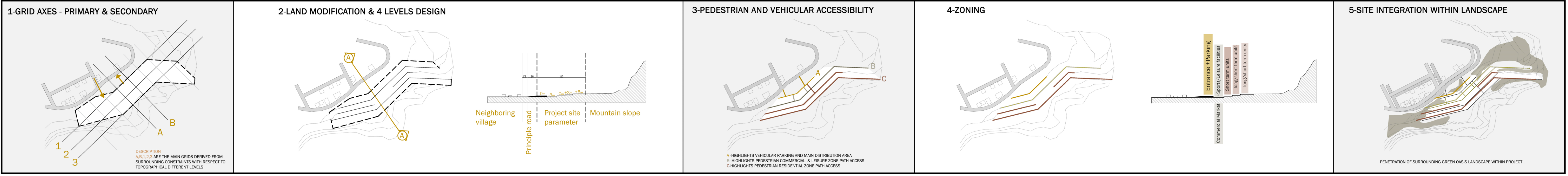


I-Master Plan



II-Conceptual Design



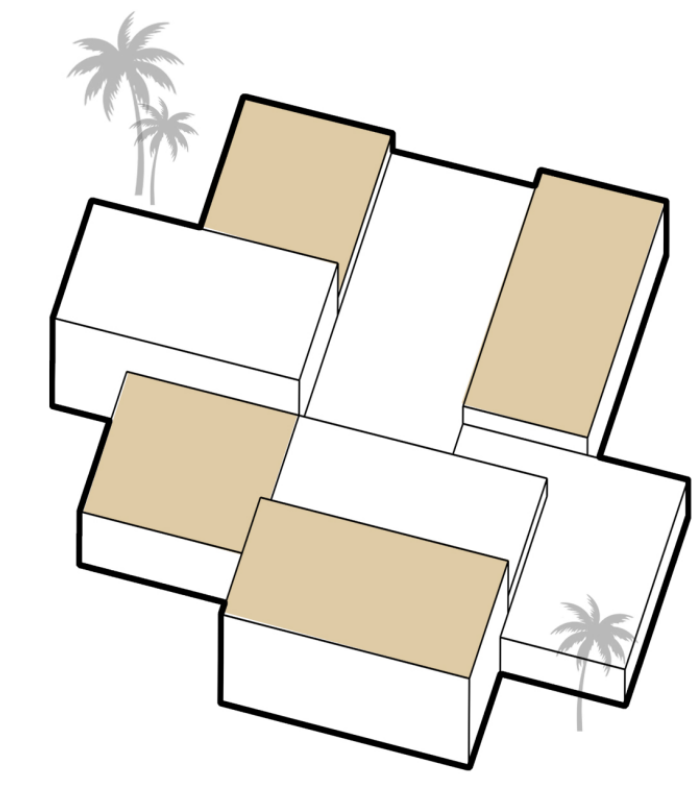
I-Project Design Process

Description :

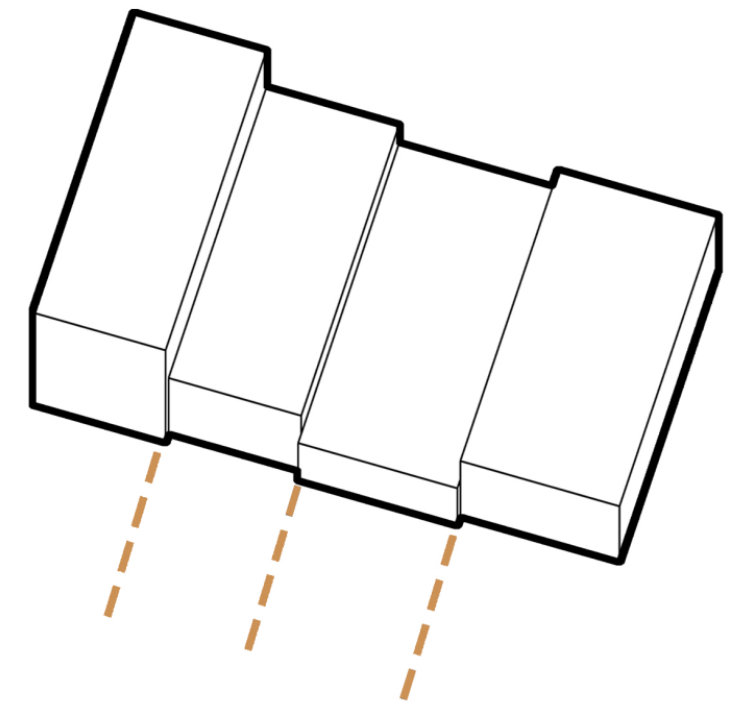
Inspired by Alula Old town's architectutal design which adapted local climate heat for years with vernacular techniques. This conceptual design bridges historical adaptations with modern evolution, from simple unit shiftings and substractions, the project still preserves privacy , natural ventilation systems, natural zenithal light openings, as well as open views for Alulas magnificant panorama mountain views .

