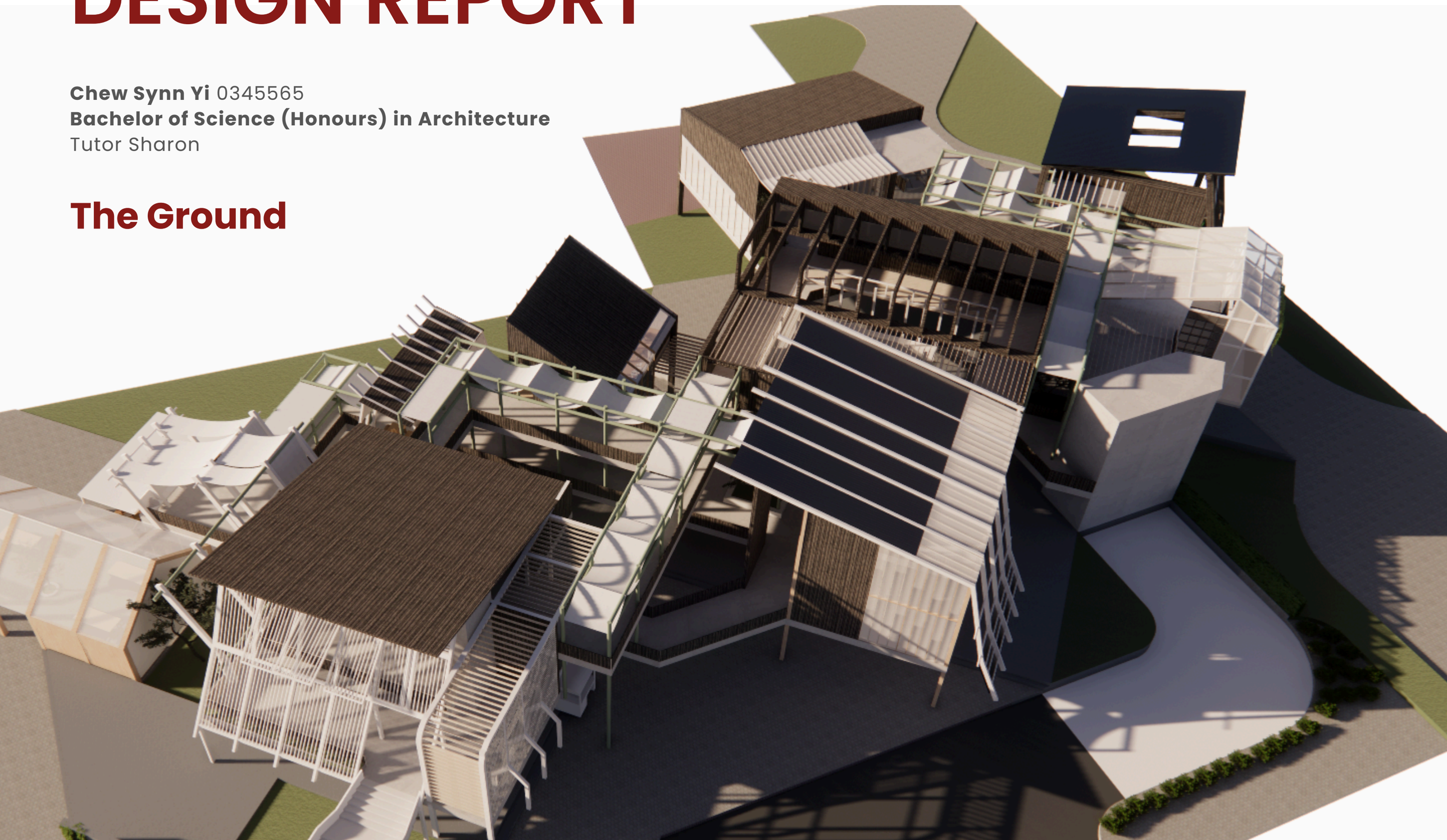
ARCHITECTURAL DESIGN REPORT

TAYLOR'S UNIVERSITY
Wisdom Integrity · Excellence

SCHOOL OF ARCHITECTURE, BUILDING AND DESIGN

Chew Synn Yi 0345565
Bachelor of Science (Honours) in Architecture
Tutor Sharon

The Ground



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1.1 Designer's CV Profile

C Synn Yi

Nationality
Malaysian

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Born on
06/ 02/ 2001

Email
synnyi.chew@gmail.com

Address
Selangor, Malaysia.

ACADEMIC BACKGROUND

2020 - 2025
Bachelor of Science (Hons) in Architecture
Taylor's University, Subang Jaya, Malaysia

2019 - 2020
Foundation in Science
University Tunku Abdul Rahman (UTAR)

2011 - 2016
High School
SMJK Yu Hua

PAST EXPERIENCE

July 2022 - Aug 2022
Intern for Architecture, Kawan Studio

Jan 2019 - May 2019
General Clerk, Projek Permata Jaya Sdn Bhd

EXTRA CURRICULAR ACTIVITIES

- *2019 - 2024*
  President , Vice President Education, Vice President Public Relation at Cheras Mandarin Toastmasters Club
- *2022 - 2023*
  World Vision Malaysia

PROFICIENCY

Modeling
Revit ★★★★★★☆☆☆☆
Sketchup ★★★★★★★★★☆
Autocad ★★★★★★★★★☆

Adobe
Photoshop ★★★★★★★★☆☆
Illustrator ★★★★★★☆☆☆☆
Indesign ★★★★★★☆☆☆☆

Rendering
Enscape ★★★★★★☆☆☆☆

SKILLS

Softwares *Revit, Sketchup, Lumion, Enscape, Photoshop, AutoCAD, Revit*

Design
Videography, Photography, Model Making

Languages
English, Chinese, Malay

02

Project Background

2.1 Project Introduction

Project Theme

Urban Room/ City Hub: Sensing the City by immersing to People's and place's needs and aspirations which becomes George Town's Third Space, providing social, recreation and cultural needs.

Project Location

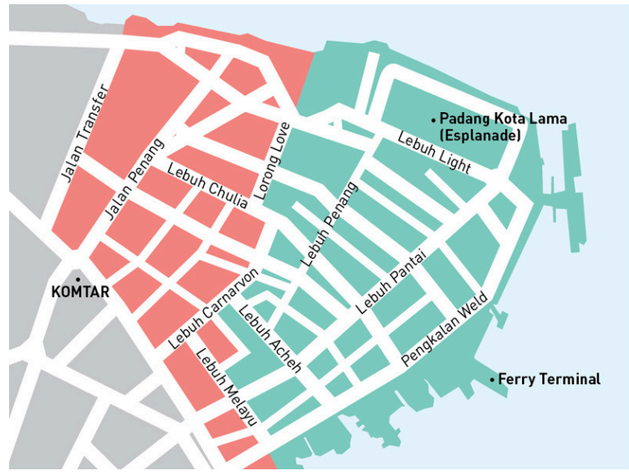
Georgetown Penang . It is located right beside a junction of 5 roads; Jalan Macalister, Jalan Penang, Jalan Magazine, Jalan Dato Keramat and Jalan Gurdwara.

Basic Requirements

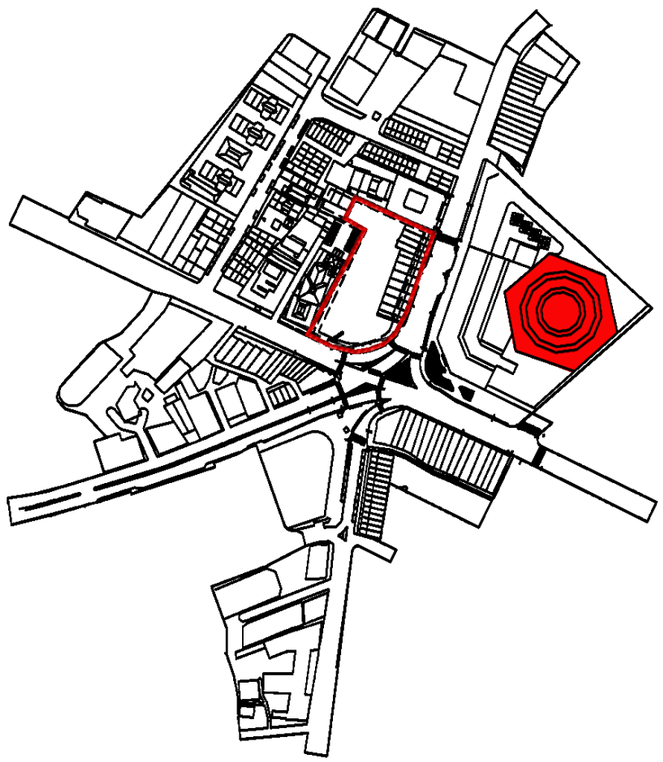
Building Function : Public Building
Gross Floor Area : 1800m² - 2000m² excl. Basement Parking
Building Design : 3-5 storeys, Open Space, Landscaping, Parking

Project Introduction

George Town, the capital city of Penang, Malaysia, is a UNESCO World Heritage Site renowned for its rich cultural heritage, diverse architecture, and vibrant street life. Throughout the years. the city has evolved into a unique blend of colonial-era buildings, traditional shophouses, religious landmarks. Nestled between right between a Malay mosque and a Chinese Clan House, and right beside the towering Komtar, sits Site 1. The location of the site is just outside of the boundary of Georgetown's Heritage zone, causing the history and memory of the site and its surrounding to be neglected by the city and its people.



2.1.1 Map of George Town, Penang



2.1.2 Site Plan, Not to Scale

03

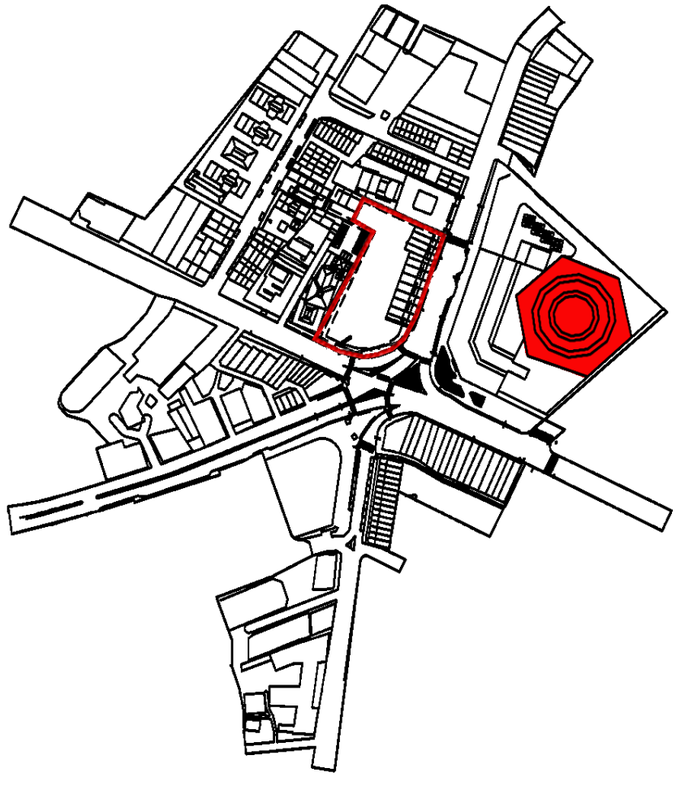
Contextual Studies

3.1 Micro Site Analysis

1936

1945

1952



The lonely beacon

KOMTAR once symbolized Malaysia's push for progress and modernity, but by the 1990s and 2000s,it fell into decline—abandoned by businesses and out of sync with the city, leaving behind an empty shell in the urban fabric.

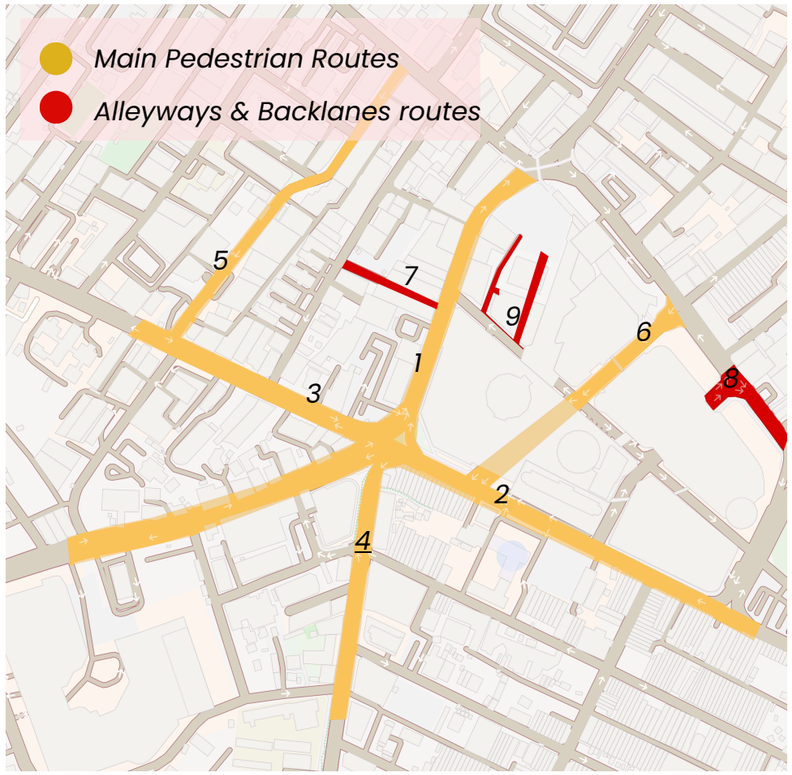
"All its known for today is a forgotten landmark, one seen without pride and essence. Existing as a forgotten pillar of hope. "

3.1 Micro Site Analysis

District

Surrounding area consists of mainly commercial buildings, with a wide variety of religous buildings built in close proximity in one another, demonstrating racial and cultural harmnony

Paths



1. *Jalan Penang (heritage retail corridor)*
2. *Jalan Magazine (KOMTAR's front facing arterial road*
3. *Jalan Macalister (Major east-west spine)*
4. *Jalan Gurdwara (Linked to Wembly and transportation)*
5. *Lorong Kinta (Compact high density shophouse street*
6. *Jalan Ria (side road near Komtar Walk and back entrances)*
7. *Lorong Bertam*
8. *Prangin Mall's side- Back alley behind Tek Soon Street (used by service staff and locals)*
9. *Behind Jalan Ria and KOMTAR car park (poor visibility access)*

High traffic in site due to being a junction where 5 main roads converge and known as 'city centre' of Georgetown. Despite high traffic flow, lack of stopping points and parking spots lead to high number of vehicles passing but not stopping on site.

