fresh water



2. Cook and cover the beans on medium heat. Add in four tablespoons of vinegar and return the beans onto the heat



3. Add in rhizopus mold when beans are cooled to about 35 Celcius. Mix well



4. Get the desired size of the banana leaf and place the beans in the middle and shape them to a rectangle by folding and securing with toothpicks



5. Place the wrapped beans into an incubator overnight/ for 12 hours. The mold should be generating its own heat by then. Keep the beans in a warm place for the rest of the fermentation (36-48 hours)



6. Cut into slices and can be stored in the freezer for more than 6 months

Required machines:



How to make tapai:

Cut the cassava into smaller pieces



2. Boil them in water until they are fork tender but not mushy. Drain off boiling water after



3. Transfer them on a clean tray to cool for 1 hour. Transfer them into a large mixing bowl



4. Use a blender/ mortar and pestle to grind the rice yeast ball into fine powder



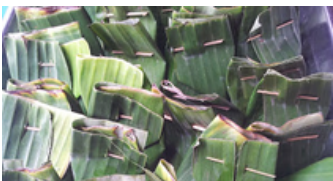
5. Sprinkle the powdered yeast all over the cooked cassava. Make sure every piece is coated with it.



6. Line them in a banana leaf and fold over to cover them. Banana leaves help speed up the fermentation process



8. The tapai should taste sweet and soft. Simply store them in the fridge.



SDG/ sustainable approach

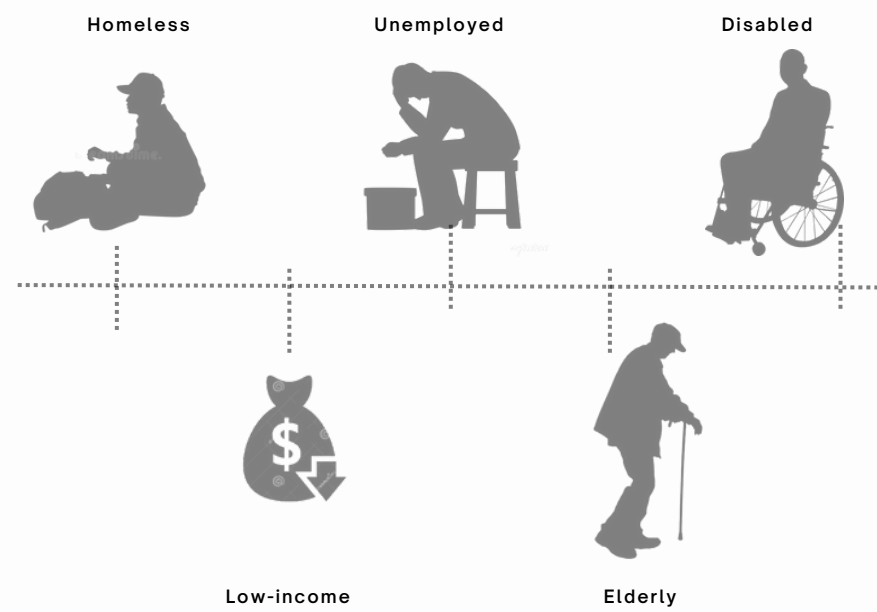


Eradicating poverty is not a task of charity, it's an act of justice and the key to unlocking an enormous human potential. Still, nearly half of the world's population lives in poverty, and lack of food and clean water is killing thousands every single day of the year. Together, we can feed the hungry, wipe out disease and give everyone in the world a chance to prosper and live a productive and rich life.

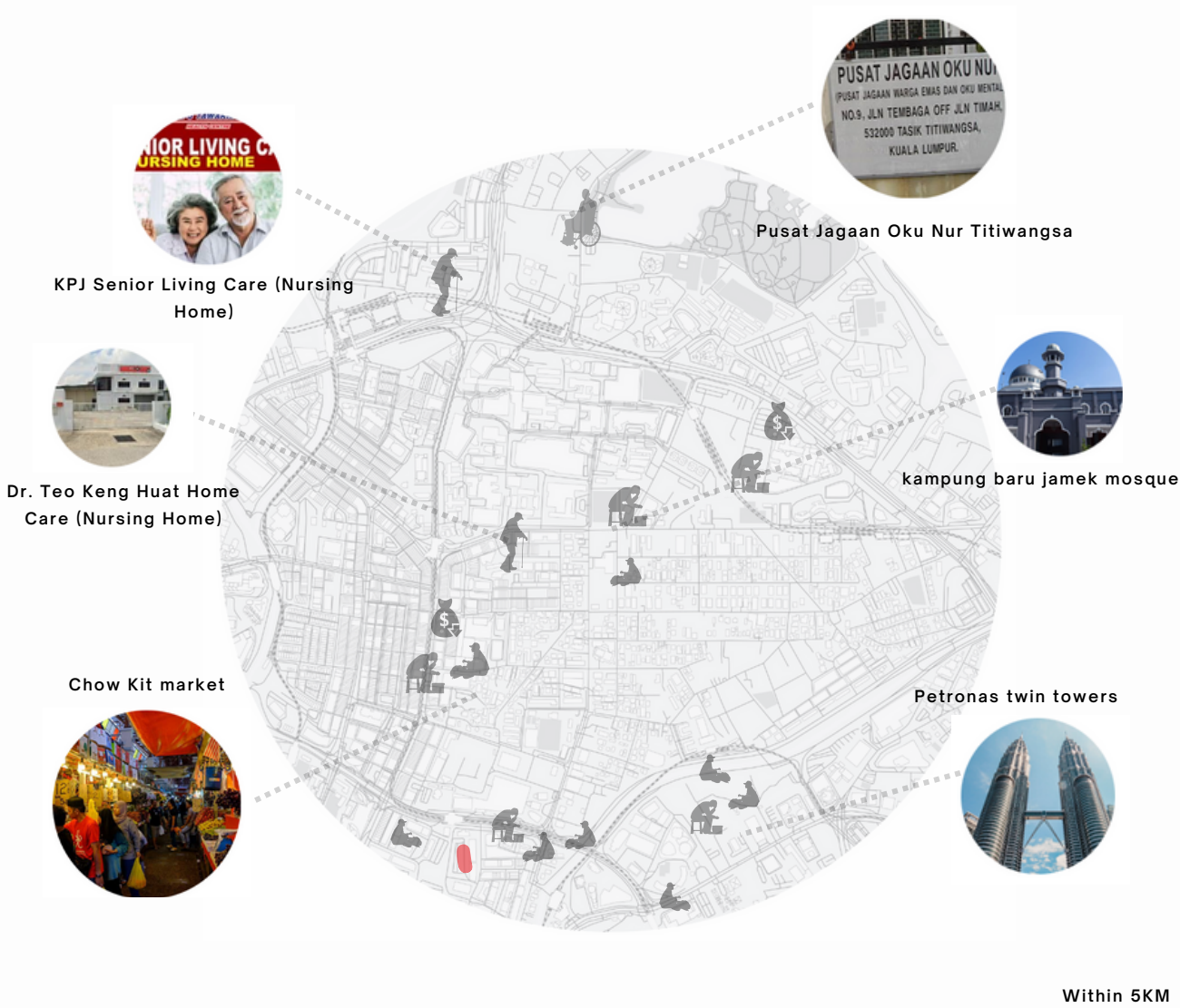
Hunger is the leading cause of death in the world. Our planet has provided us with tremendous resources, but unequal access and inefficient handling leaves millions of people malnourished. If we promote sustainable agriculture with modern technologies and fair distribution systems, we can sustain the whole world's population and make sure that nobody will ever suffer from hunger again.



Target users



- 1.Homeless individuals: People living on the streets or in temporary shelters who lack stable housing.
- 2.Low-income individuals and families: Those who are struggling to make ends meet and may not have enough money to consistently purchase food.
- 3.Unemployed individuals: People who are out of work and may be experiencing financial hardship.L
- 4.Elderly individuals: Senior citizens who may be living on a fixed income or facing challenges in meeting their basic: needs.
- 5.Individuals with disabilities: People with physical or mental disabilities who may face difficulties in accessing regular meals or preparing food.



Neighborhood context

Client profile



KSK (Kechara Soup Kitchen) has been serving marginalised communities in Malaysia for over 15 years; these include the homeless, urban poor and Orang Asli populations. Towards this end, they run their Soup Kitchen, Food Bank and Empowerment programmes to help these vulnerable demographics. They are non-religious and do not discriminate in the help they give. Kechara Soup Kitchen strives to reduce homelessness, hunger, poverty, food wastage and work towards a better quality of life for the underprivileged in Malaysia.



Mission:

- 1 Serve the homeless and marginalised communities of all races and religions in Malaysia in various ways.
- 2 Give dry provisions and reduce food wastage by redirecting surplus food from landfills to those we serve
- 3 Equip the urban poor with skills which promote self-reliance and financial independence.

Philosophy:

Target root issues of homelessness and poverty such as inequality, food insecurity and unemployment.

Vision:

Towards a nation of less homelessness, hunger, poverty, food wastage and a better quality of life.

These 3 programmes aim to provide assistance to the most vulnerable people in our community.

1



provides basic sustenance, medical care and welfare aid to those who are homeless or in need.

2



focuses on helping the poor and the marginalised who are at-risk of becoming homeless.

3



to foster financial independence in individuals in need, we teach them skillsets such as sewing and baking.

