Modern Sala

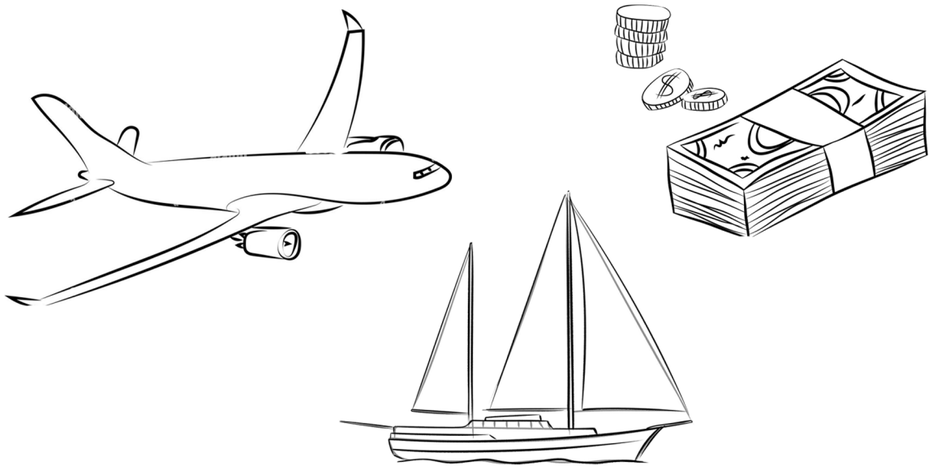
A Community Center on Koh Samui: Connecting natural elements to give back to the locals

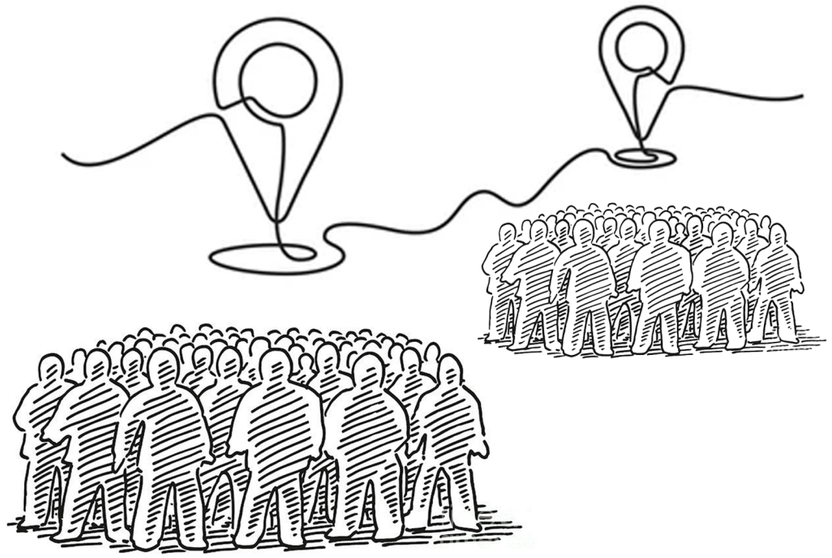
“Sala Thai” | Definition

an open pavilion, used as a **meeting place** and to give people **shade**

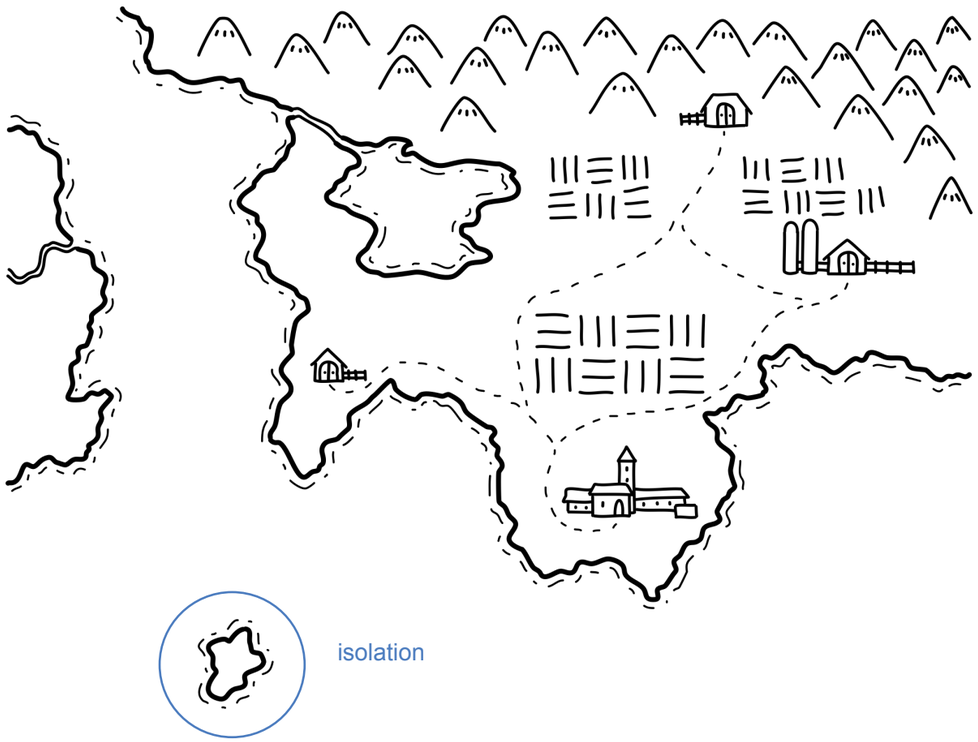
Agenda | Presentation

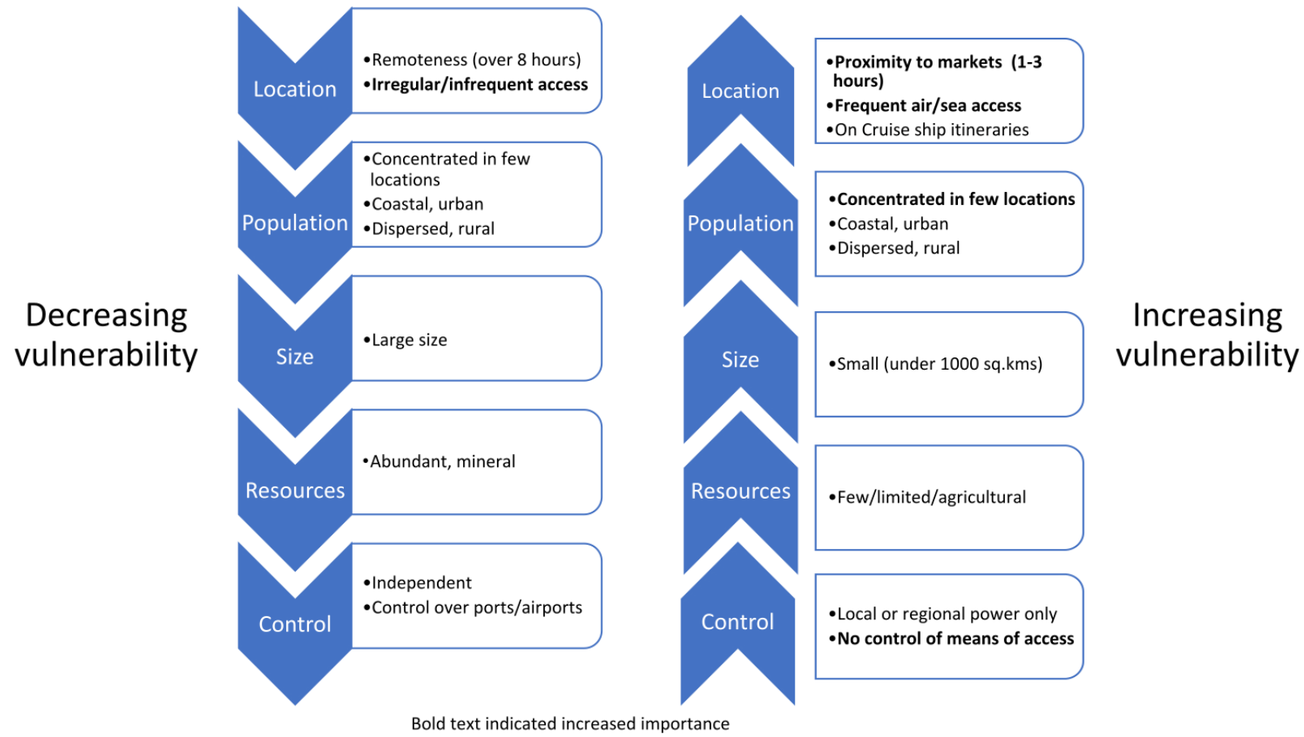
General Problem Statement | Global Issues of Overtourism





General Problem Statement | Island Vulnerability





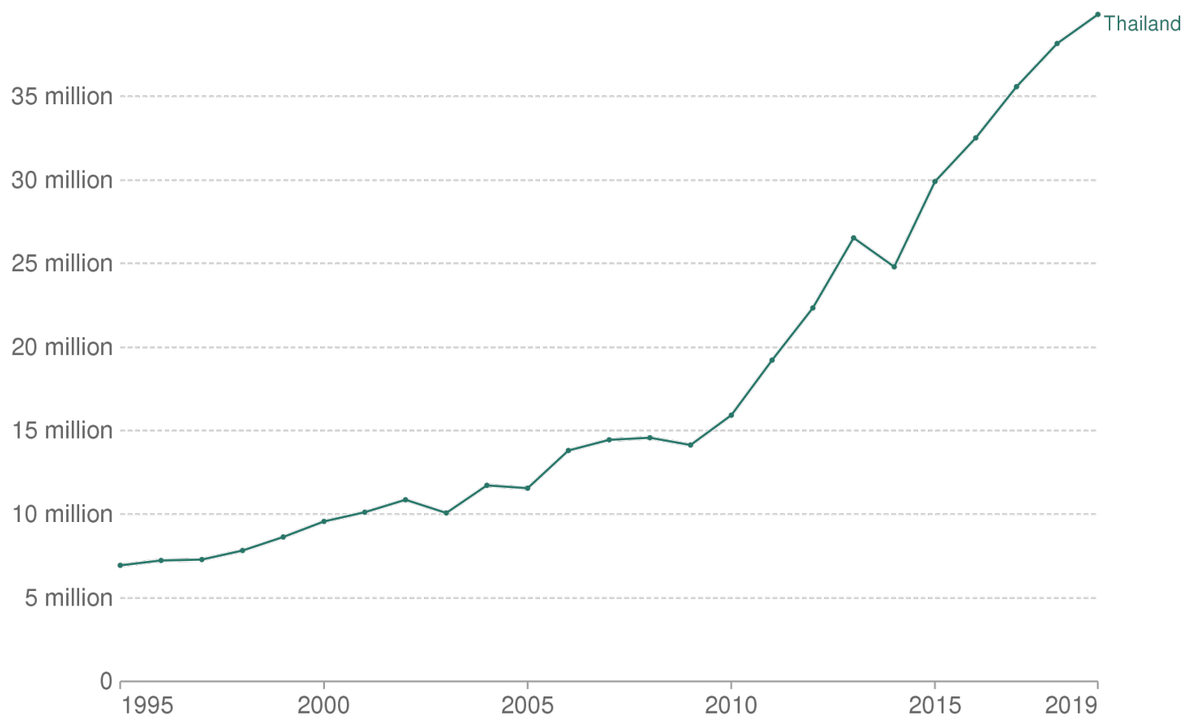
(Butler & Dodds, 2022)

General Problem Statement | Thailand

City	Country	Tourists per Inhabitant (City)
Phuket	Thailand	118.5
Pattaya	Thailand	98.7
Krabi	Thailand	72.2
Muğla	Turkey	40.2
Hurghada	Egypt	28.6
Macau	China	26.9
Heraklion	Greece	22.0
Venice	Italy	21.3
Rhodes	Greece	20.3
Miami	United States	18.6

(MoneyTransfers.com, 2023)

Most “Over-Touristed” Cities in the World



(World Tourism Organization, 2020)

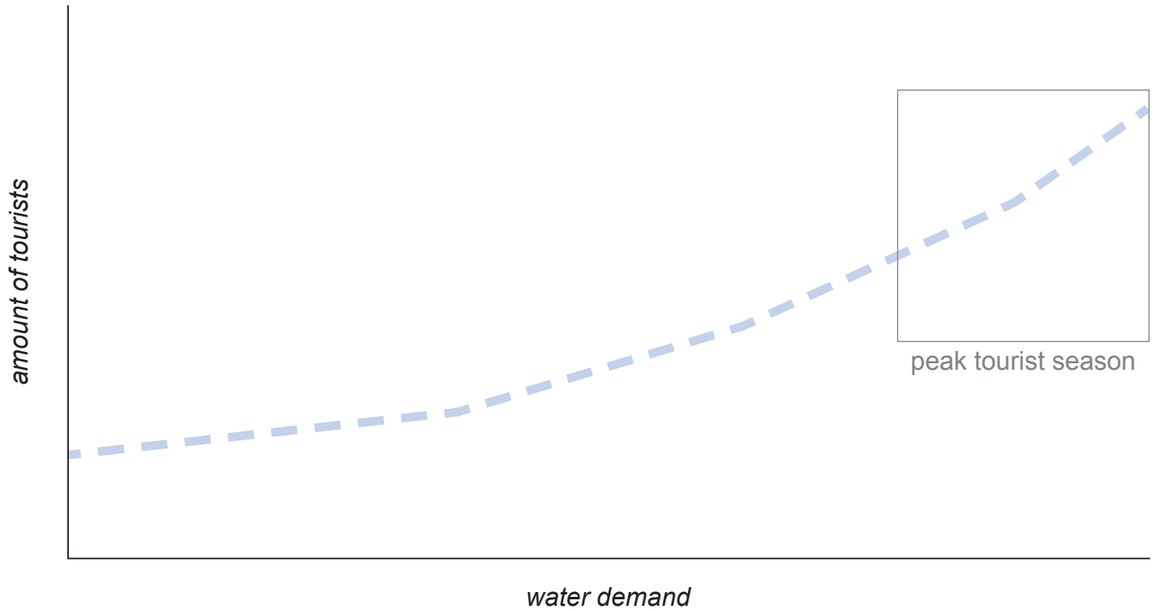
International Tourism: Number of Arrivals in Thailand

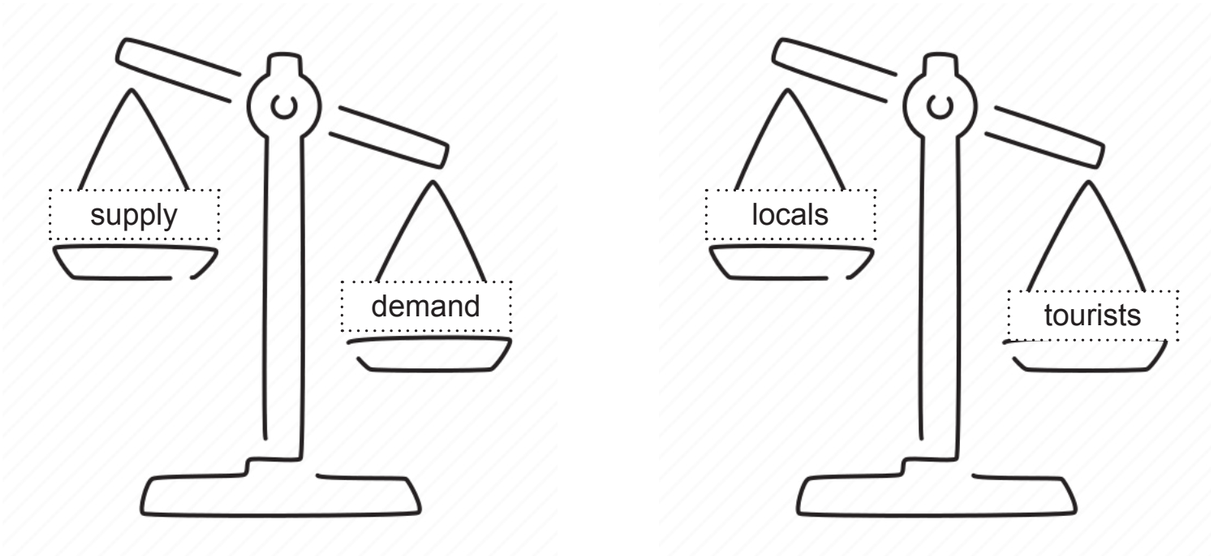
General Problem Statement | Advertising Images

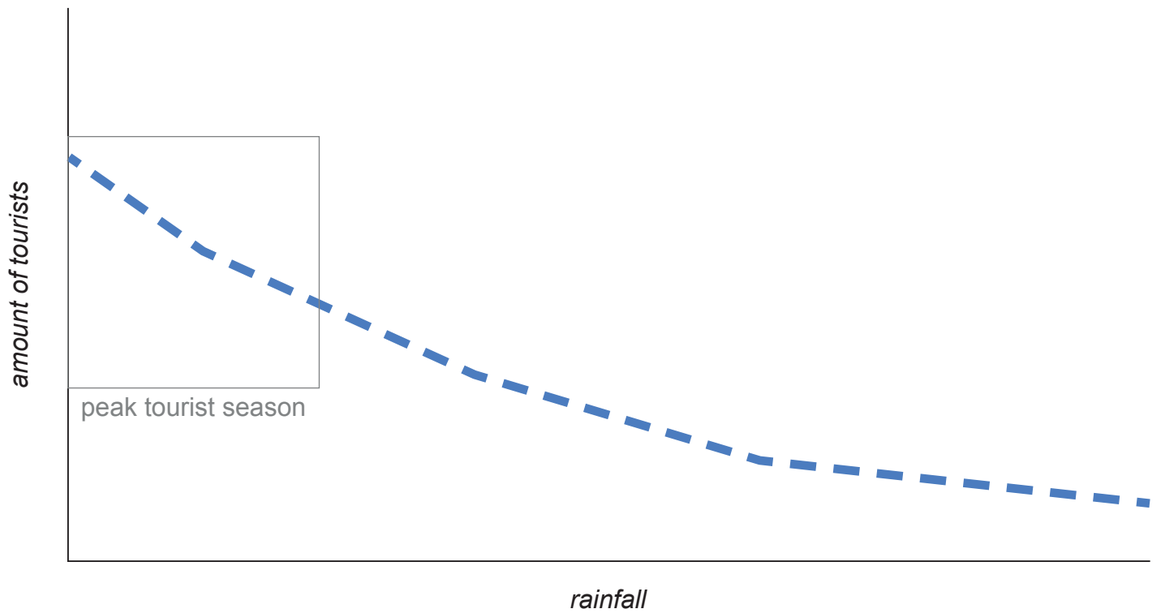
General Problem Statement | Real Issues

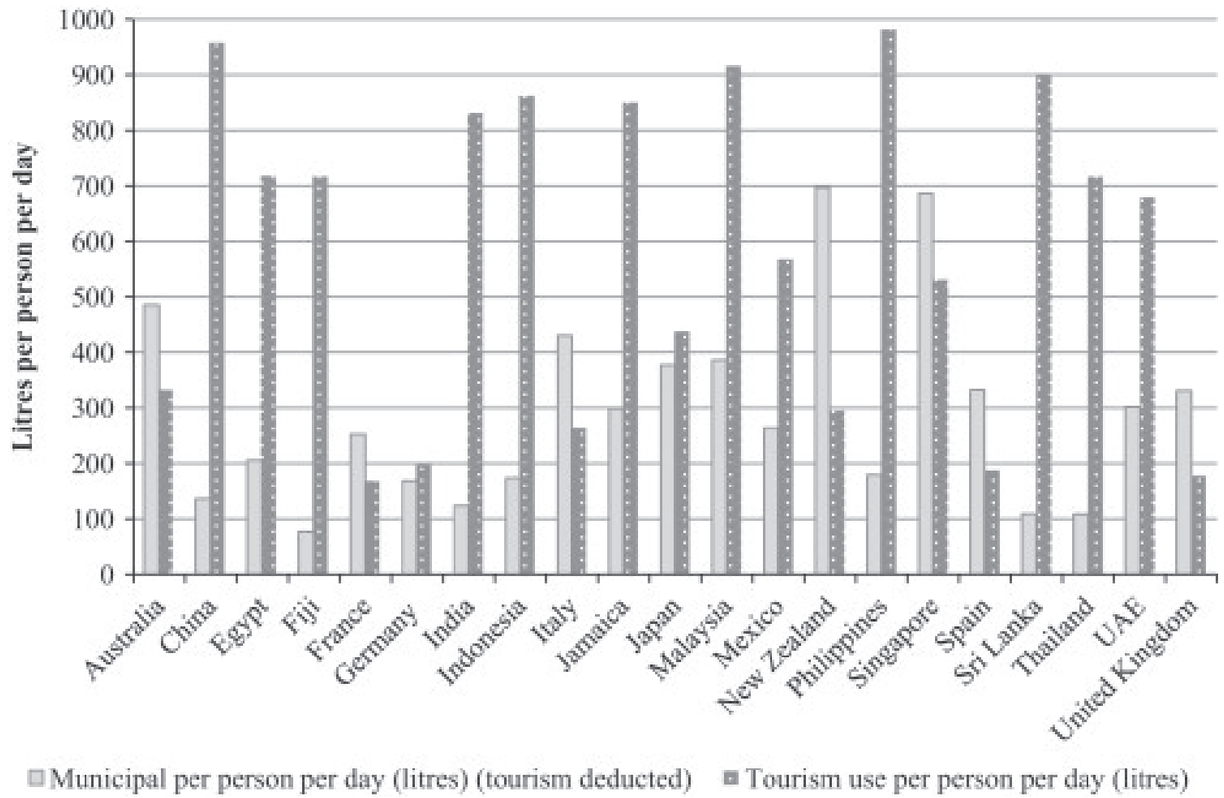
Thematic Research | Watershortage

Thematic Research | Problem Statement





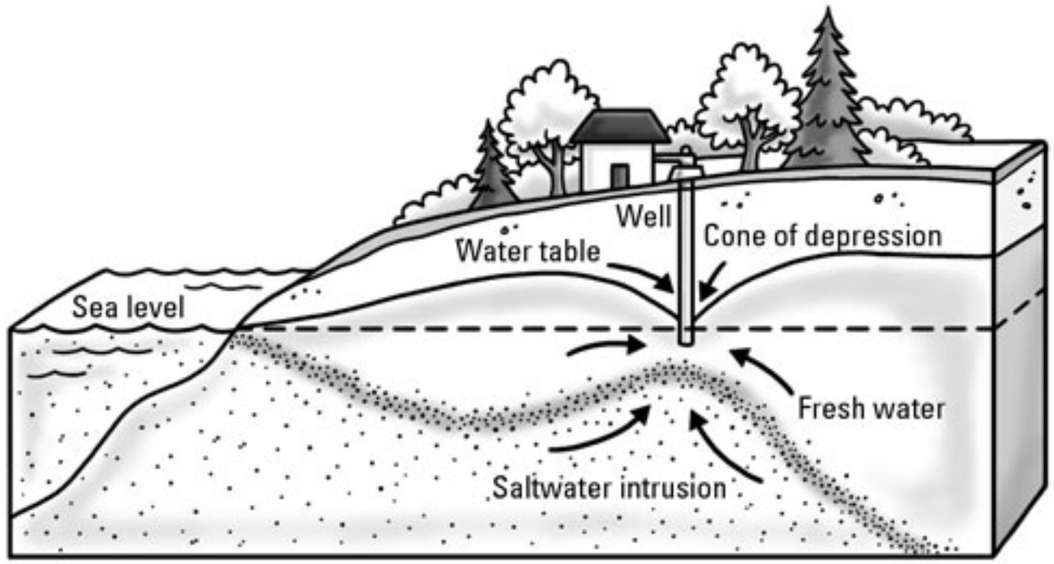




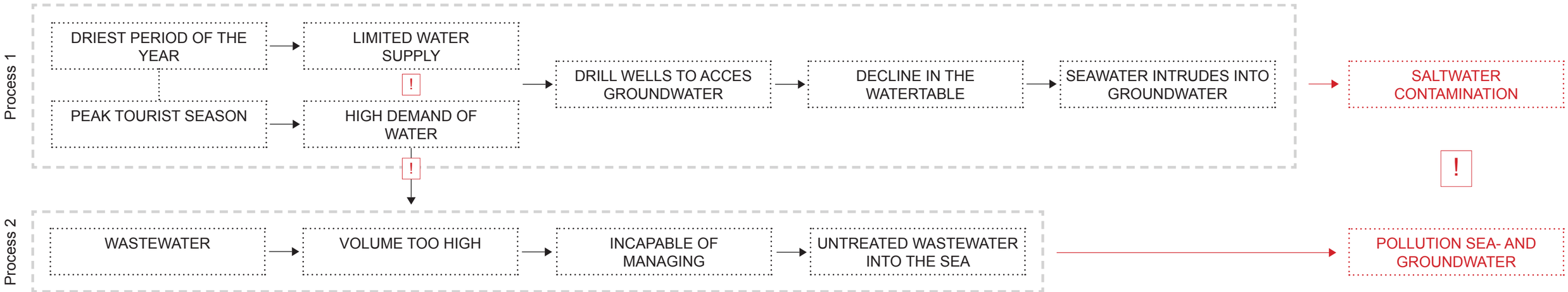
Relation Water Demand and Tourism

Comparison of Municipal and Tourism Water Use per Person per Day (Becken, 2014)