Potential for multiple access from different dierections including from masjid, clan house and the back alley, helping the walkability of the site and city as a whole

3.1 Micro Site Analysis

“"I wish Komtar had more restaurants — it’d be easier to shop and eat. I love the food here, just **hate** going out in the afternoon 'cause it’s so hot. Still, I prefer Penang over KL."

There used to be many **cinemas** here — all gone now. They were affordable, part of daily life. But after Komtar came, they slowly shut down.

“"Got more foreigners now. Not a heritage site, so government also **don’t care**. Shop lots all individually owned, they don’t want to sell. Too expensive for government... maybe one day they will."

Now, people only come here for the government offices like UTC and MBPP. The only real attraction left is The Top, but it **hasn’t really helped** local businesses or brought people to the other side of Komtar.

I really miss the **cinemas** that used to be around here. Not sure why they closed them all... they were such a big part of the area.

Komtar holds my childhood like the old McD, the **cinemas.** They’re gone now, and it’s sad. Penang feels like home, small and close-knit. I wish old shophouses were preserved. **Cinema hopping** with my dad was everything.

3.1 Micro Site Analysis

Strength

strong visual anchor with its dominant landmark and placemarkers that are visible from different direction and orientation. Its tertiary to back lanes Lanes offer good pedestrian permeability with proper sun shade.

Weakness

Illegal plots builidngs create dead ends. The effect of overextension of commercial buildings cause edges to be unclear and fragmented.

Opportunity

Widen lanes like Bertam Lane for better soft edges.
Increasing walkability through clearer boundary of edges and proper crosswalks.

Threats

Over-commercialisation causes spillover onto walkways causing pedestrian flow to be obstructed and confusing.

04

Design Development

4.1 Design Narrative & Concept

At the once-vibrant heart of George Town, Simpang Enam-where six roads met in a swirl of trade, prayer, and exchange now lies muted and fragmented. Overshadowed by KOMTAR'S scale and drained by traffic flow, this once-thriving junction has lost its rhythm, its memory faded under the weight of commercial sprawl and urban neglect.
The Reground Urban Hub a call to reinhabit this space-not with vehicles, but with voices, rituals, and relationships. It transforms the site from a forgotten transit node into a civic platform for cultural coexistence and collective memory. Drawing from the original radial geometry, six symbolic axes unfold-hosting performance, storytelling, prayer, making, trading, and learning each reflecting Penang's plural cultural life.

At the core lies a shared commons: a space for gathering, pausing, and celebration.
Around it, micro-pavilions, interfaith courtyards, and shaded walkways create room for quiet reflection and lively exchange. This isn't a nostalgic revival-it's a deliberate act of cultural resilience and urban healing.

Responding to the area's current fragmentation-low walkability, loss of heritage, aging population-the project integrates gardens, food heritage labs, and craft spaces to revive public life and reconnect people with place and each other. Sustainability is embedded not only through local materials and green design but in its deeper mission: to restore meaning and belonging.

Here, culture is not preserved behind glass-it's lived. It is felt in the hands of artisans, heard in stories shared, and seen in rituals unfolding. The urban hub doesn't just redesign space—it reclaims Penang's civic soul.

ISSUES

Elderly

insufficient spaces to rest or engage in meaningful activities and dialogues

Tourist

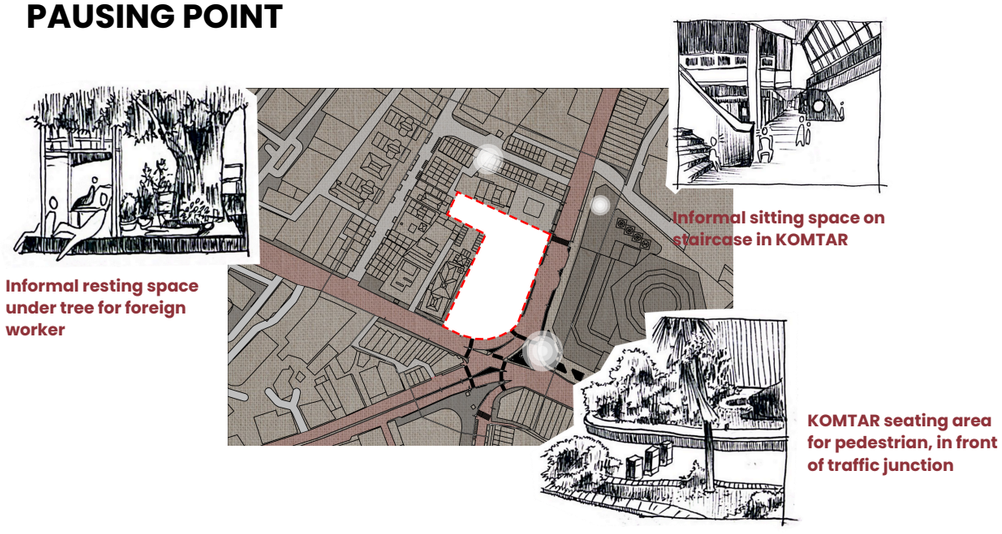
experience only surface-level glimpses of Penang's rich culture, with limited opportunities to dive deeper into its history, local traditions, and authentic experiences

Youngster/Local Artist

-lack community platforms to showcase their talents, creativity, and engage with others

-lack of dynamic, social spaces where young people can come together,

PAUSING POINT



4.2 Precedent Studies

Simpla Kert's use of reclaimed and recycled materials can inspire The Reclamation Nexus to incorporate similar elements, ensuring the building is both environmentally sustainable and visually distinctive
• Adopting the principle of adaptive reuse, The Reclamation Nexus can transform existing structures or materials into functional and aesthetically pleasing spaces, preserving the historical essence while promoting sustalnability.
• Creating multi-functional spaces that cater to diverse activities, such as workshops, art exhibitions, and community events, will foster a lively and engaging atmosphere similar to Simpla Kert.

The Commons

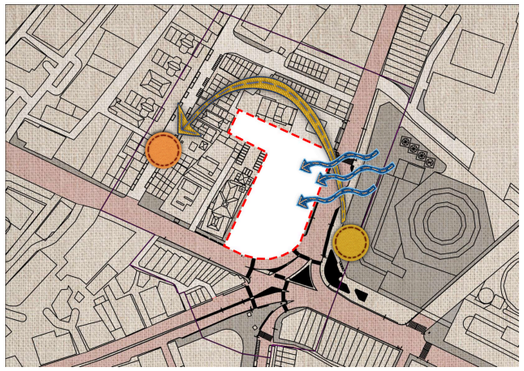
Architect : Department of Architecture

a vertical open-air public space folding upward as a backbone of the building

a landscape of steps and ramps integrated with platforms, seatings, planting and small kiosks.

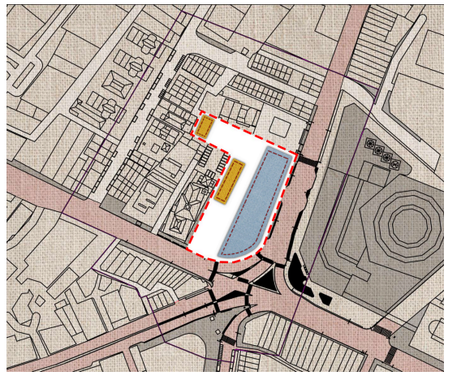
The space vertically and horizontally flows in and out the entire building and allows for natural ventilation throughout.

4.3 Site Planning Stratgies



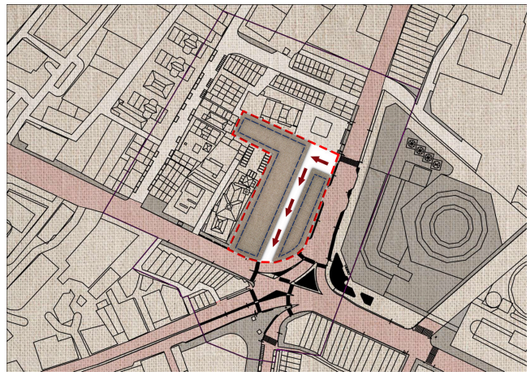
Solar Panel

The site is fully exposed to the sun during the day, solar panels will be installed on the roof to harness solar energy.



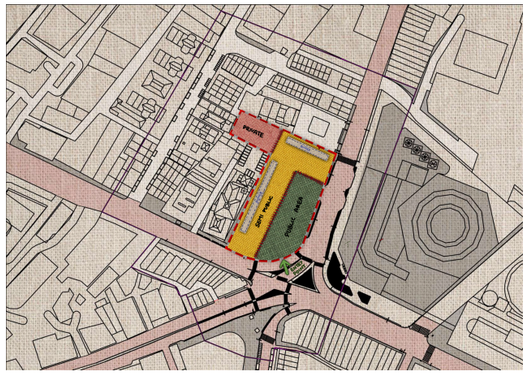
Sun Shading Devices

- To mitigate excessive heat gain and glare from the harsh afternoon sun, horizontal and vertical sun-shading devices will be strategically integrated on the west-facing façade.
- The site is fully exposed to the sun during the day, solar panels will be installed on the roof to harness solar energy.



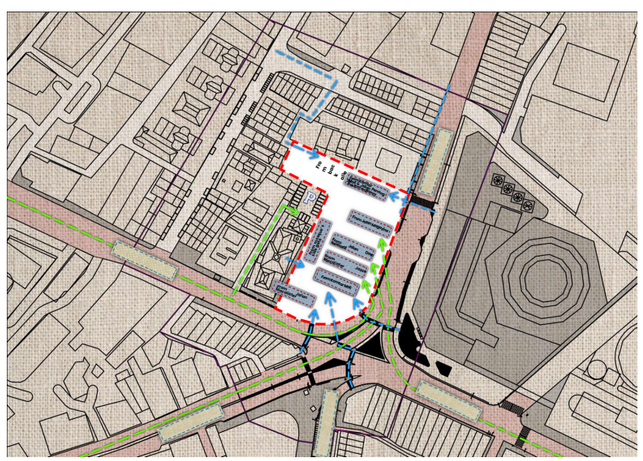
Natural Ventilation

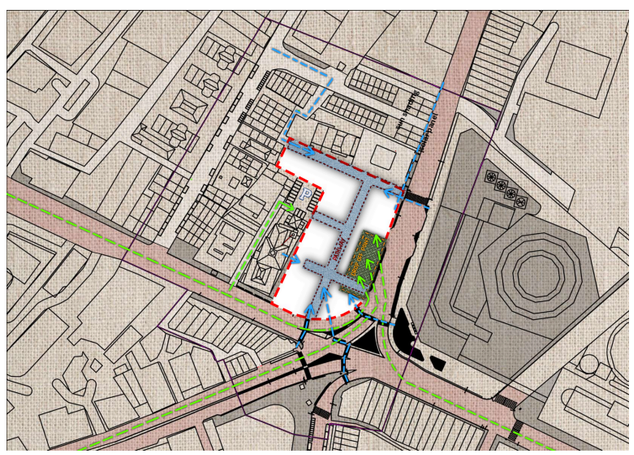
Openings and ventilation pathways will be oriented towards the East-Northeast, aligning with wind directions to facilitate cross-ventilation.



Buffer & Entry Point

Implemented along the semi-public that facing the mosque and parking area to prevent direct sightlines from the mosque into the building, while also blocking the parking lots view (negative view)





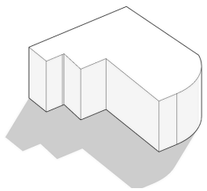
Accessibility

LEGEND:

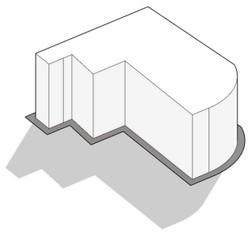
Pedestrian walkway routes

vehicle walkway routes

4.4 Concept & Massing Strategies

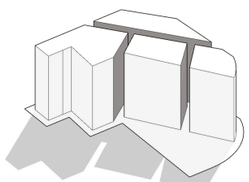


Site



Setback

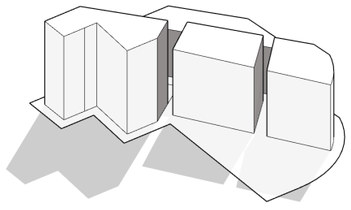
Maximizing Built Area;
asolid block thatmaximizes the potential floor space



Orientation

Exposure & Openness;
a voidiscarved outof thecenter portion of the main block.

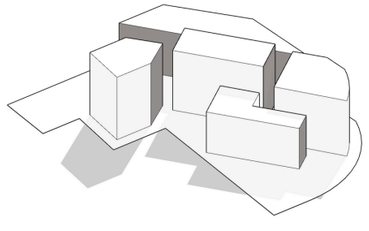
Central Utilities;
surrounding portionsofthe site are lowered.



Leveling

Courtyard & Connectivity;
main blockis further sculpted by pulling section onwards creating walkways.

Playing with Volumes;
certain parts extruded upwards creating towers for manipulation of volumes.



Space Planning

Sun, Shades & Ventilation;
Strategically positioned blocks for shade and natural lighting.