Collaboration with shopee supermarket



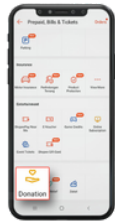
#ShopeeGivesBack is running a campaign to aid the underprivileged and vulnerable communities via partnership with Islamic Relief Malaysia, The Lost Food Project, Kechara Soup Kitchen - Food Bank and Ukhwah For Ummah.

It is a Malaysian aid program that is providing support to vulnerable communities. Over 37,000 hardcore poor families will benefit from the program this year. Shopee is supporting this initiative by offering their version whereby the public can donate by purchasing it and Shopee will deliver the items to the KSK Soup Kitchen - Food Bank.

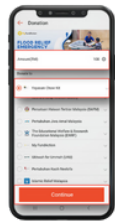
- Step 1: Head over to Shopee Supermarket's store and choose from curated bundle items
- Step 2: Make payment for the item(s) selected to be donated.
- Step 3: A Push Notification will be sent to you indicating the order is completed.
- Step 4: Shopee Supermarket will send the purchased items to KSK Food Bank.



STEP 1 Tap on the "Prepaid, Bills & Tickets" circle on the Shopee App Homepage.



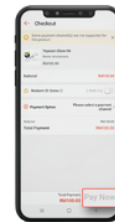
STEP 2 Tap on the "Donation" once you're on the main Prepaid, Bills & Tickets page.



STEP 3 Key in the amount you wish to donate, select the charity organisation that you wish to donate to and tap "Continue".

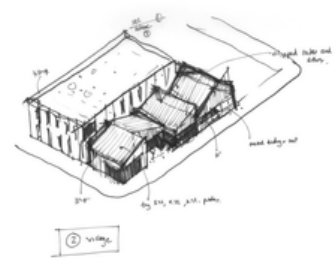


STEP 4 Select "Personal" or "Business" and fill in the required details to receive an official receipt in 14 days from the respective charity organisation and tap "Continue".



STEP 5 Ensure that your details are correct and tap "Pay Now".

Case Studies



Ballard Food Bank

Starring: Graham Baba Architects

Photographer: Lara Swimmer

City: Seattle, USA

Section: Health & Wellness



Spatial requirement

Fundamental to the organization’s mission is the market, which is designed as a large supermarket style space. Design cues are taken from other markets in the community to create a dignified and normalized shopping experience for people who need assistance. An enlarged and efficient warehouse and outdoor storage yard serves the market and the Food Bank’s delivery programs, while a new office space offers staff a safe and attractive place to work.



Shopping experience



Warehouse and outdoor storage



Staff working space





Waiting area



Kitchen

Clients will enter through the front door which, while visible from Leary Ave, is set back along a side street to provide a more private and welcoming entrance to the building. Directly inside, a waiting area serves as a center point for the community. The kitchen is also a community café and allows the Food Bank to upcycle donated commodity food items into nutritious meals. The Hub will host a variety of partner organizations providing mail delivery, medical services, counseling, financial and housing assistance, veterans' services, and case management. All of these spaces are designed to feel comfortable and warm.

"The intention behind the building is to create a space of belonging, where everyone feels valued, this is a building for our community."



Graham Baba Architects' new Ballard Food Bank also relates to its urban surroundings with a newly built streetscape, gardens, urban vegetable plots and seating areas around the building. The sustainability strategy reduces operating costs for the food bank while offering a healthier environment for the community it serves.





Jam Sessions

Client:	Valcucine
Project team:	Team TDFK Studio
City:	Expo Gate, Milan
Section:	Workshop

About the program

Three weeks of workshops and conversations with chefs and personalities from the world of design, music and culture. Casually sitting around a table chatting and preparing preserved fruits and jams in the Valcucine's temporary kitchen at Expo Gate in Milan.

The concept was born from the traditional communal ritual of sitting around a table at the end of summer, chatting while peeling and preparing summer fruits for the winter preserve.

The design studio, specialised in creating innovative culinary products and experiences, will involve the participants in a cooperative production process which, using only seasonal and organic oranges and lemons, will produce a variety of preserves in glass jars: marmalades, jellies, chutneys, lemons preserved in salt, candied peel, schnapps and flavoured salt. Between each phase of the preparation process, personalities of the design and cultural world will entertain visitors with stories of their real-life and culinary experiences.

Design considerations

Ventilation and lighting

Large windows and doors can provide natural ventilation by allowing fresh air to enter the workshop. This can help control odors, remove excess heat, and improve air circulation. They also allow ample natural light to enter the workshop, which can improve visibility and is often preferred in food processing areas as it provides a more accurate representation of colors and enhances visual inspection.

Zoning

Zoning the workshop based on workflow allows for a streamlined and efficient process. It ensures that raw materials, processing equipment, packaging materials, and finished products are arranged logically, minimizing unnecessary movement and improving productivity.

Flooring choice

Materials for the flooring and surfaces are easy to clean, non-porous, and resistant to stains and microbial growth- concrete flooring. Smooth and durable surfaces such as epoxy or stainless steel are often recommended for food preservation workshops.



Laizhou Bar

Architects:	RooMoo Design Studio
Area:	200 m²
City:	Shanghai, China
Section:	Bar

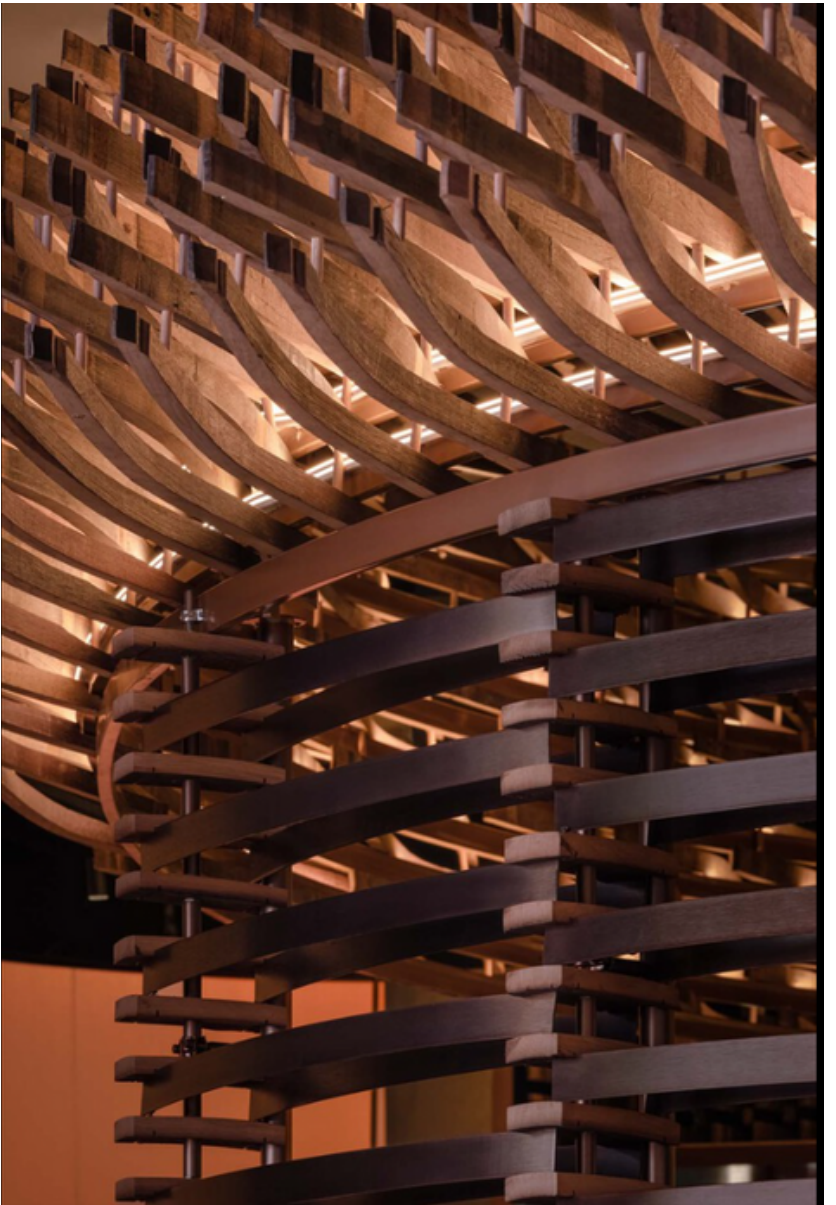
Introducing natural element

"born from nature, walking with nature"

At present, as China's most extensive whiskey distillery, it has become the first group company in China to practice the green concept of net zero emissions and take carbon neutrality as its long-term goal. Therefore, the beauty of production naturally became the design inspiration for their first flagship whiskey bar in Shanghai.

The design is amplifying the factory's production process and importing the details of the materials used in the production process into the space design.

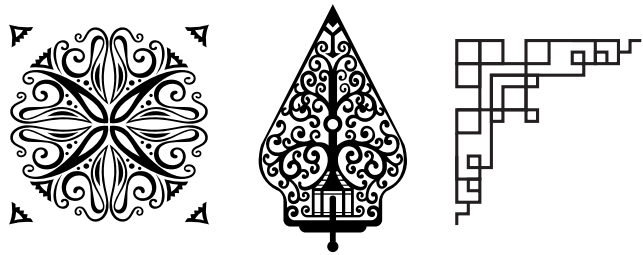
6,000 pieces of discarded wooden barrels dismantled from the whiskey barrels of the distillery to assemble the long site from the outside to the indoor entrance tasting area until the bar area in the back area to form a coherent flow spatial visual experience.