Thematic Research | Problem Statement



Water Polution



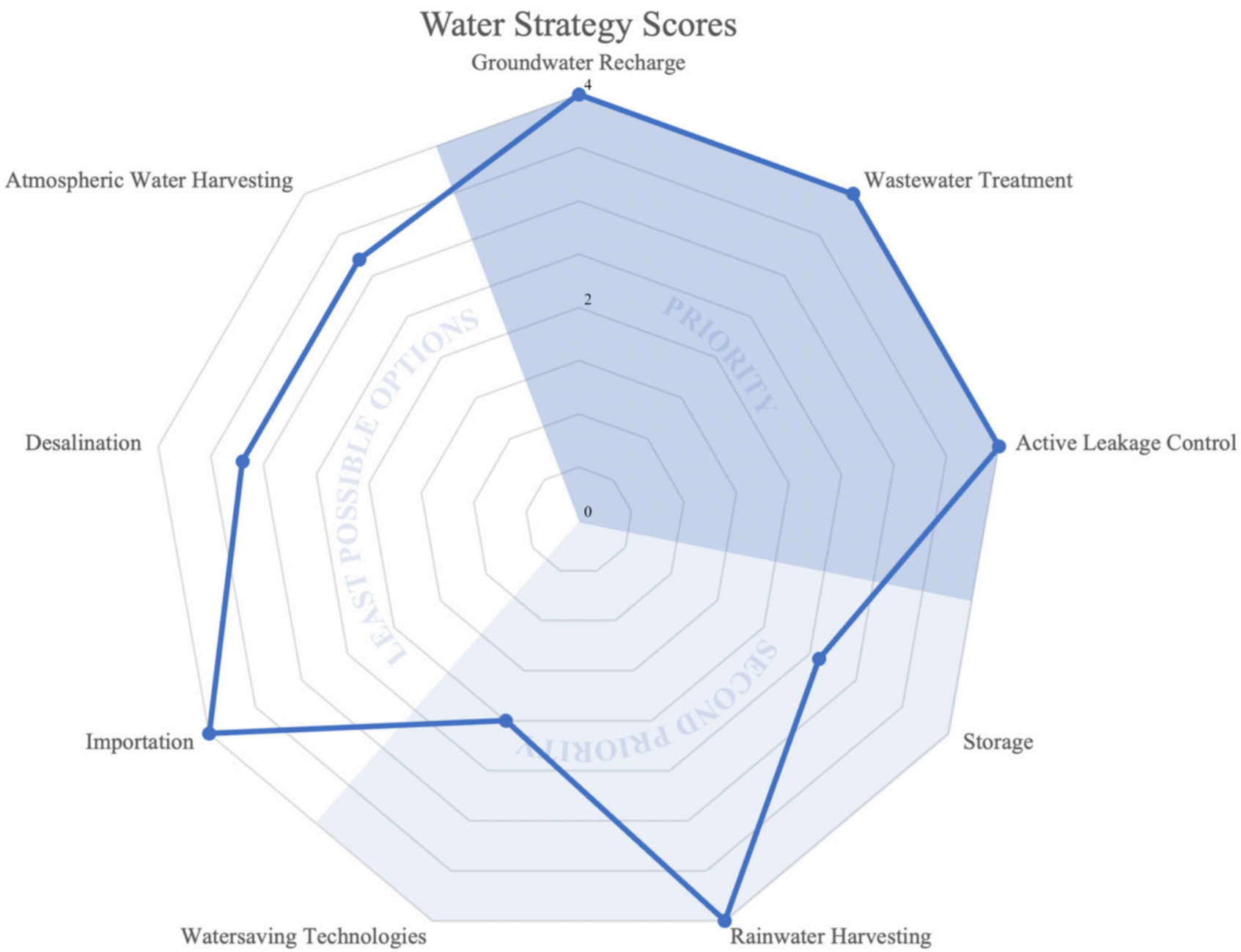
situation is worsened because of these problems...

Thematic Research | Results (Water Strategy Tool)

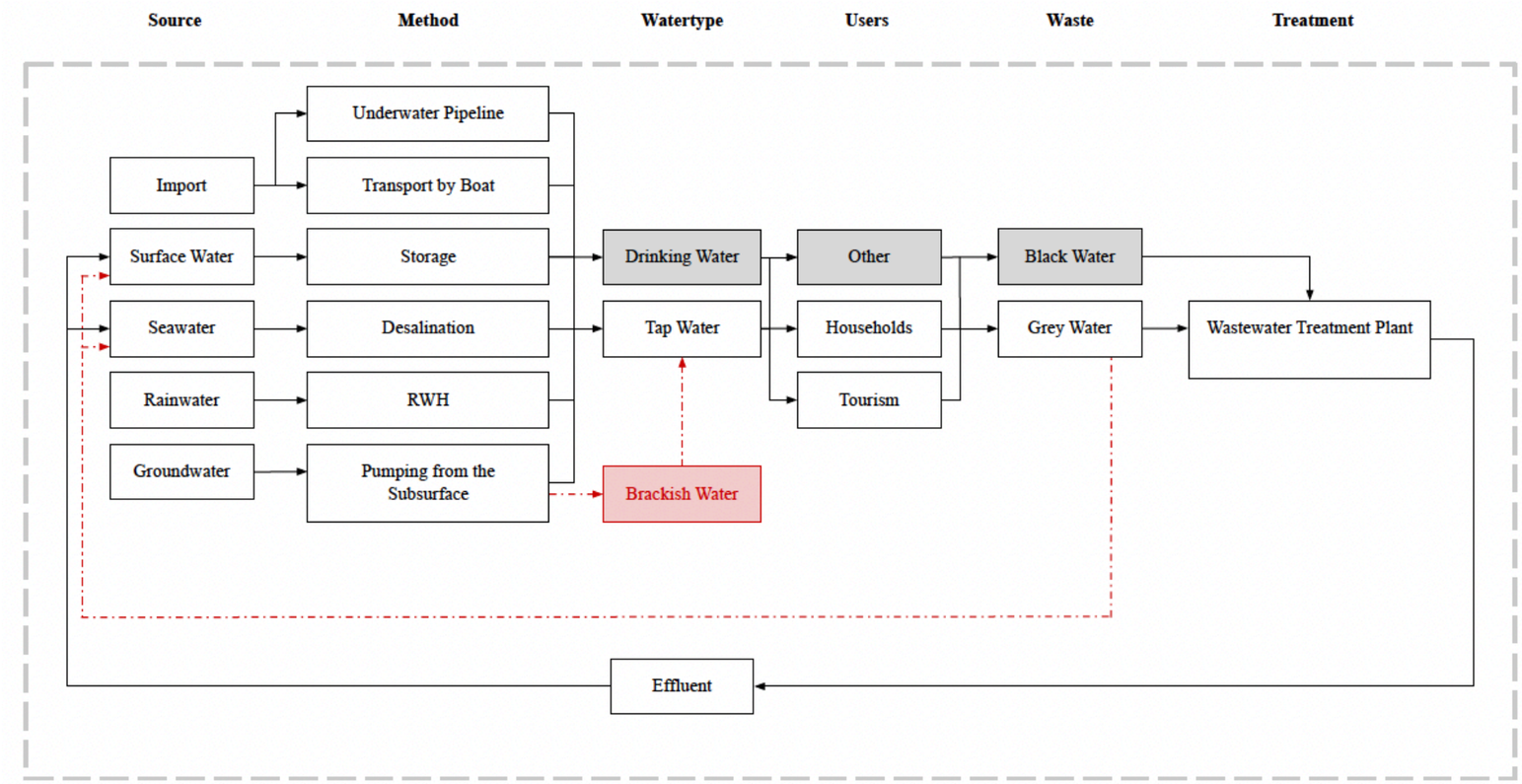
Assessment Factor	Select Option		
Size	○ Very Small	● Small	○ Large
	< 100 km2	100 km2 - 2000 km2	> 2000 km2
Population Density	○ Low	○ Moderate	● High
	< 50 inhabitant/km2	50 - 500 inhabitant/km2	> 500 inhabitant/km2
Topography	○ Gently sloping	● Moderately sloping	○ Steep
	the land surface displays mild slopes and is generally not very steep	the landscape has significant slopes, but they are still manageable	the area is characterized by steep slopes, indicating pronounced relief
Distance to Mainland	● Very close	○ Close	○ Far
	< 25 km2	25 km2 - 100 km2	> 100 km2
Annual Precipitation Rate	○ Low	○ Moderate	● High
	< 500 mm	500 mm - 1000 mm	> 1000 mm
Average Relative Humidity	○ Low	○ Moderate	● High
	< 30%	30% - 70%	> 70%
Temperature	○ Low	○ Moderate	● High
	< 10°C	10°C - 25°C	> 25°C
Fog	● Low	○ Moderate	○ High
	fog is not present or only lightly	fog is present, leading to a noticeable reduction in visibility but still allowing for some activities	dense fog is prevalent, causing a substantial reduction in visibility and potentially disrupting various daily activities
Prosperity	○ Low	● Moderate	○ High
	limited economic resources, low income levels and restricted access to essential amenities	moderate economic resources and incomes, where access to basic needs and services is reasonable	abundant economic resources, high income levels and extensive access to high-quality amenities and services
Water Quality	● Low	○ Moderate	○ High
	islands experiencing challenges with limited water quality due to saltwater contamination and wastewater pollution	islands experiencing a moderate level of water quality concerns, including issues related to saltwater contamination and wastewater pollution	islands characterized by a high level of water quality, with minimal impact from saltwater contamination and wastewater pollution
Water Loss	○ Low	○ Moderate	● High
	islands with minimal water loss, indicating efficient water management practices and infrastructure	islands experiencing a moderate level of water loss, suggesting a need for improved water conservation measures and infrastructure	islands characterized by a significant level of water loss, signifying potential inefficiencies in water distribution systems and infrastructure

Bozkurt, C., Fırat, M., Ateş, A., Yılmaz, S., & Özdemir, Ö. (2022)

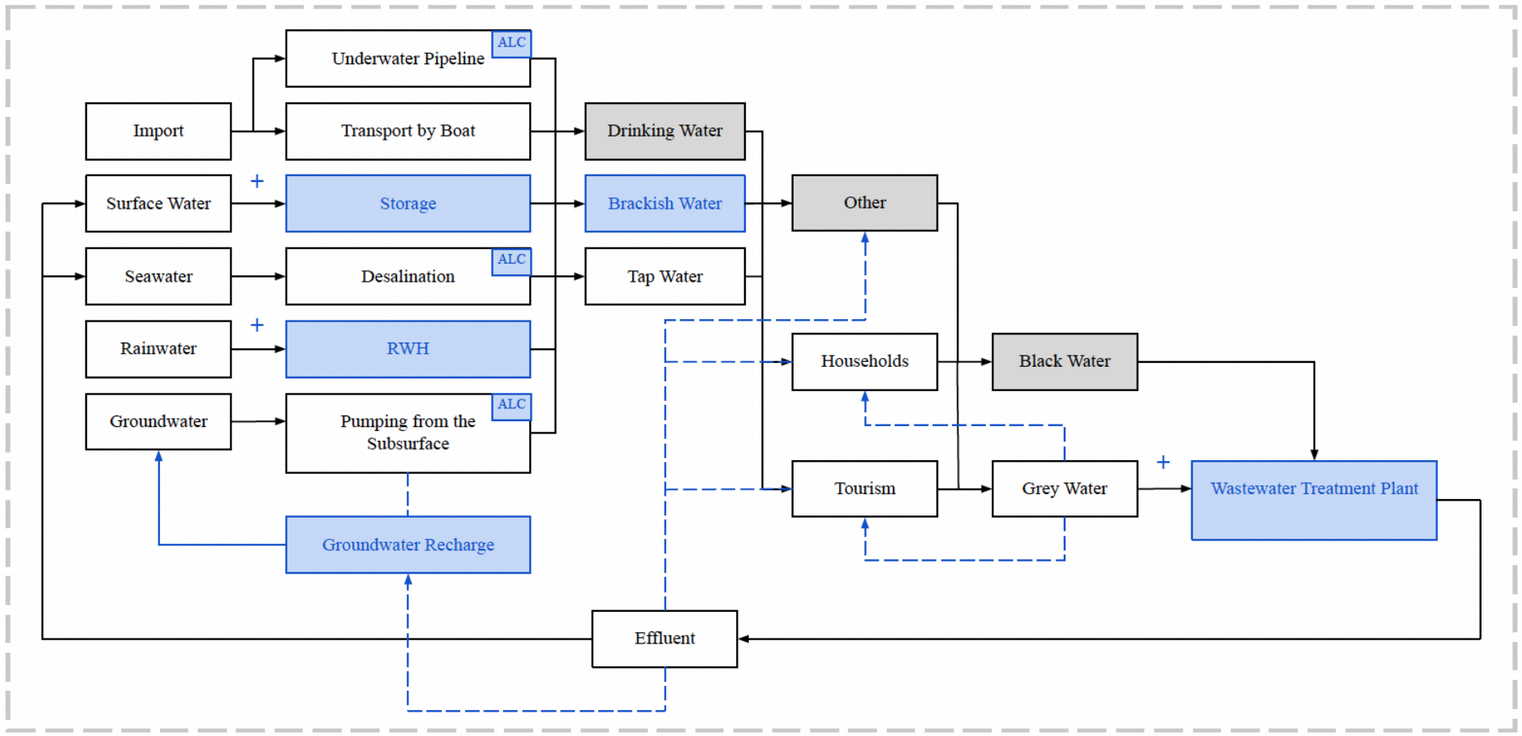
Thematic Research | Results (Water Strategy Tool)



Thematic Research | Conclusion (Flow Diagrams)