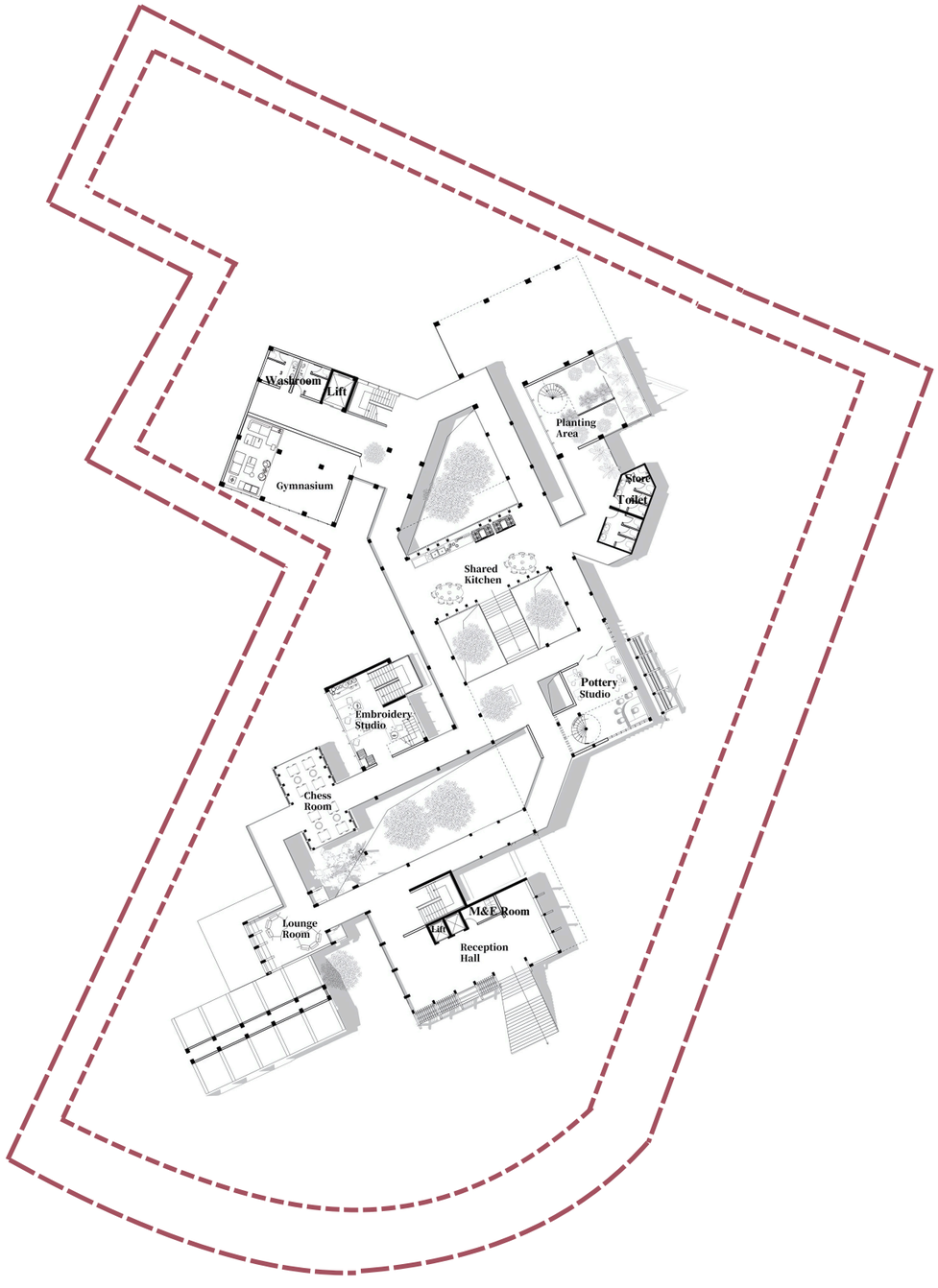
4.5 Spatial Planning & Organization

Programmes:

1. Cafe/Outdoor Cafe
2. Open Retail Space
3. Local Artisan Market
4. Multifunctional Area
5. Outdoor Seating Area

The ground floor plan uses an open concept where spaces transition into one another seemlessly, consisting of public spaces and landscaping in between spaces to bring life and comfort for users.

4.5 Spatial Planning & Organization

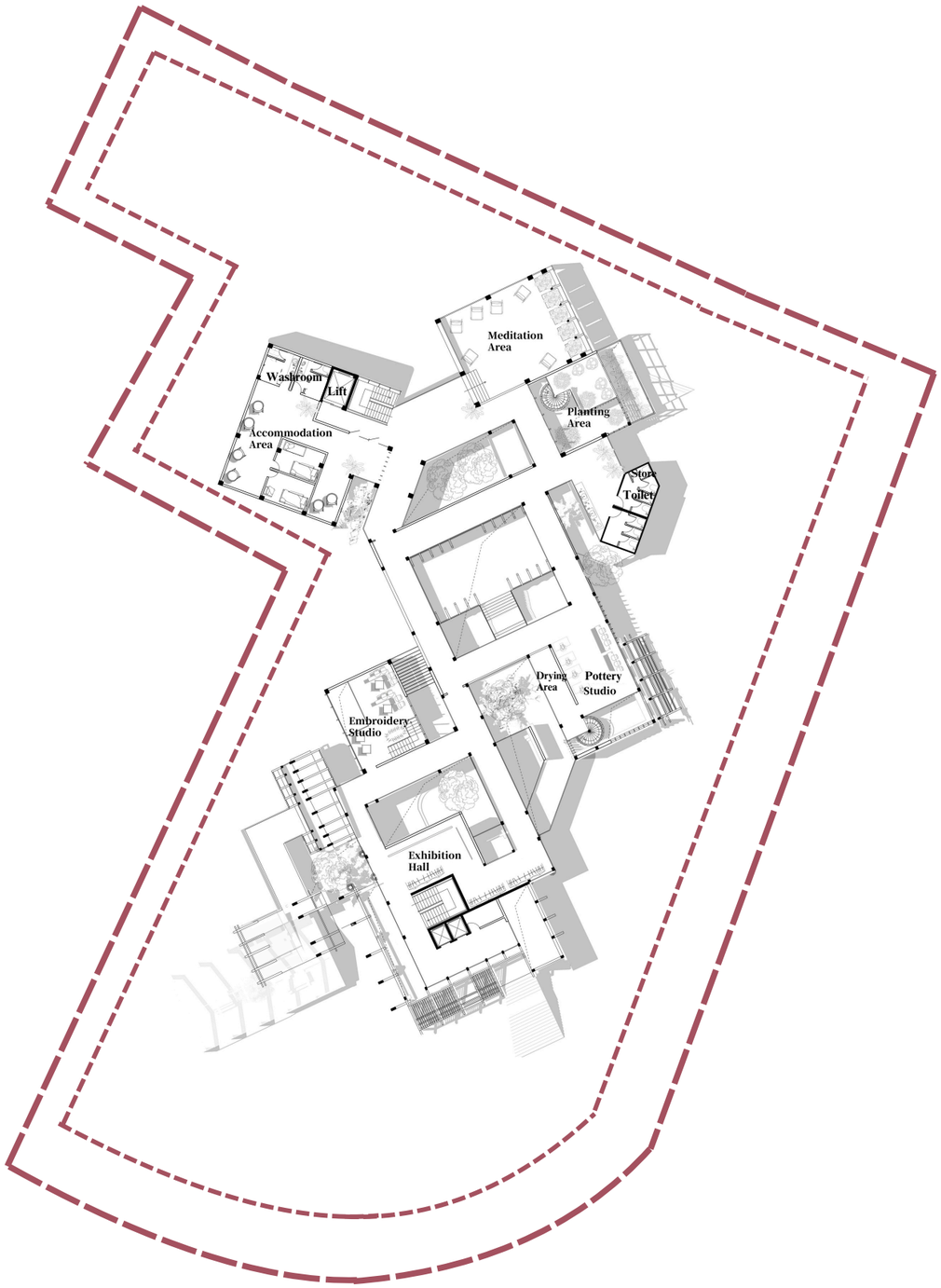


Programmes:

1. Embroidery Studio
2. Planting Area
3. Gymnasium
4. Shared Kitchen
5. Chess Room
6. Lounge Roomm

The first floor consists of semi public spaces housing a portion of the main programmes. Circulation spaces are expanded to accomodate activities. It acts as a quiter public space

4.5 Spatial Planning & Organization



Programmes:

1. Meditation Area
2. Accommodation Area
3. Embroidery Studio
4. Pottery Studio/Drying Area
5. Exhibition Hall
6. Planting Area

The second floor consists of quitest public spaces facilitating the studios where concentration and contemplation are required

05

Final Outcome

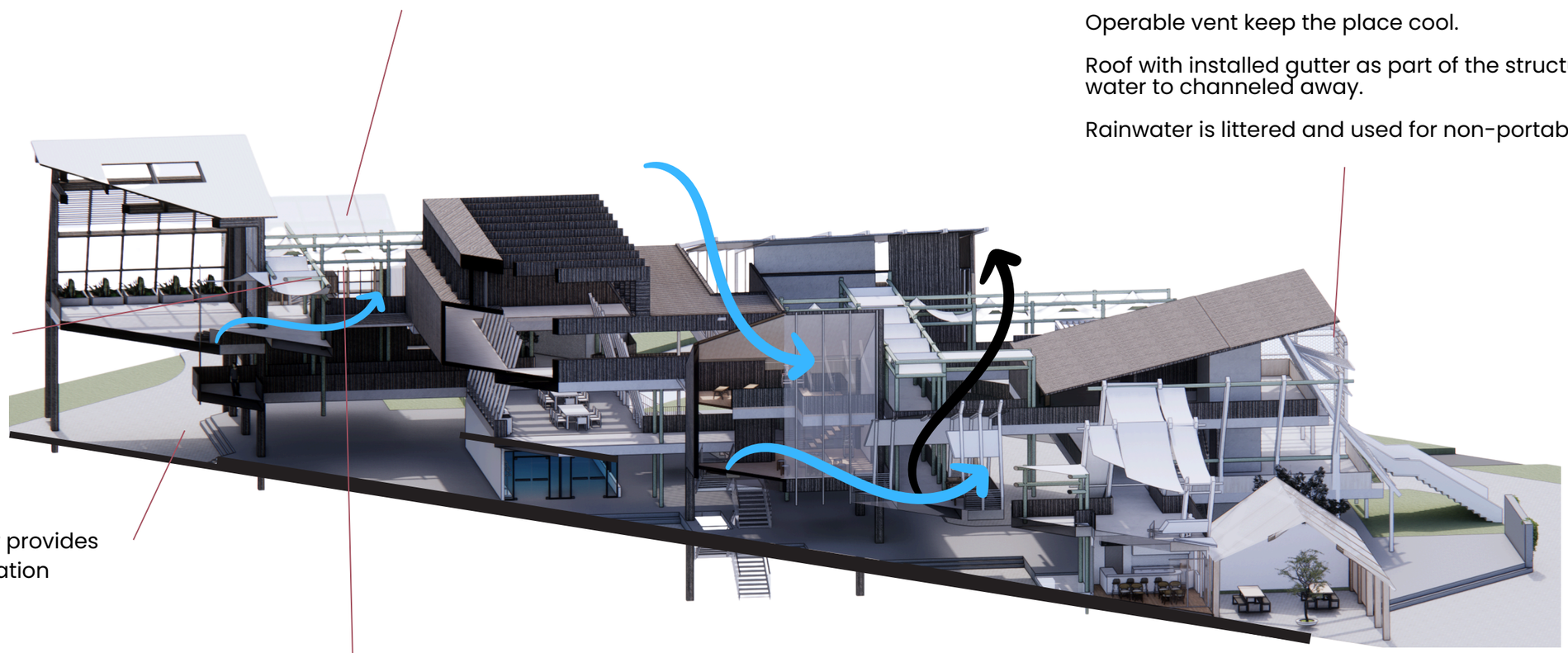
5.1 Green Strategies and Features

Polycarbonate roof allows sunlight to penetrate into the building

Operable vent keep the place cool.

Roof with installed gutter as part of the structure allow water to channeled away.

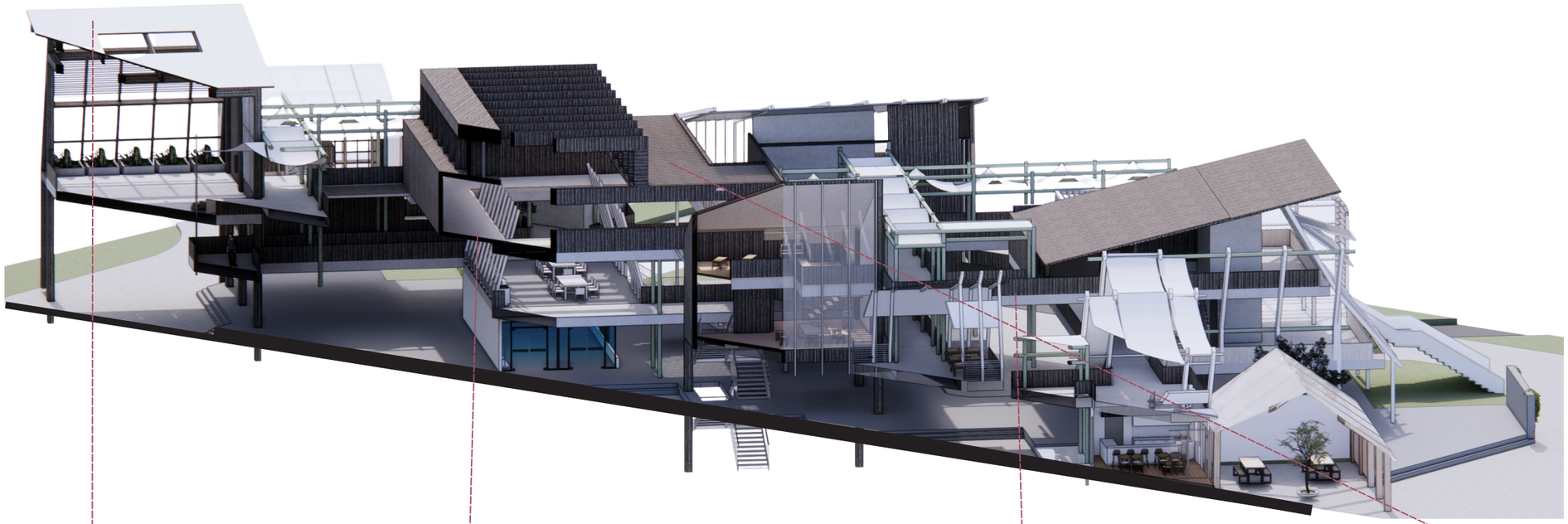
Rainwater is littered and used for non-portable use.