Design Concept

Traditional elements

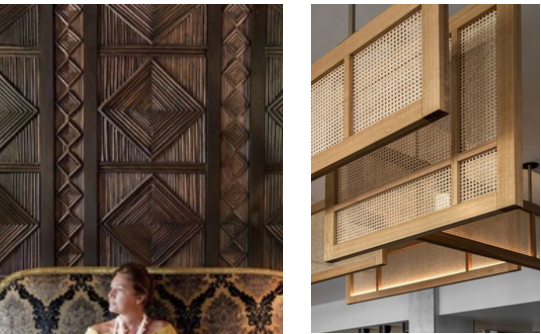
- Geometric patterns- symmetrical, diamonds
- Floral motifs- hibiscus, reflecting the natural beauty and cultural significance of local flowers
- Batik art- reflecting the diversity of Malaysian heritage
- Woven textiles- songket, sarong
- Carvings wood panels, screens, furniture



**Concept:
Embracing
Malaysian Culture**

Colour palette

- rich and warm
- earthy tones- brown, terracotta, deep reds
- reflecting natural landscape and cultural heritage



Natural elements

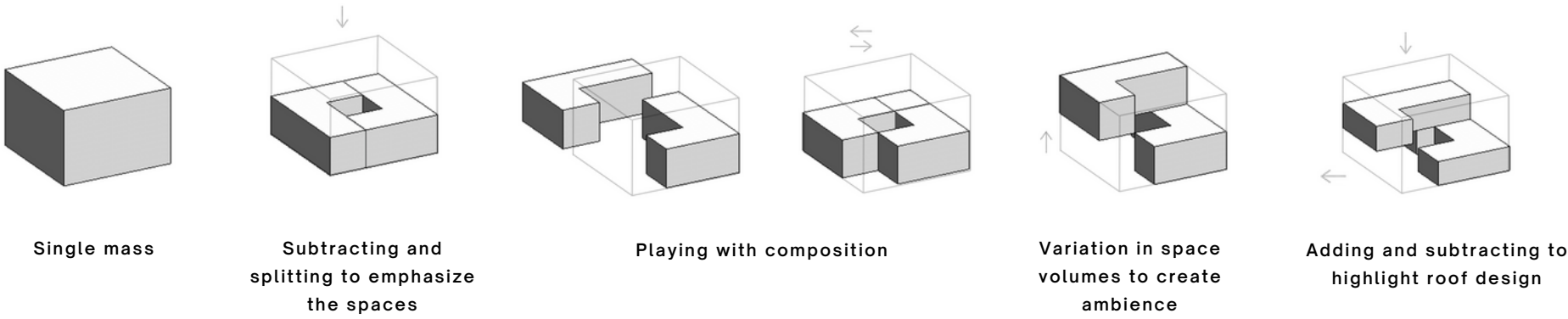
- natural materials- wood, stone, rattan
- natural light- big windows, doors
- greenscape

Design considerations

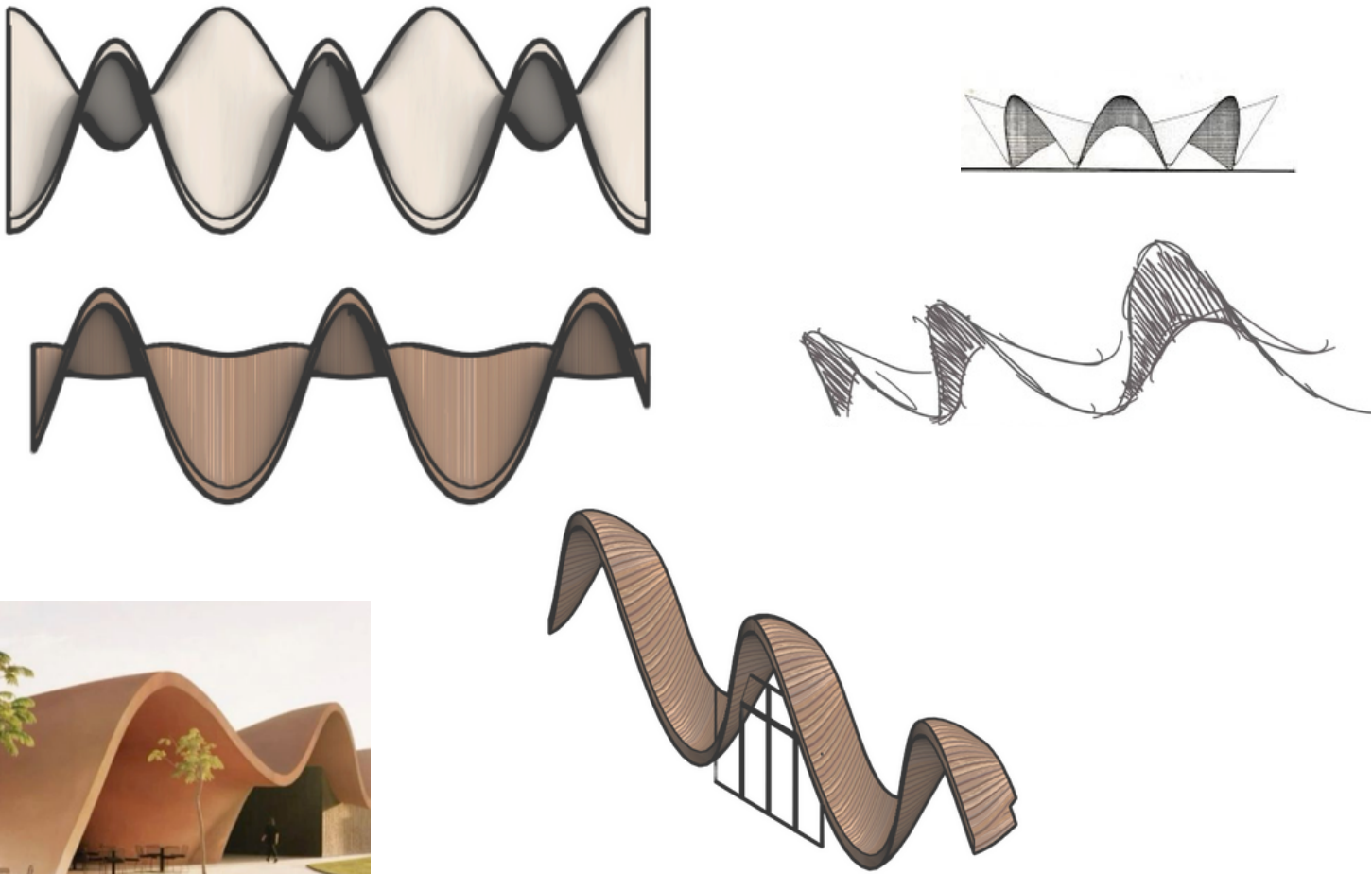
- High ceilings
- Large glass windows and doors
- Exhaust systems
- Adequate space and lighting



Design development



Sketches



Reference pictures



Design requirement and consideration for food preservation workshop



Adequate space

Ensure that the workshop has enough space to accommodate all the necessary equipment, workstations, storage areas, and movement of personnel. Plan for clear pathways and sufficient working space to prevent congestion and facilitate efficient workflow.



Zoning and segregation

It's essential to separate different areas within the workshop based on their specific functions. For example, allocate separate zones for food preparation, processing, packaging, storage, and cleaning. This helps prevent cross-contamination and maintain hygienic conditions.



Ventilation

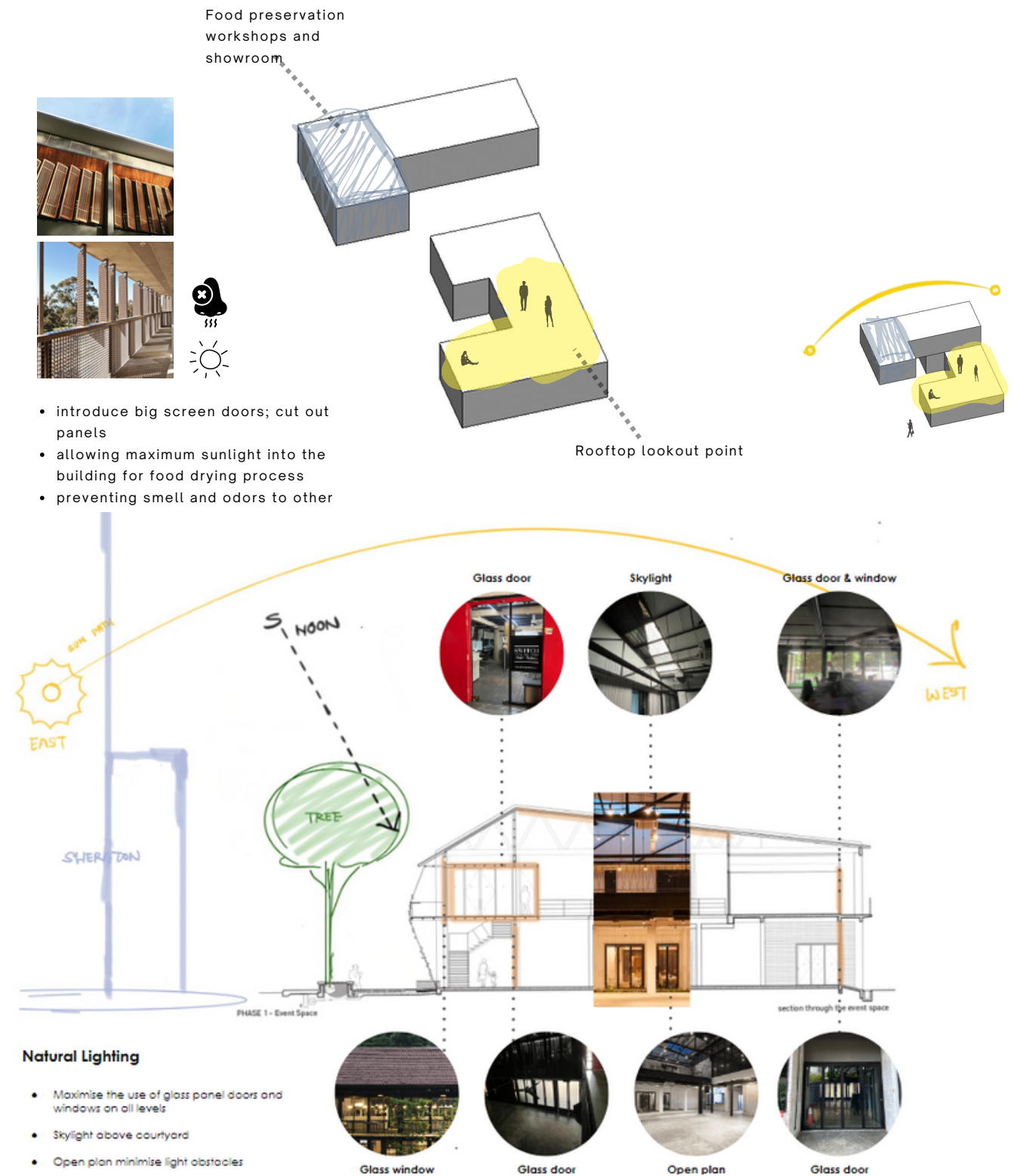
Proper ventilation is crucial to control odors, remove excess heat, and maintain suitable humidity levels. Incorporate ventilation systems such as exhaust fans or air conditioning to ensure fresh air circulation and minimize the risk of spoilage or microbial growth.