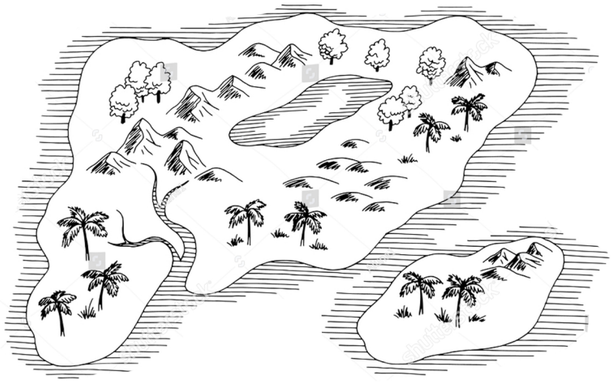


Existing Situation



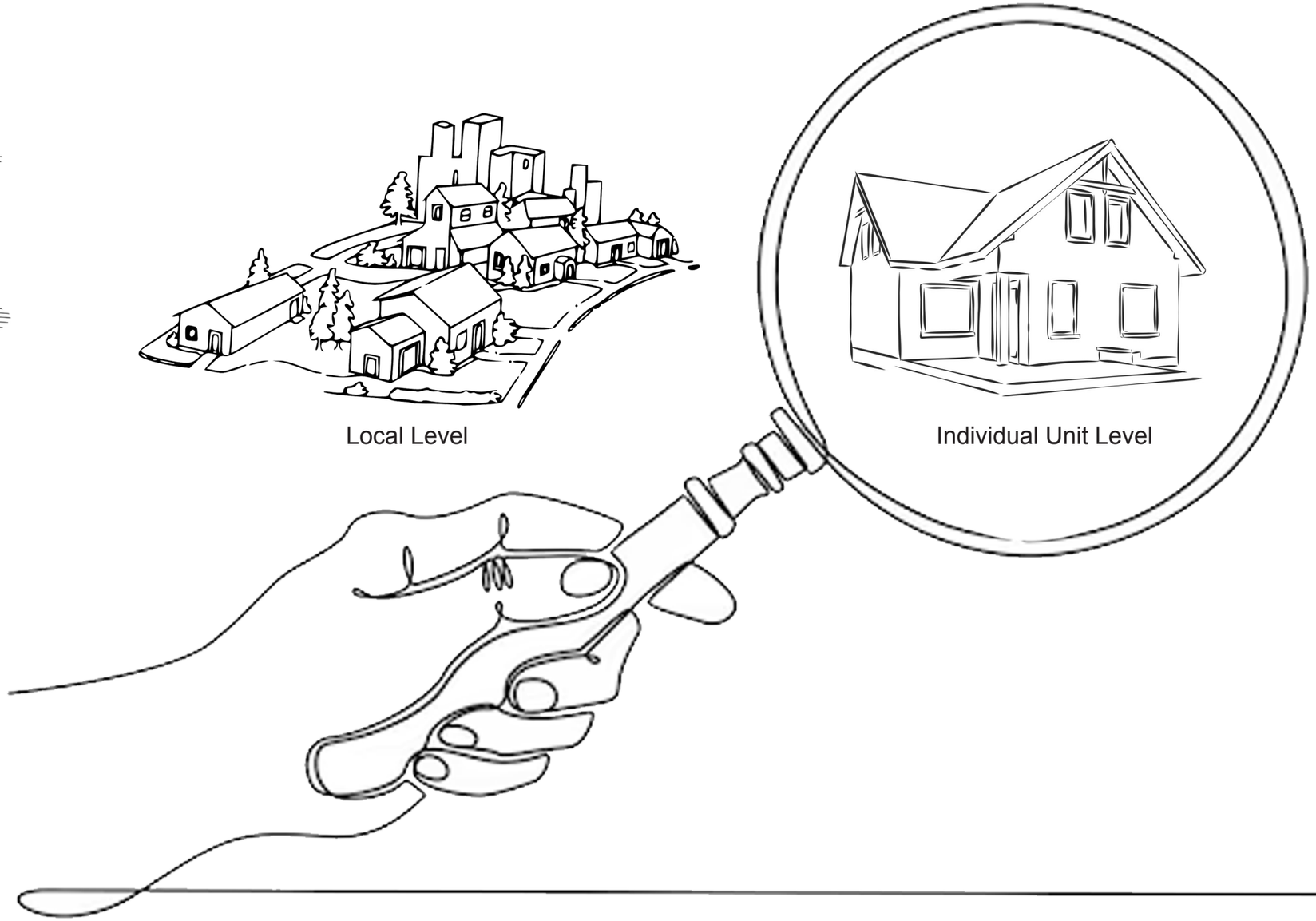
Proposed Improvement Strategy

Interplay within Research and Design | Conclusion



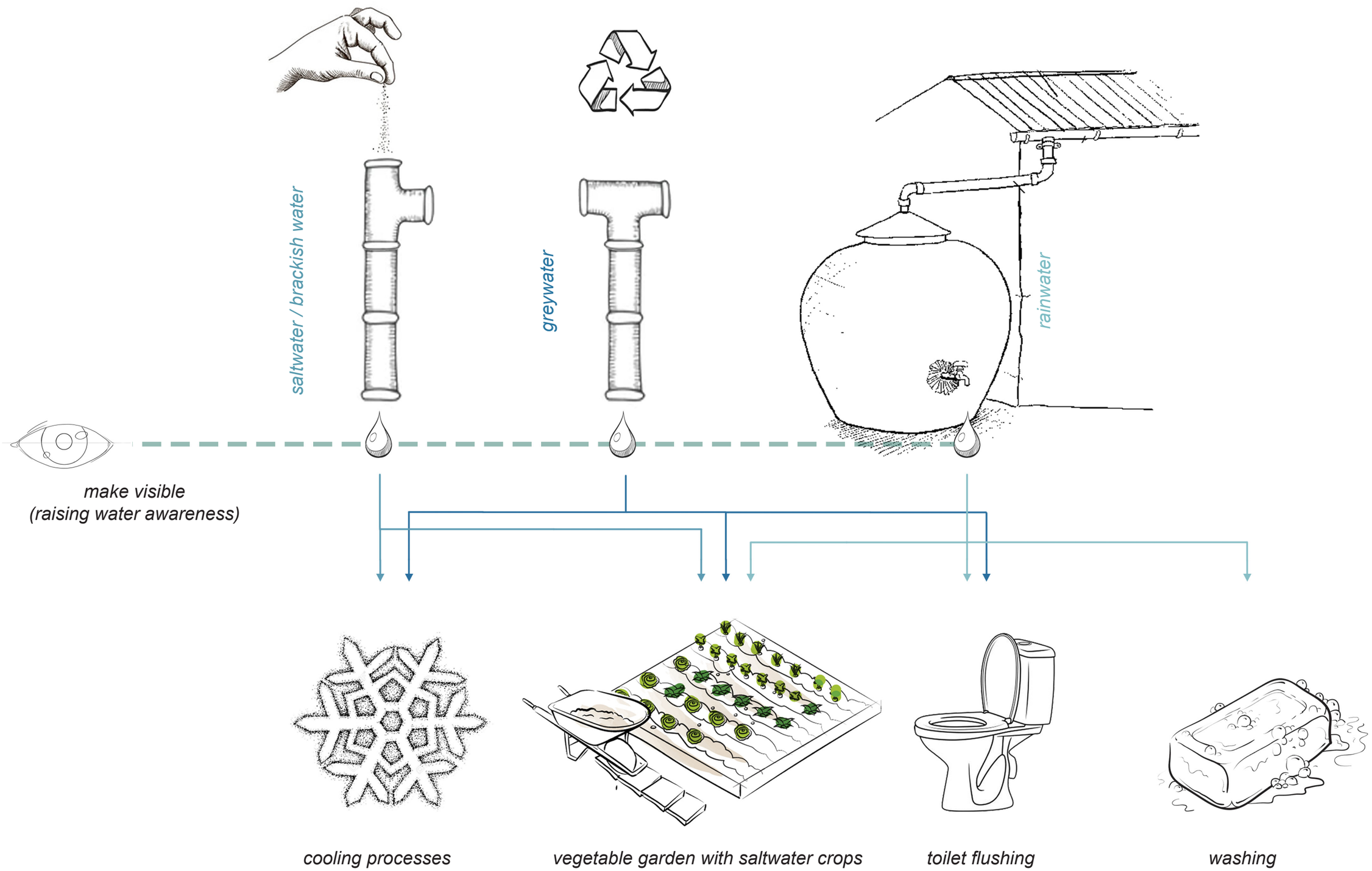
Island-Wide

Local Level



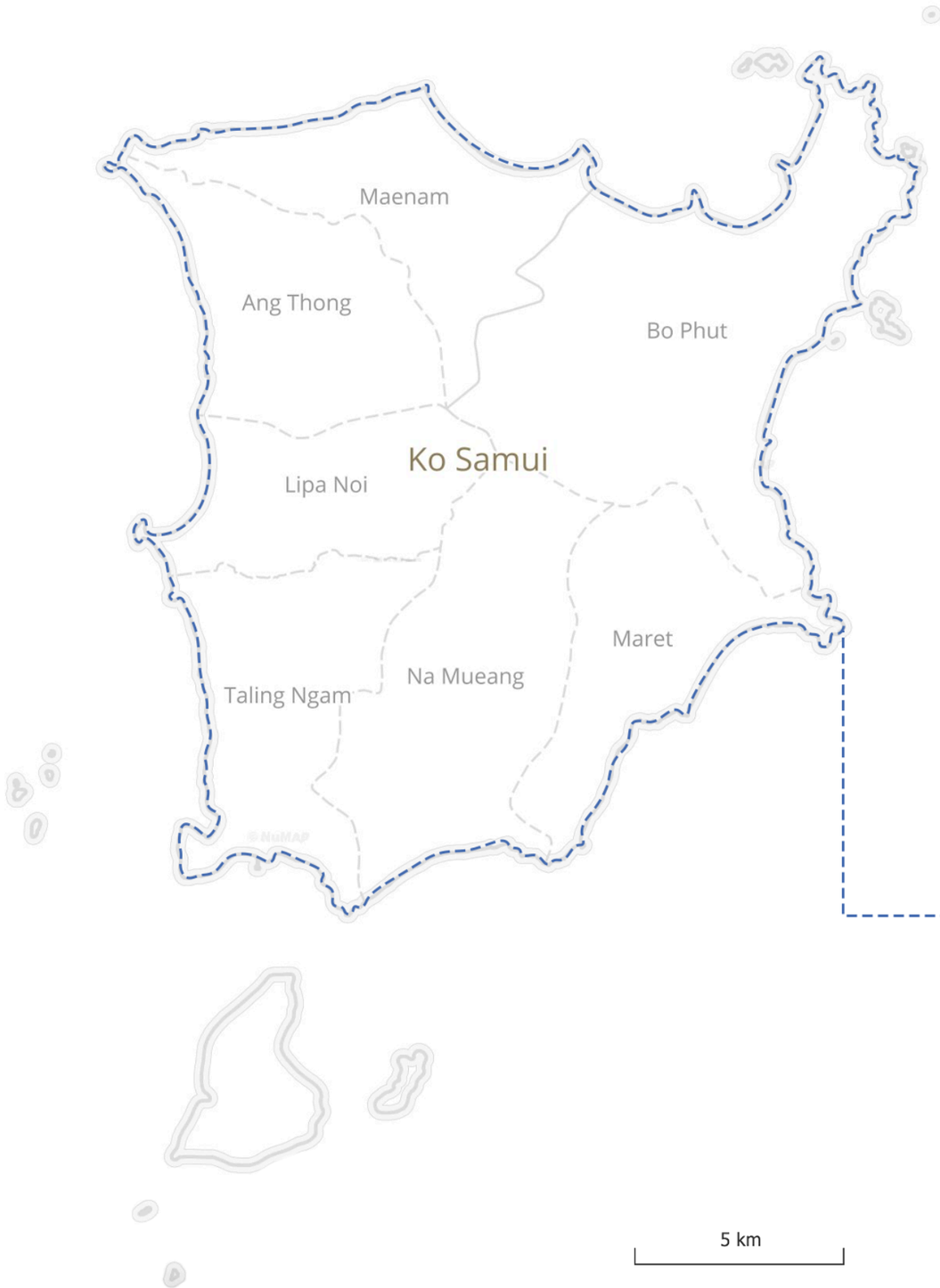
Individual Unit Level

Interplay within Research and Design | Conclusion

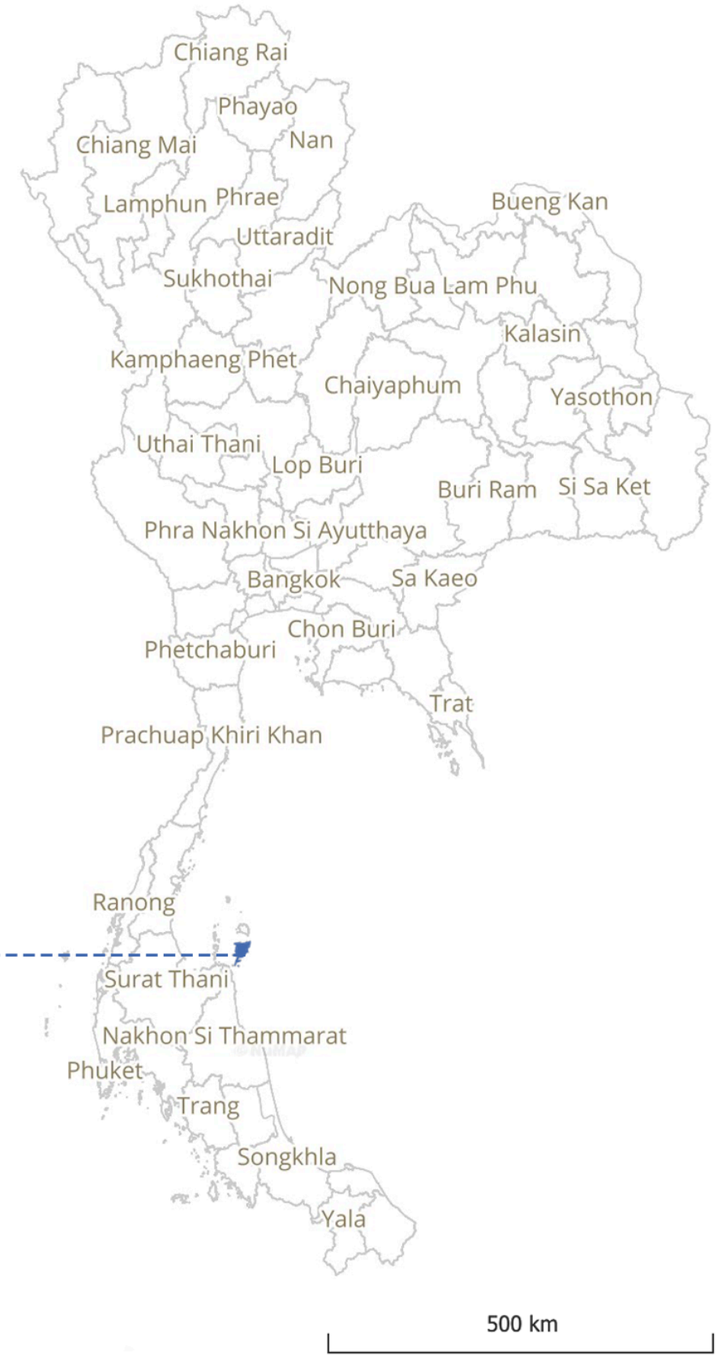


Dual Pipe System with Saltwater / Brackish Water, On-Site Water Filtration / Recycling utilizing Greywater and Rainwater Harvesting (RWH)

Architectural Design | Location

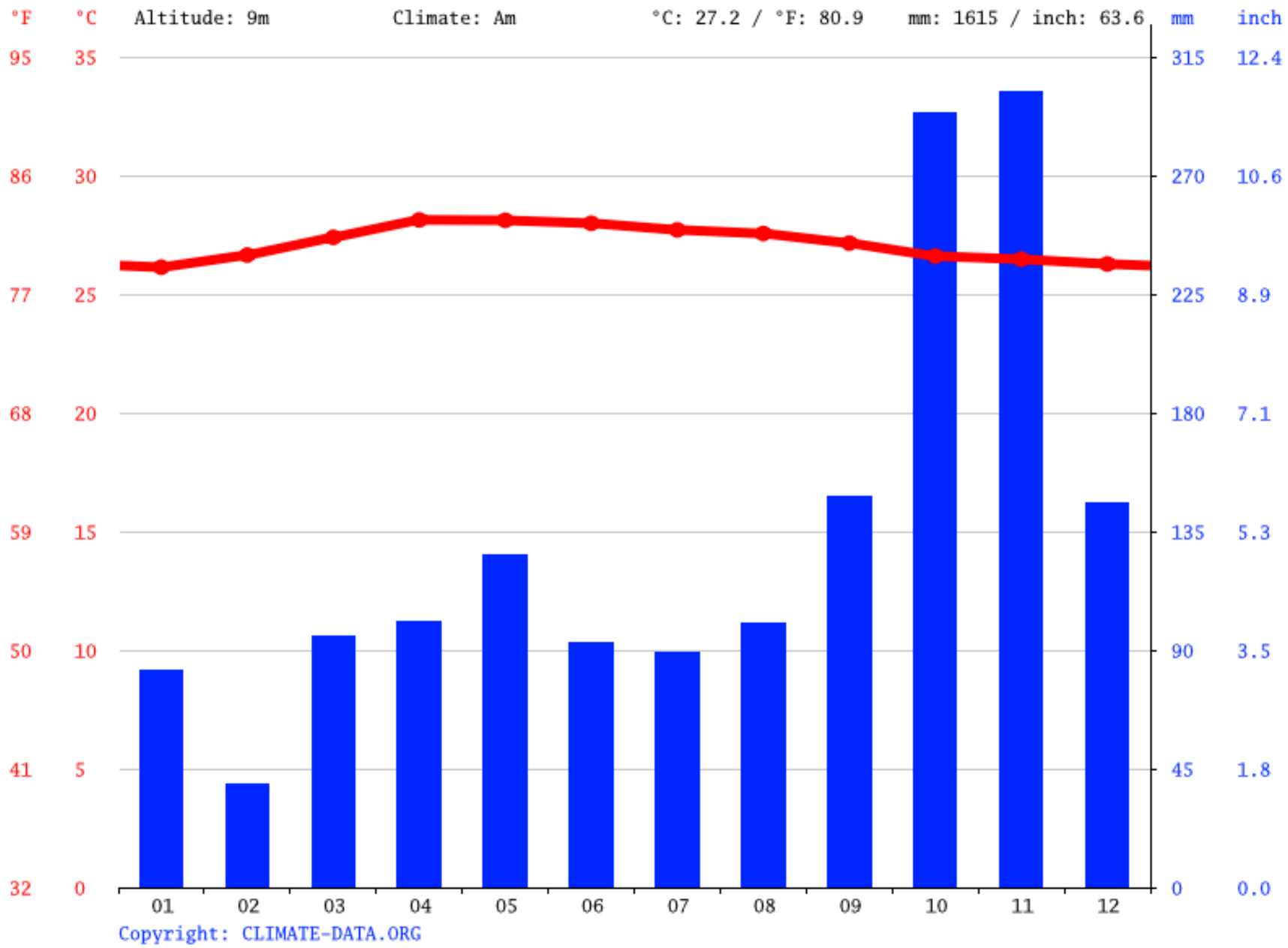


Koh Samui



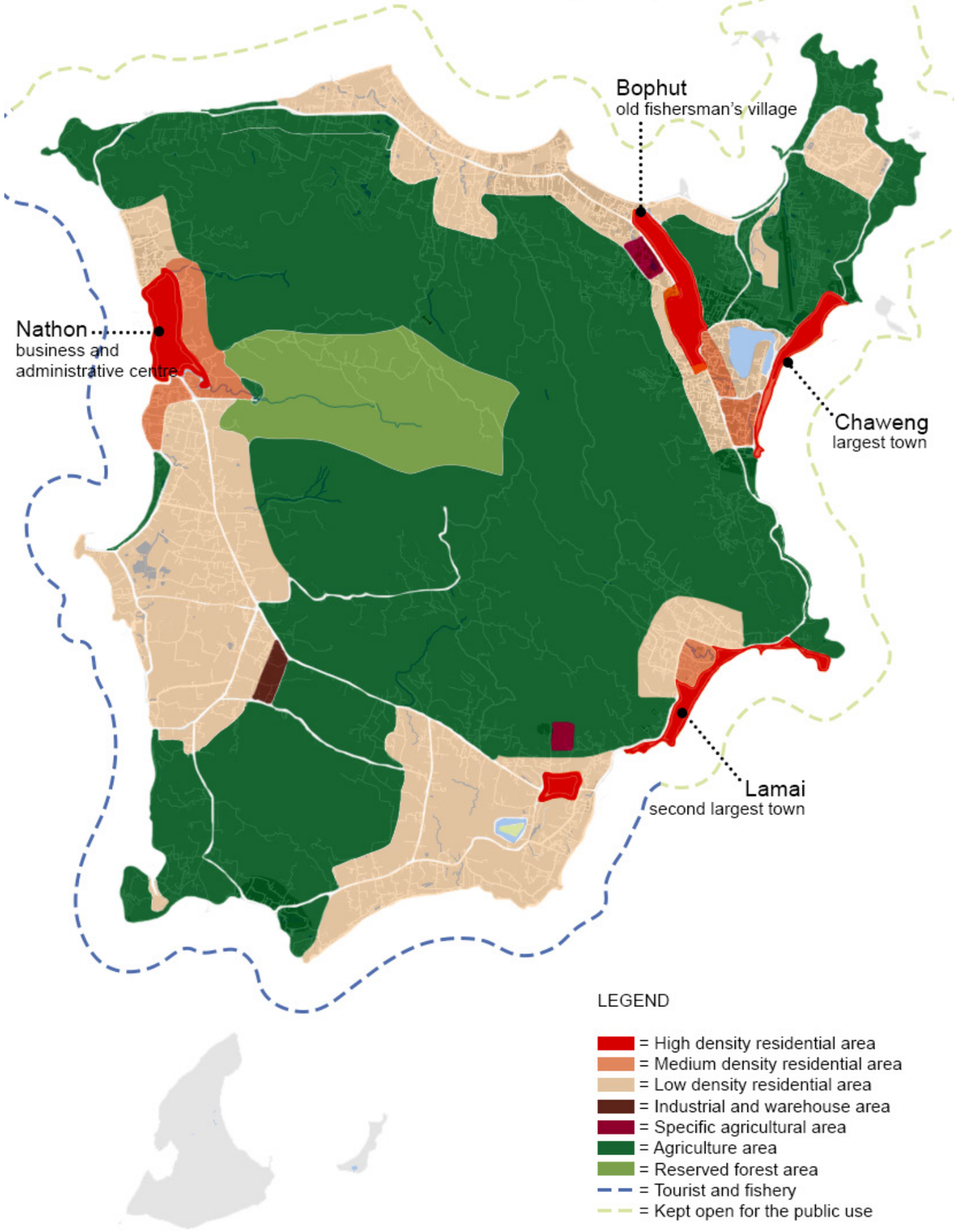
Thailand

Architectural Design | Location



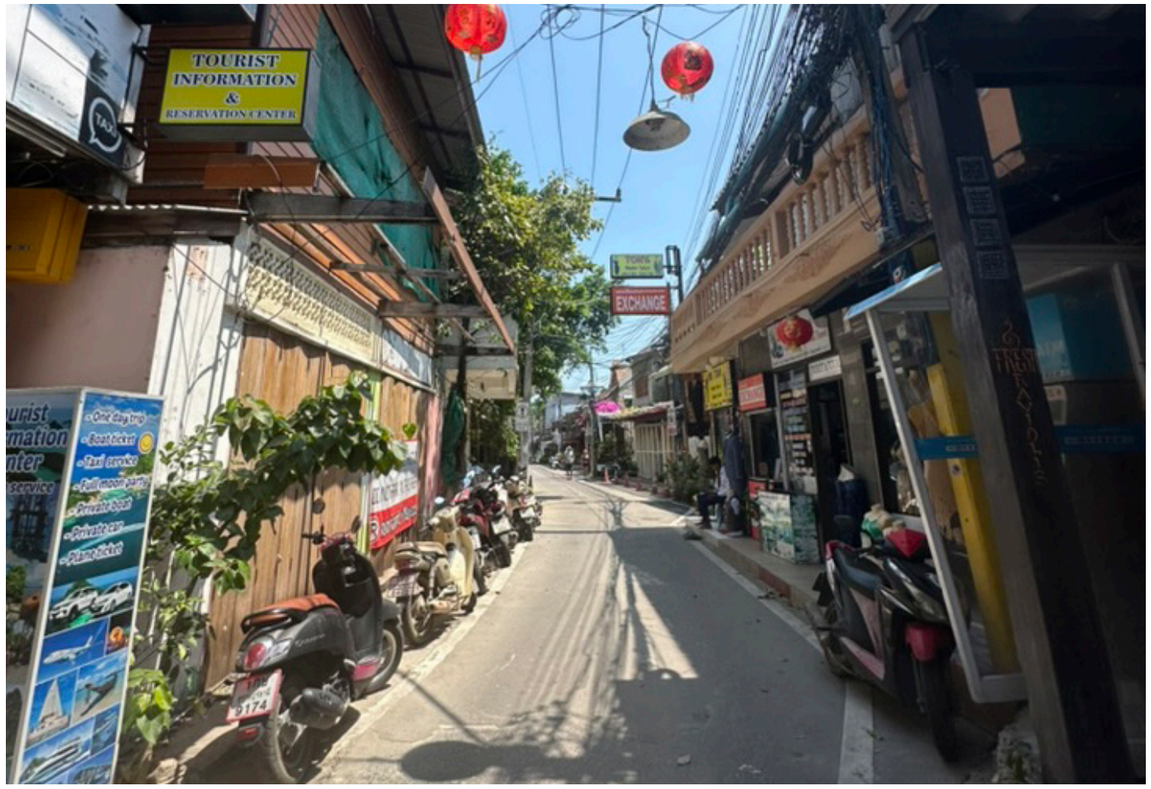
Climate Koh Samui (Temperature and Precipitation)