Open ground floor provides natural ventilation

Integrating vertical greeneries facade on building exteriors to enhance insulation. Improve air quality and act as a screen- it allows wind and light to penetrate in

5.2 Material and Resources



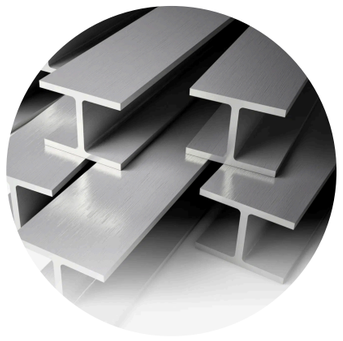
Seemless Zinc Roof Panel

Zinc is flexible and can be used for curved roofing and cladding. It is durable, aesthetically refined, and works best when supported by a strong framework to create flowing, sculptural roof forms.

Concrete

Concrete flooring is a versatile and durable option for both residential and commercial spaces. inherent strength, resistance to wear, and ability to withstand heavy use make

Aluminum

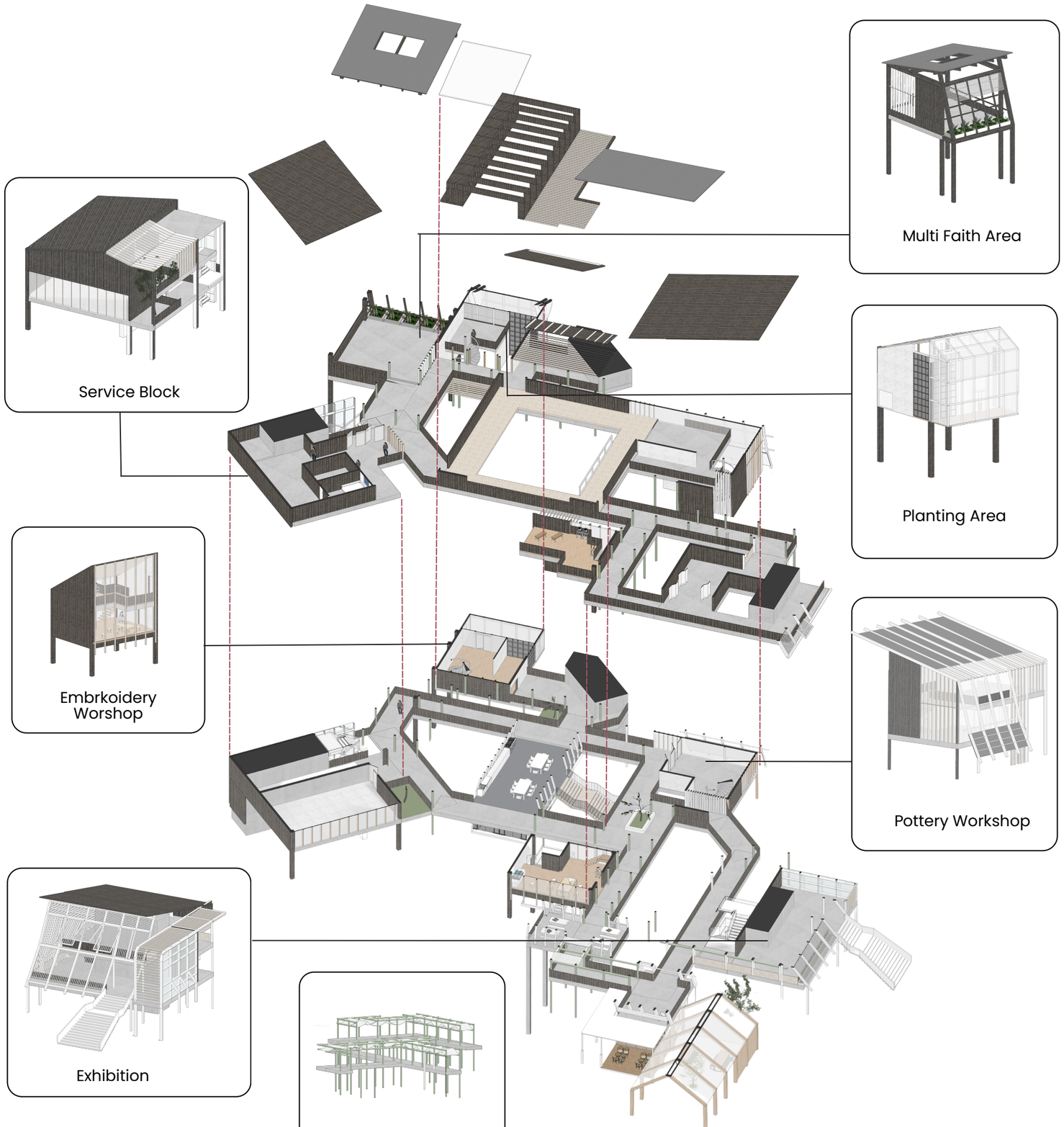


Strong and flexible steel frames

Merbau Wood

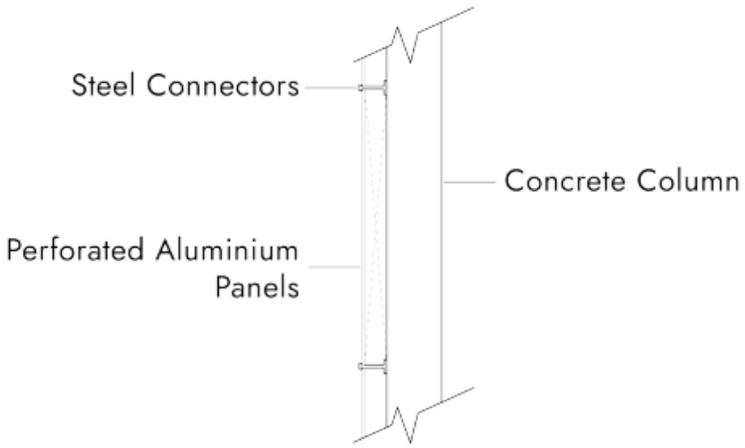
Highly durable Malaysian hardwood known for its resistance to decay, making it ideal for interiors exposed to humidity. It has rich warm tones and that enhance visual appeal and comfort.