Lighting

Adequate lighting is necessary for tasks that require precision and attention to detail. Install ample lighting fixtures, including both natural and artificial lighting sources, to ensure clear visibility throughout the workshop.

Design strategy



Spatial requirement

Space listing:



Visitor Area

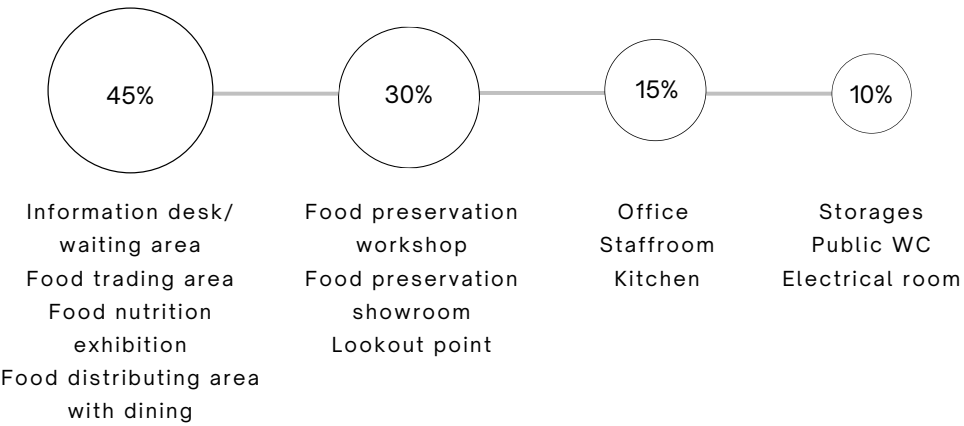
- Information desk/ waiting area
- Food preservation workshop
- Food preservation showroom
- Food trading area
- Food nutrition exhibition
- Food distributing area with dining
- Lookout point
- Public WC



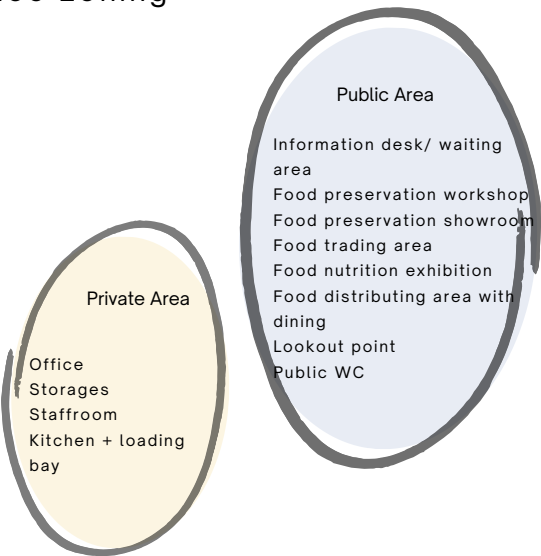
Staff Area

- Office
- Storages
- Staffroom
- Kitchen + loading bay

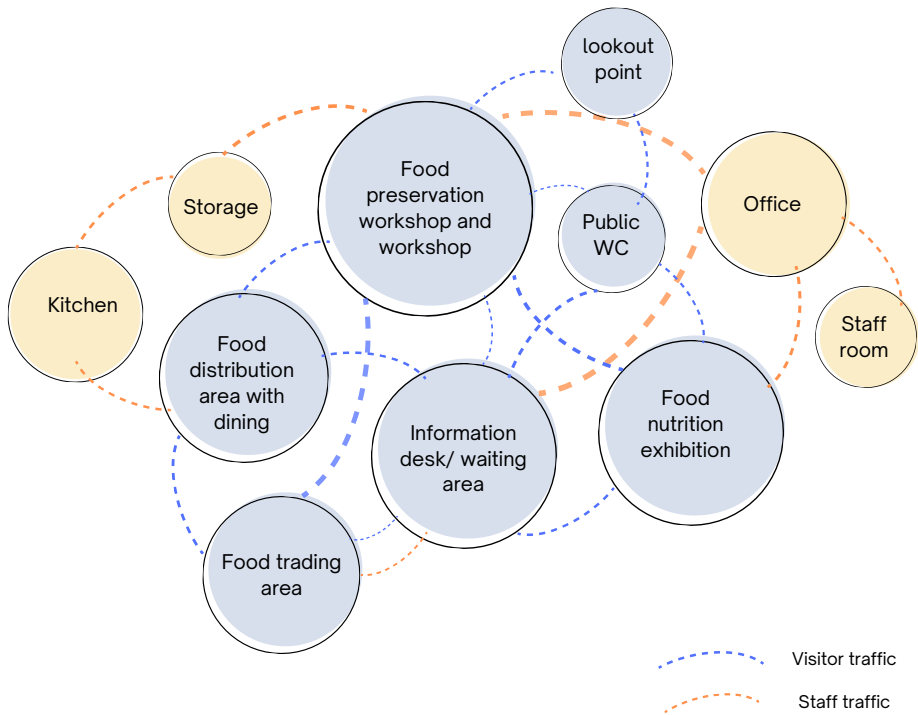
Space percentage



Space zoning



Space connectivity



Schedule of Accommodation (SOA)

LIST OF SPACE	PAX	AREA P/PAX (m2)	TOTAL AREA (m2)
Information desk	15	2	30
Food distributing area + dining	25	1.6	40
Food trading area	20	1.6	32
Food nutrition exhibition	20	1	20
Public WC	5	2	10
Food preservation workshop	15	1	15
Food preservation showroom	15	1	15
Rooftop lookout point	20	1	20

LIST OF SPACE	PAX	AREA P/PAX (m2)	TOTAL AREA (m2)
Office	8	1.5	12
Kitchen + loading bay	10	1.6	16
Storage	8	1	8

Space approach

For visitor



Preview



Connect



Learn



Sell

- Information desk/ waiting area

- Food distribution area with dining
- Food trading area

- Food preservation workshop
- Food nutrition exhibition
- Lookout point

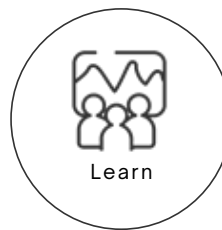
- Food selling stall



Connect

- Food distribution area with dining
- Food trading area

Soup kitchen provides a communal dining setting where people can sit together and share a meal. This creates an opportunity for individuals experiencing homelessness to engage in conversations, exchange stories, and build connections with others in similar situations. Homeless people can connect with each other through food trading as a means of sharing resources and meeting their immediate needs.