Architectural Design | Location



Zoning Regulations Koh Samui

Architectural Design | Location



Architectural Design | Project Site

Architectural Design | Project Site

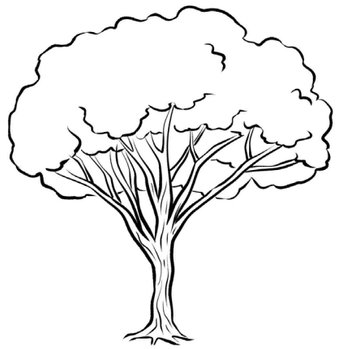
Architectural Design | Project Site

Architectural Design | Project Site

Architectural Design | Conclusion Fieldwork

ENVIRONMENTAL ISSUES

Import

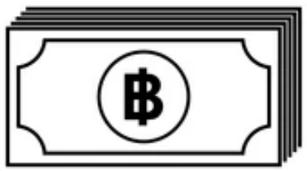


No Awareness

Water Shortage

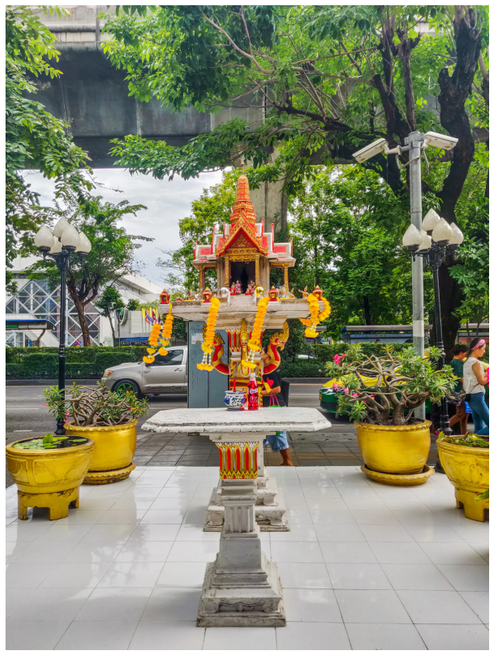
Waste

PRIOTOTIES



Money

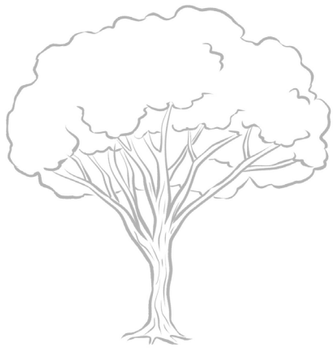
Budism



Architectural Design | Conclusion Fieldwork

OPPORTUNITIES

Import

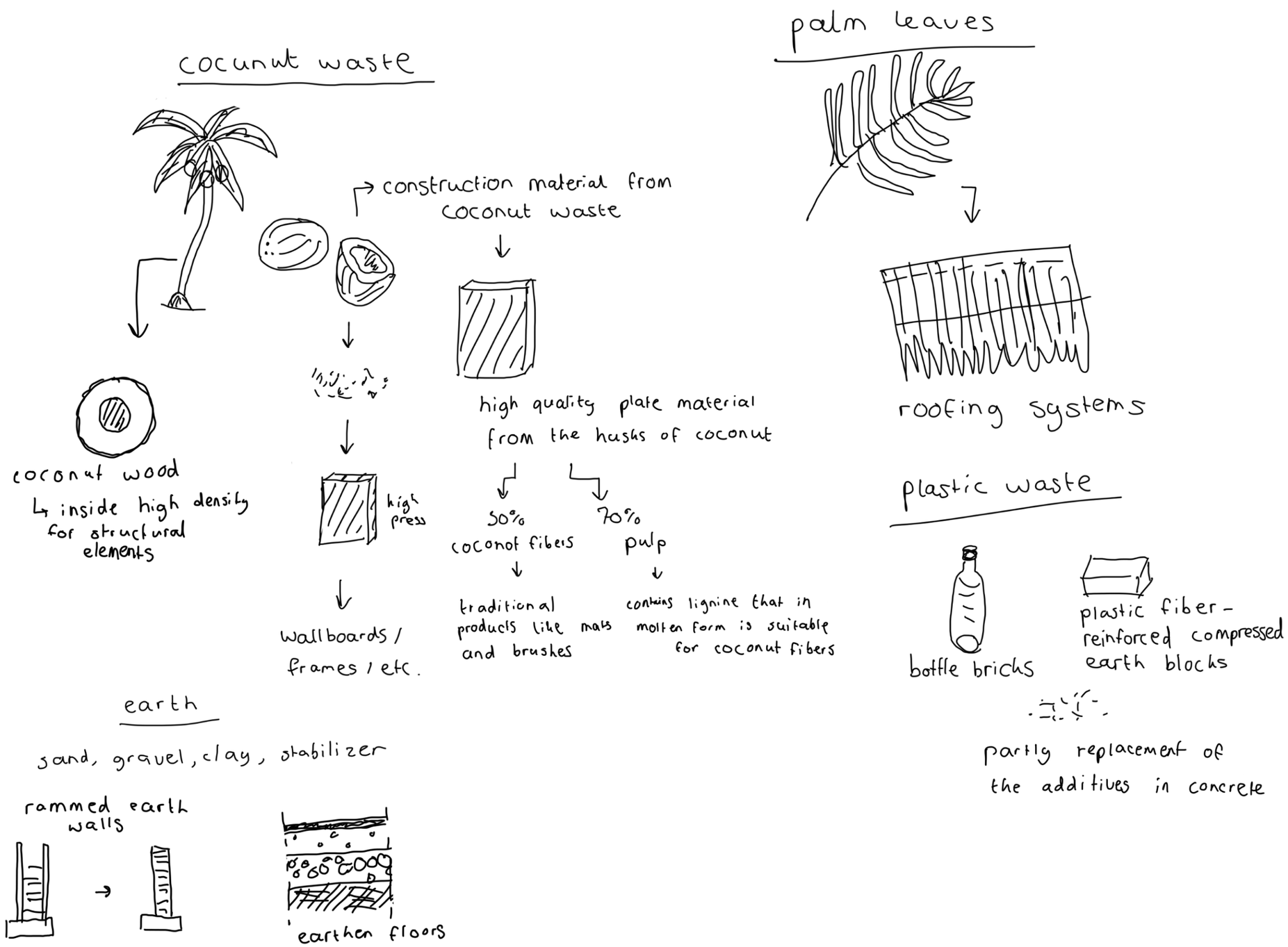


No Awareness

Water Shortage

Waste

Architecural Design | Conclusion Fieldwork

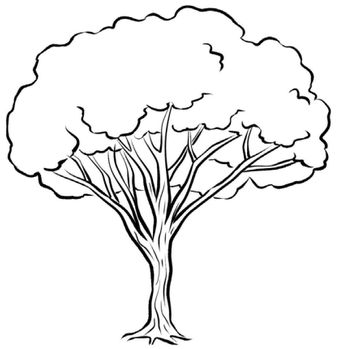


Local building materials

Architecural Design | Conclusion Fieldwork

Architecural Design | Conclusion Fieldwork

Import

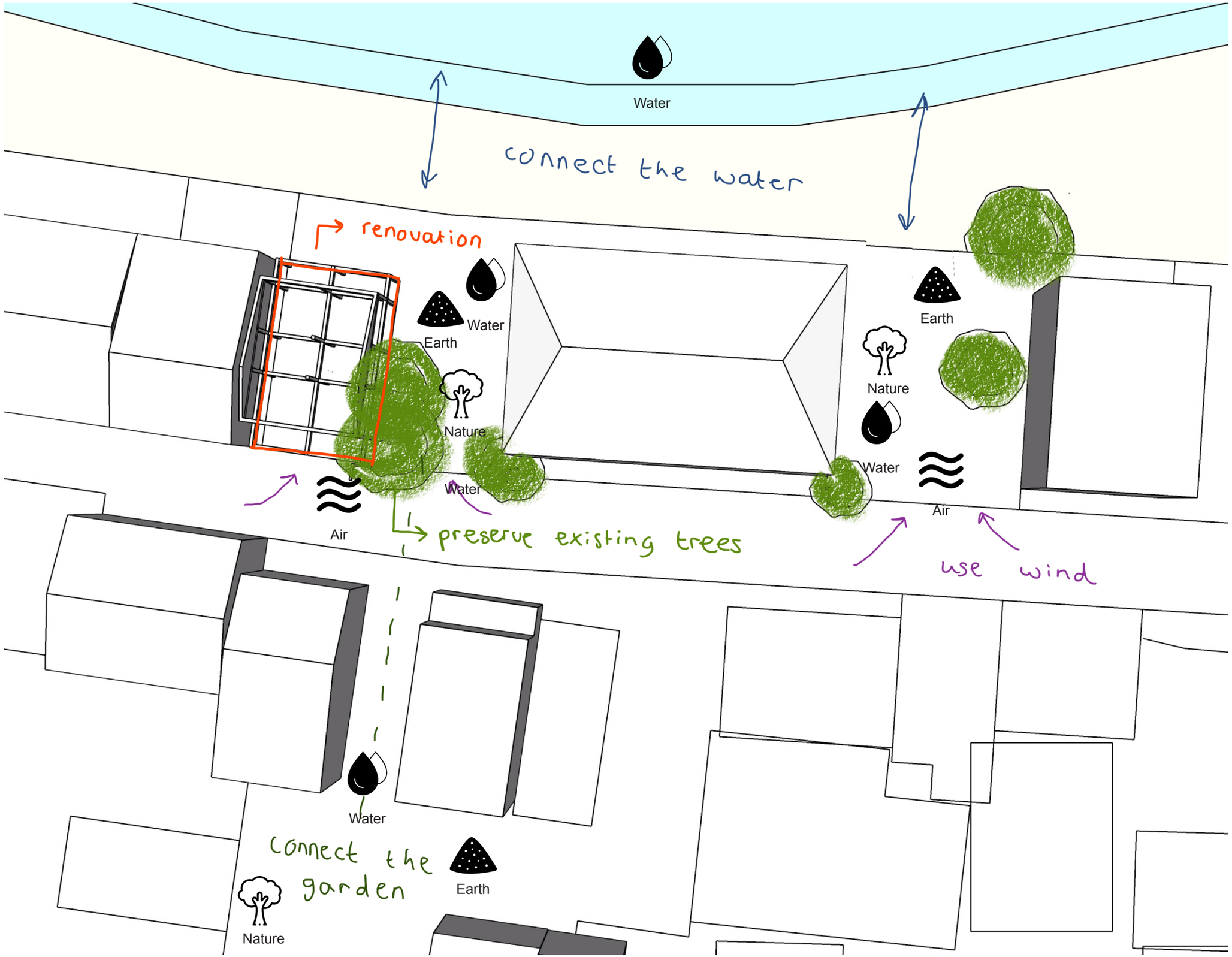


No Awareness

Water Shortage

Waste

Architecural Design | Conclusion Fieldwork



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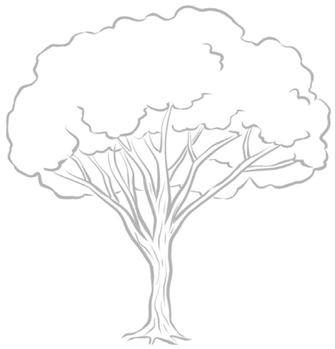
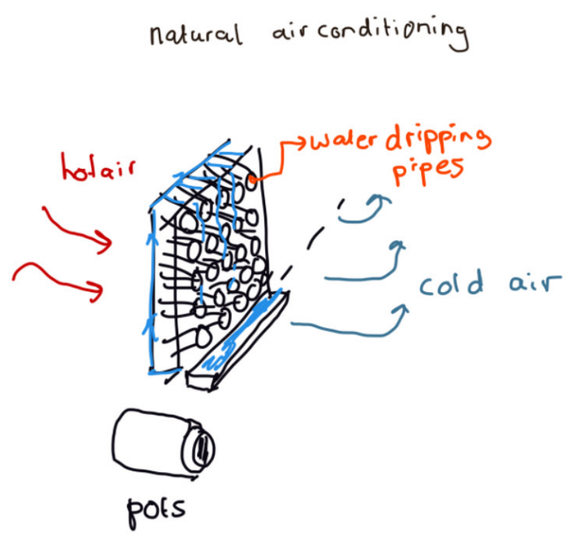


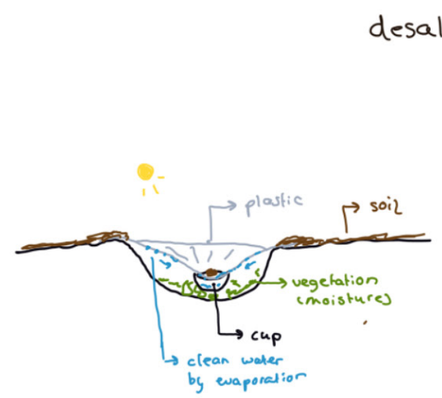
No Awareness

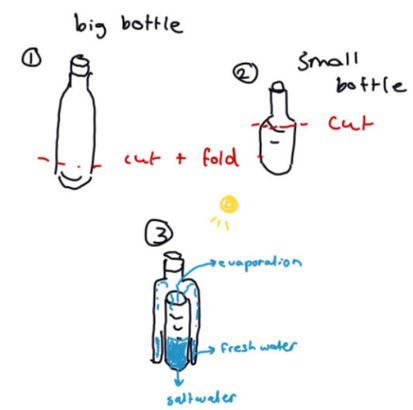
Water Shortage

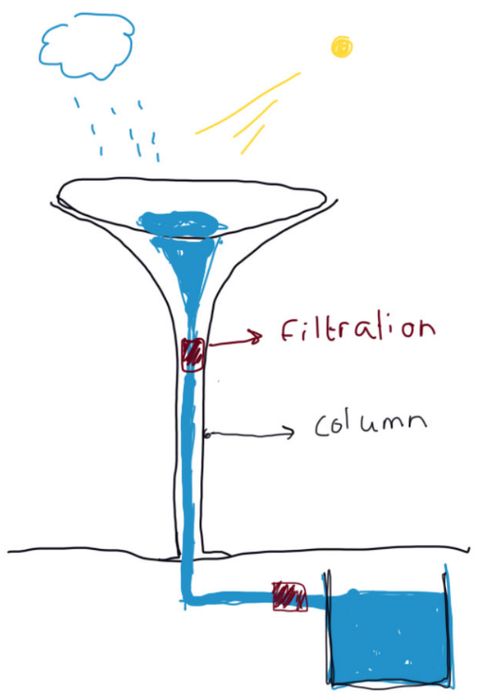
Waste

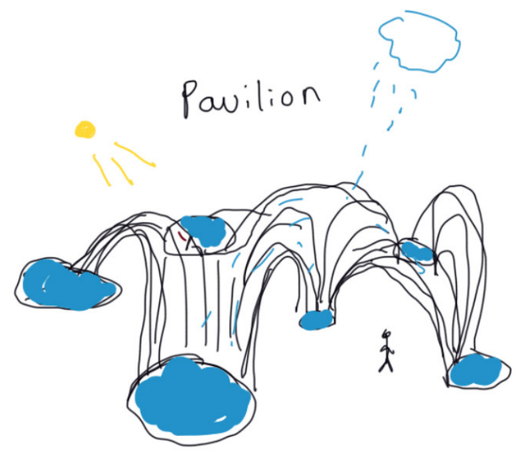
Architecural Design | Conclusion Fieldwork

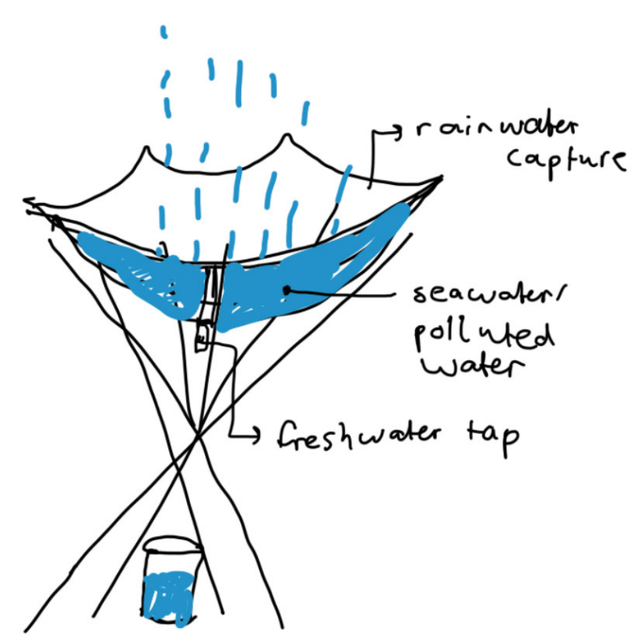








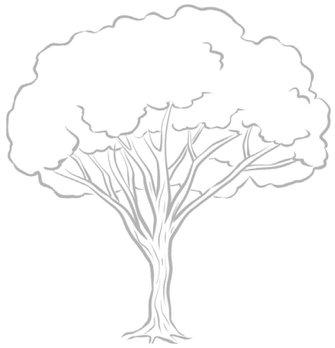




Create awareness in a recreational way with water experiments

Architecural Design | Conclusion Fieldwork

Import



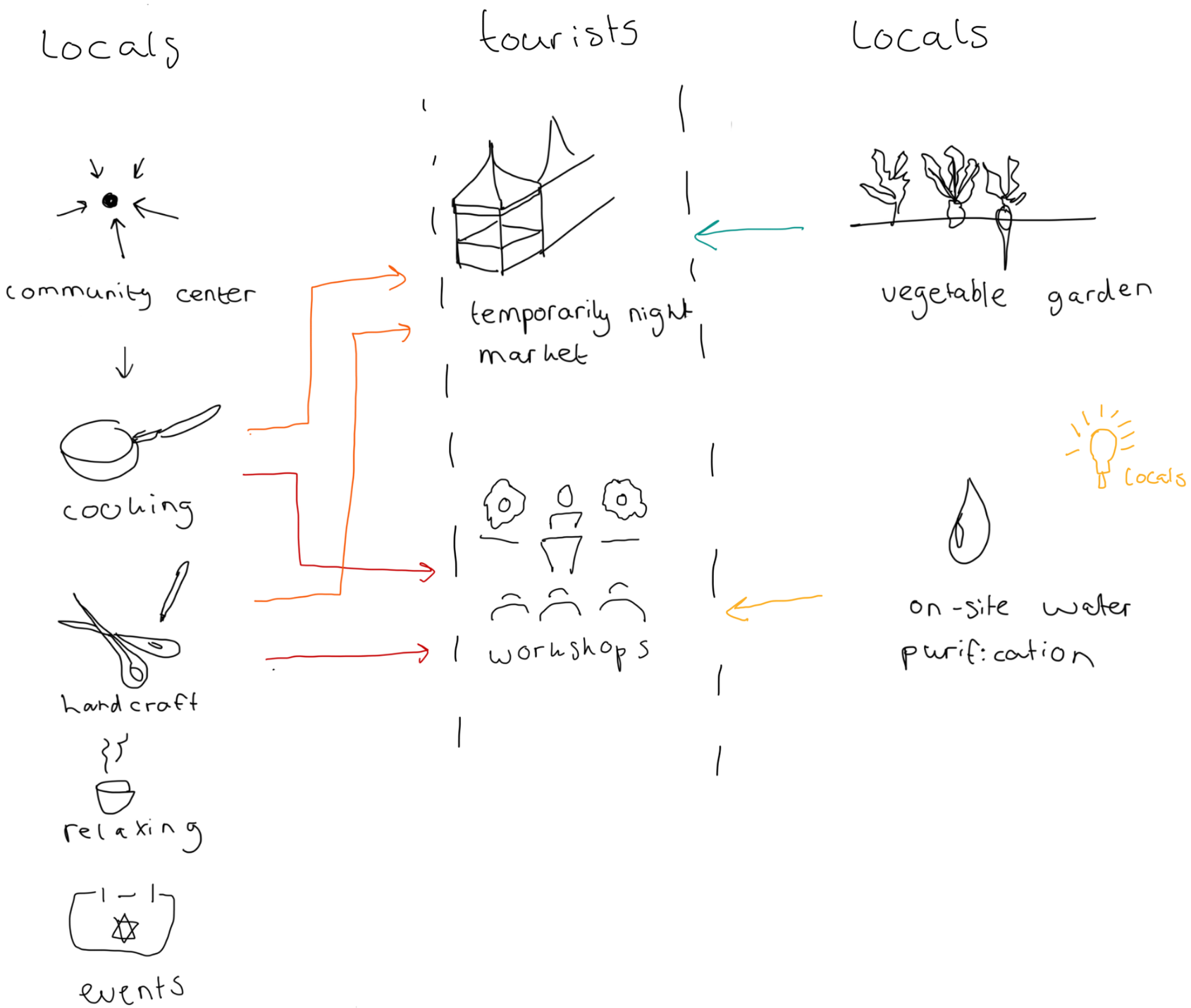
No Awareness

Water Shortage

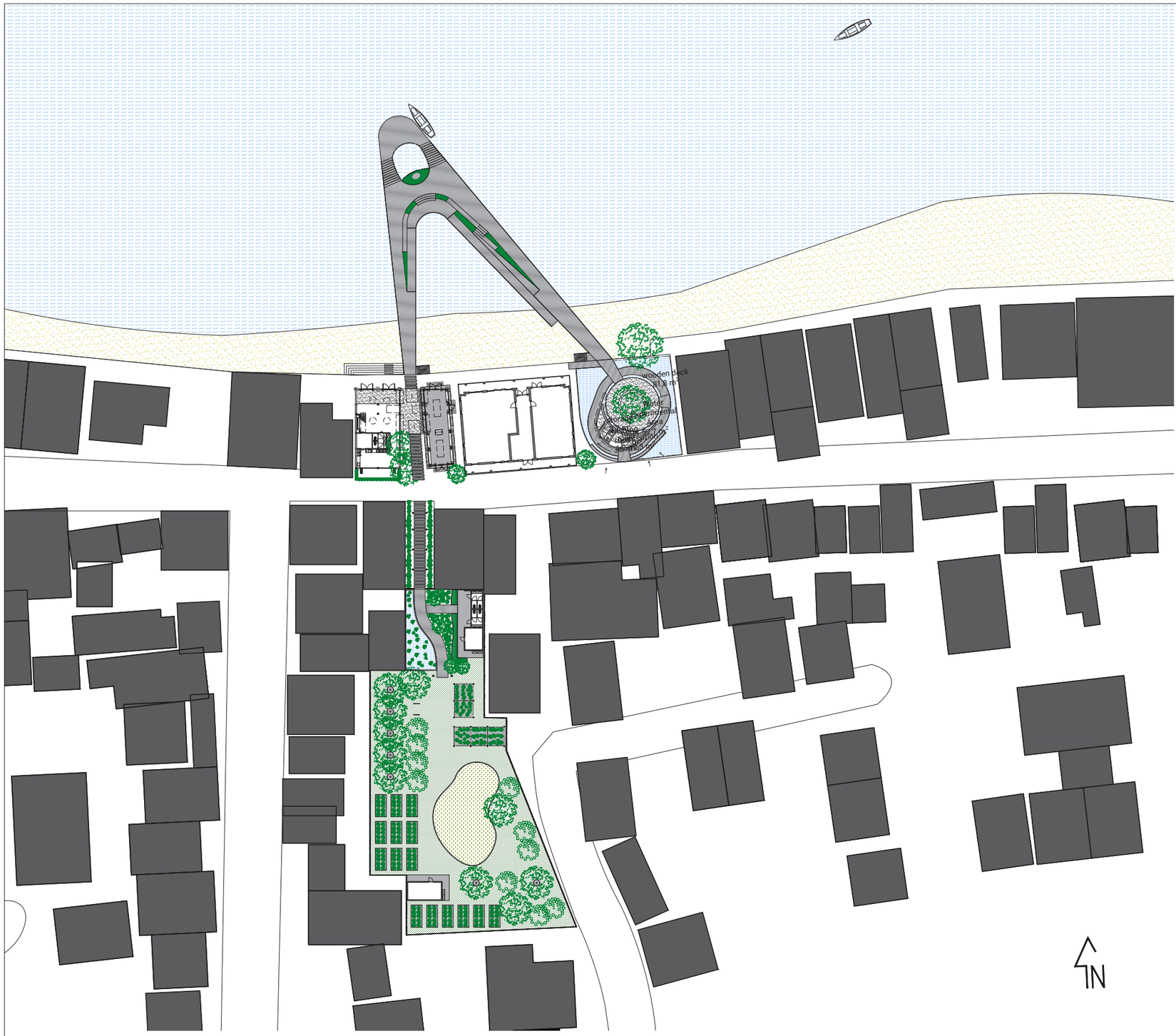
Waste

Architecural Design | Conclusion Fieldwork

Architectural Design | Program



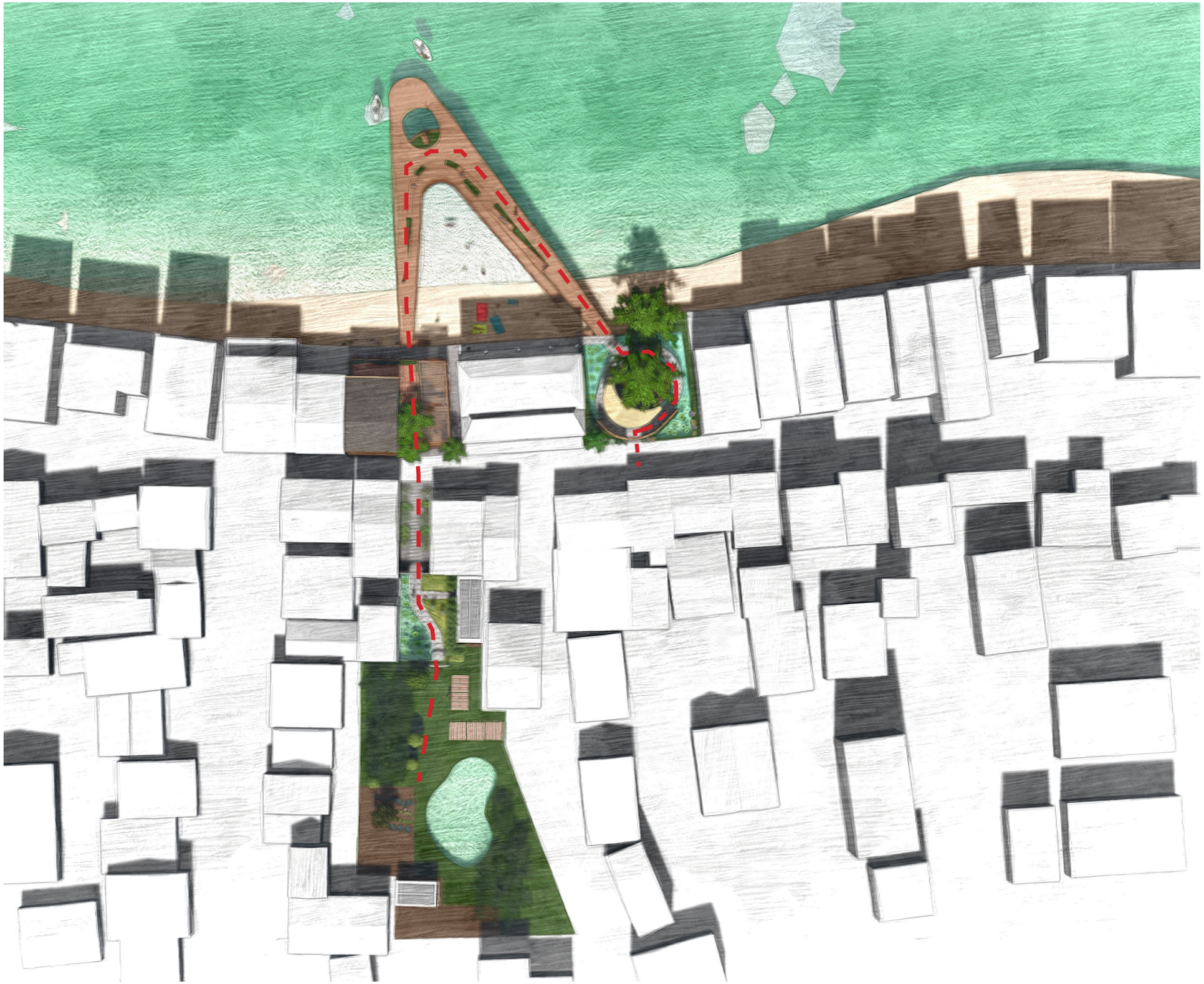
Architectural Design | Masterplan



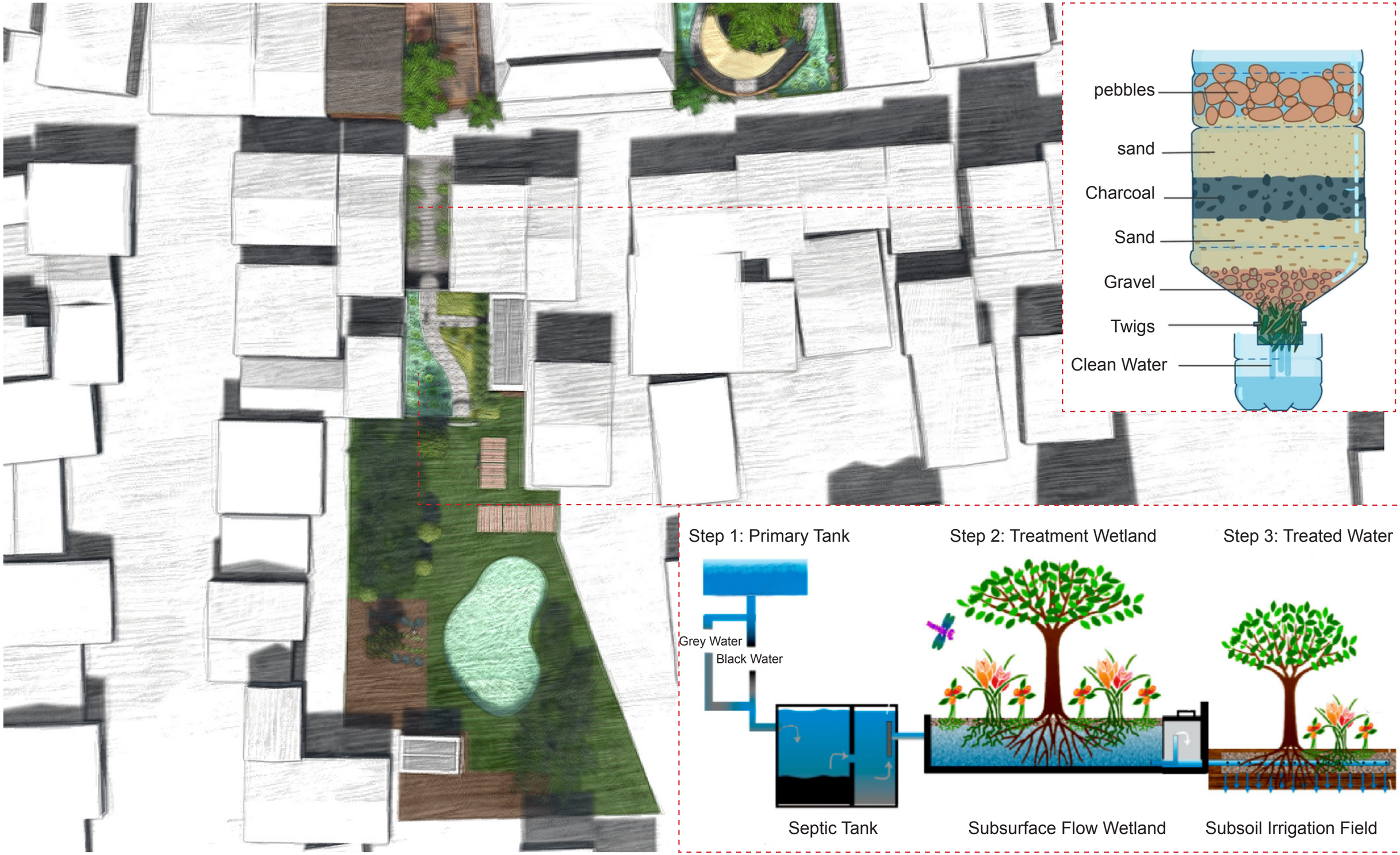
MASTERPLAN
GROUNDFLOOR

STUDIO Architectural Engineering	DATE 02.07.2024	
PROJECT Modern Sala	SIZE A2	1:500
PART Masterplan	SET 202301	SO_B_010