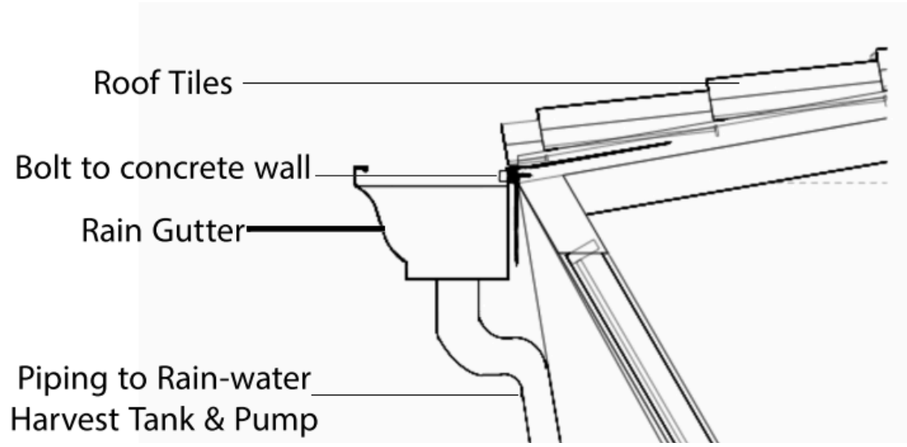
5.3 Architectural Details



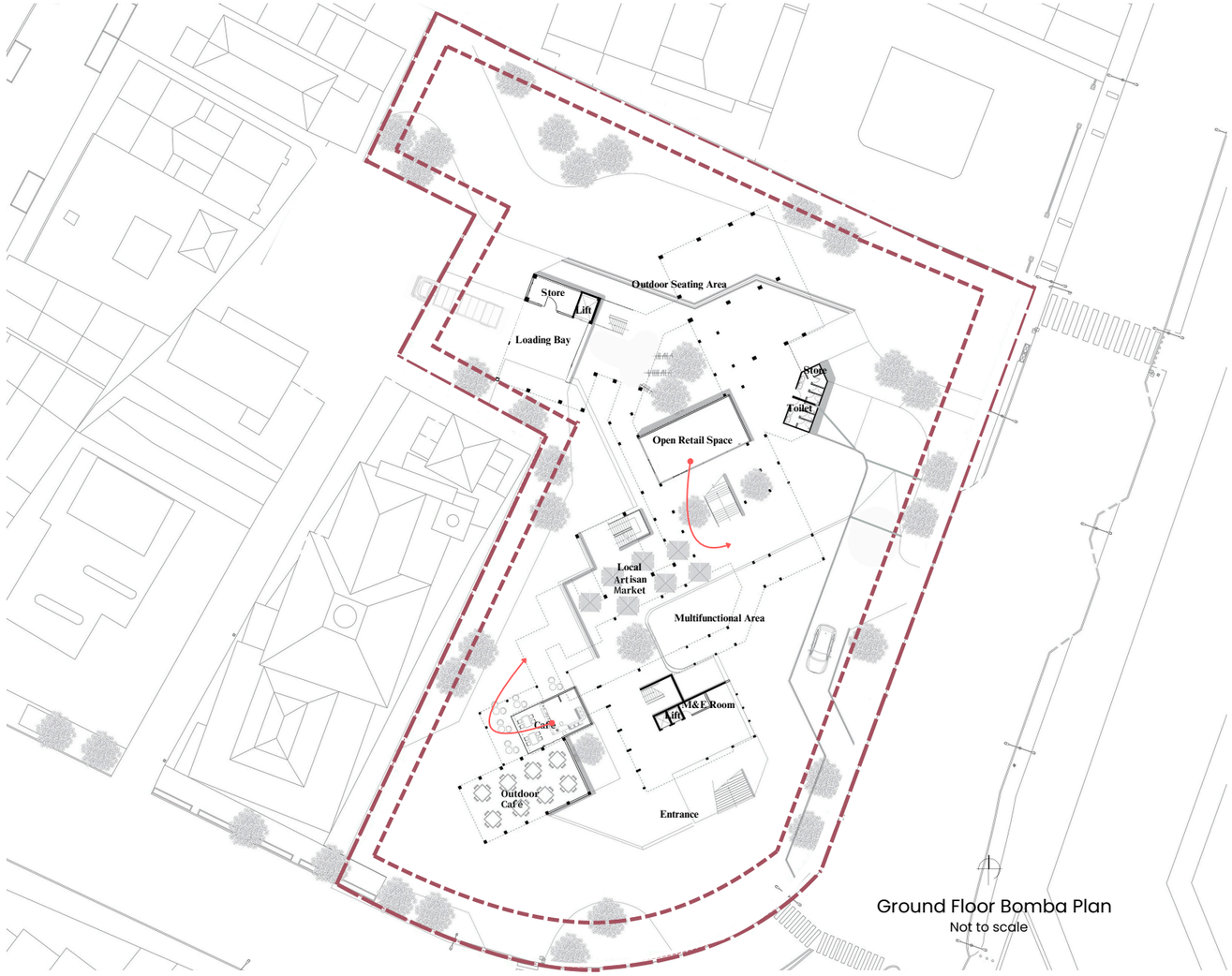
Exploded Axonometric
Not to Scale

5.3 Architectural Details

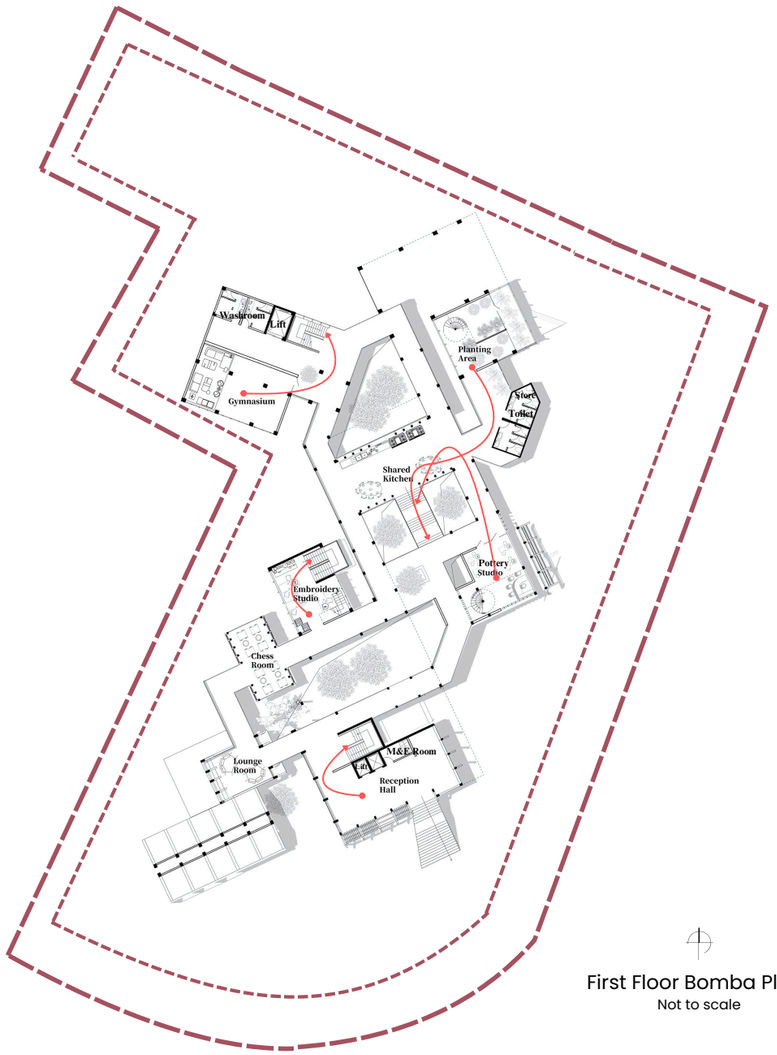




5.4 Bomba Plans



Ground Floor Bomba Plan
Not to scale



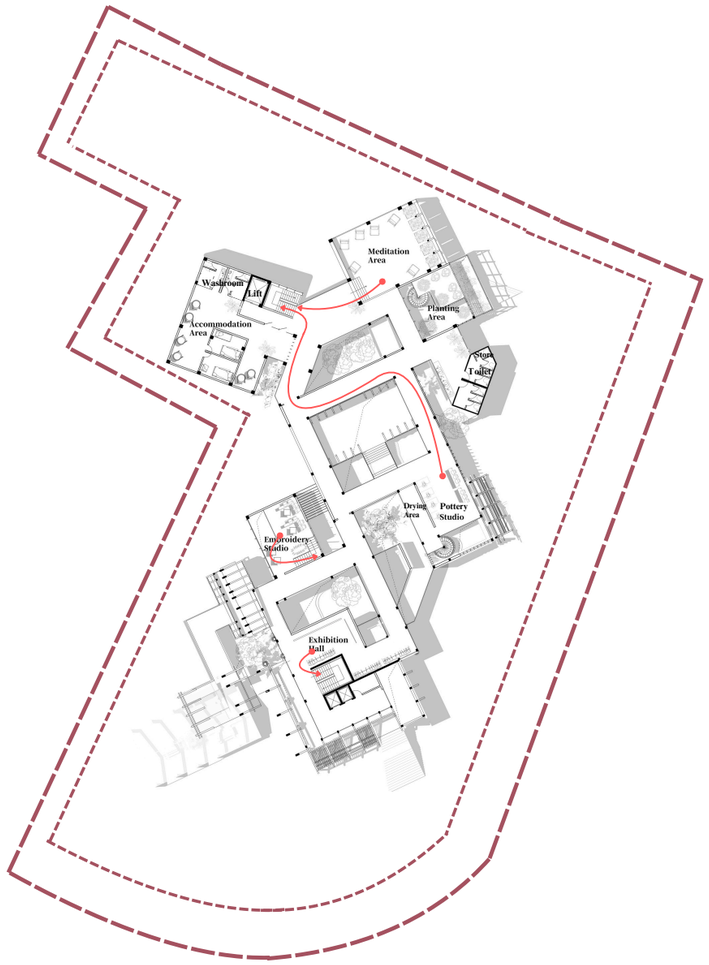
First Floor Bomba Plan
Not to scale

LEGENDS

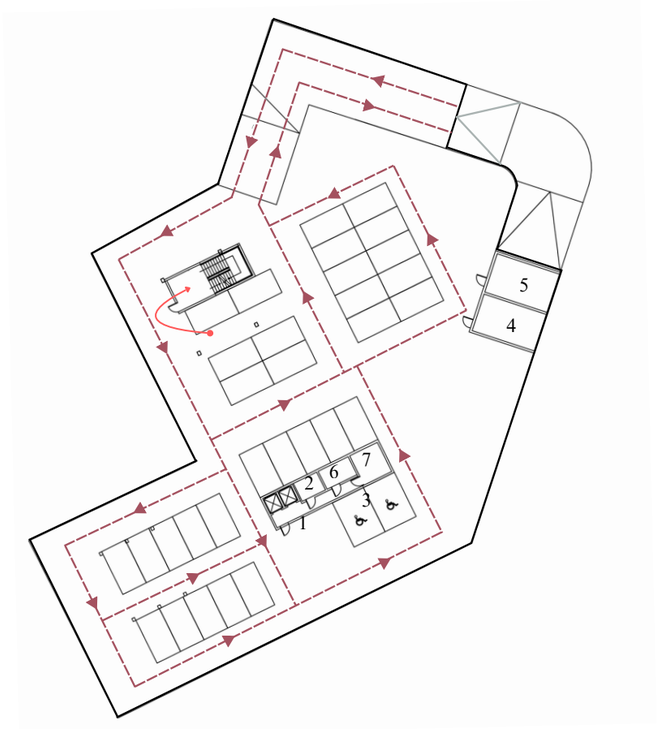
Escape Route

- Indicate the travel distance from the dead ends to the nearest fire escapes on the plans
- Use symbols to indicate the appropriate active fire protection systems on the plans