This conceptual design preserves Alula's cultural identity with its cubic forms and natural materials used,which revive local history and provide visitors with an authentic experience, aligning with the Alula's future development goals.

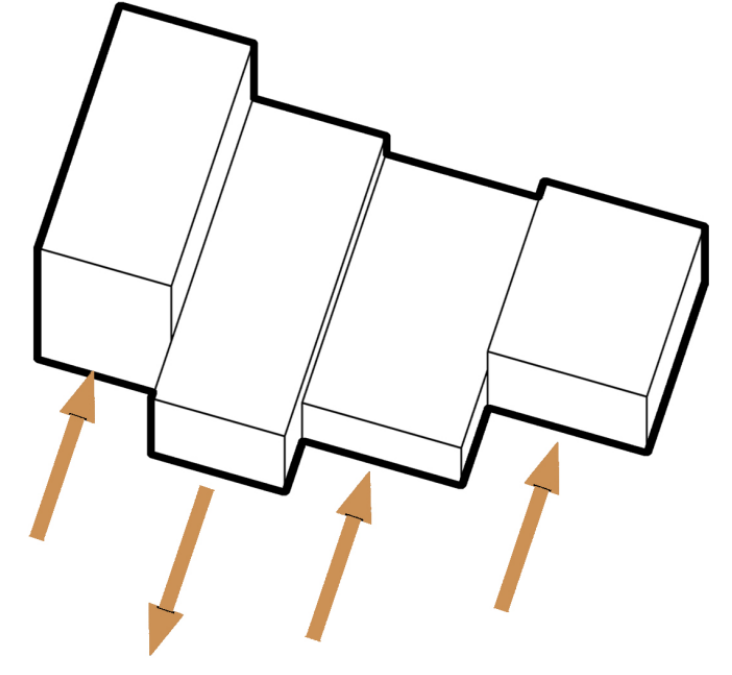
1
Derived from Alula old town's architectural dispositions of residential unit blocks, designed with different horizontality and verticality , providing privacy, thermal comfort, with natural light and aeration for every unit.



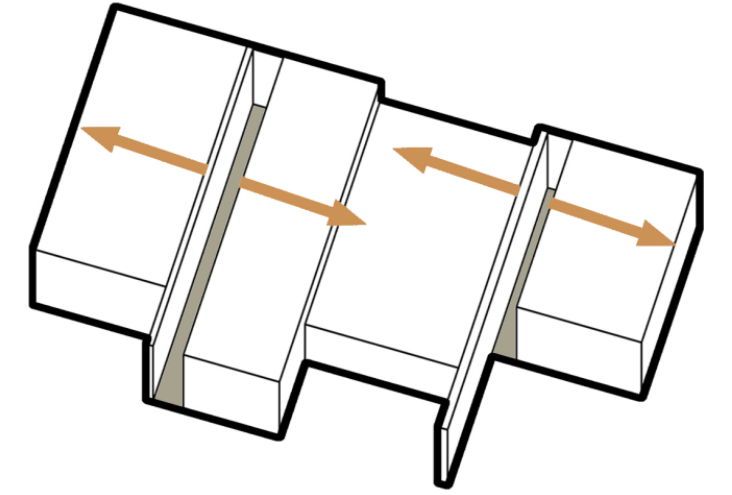
2
Wall to Wall unit positions for reducing sun heat on units surfaces, hence decreasing internal temperature & energy usage