Architectural Design | Masterplan



Architectural Design | Vegetable garden



Architectural Design | Vegetable garden

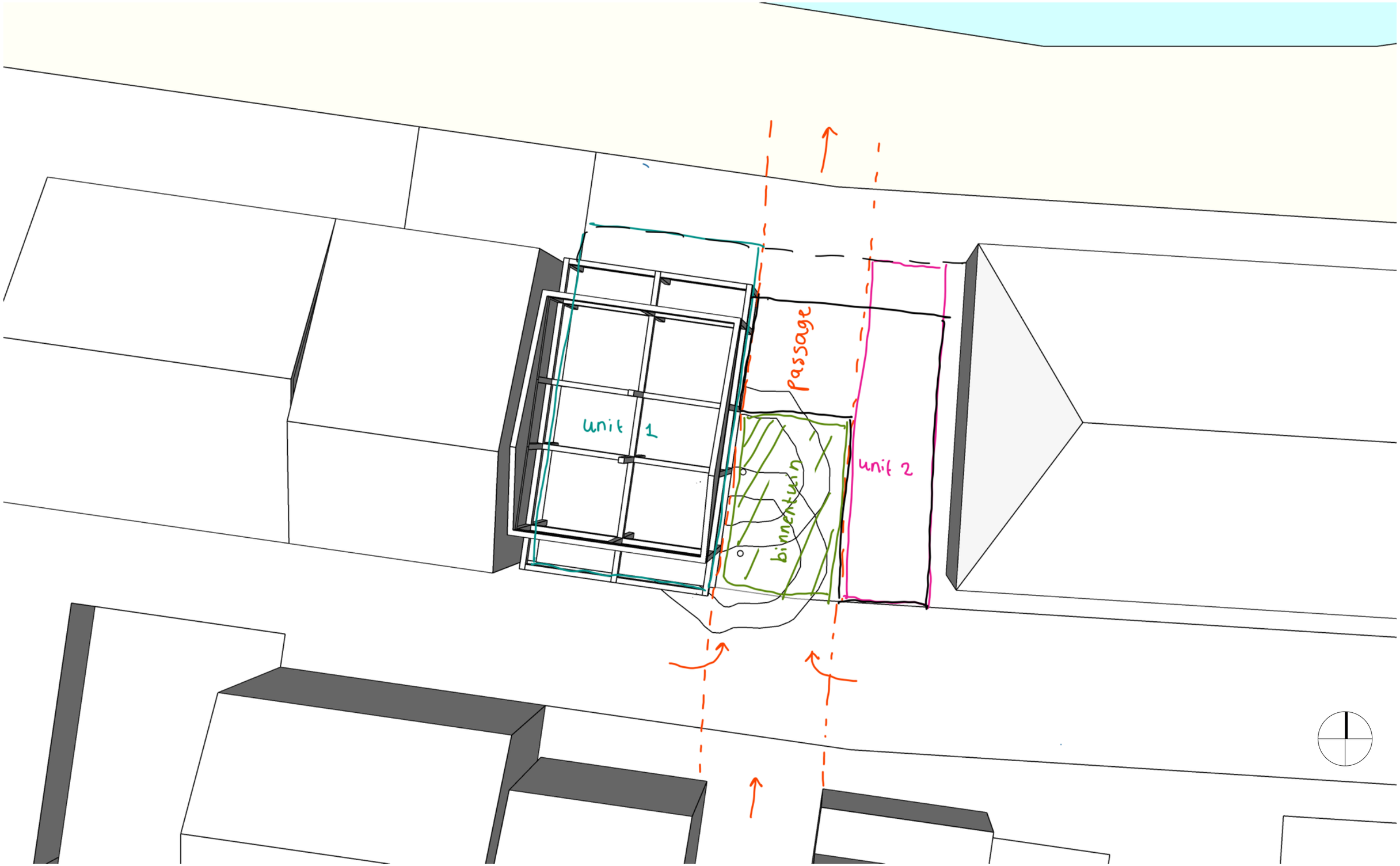
Architectural Design | Vegetable Garden

Architectural Design | Vegetable Garden

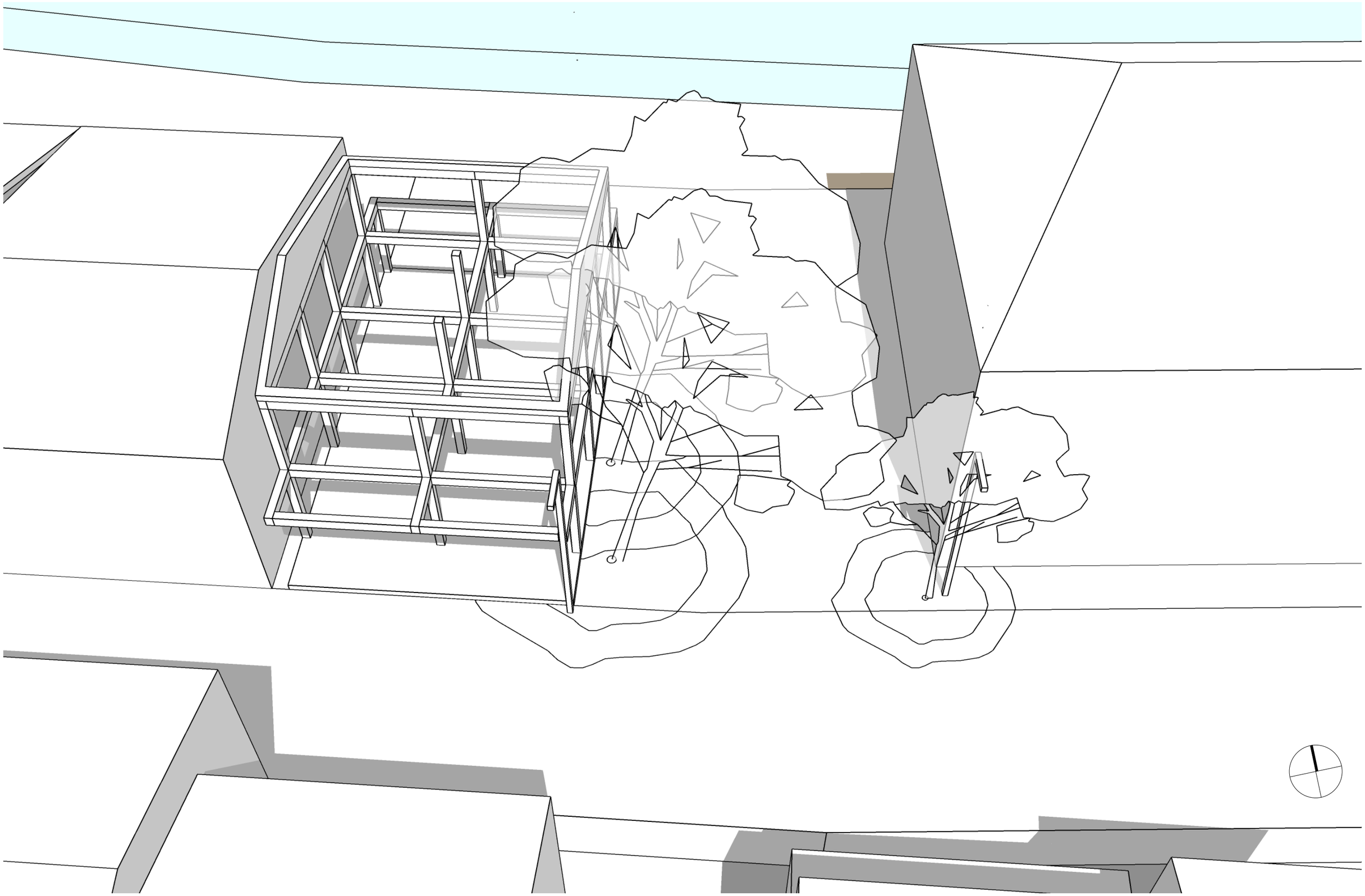
Architectural Design | Vegetable Garden

Architectural Design | Community Center

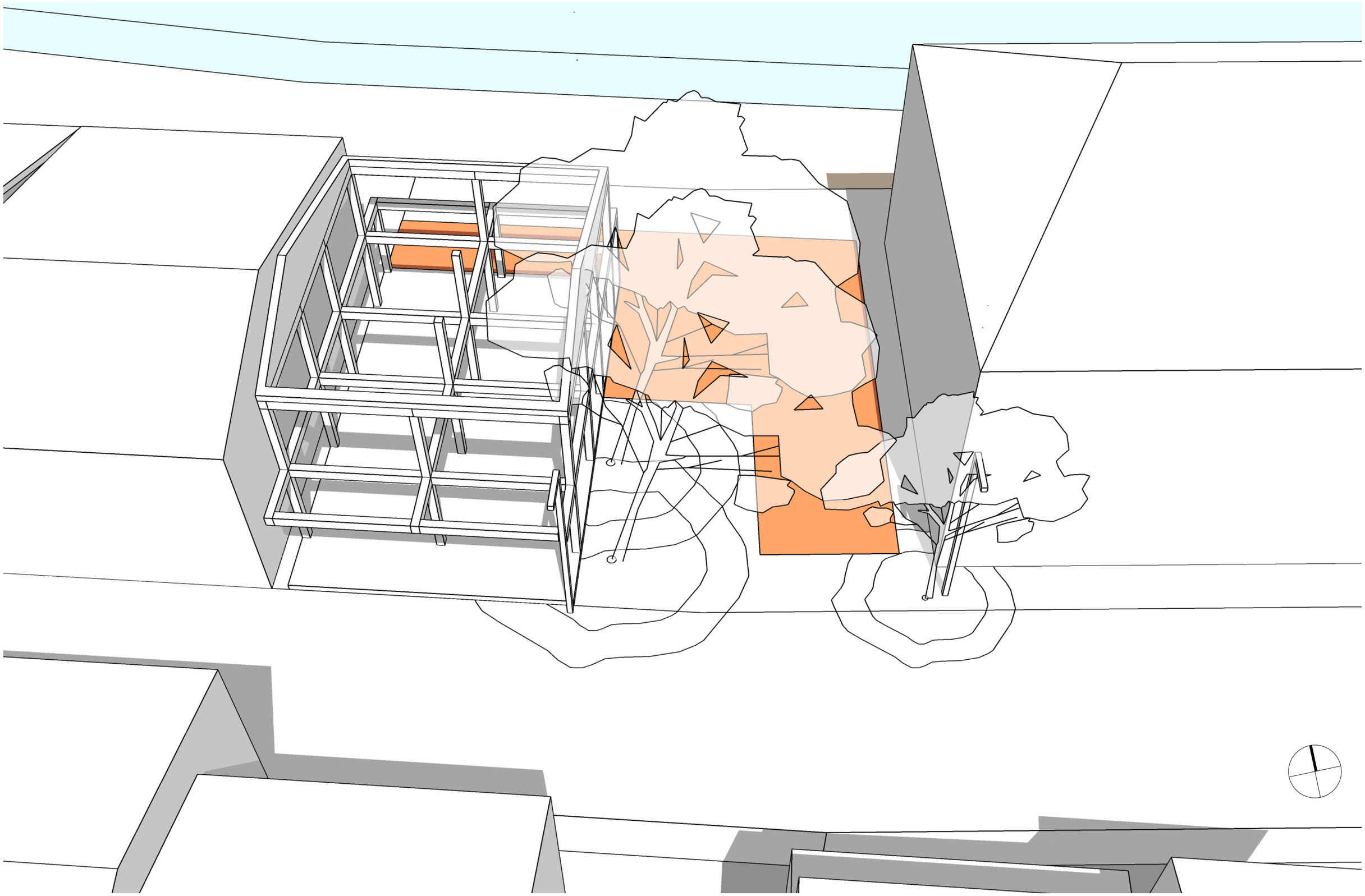
Architectural Design | Community Center (Concept)



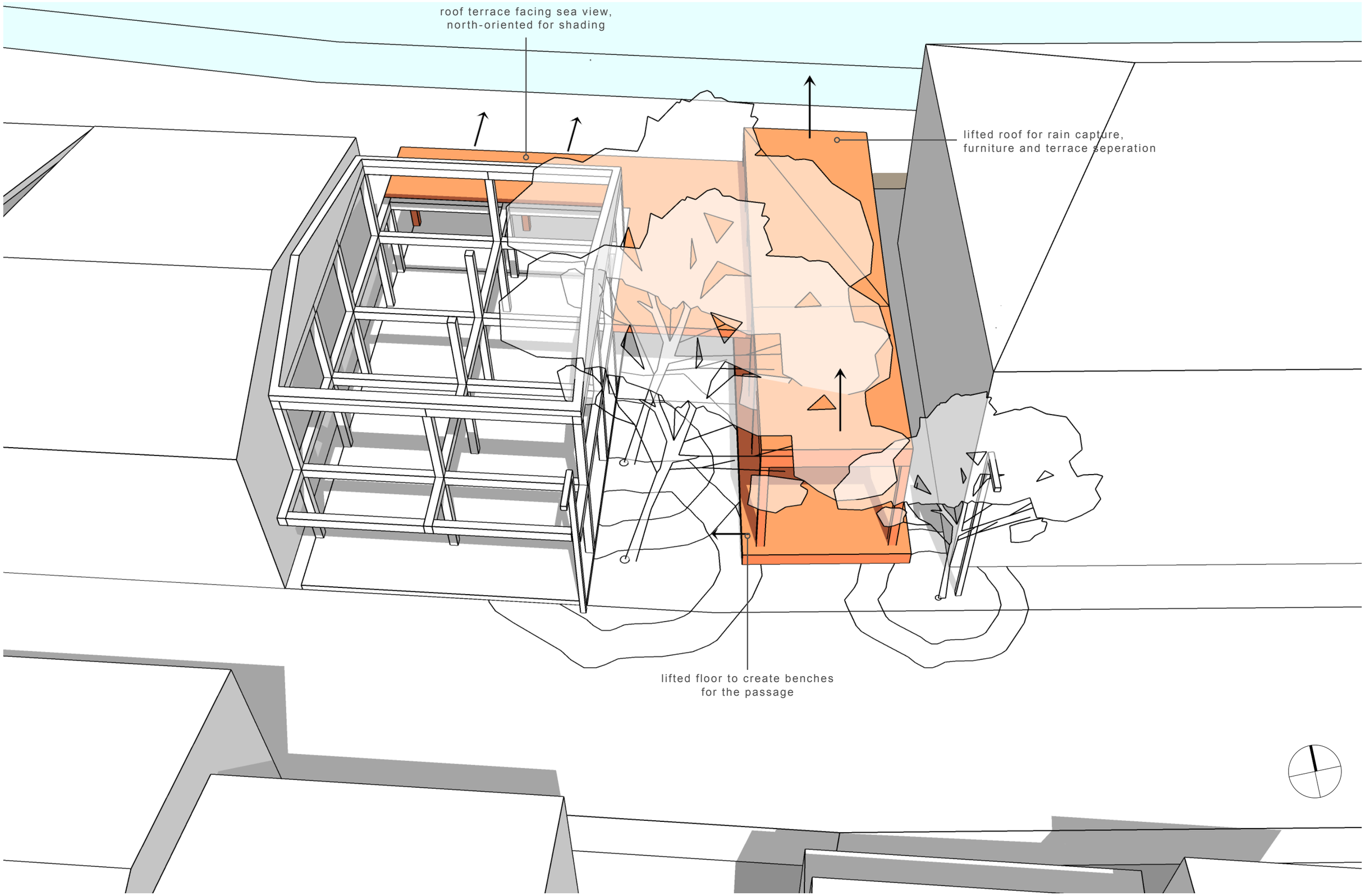
Architectural Design | Community Center (Volume)



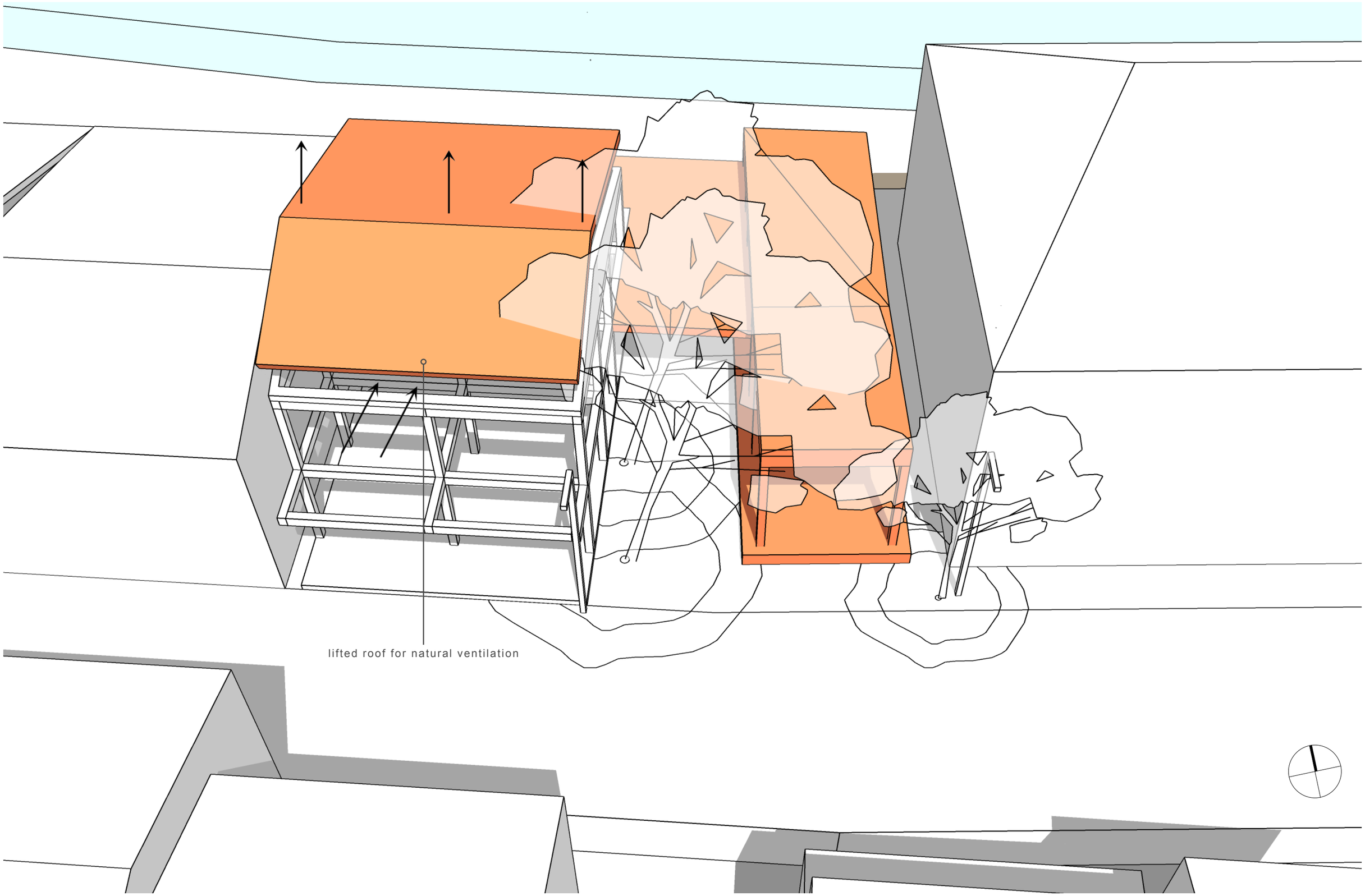
Architectural Design | Community Center (Volume)



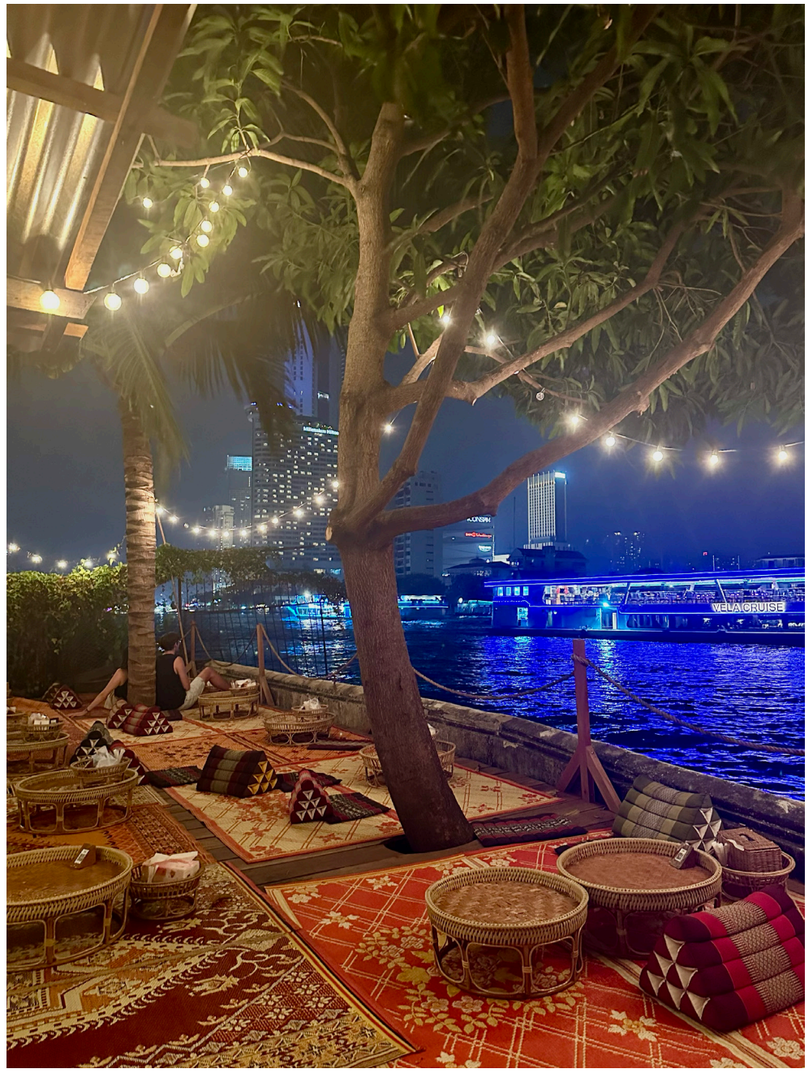
Architectural Design | Community Center (Volume)