Learn

- Food preservation workshop
- Food nutrition exhibition
- Lookout point

Food preservation workshop provides a dynamic and immersive learning experience. By actively participating, engaging in practical exercises, participants can acquire new skills that will benefit them in many ways. Attending a food nutrition exhibition provides an opportunity to explore, individuals can acquire valuable knowledge about the importance of taking sufficient nutritious food in their daily lives.



reduce food insecurity and hunger



provide nutritious food



promote inclusivity



minimize food waste



minimize food waste



reduce food insecurity and hunger



act as a learning platform



promote inclusivity

For staff



Service



Work



Service

- Information desk/ waiting area
- Kitchen

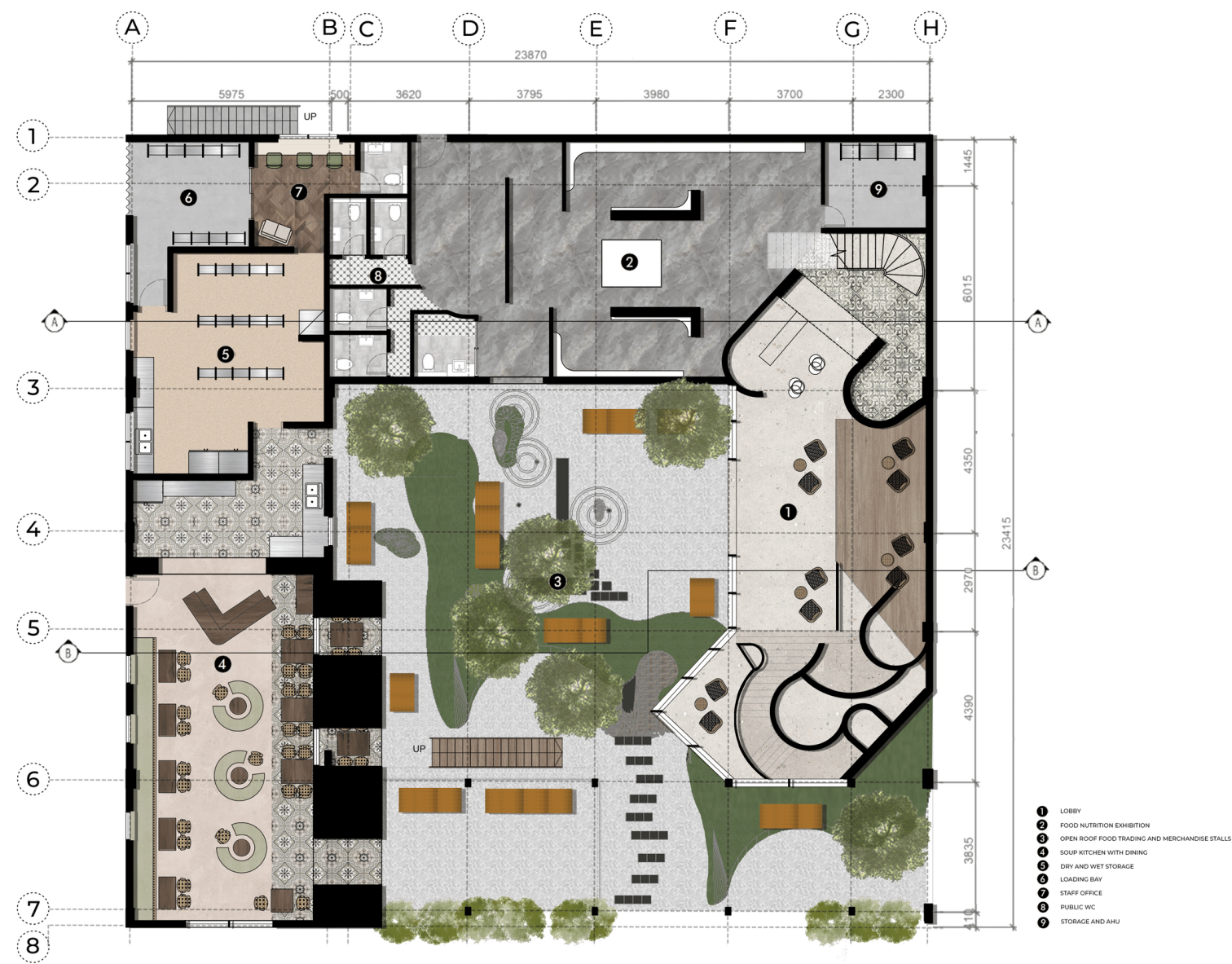
- office
- Storage

Team giving out services that fulfil and satisfy the visitors, making sure their needs are met in a manner that reflects positively on the soup kitchen program. Goal is to provide visitors an inclusive and interactive experience while providing food security and minimising food waste.

Initial space planning and sketches



Final layout plan

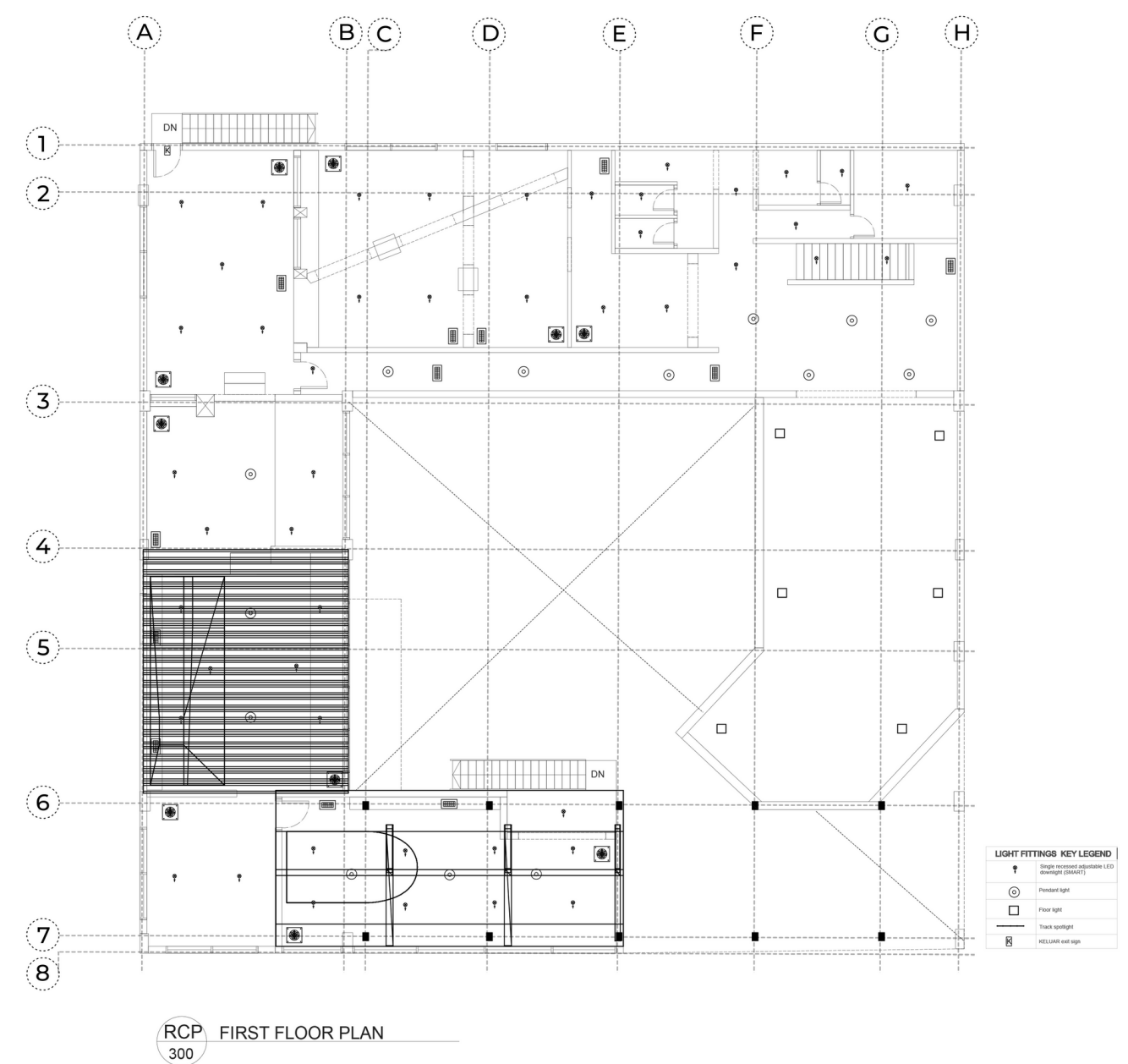
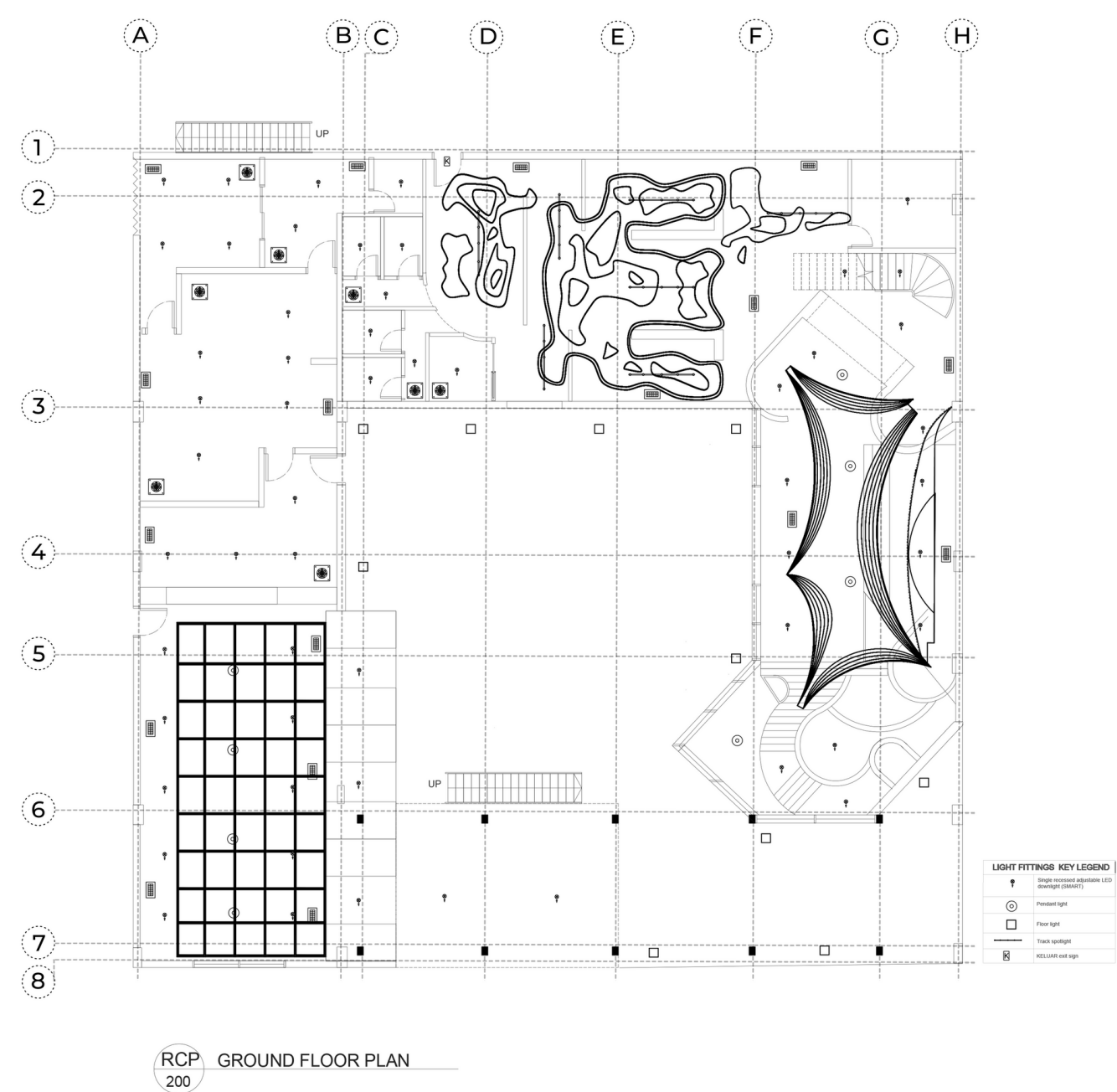