5.4 Bomba Plans



First Floor Bomba Plan
Not to scale

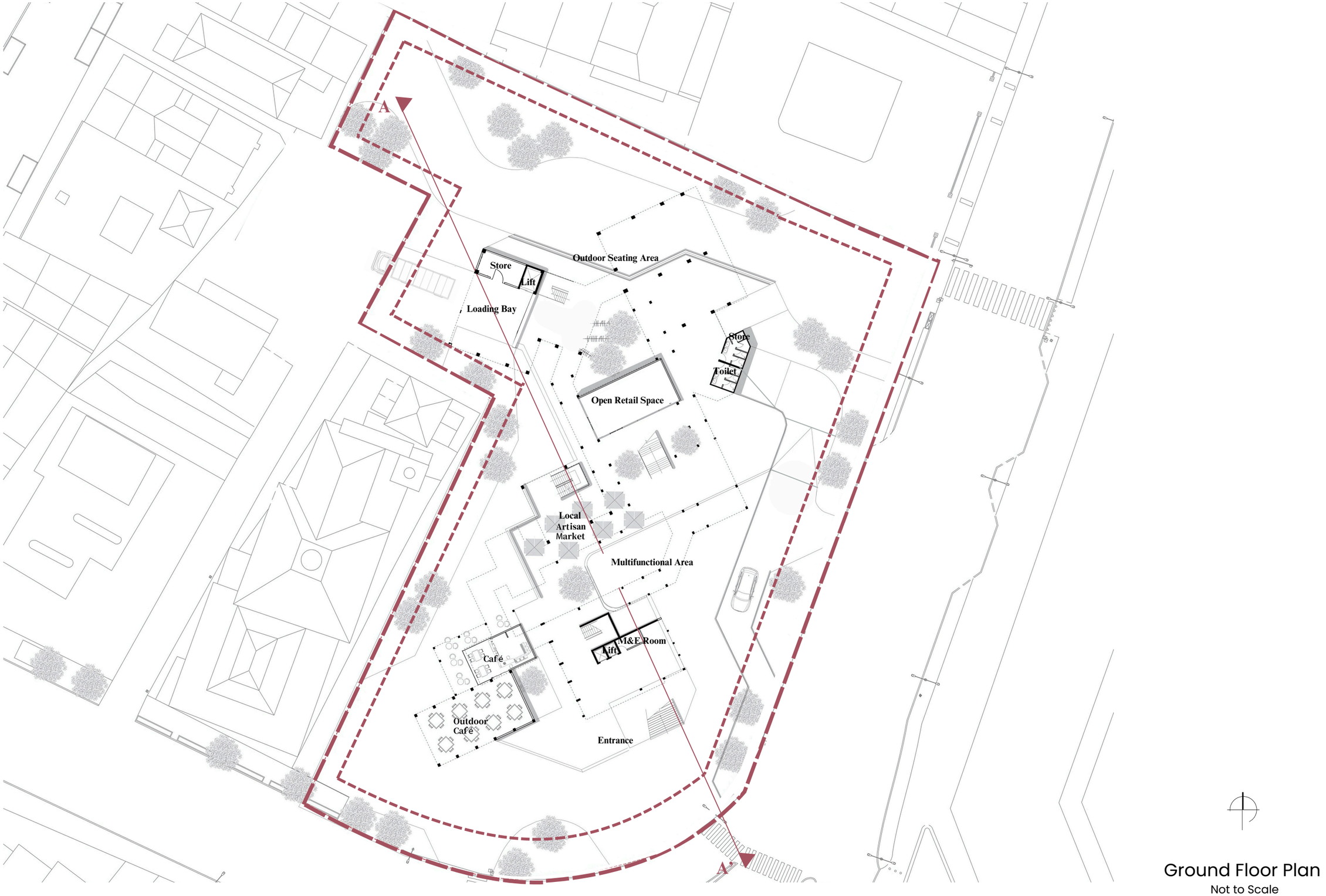


Basement Bomba Plan
Not to scale

5.5 Final Design Outcome

Site Plan
Not to Scale

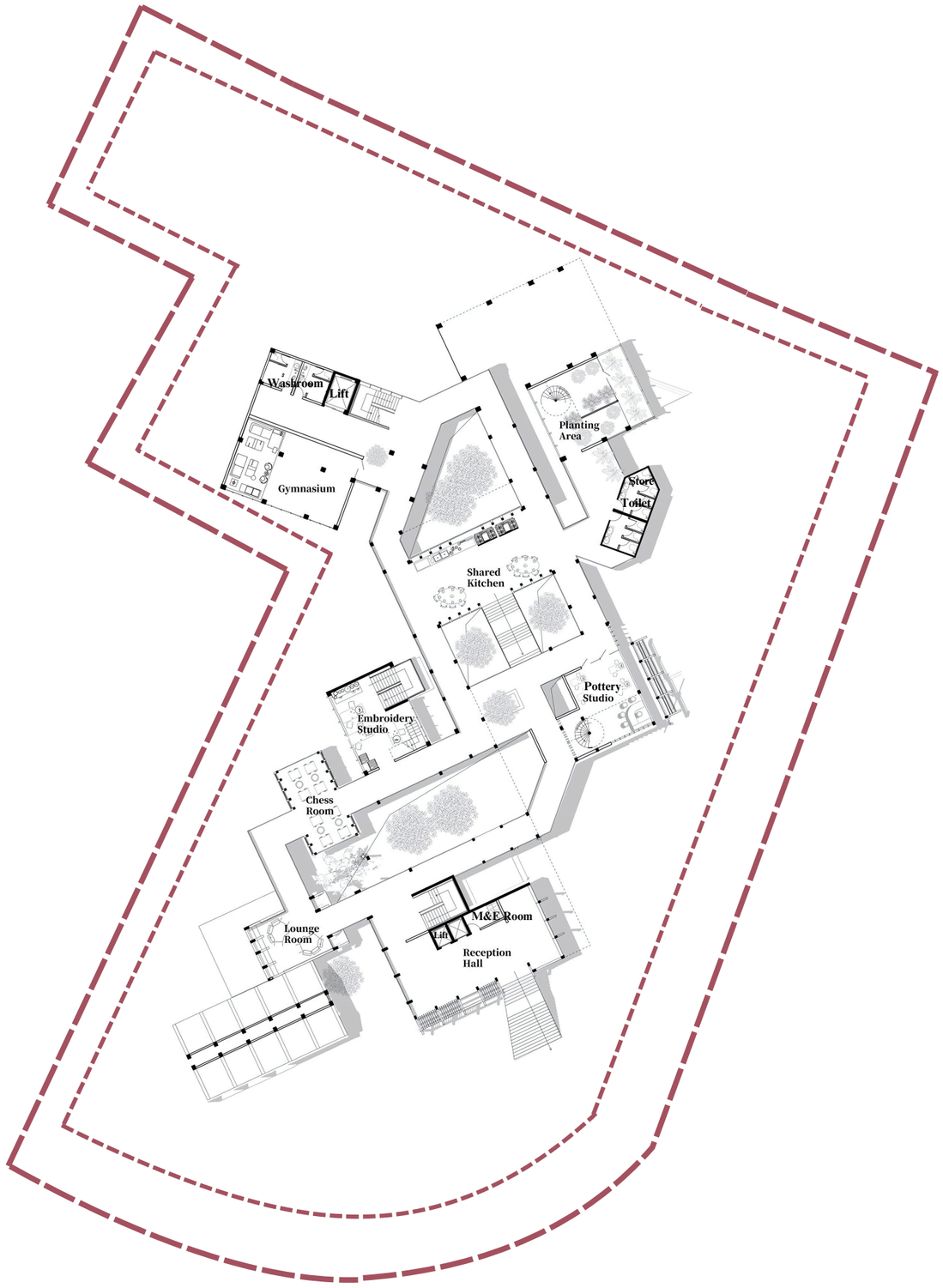
5.5 Final Design Outcome



Ground Floor Plan

Not to Scale

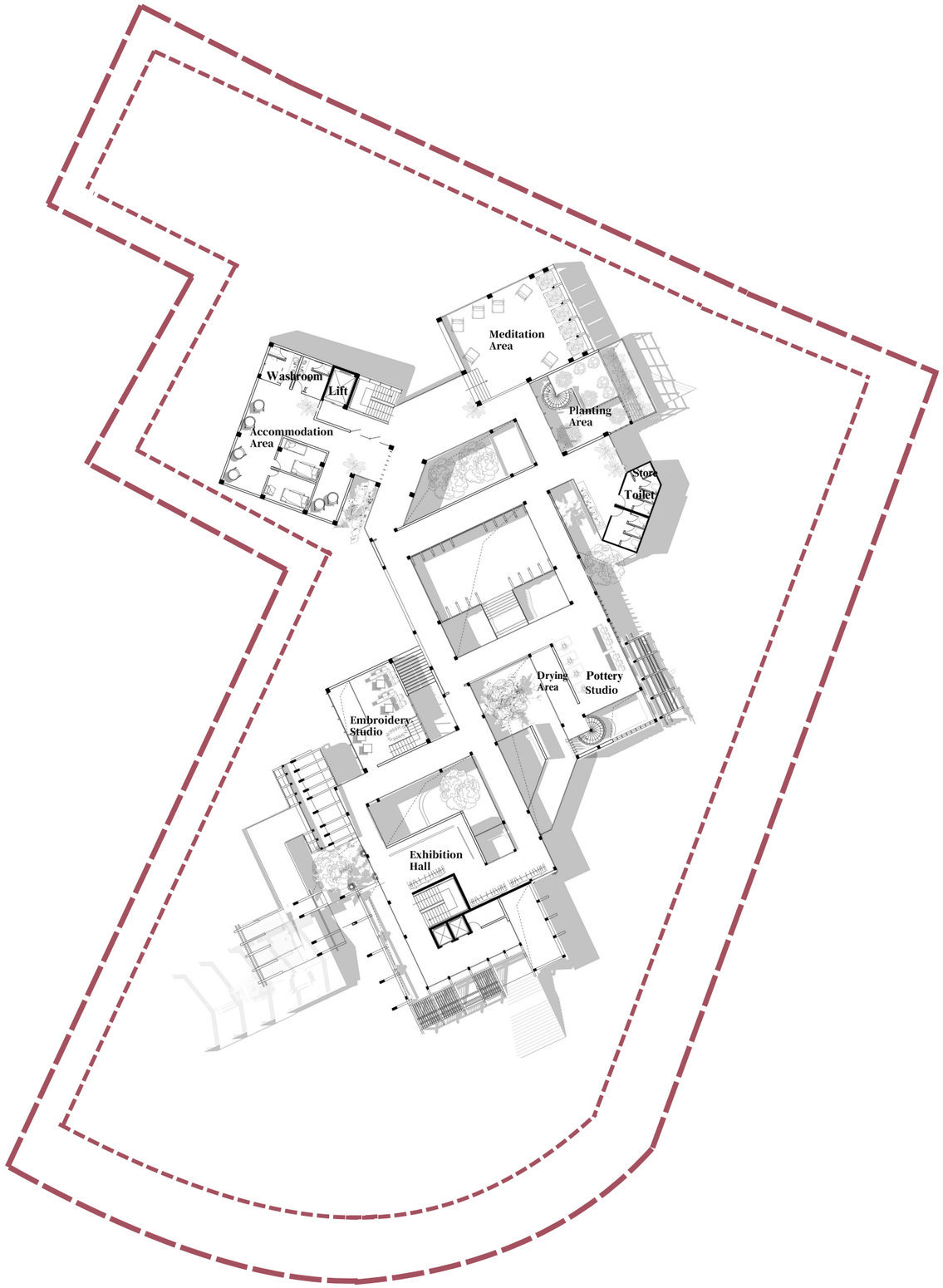
5.5 Final Design Outcome



First Floor Plan

Not to Scale

5.5 Final Design Outcome

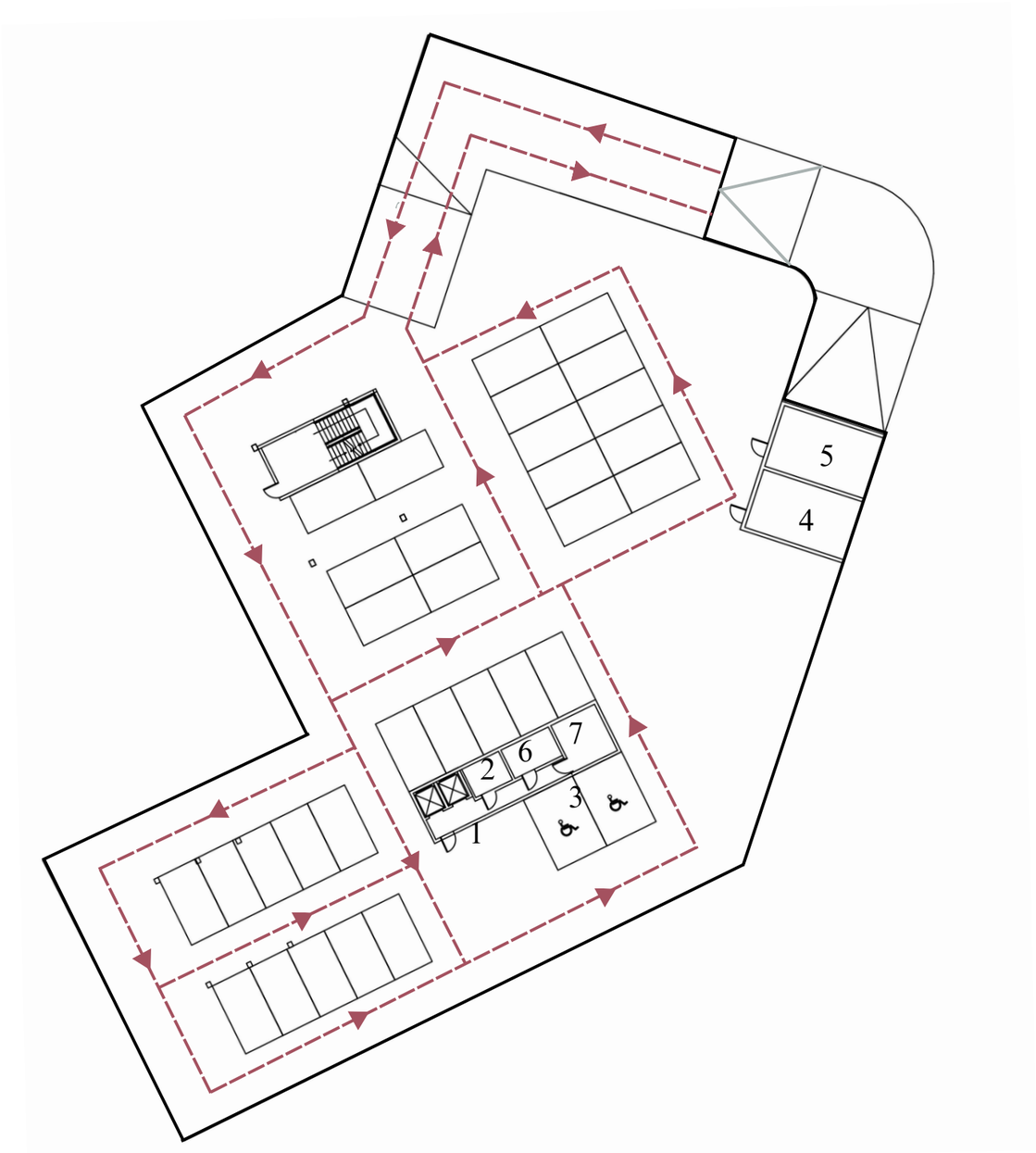


Second Floor Plan

Not to Scale

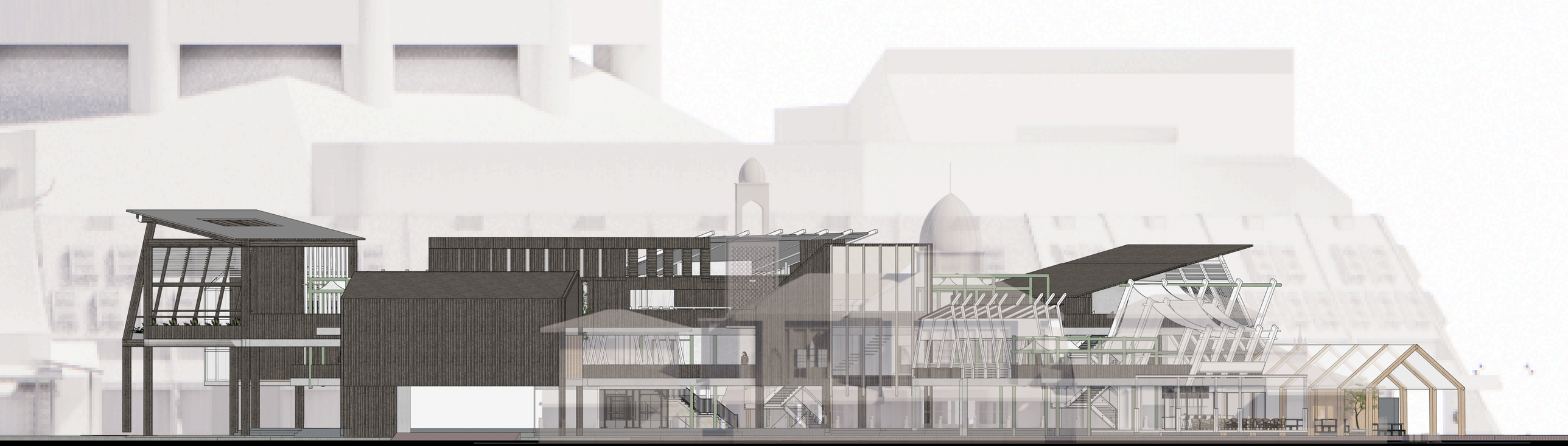
5.5 Final Design Outcome

1 Service Lobby
2 Storeroom
3 OKU Parking
4 Water Tank
5 Pump Room
6 Electric Room
7 Security Room



Basement Plan
Not to Scale

5.5 Final Design Outcome



Left Elevation

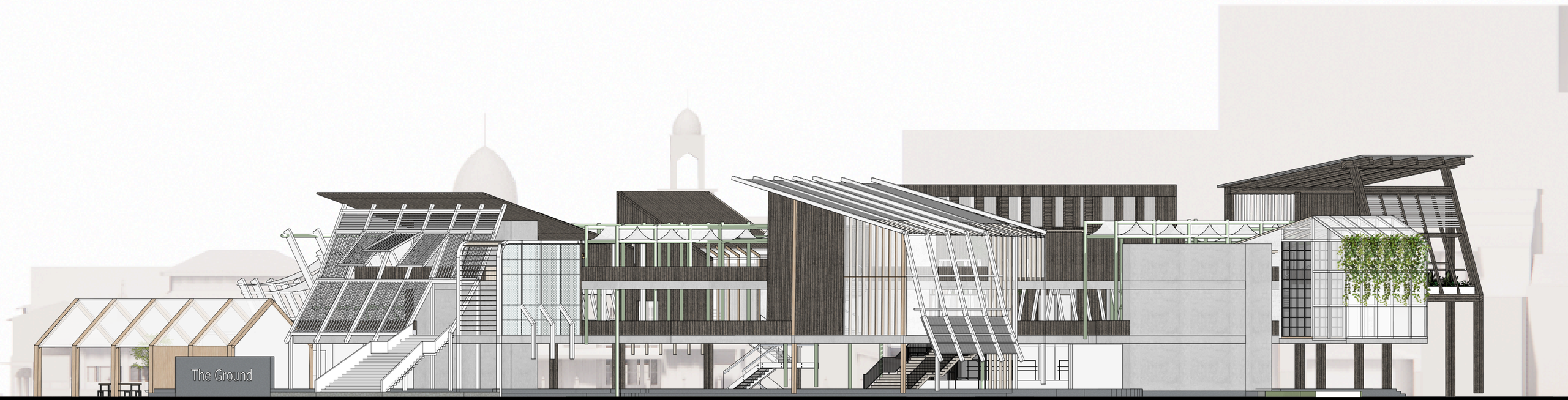
Not to Scale

5.5 Final Design Outcome

Back Elevation

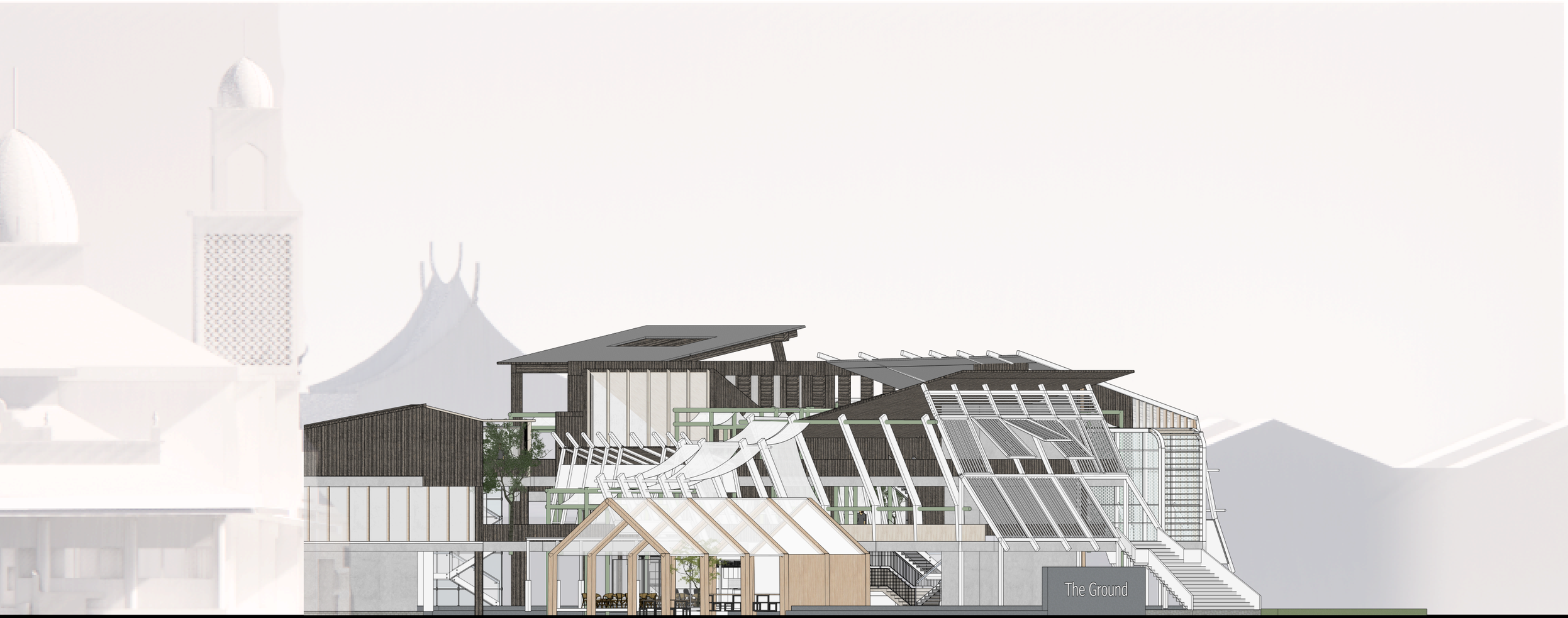
Not to Scale

5.5 Final Design Outcome



Right Elevation
Not to Scale

5.5 Final Design Outcome



Front Elevation
Not to Scale

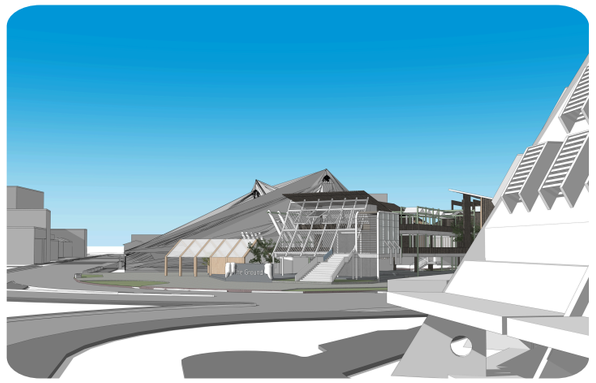
5.5 Final Design Outcome

Section A-A'
Not to Scale

The Urban Hub

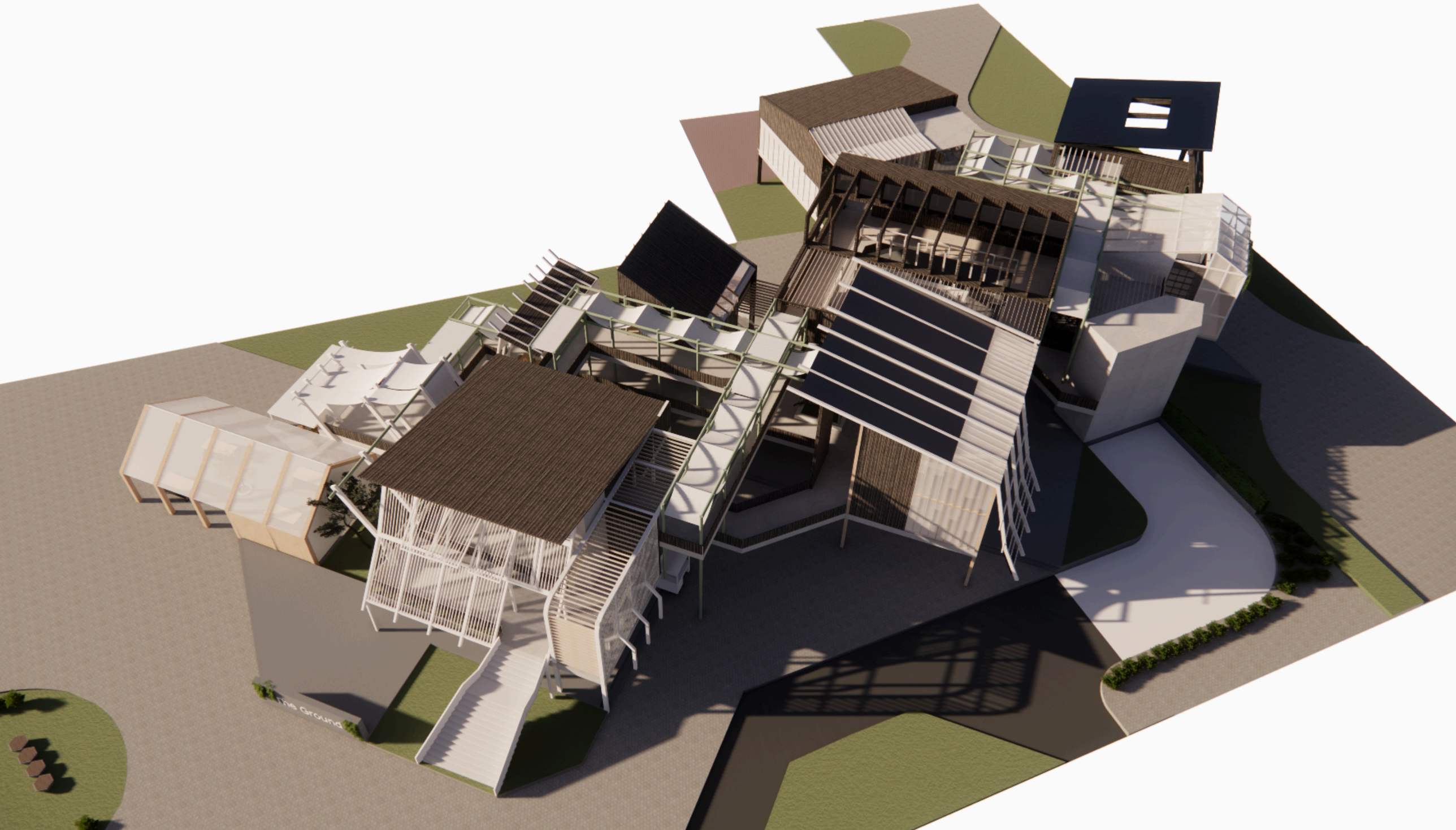
The Ground

Walk from Gama / Hin Bus Depot



Walk from Komtar

5.5 Final Design Outcome



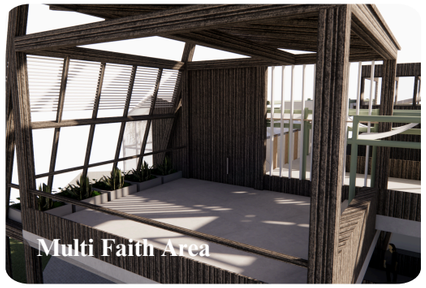
5.5 Final Design Outcome

Entrance

Walkway to Lounge

Chess Room

Walkway to Pottery Workshop


Multi Faith Area

Local Artisan Market

Lounge Room

Embroidery Studio

Pottery Workshop

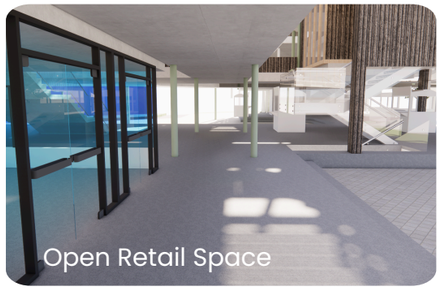
Courtyard walkway

Cafe

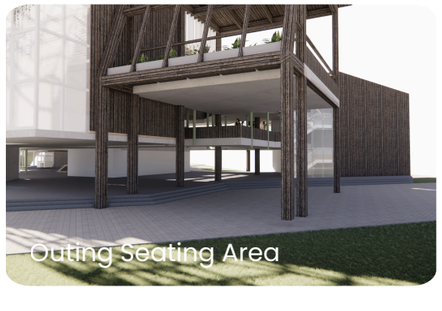
Embroidery Studio

Pottery Drying Area

Exhibition Hall

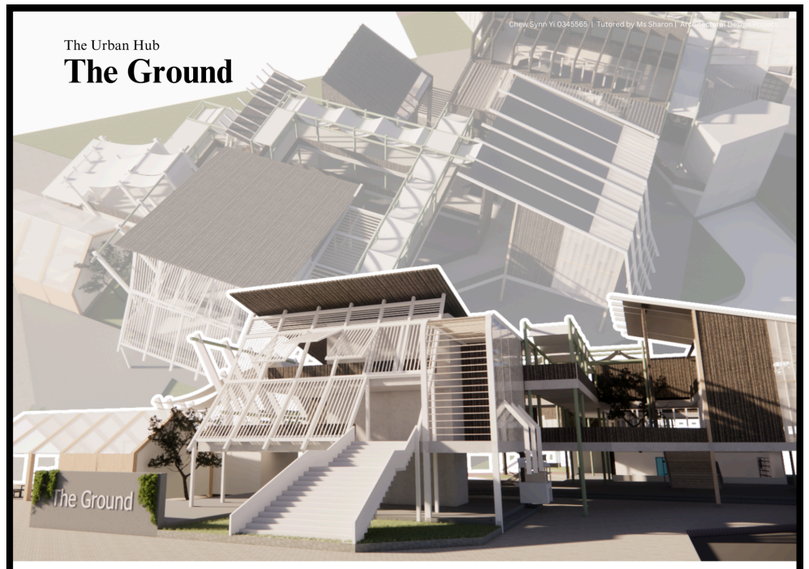

Open Retail Space

Walkway to Courtyard


Outing Seating Area

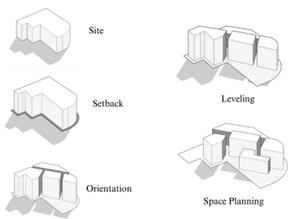
Communal Kitchen

5.6 Final Presentation