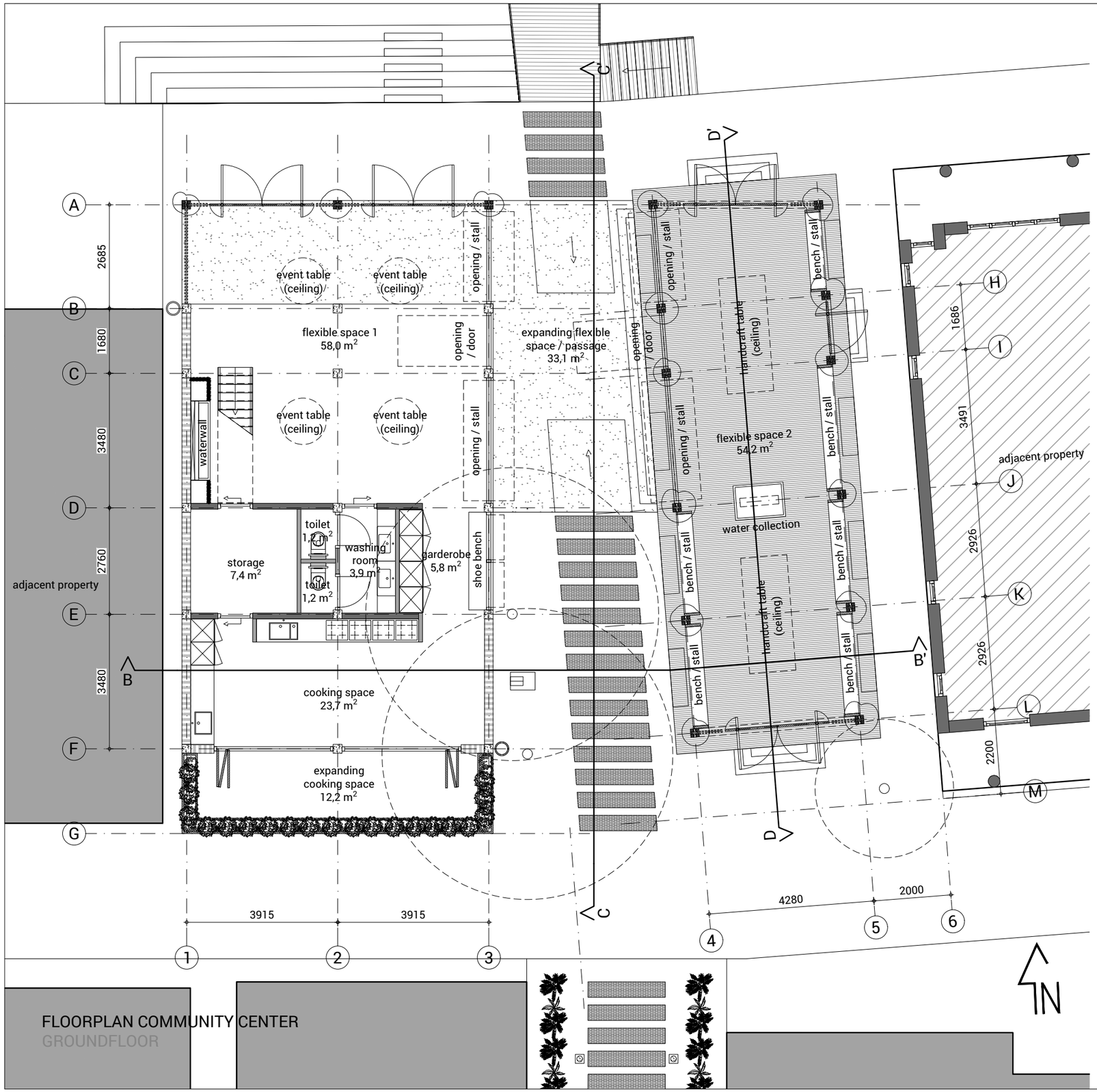
Architectural Design | Community Center (Volume)



Architectural Design | Community Center



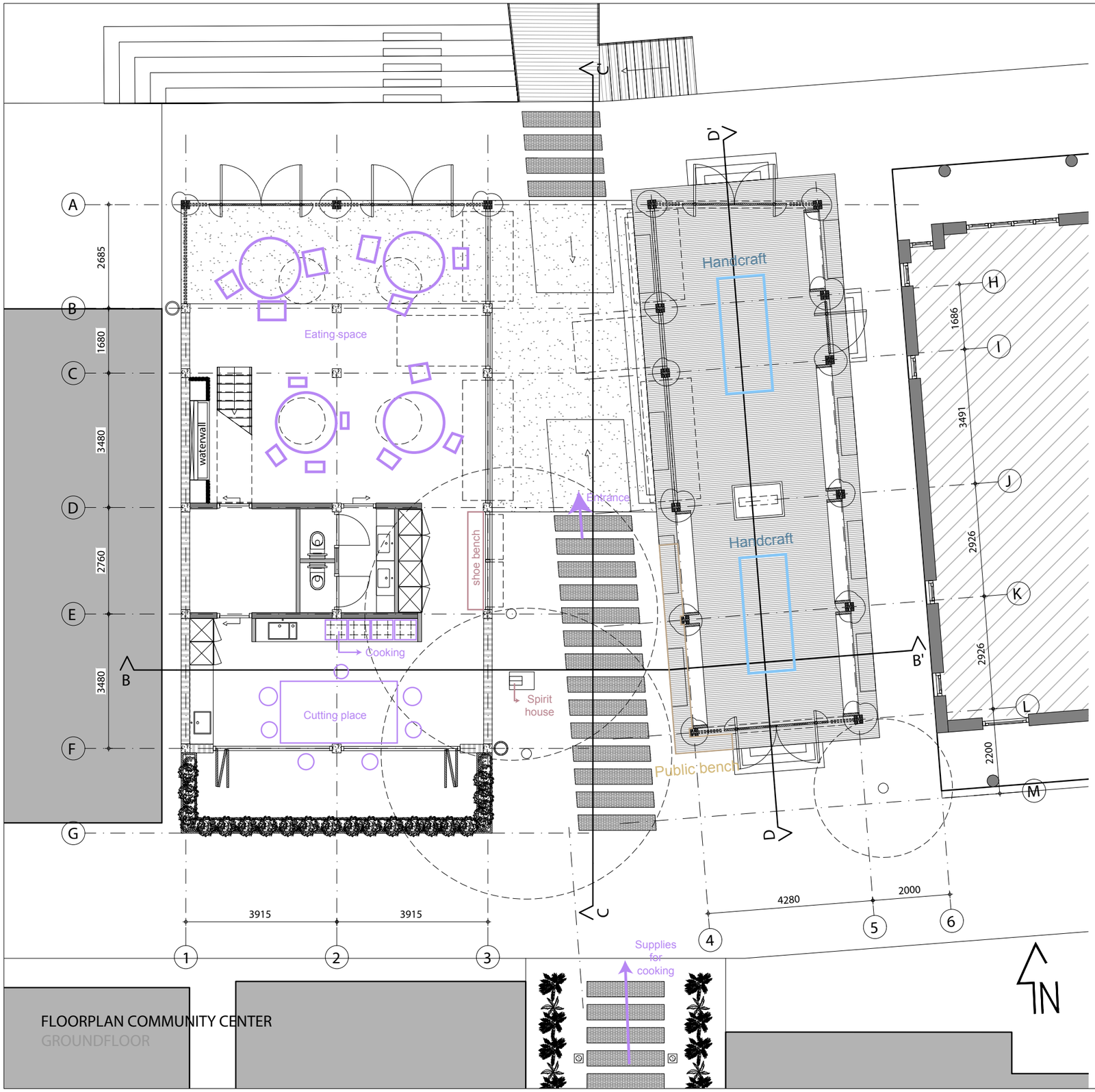
Architectural Design | Community Center



FLOORPLAN COMMUNITY CENTER
GROUNDFLOOR

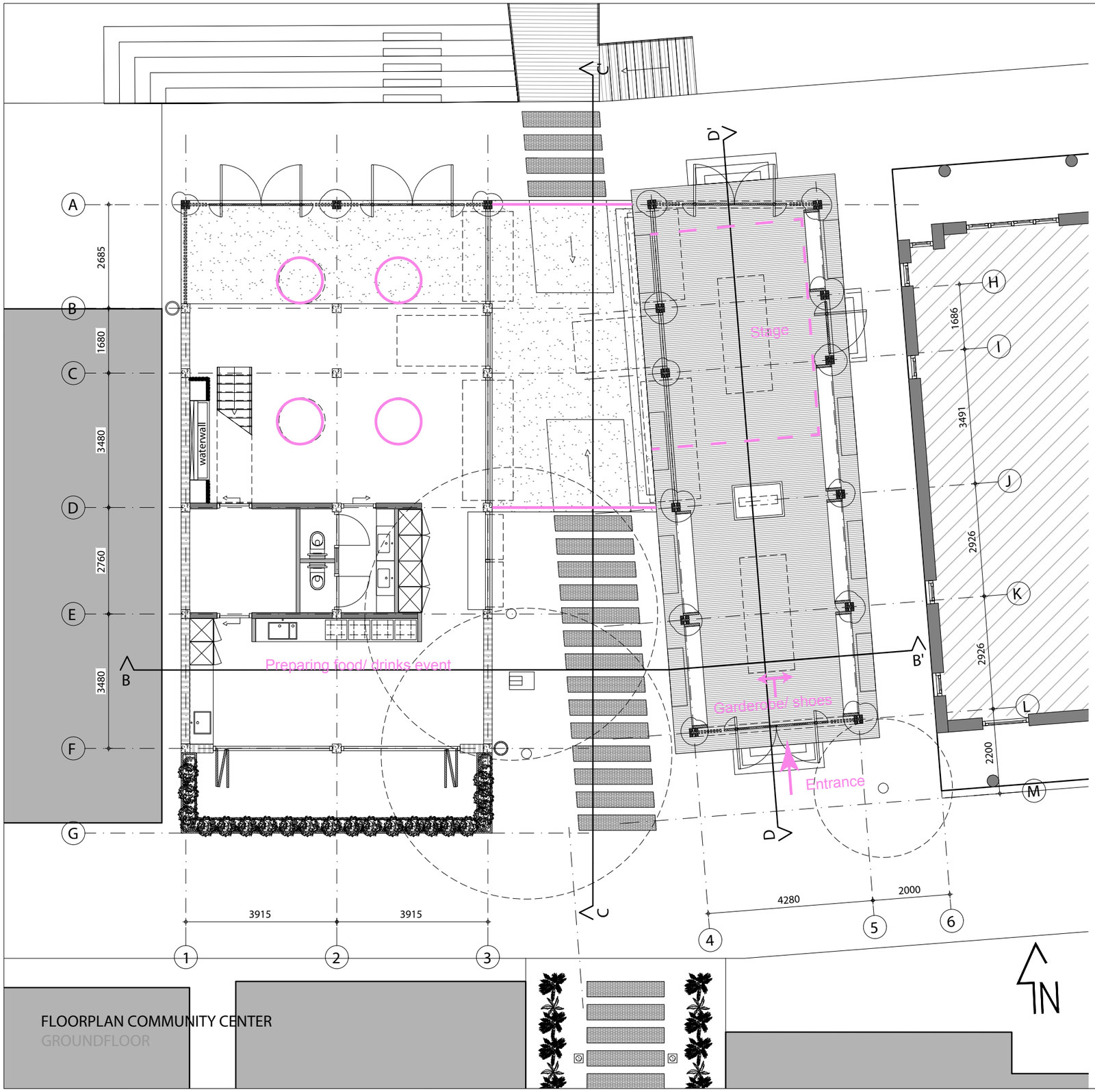
STUDIO Architectural Engineering	DATE 02.07.2024	
PROJECT Modern Sala	SIZE A3	1:100
PART Groundfloor Community Center	SET 202301	SO_B_100

Architectural Design | Community Center



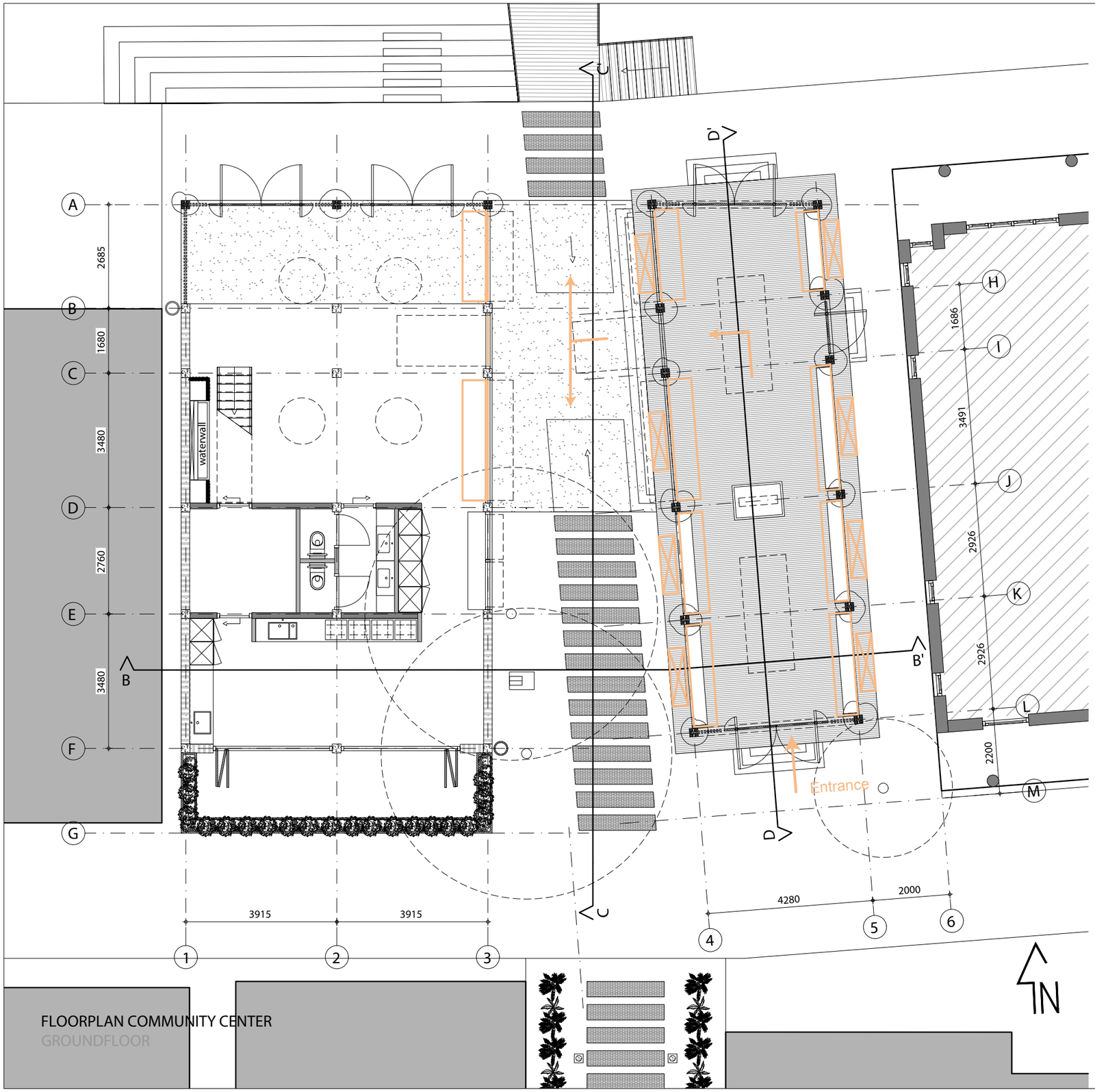
STUDIO	DATE	
Architectural Engineering	02.06.2024	
PROJECT	SIZE	
	A3	1:100
PART	SET	
Groundfloor Community Center	202301	SO_B_100

Architectural Design | Community Center



STUDIO	DATE	
Architectural Engineering	02.06.2024	
PROJECT	SIZE	
	A3	1:100
PART	SET	
Groundfloor Community Center	202301	SO_B_100

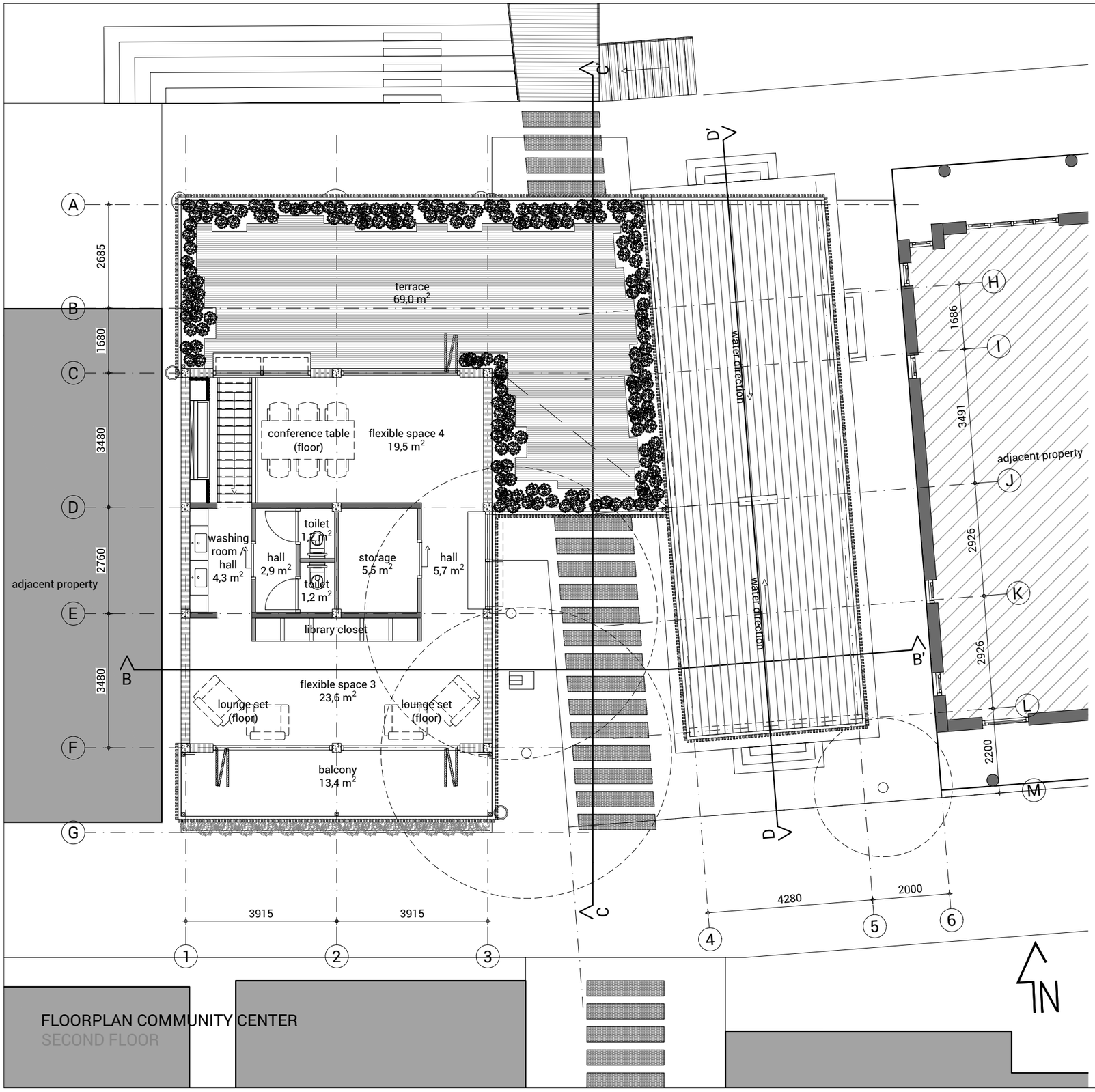
Architectural Design | Community Center



STUDIO	DATE	
Architectural Engineering	02.06.2024	
PROJECT	SIZE	
	A3	1:100
PART	SET	
Groundfloor Community Center	202301	SO_B_100

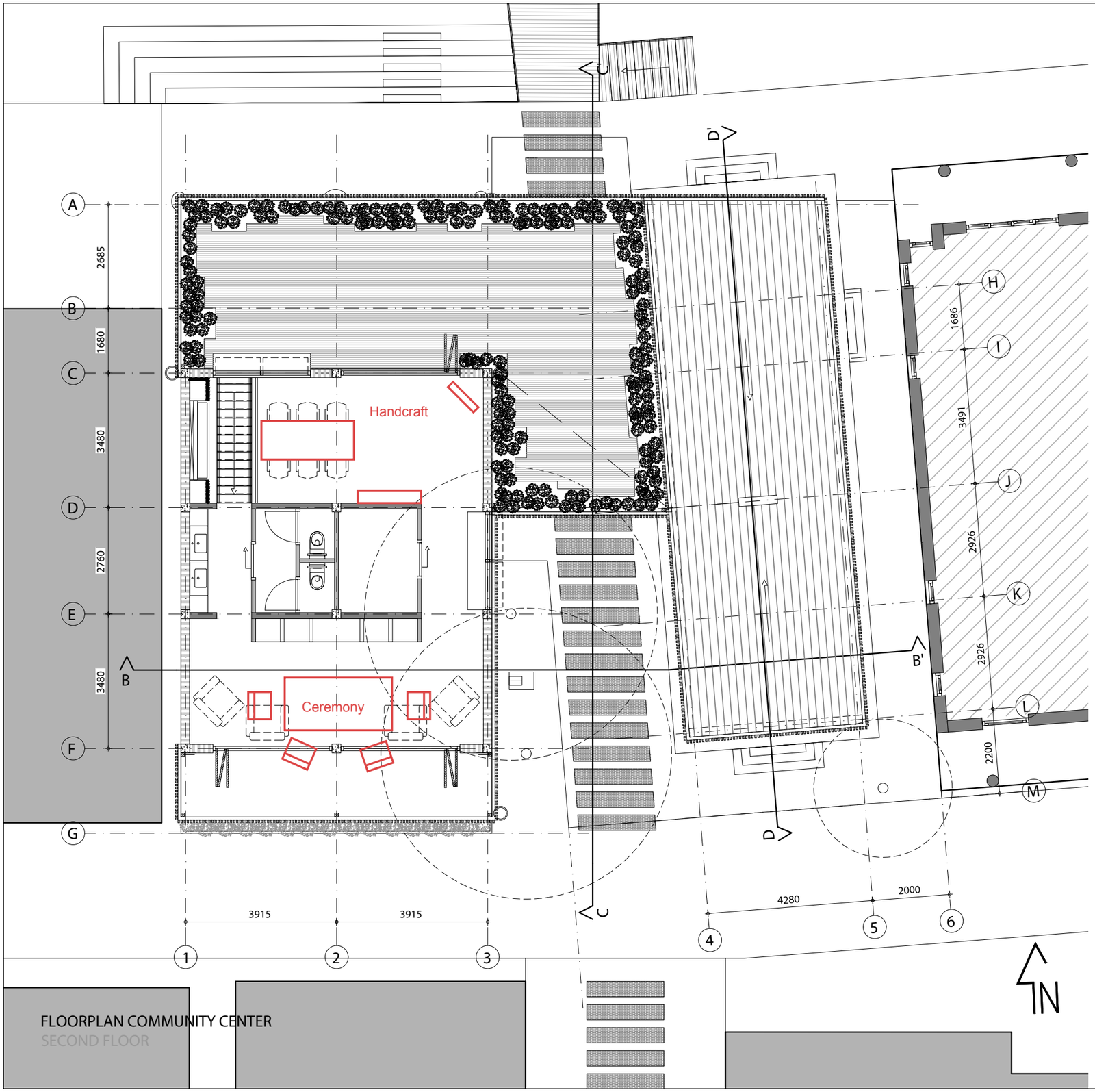
Architectural Design | Community Center

Architectural Design | Community Center



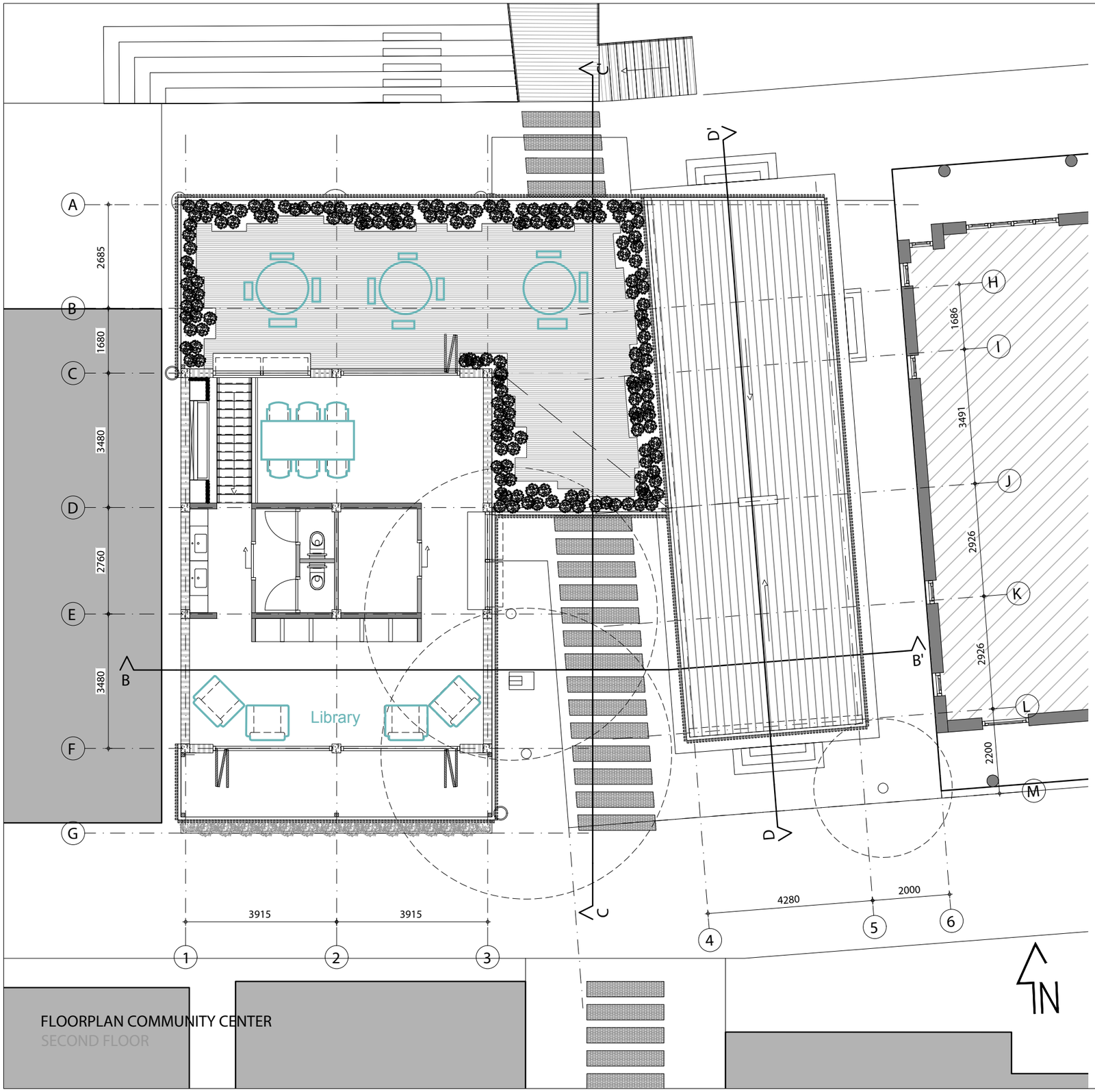
STUDIO	DATE	
Architectural Engineering	02.07.2024	
PROJECT	SIZE	
Modern Sala	A3	1:100
PART	SET	
First floor Community Center	202301	SO_B_110