FP 000 GROUND FLOOR PLAN

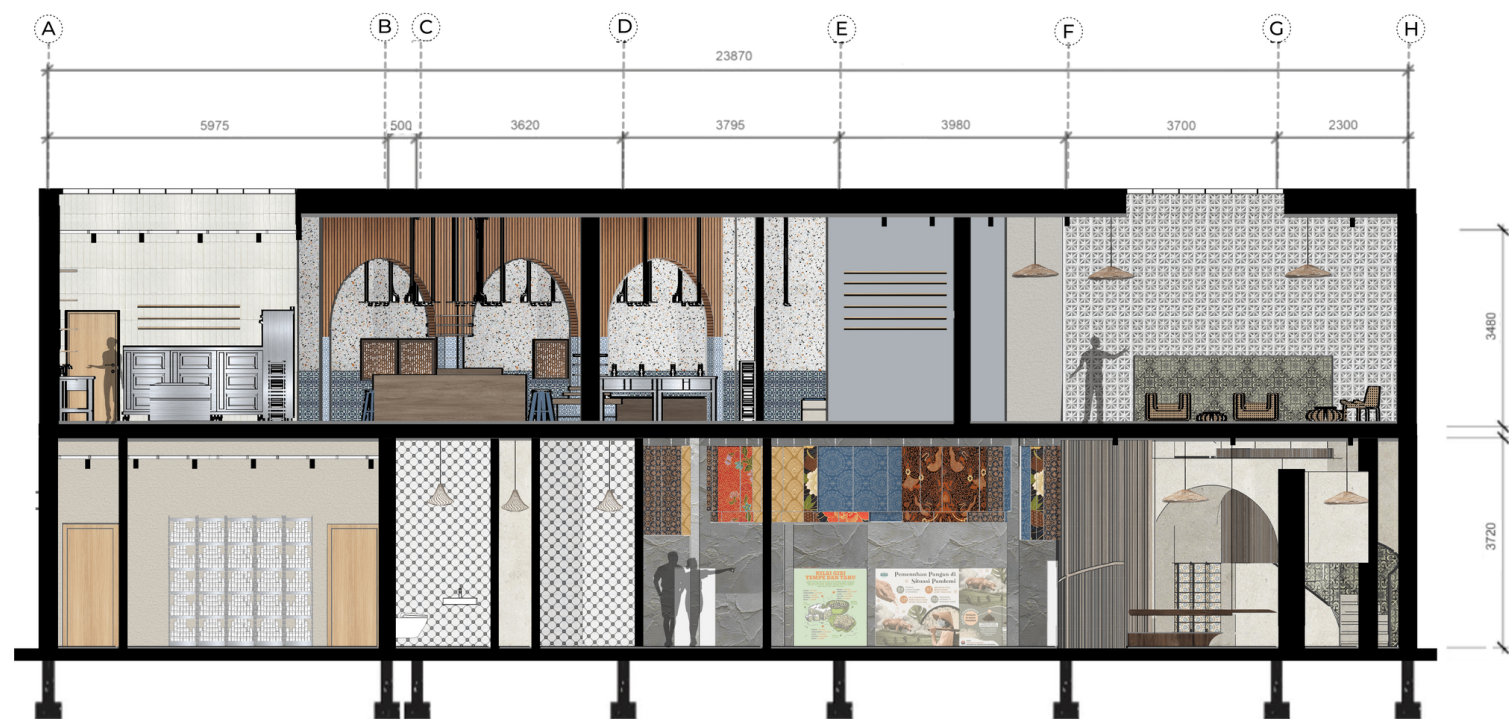


FP 100 FIRST FLOOR PLAN

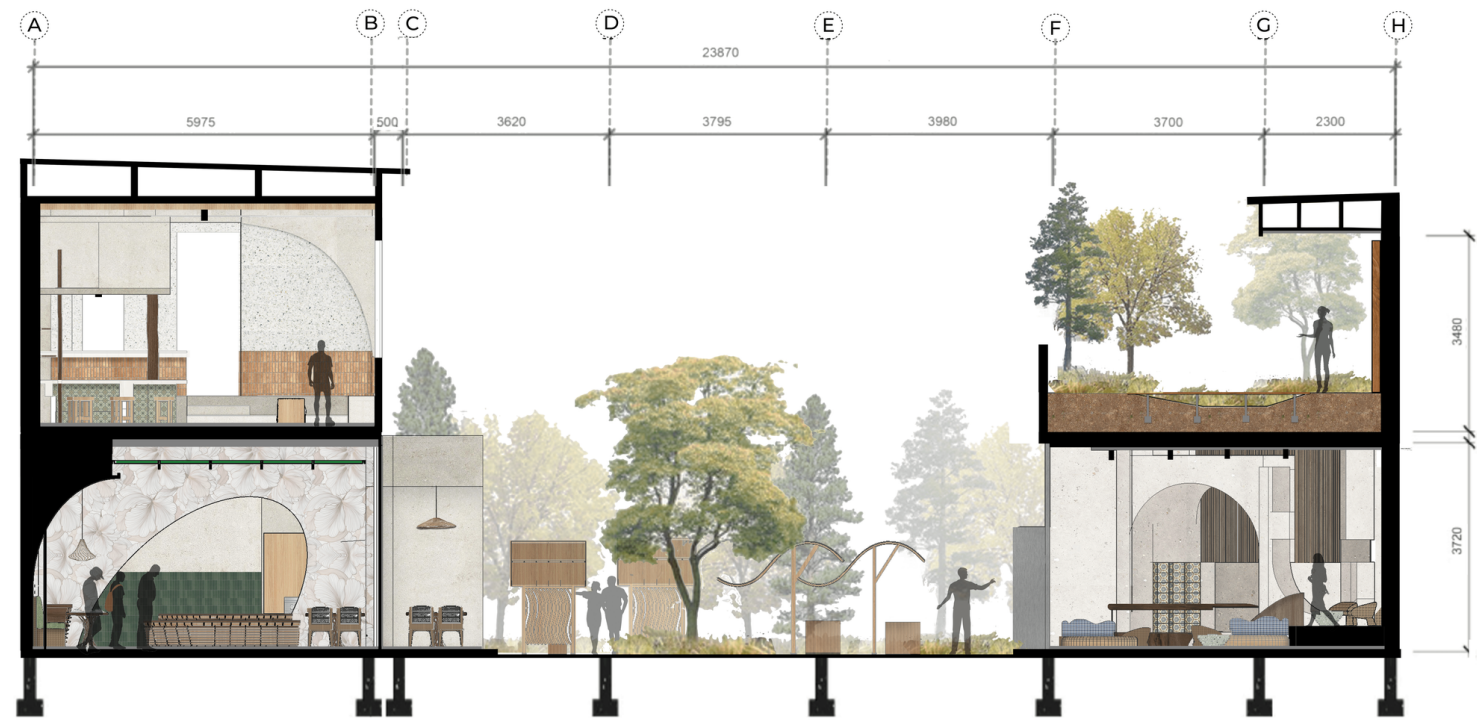
Final RCP



Final Sections

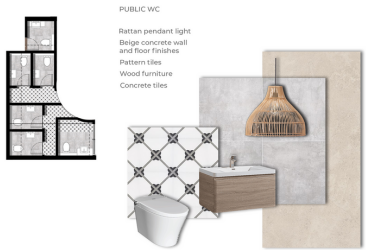
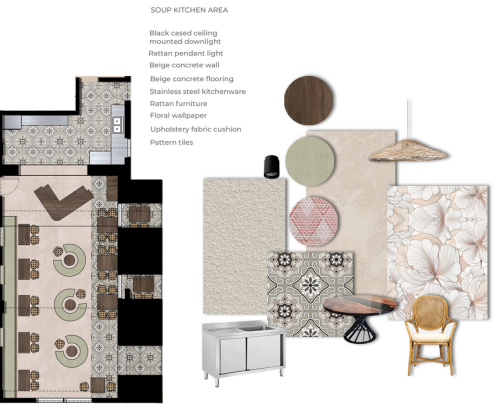