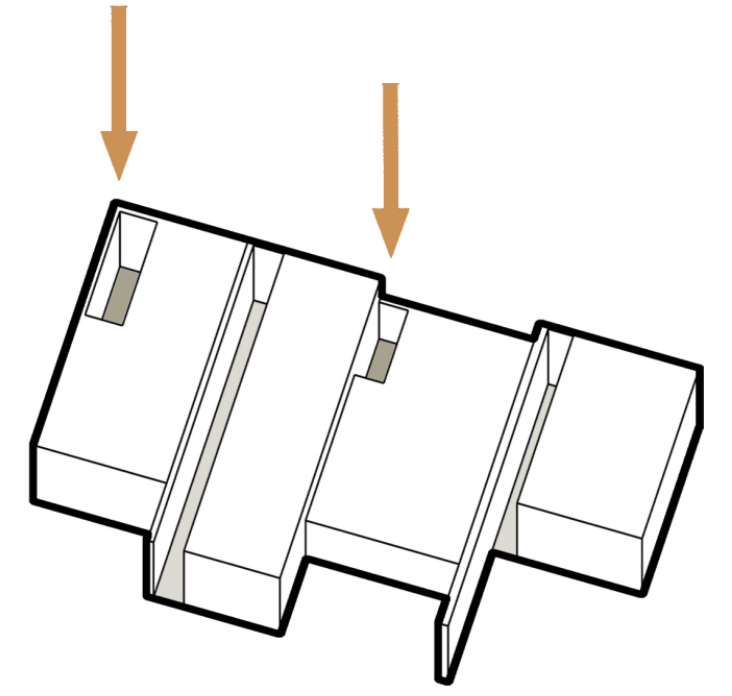
3
Push-Pull process for privacy and architectural integrity in site topography, while providing open views



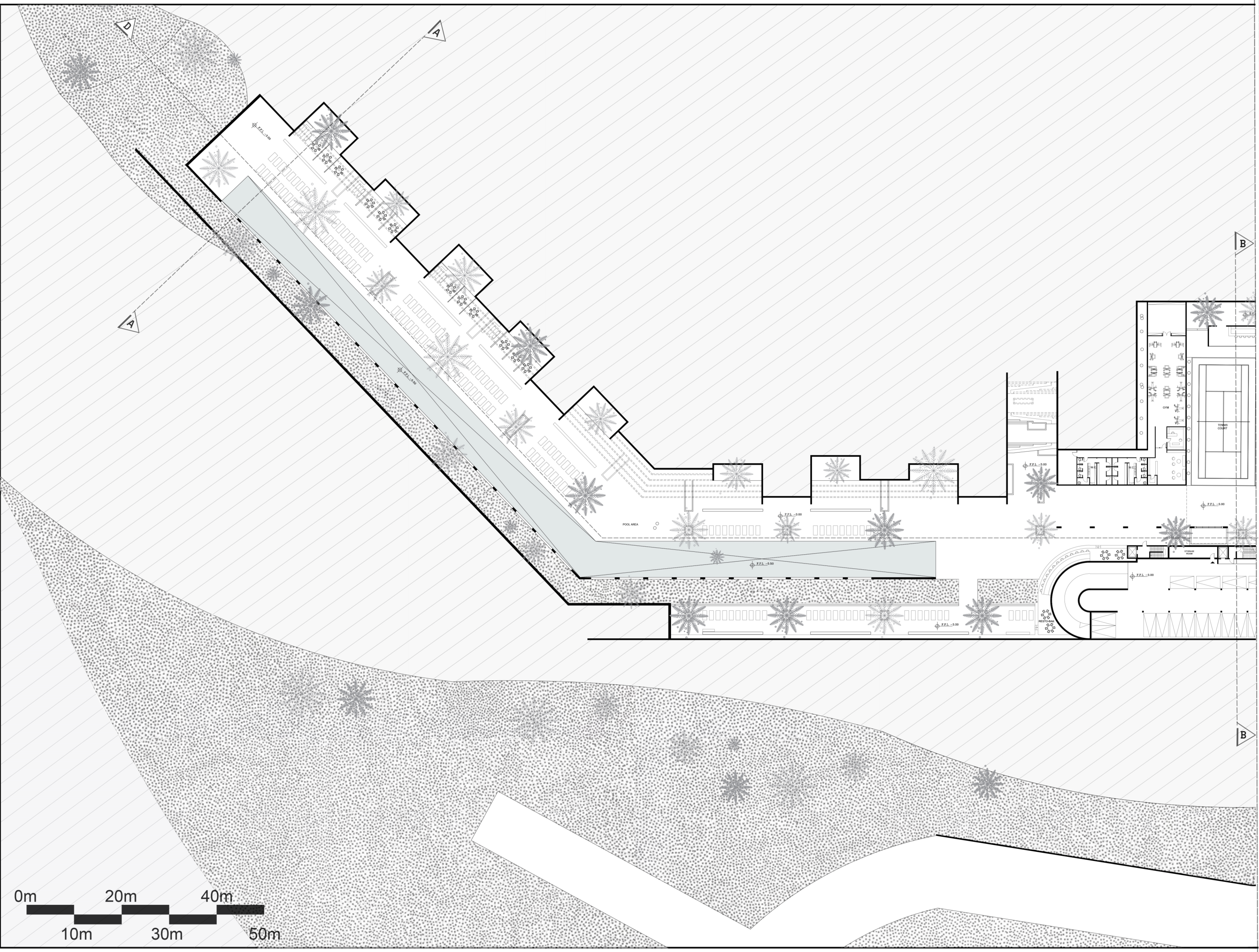
4
A Contemporary solution of implementing private shaded common green spaces ,for indirect natural lighting and ventilation