Architectural Design | Community Center



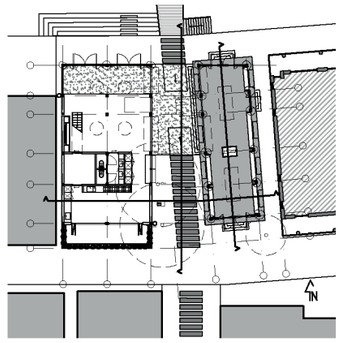
STUDIO	DATE	
Architectural Engineering	02.06.2024	
PROJECT	SIZE	
	A3	1:100
PART	SET	
First floor Community Center	202301	SO_B_110

Architectural Design | Community Center



STUDIO	DATE	
Architectural Engineering	02.06.2024	
PROJECT	SIZE	
	A3	1:100
PART	SET	
First floor Community Center	202301	SO_B_110

Architectural Design | Community Center

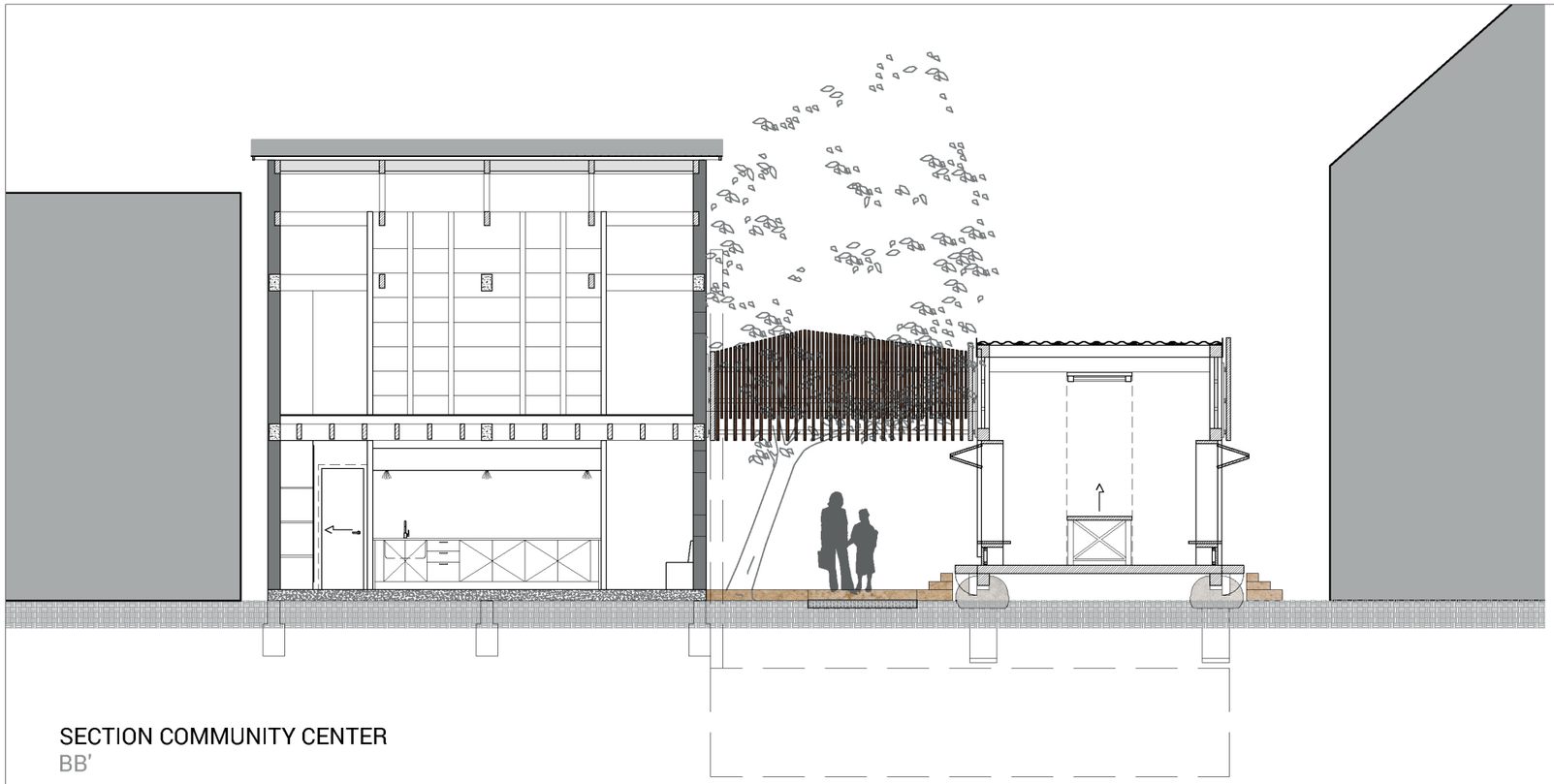


ELEVATION COMMUNITY CENTER
NORTH

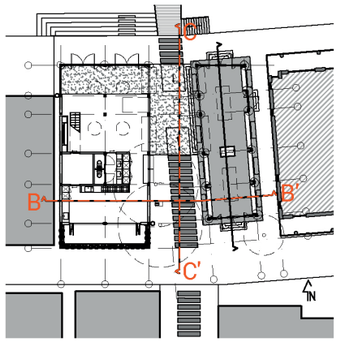
ELEVATION COMMUNITY CENTER
SOUTH

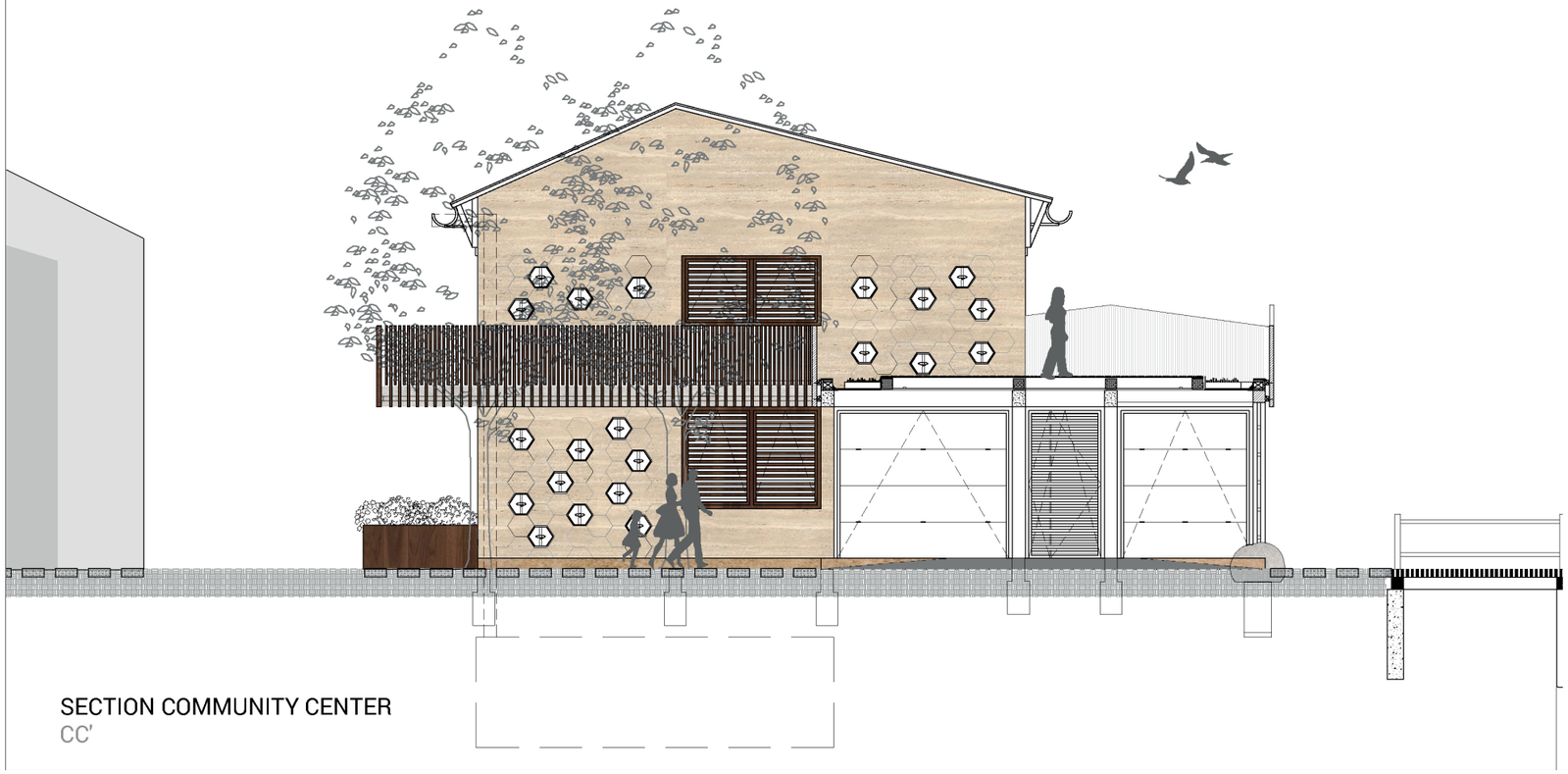
STUDIO Architectural Engineering	DATE 02.06.2024	
PROJECT	SIZE A3	1:100
PART Elevations Community Center	SET 202301	SO_B_300

Architectural Design | Community Center



SECTION COMMUNITY CENTER
BB'

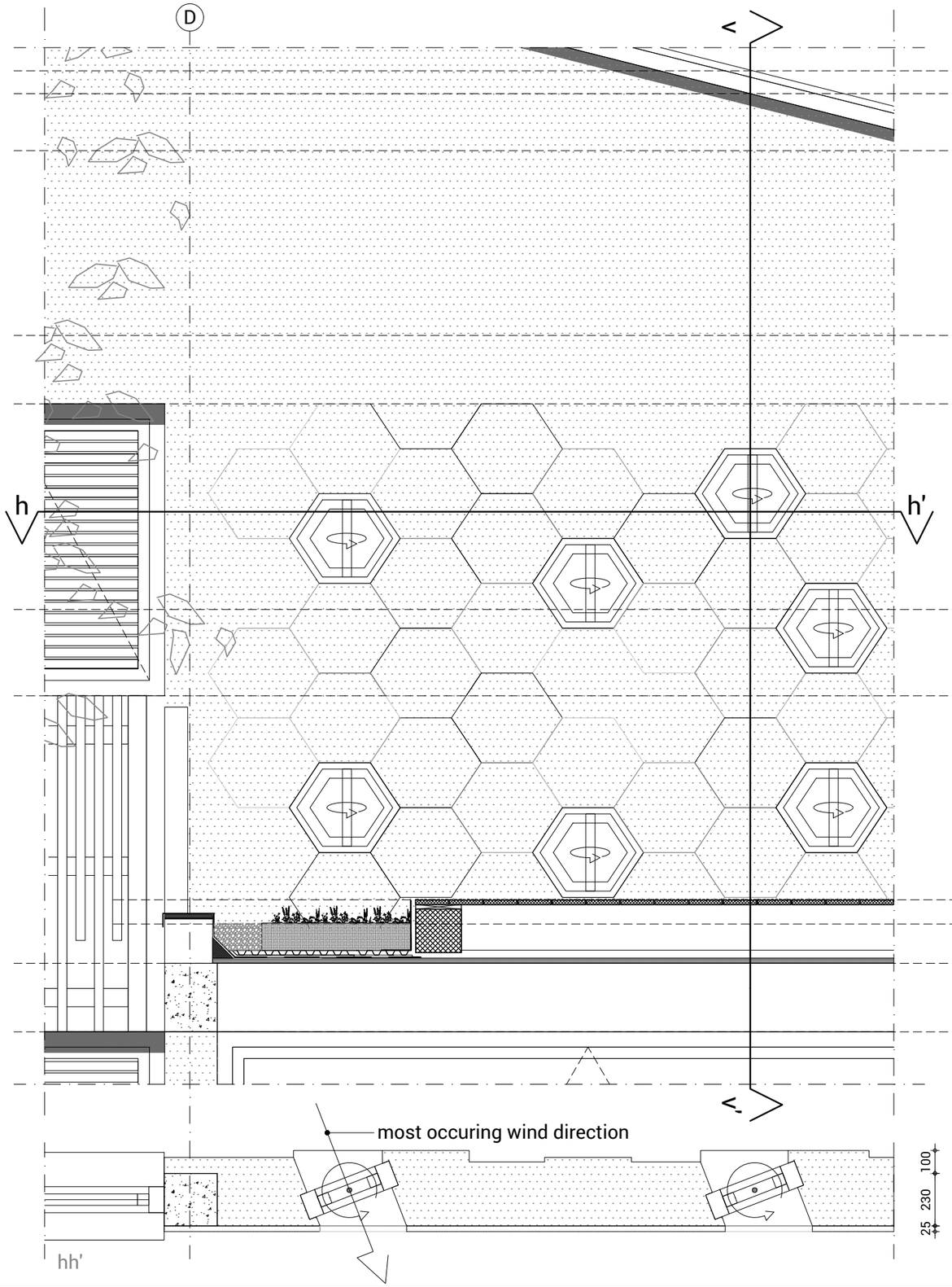


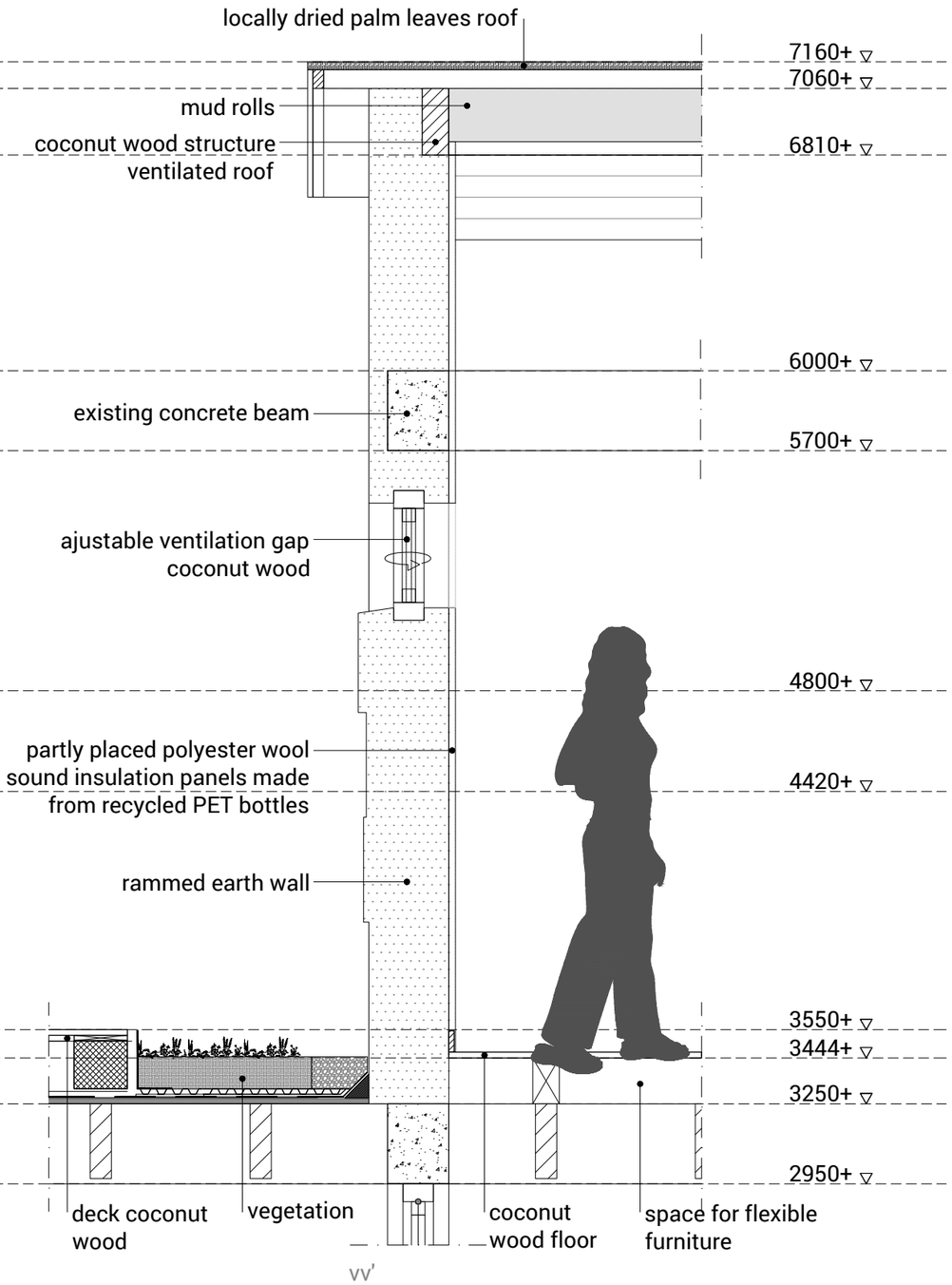


SECTION COMMUNITY CENTER
CC'

STUDIO Architectural Engineering	DATE 02.06.2024	
PROJECT	SIZE A3	1:100
PART Sections Community Center	SET 202301	SO_B_200

Architectural Design | Community Center

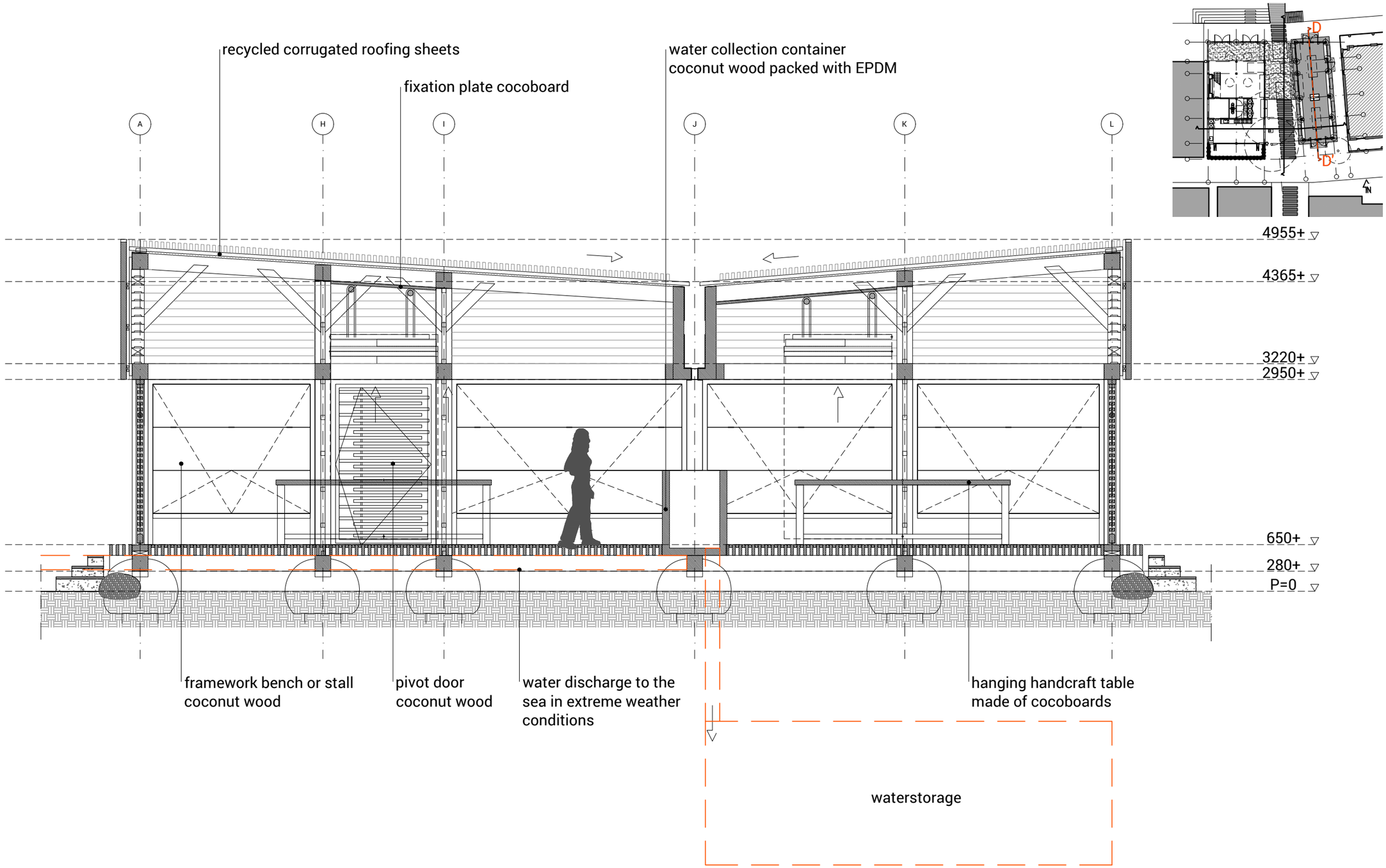




FACADE FRAGMENT B
EAST

STUDIO	DATE	
Architectural Engineering	02.07.2024	
PROJECT	SIZE	
Modern Sala	A3	1:20
PART	SET	
Facade Fragment Renovation - Community Center	202301	SO_B_410