At the once-vibrant heart of George Town, Simpang Enam-where six roads met in a swirl of trade, prayer, and exchange now lies muted and fragmented. Overshadowed by KOMTAR'S scale and drained by traffic flow, this once-thriving junction has lost its rhythm, its memory faded under the weight of commercial sprawl and urban neglect.
The Reground Urban Hub a call to reinhabit this space-not with vehicles, but with voices, rituals, and relationships. It transforms the site from a forgotten transit node into a civic platform for cultural coexistence and collective memory. Drawing from the original radial geometry, six symbolic axes unfold-hosting performance, storytelling, prayer, making, trading, and learning each reflecting Penang's plural cultural life.
At the core lies a shared commons: a space for gathering, pausing, and celebration.
Around it, micro-pavilions, interfaith courtyards, and shaded walkways create room for quiet reflection and lively exchange. This isn't a nostalgic revival-it's a deliberate act of cultural resilience and urban healing.
Responding to the area's current fragmentation-low walkability, loss of heritage, aging population-the project integrates gardens, food heritage labs, and craft spaces to revive public life and reconnect people with place and each other. Sustainability is embedded not only through local materials and green design but in its deeper mission: to restore meaning and belonging.
Here, culture is not preserved behind glass-it's lived. It is felt in the hands of artisans, heard in stories shared, and seen in rituals unfolding. The urban hub doesn't just redesign space —it reclaims Penang's civic soul.

Massing



Target User

ELDERLY
insufficient spaces to rest or engage in meaningful activities and dialogues

YOUNGSTER/LOCAL ARTIST
-lack community platforms to showcase their talents, creativity, and engage with others

-lack of dynamic, social spaces where young people can come together,

TOURIST
experience only surface-level glimpses of Penang's rich culture, with limited opportunities to dive deeper into its history, local traditions, and authentic experiences