SC 400 SECTION A-A

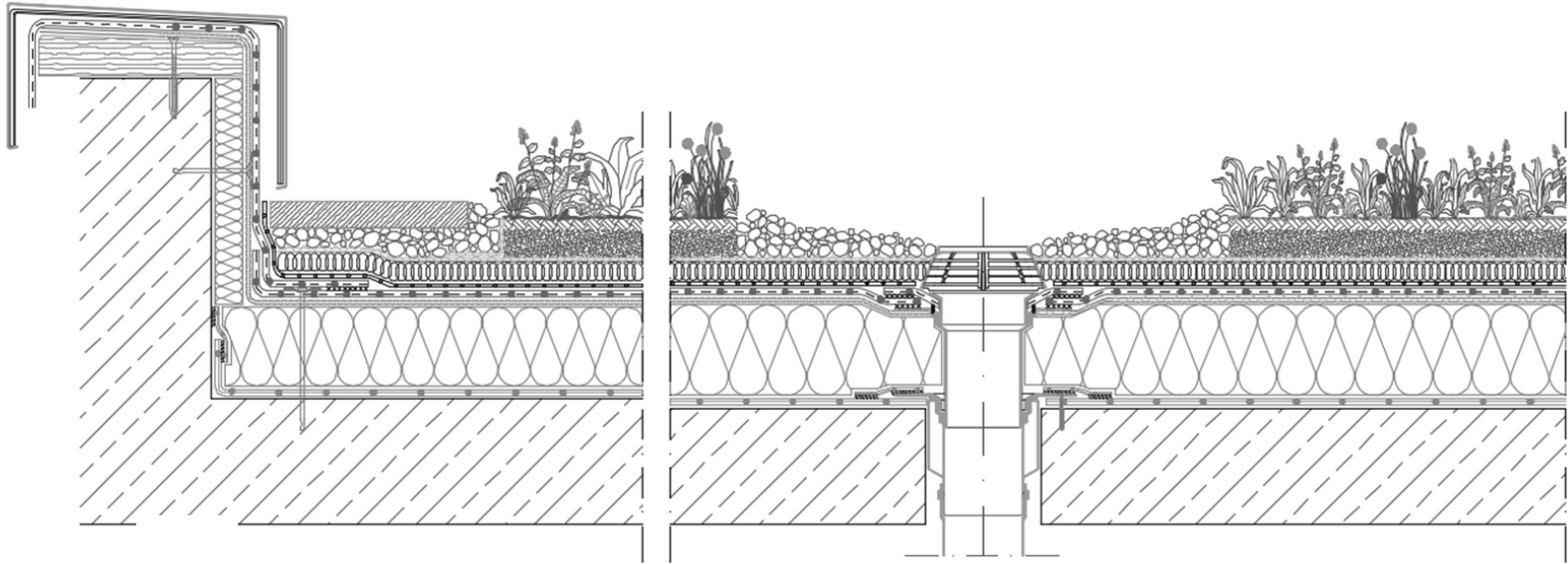


SC 500 SECTION B-B

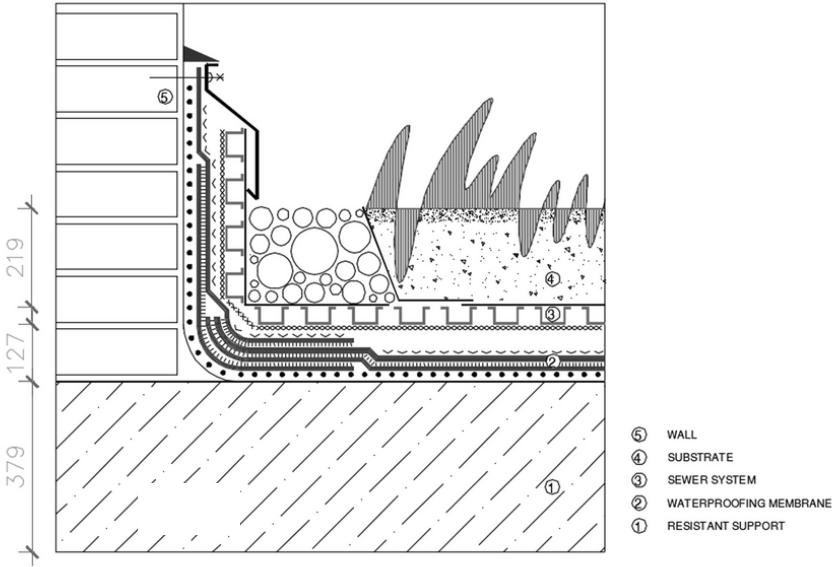
Space Styling



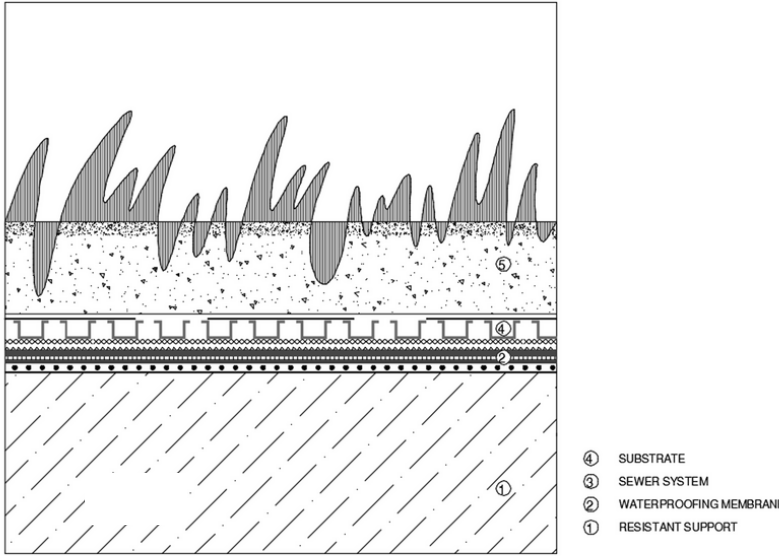
Detail 1- Green Rooftop



GREEN ROOFTOP - SECTION
SCALE 1:50

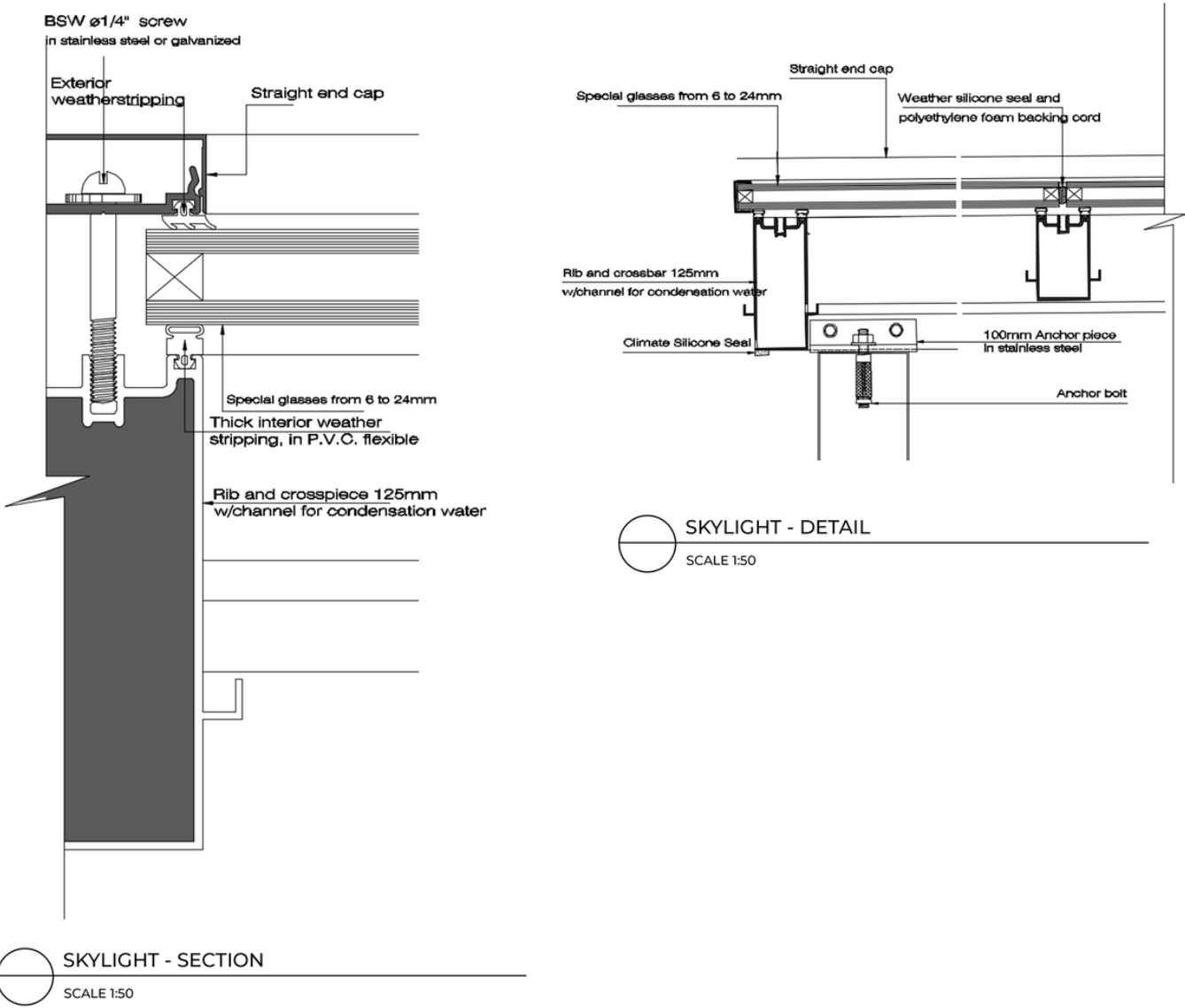


GREEN ROOFTOP - DETAIL A
SCALE 1:50

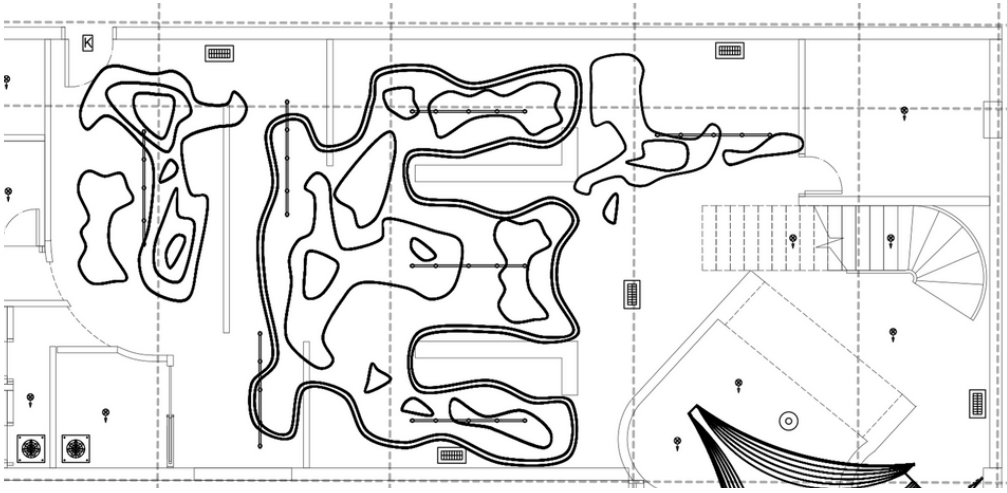
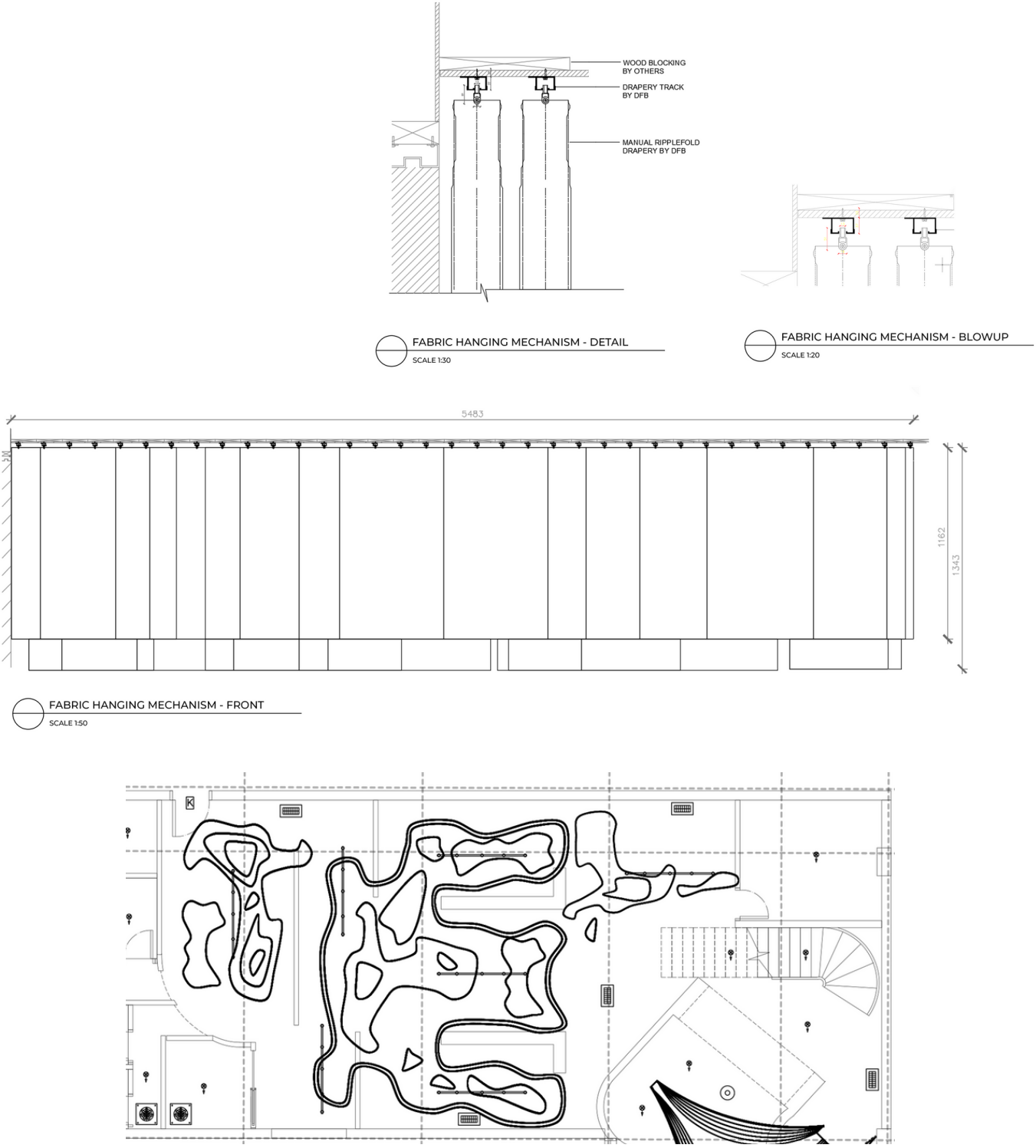


GREEN ROOFTOP - DETAIL B