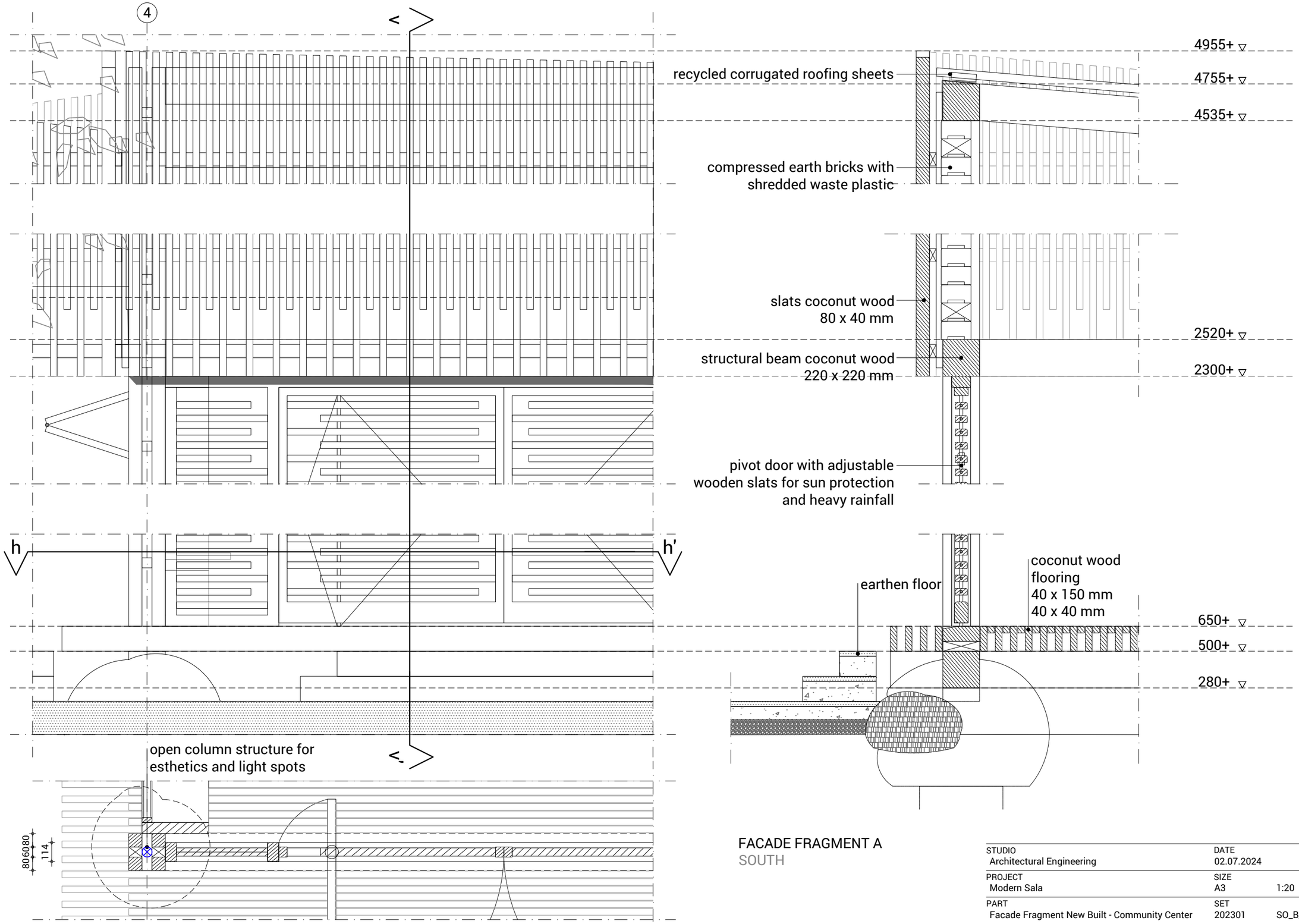
Architectural Design | Community Center



STUDIO	DATE	
Architectural Engineering	02.07.2024	
PROJECT	SIZE	
Modern Sala	A3	1:50
PART	SET	
Longitudinal Section New Construction	202301	SO_B_210

LONGITUDINAL SECTION NEW CONSTRUCTION
DD'

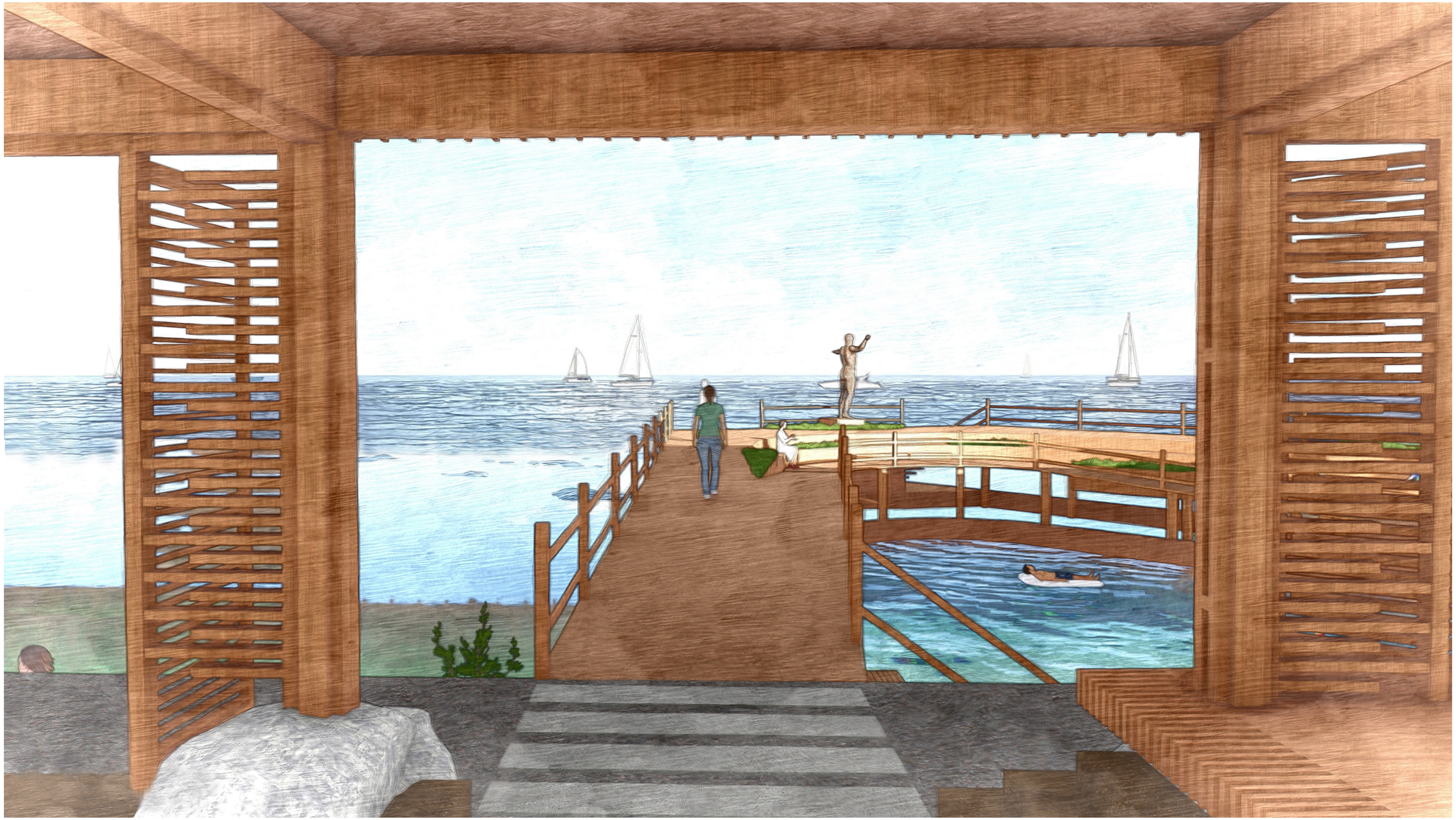
Architectural Design | Community Center



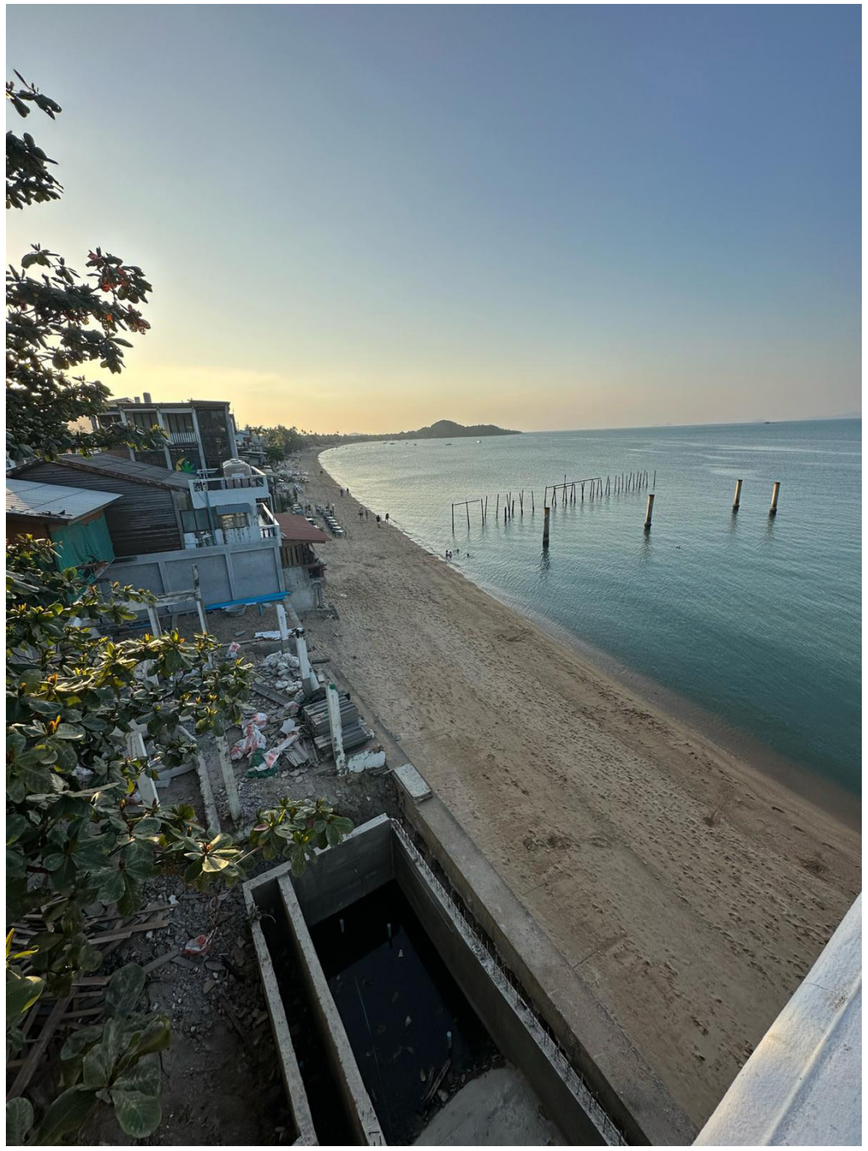
FACADE FRAGMENT A
SOUTH

STUDIO	DATE	
Architectural Engineering	02.07.2024	
PROJECT	SIZE	
Modern Sala	A3	1:20
PART	SET	
Facade Fragment New Built - Community Center	202301	SO_B_400

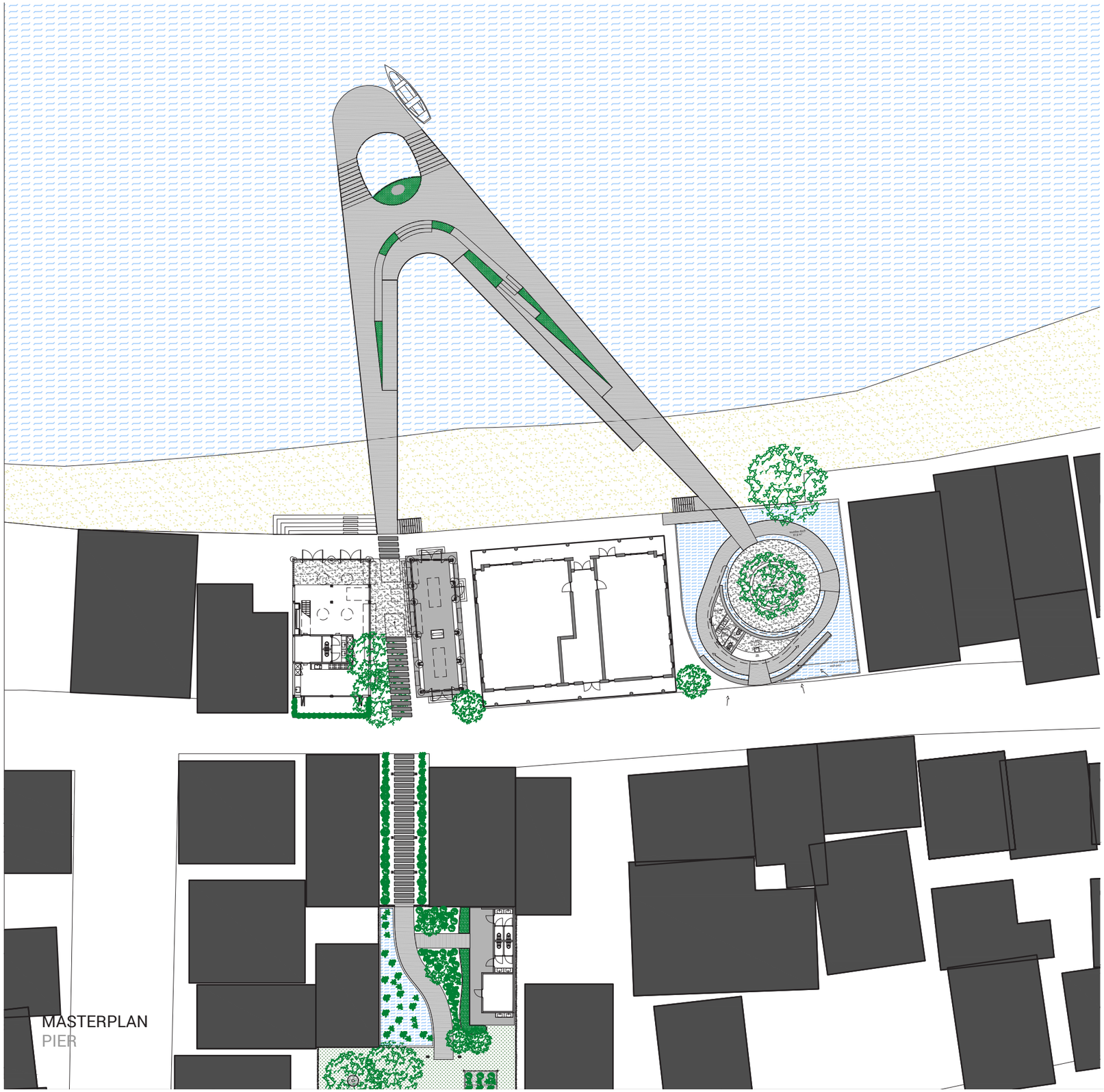
Architectural Design | Pier



Architectural Design | Pier



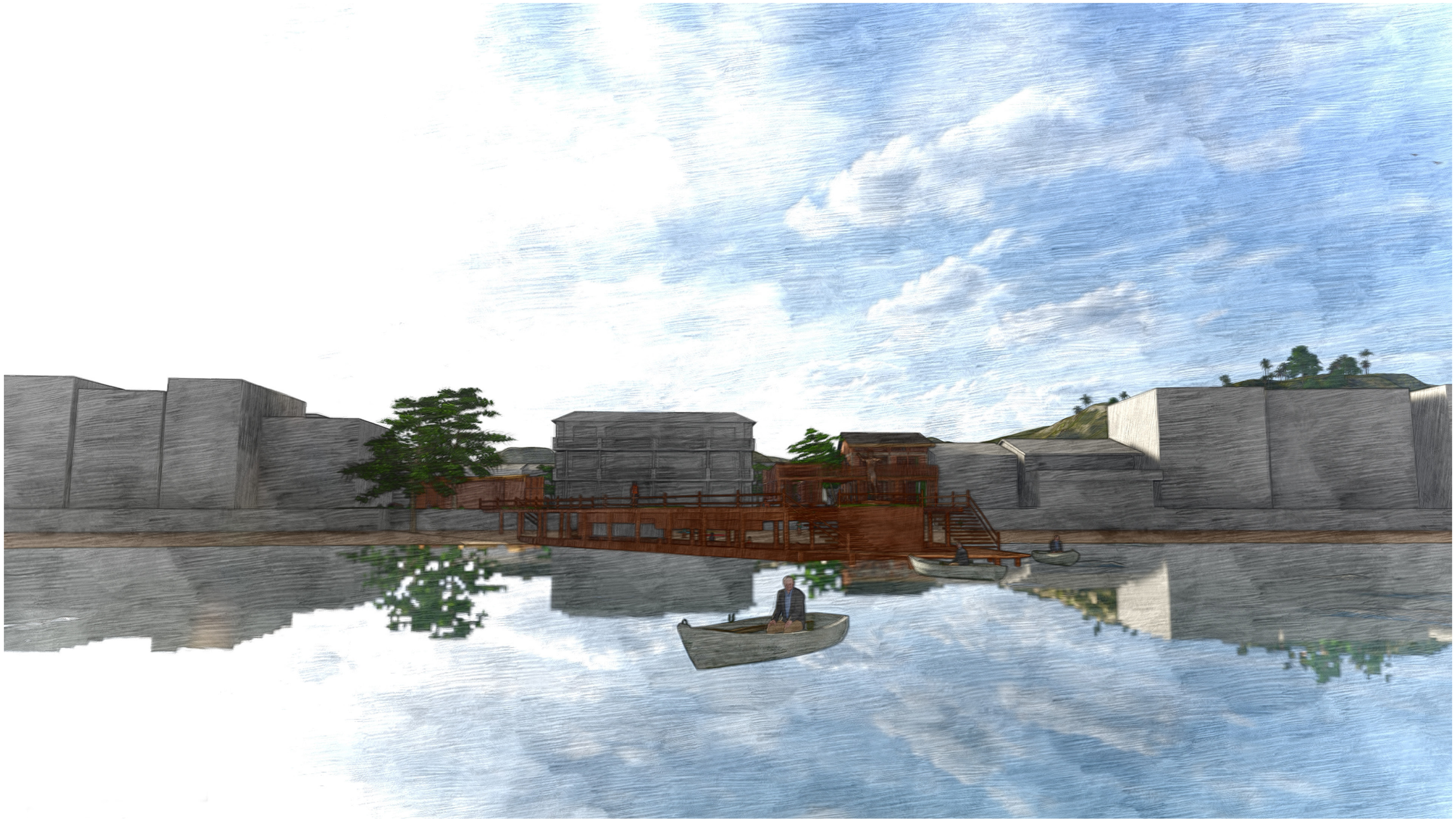
Architectural Design | Pier



Architectural Design | Pier

Architectural Design | Pier

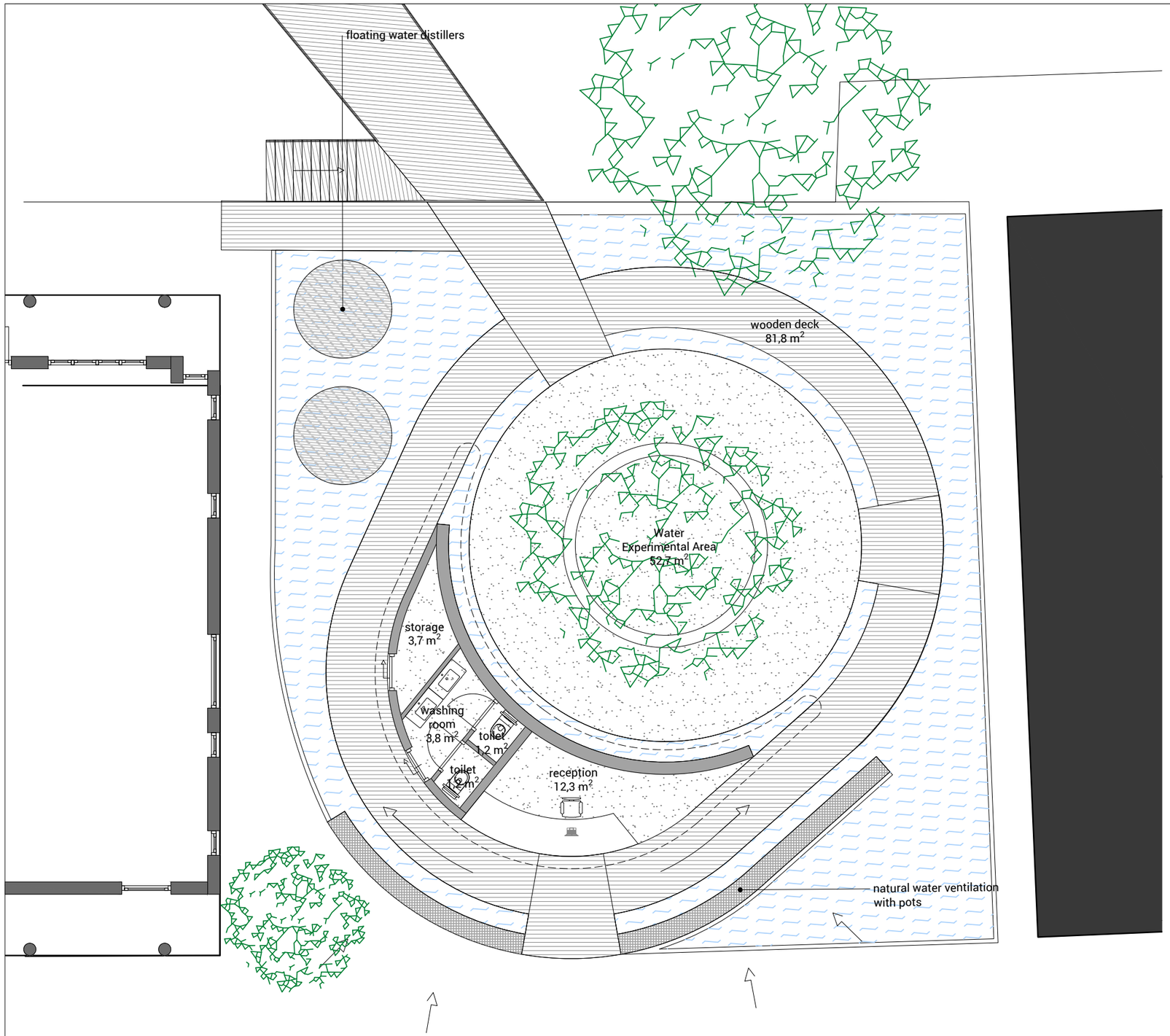
Architectural Design | Pier

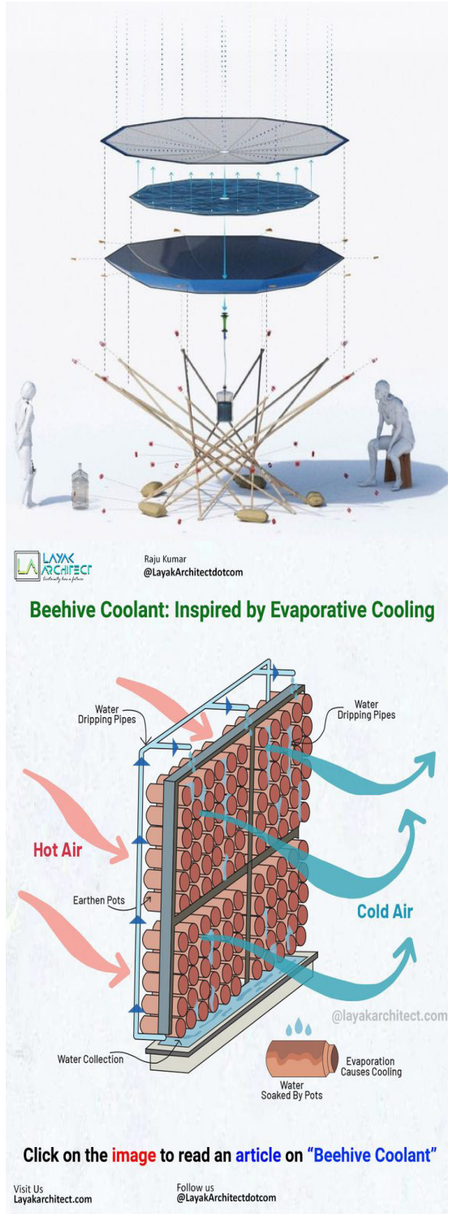


Architectural Design | Pier

Architectural Design | Water Pavillion

Architectural Design | Water Pavillion





FLOORPLAN WATER CENTER
GROUNDFLOOR

N

STUDIO	DATE	
Architectural Engineering	02.07.2024	
PROJECT	SIZE	
Modern Sala	A3	1:100
PART	SET	
Groundfloor Water Center	202301	SO_B_120

Architectural Design | Water Pavillion

Architectural Design | Water Pavillion

Conclusion | Modern Sala