Building Programs

Integrative Space - ***Cultural Axes*** - ***Central Commons***

Plantation Area | Embroidery Workshop, Pottery Workshop | Multifaith Area

Design Intention

Creative - Cultural - Coexistence

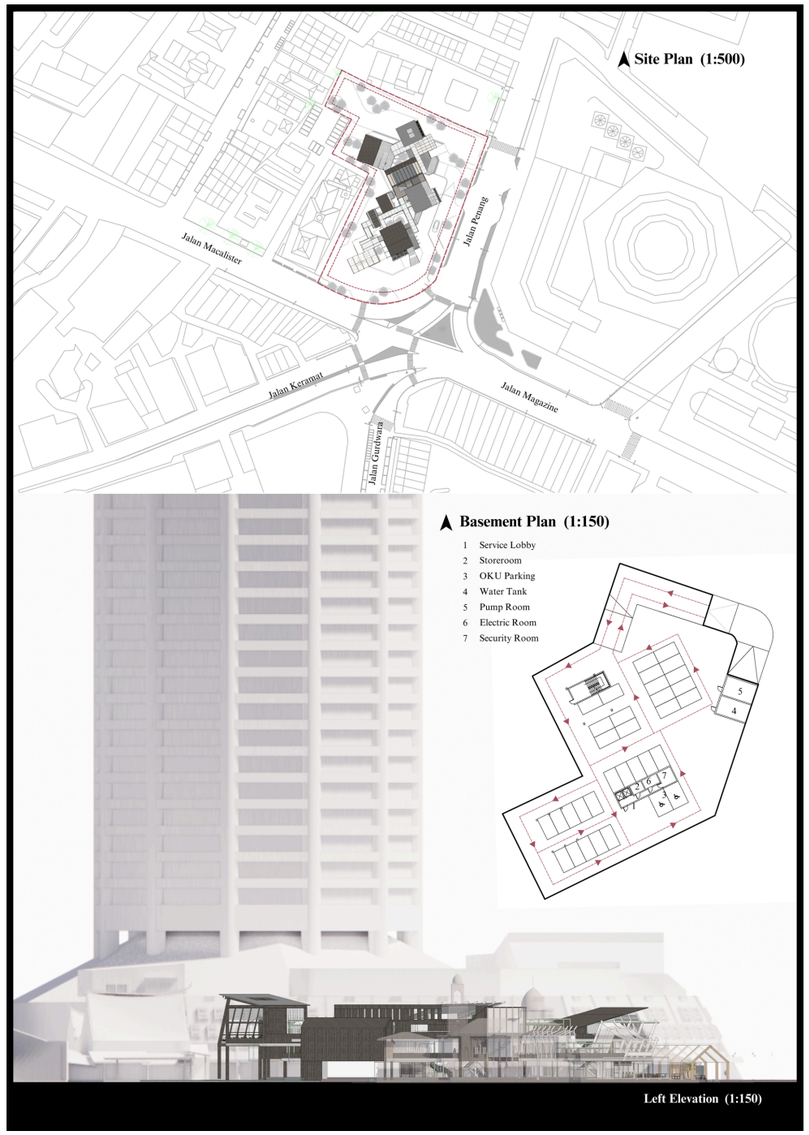
Design Response

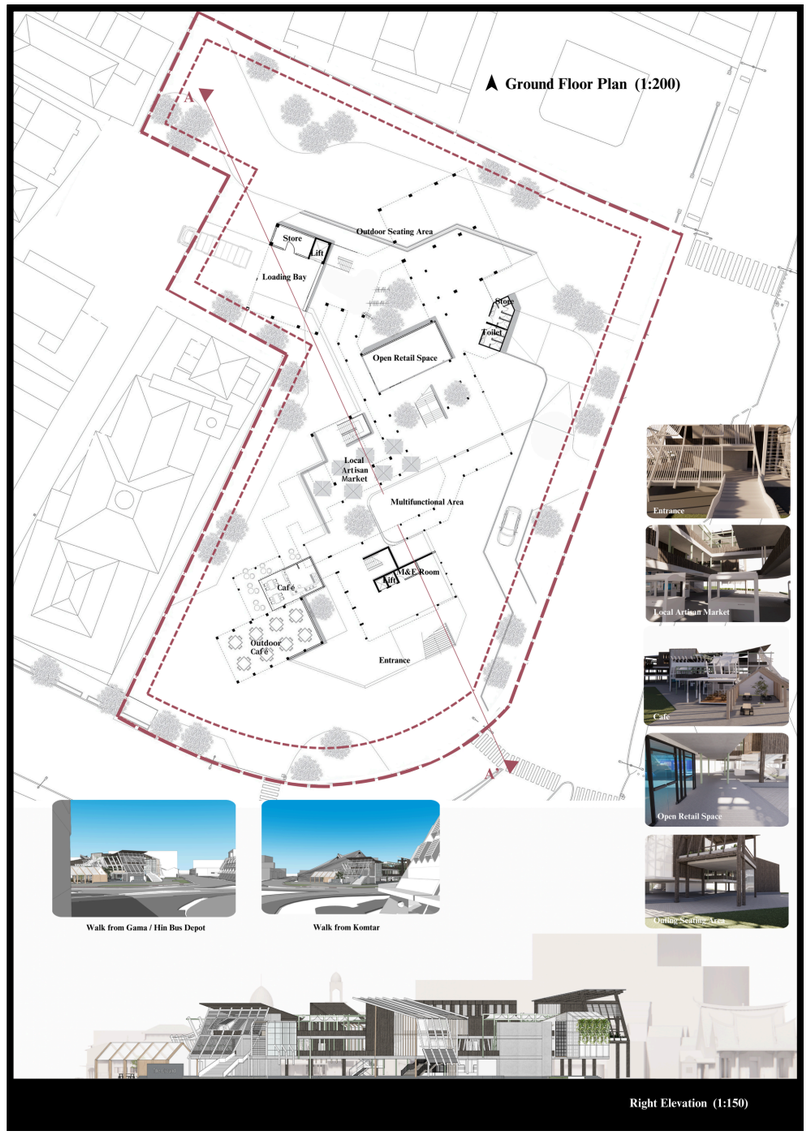
WINDS
dominant winds and the breeze pass thugh the streets

SOFTEN EDGES
created a way to welcome the vistors from shoplots to Urban Hub

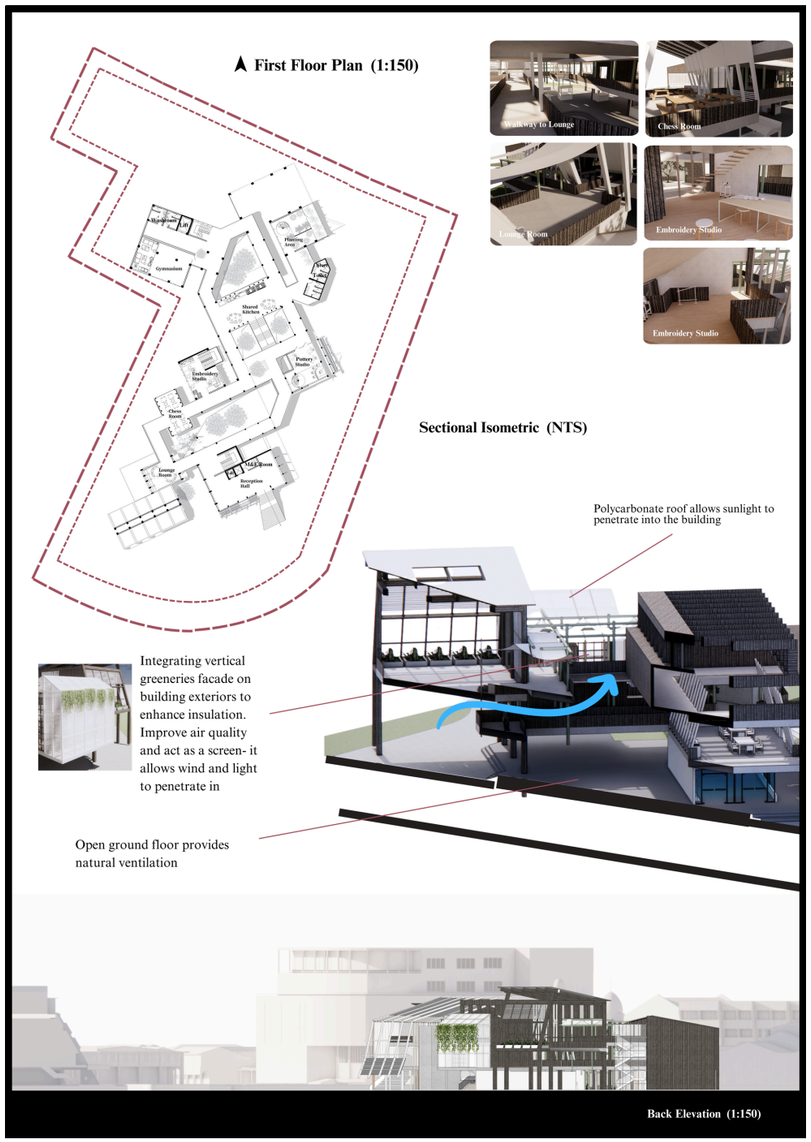
CONTINUOUS PUBLIC LOOP
The site boundary connects the extension of exsisting and introduction of new streets into a continuous loop

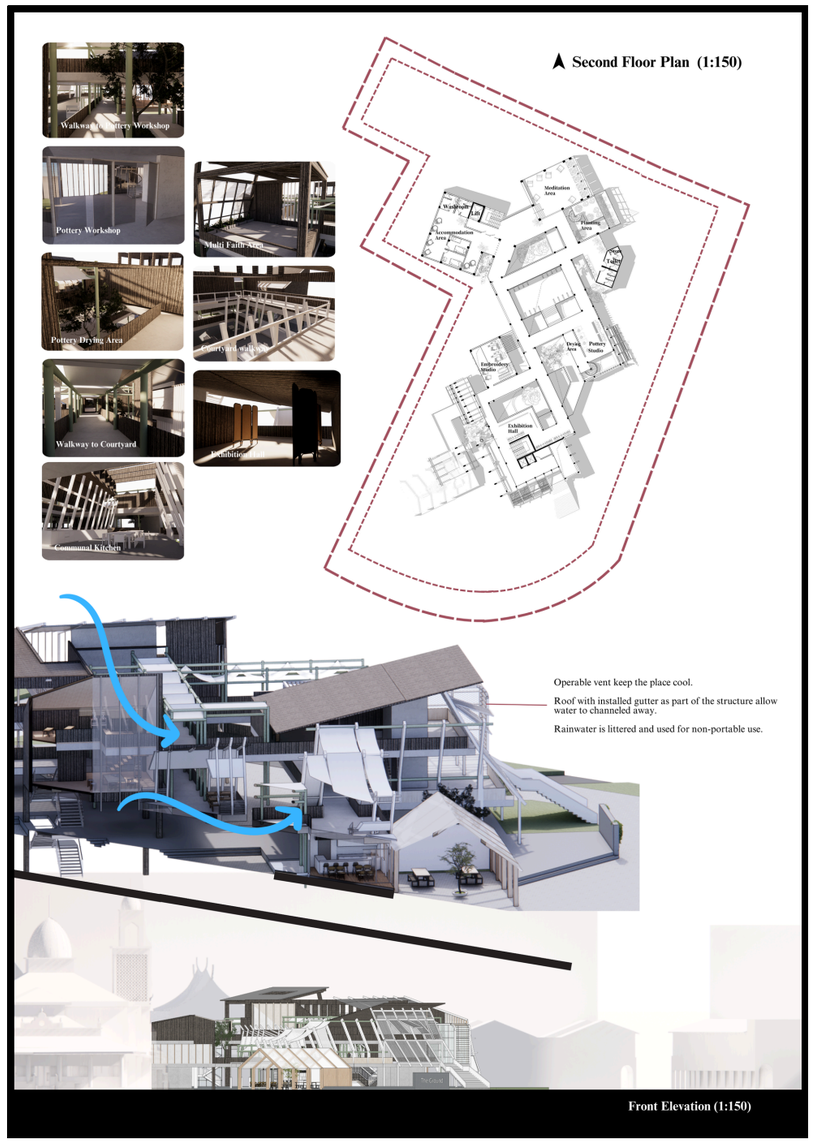
VIEWS
Multiple entry points to site and maintaining an open ground floor plan to improve permeability

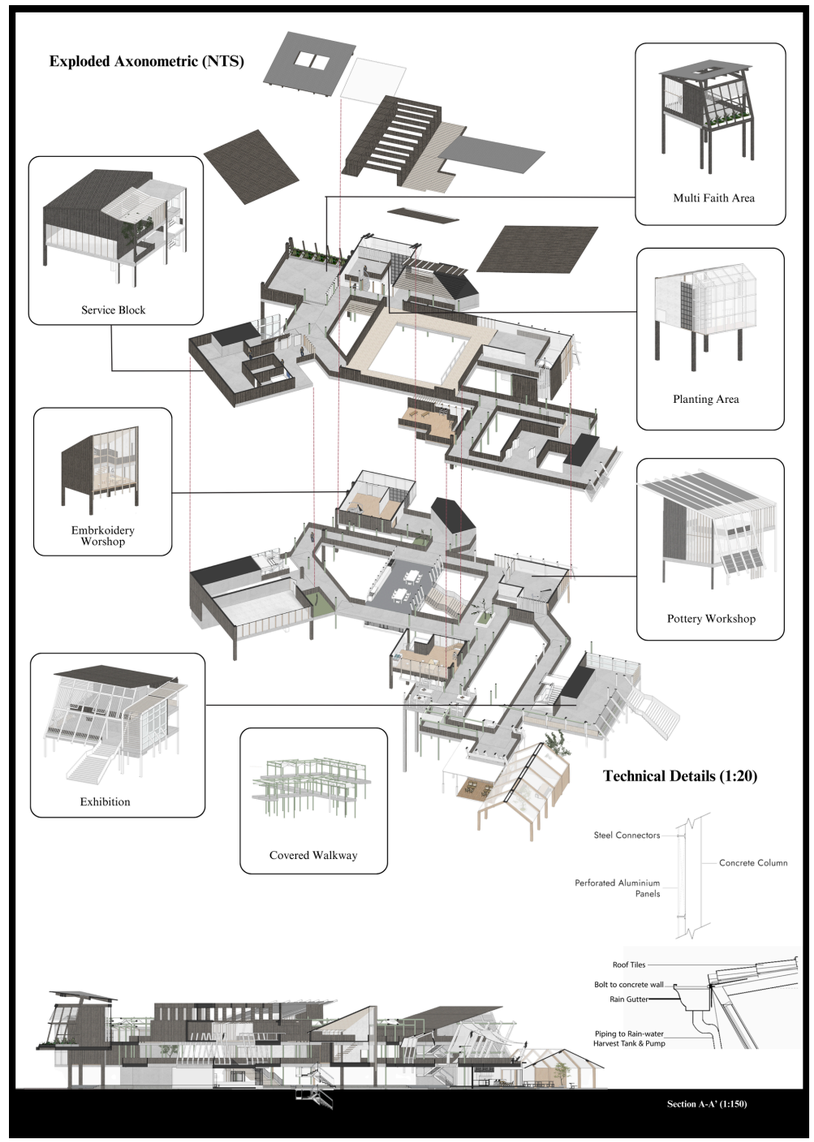




5.6 Final Presentation







6.0 Reflective Journal

Looking back on my journey, I feel deeply grateful for the unwavering support of my tutors. Ms. Sharon's mentorship extended far beyond technical guidance—her encouragement kept me going whenever self-doubt crept in. Mr. Prince, our module coordinator, was equally instrumental, ensuring we were well-prepared and always making himself available to help.

This semester marked a milestone: my first large-scale project with a strict site built-up limit of 2,000 m². It challenged me to think creatively about maximising impact within tight constraints. Using deconstructive analysis, I began to read the city as a living network, seeking ways to address fragmentation, bridge cultural gaps, and restore a lost urban rhythm.

The process taught me the value of perseverance, detailed planning, and adaptability. I learned to appreciate how small-scale interventions—like shaded pocket gardens, rainwater harvesting systems, and naturally ventilated atriums—can have profound civic impact. Beyond technical skills, I rediscovered my passion for architecture, from the meditative act of sketching to the precision of model-making, and embraced the discipline as a balance of innovation and tradition.

These six semesters have been as demanding as they were transformative. There were moments of uncertainty, but the encouragement of friends, family, and peers helped me regain my confidence. Today, I am proud of my growth—both as a designer and as a person—and I look ahead with excitement, committed to shaping spaces that are not only functional and beautiful, but also deeply meaningful for people and the planet.

7.0 References

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