SCALE 1:50

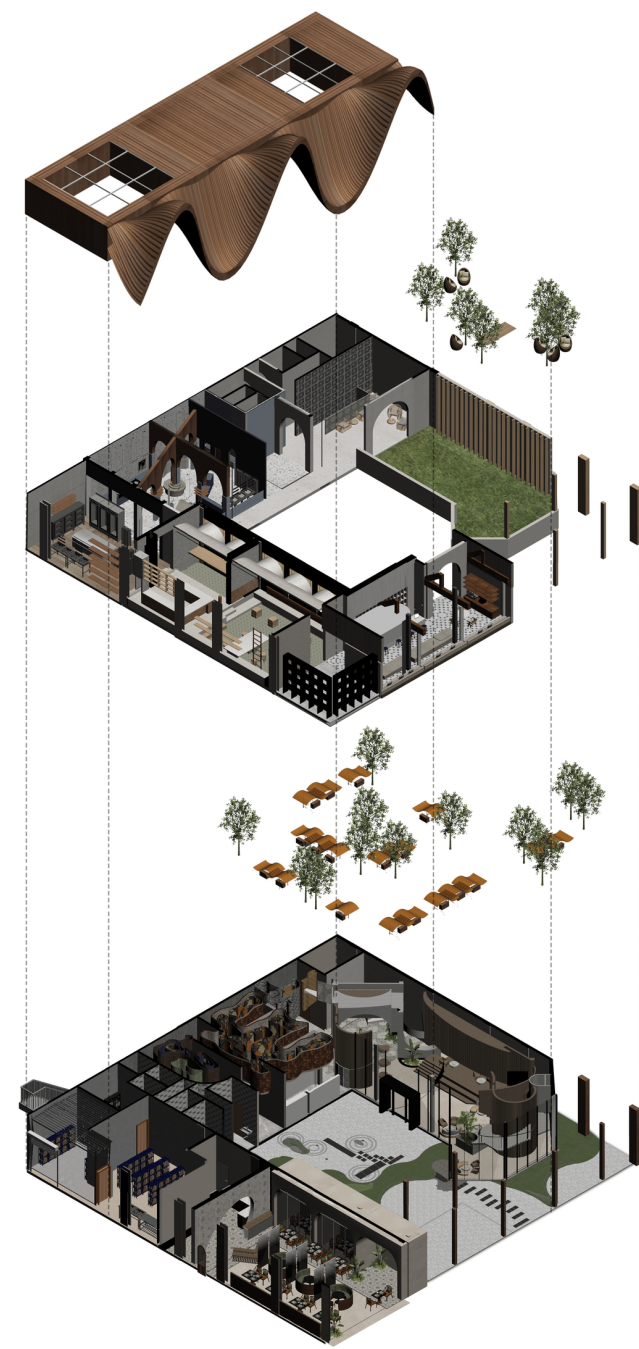
Detail 2- Glass Roof



Detail 3- Fabric hanging Mechanism



Final Axonometric and Facade



Final perspective views



lobby



Food nutrition exhibition

Soup kitchen with dining



Soup kitchen with dining



Staff food preservation area



Food preservation workshop



Outdoor food trading and merchandise

BIA FYP WORKBOOK 2023

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