5
Bridging interior with exterior private spaces, hence having an additional microclimate space nessecary for every room



II-Plan Level -3.00



III-Plan Topography Overview

Description:

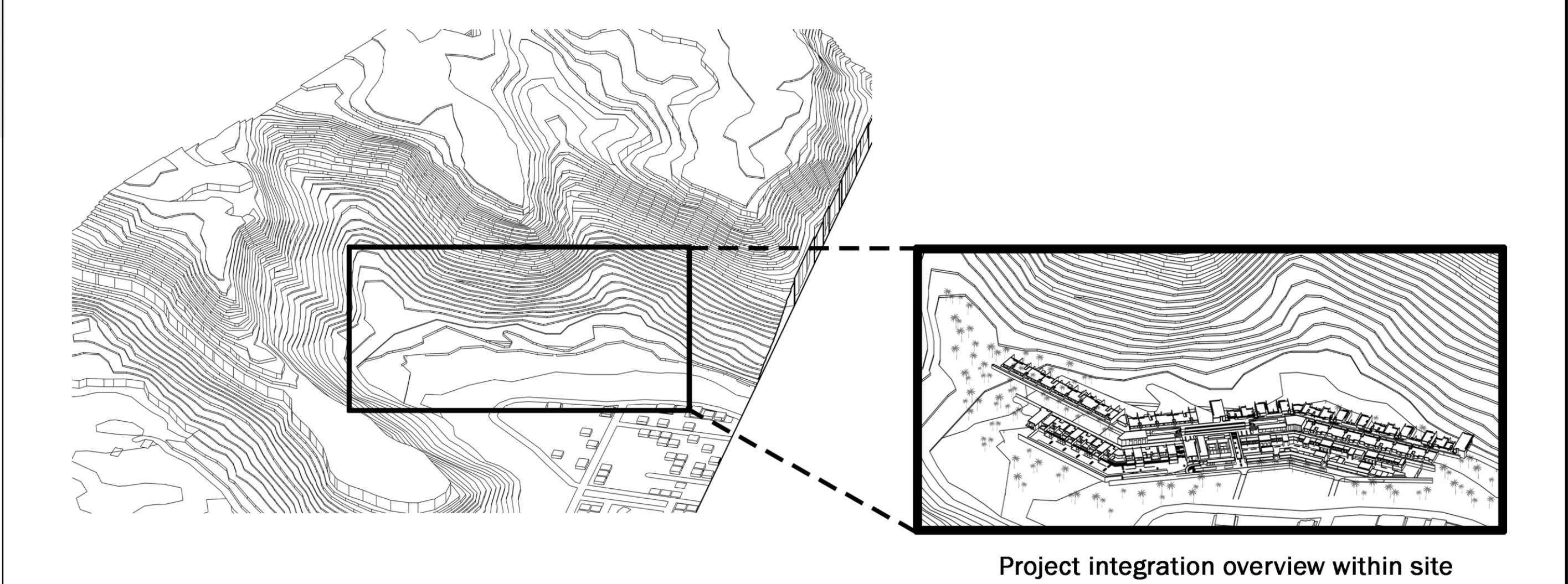
The side diagram represents the project's 3d plot topography and its integration with it's landscape and surrounding oasis . Situated on the bottom of a mountain slope overlooking both alula's east canyon city view ,as well as the rocky mountain towards the back.

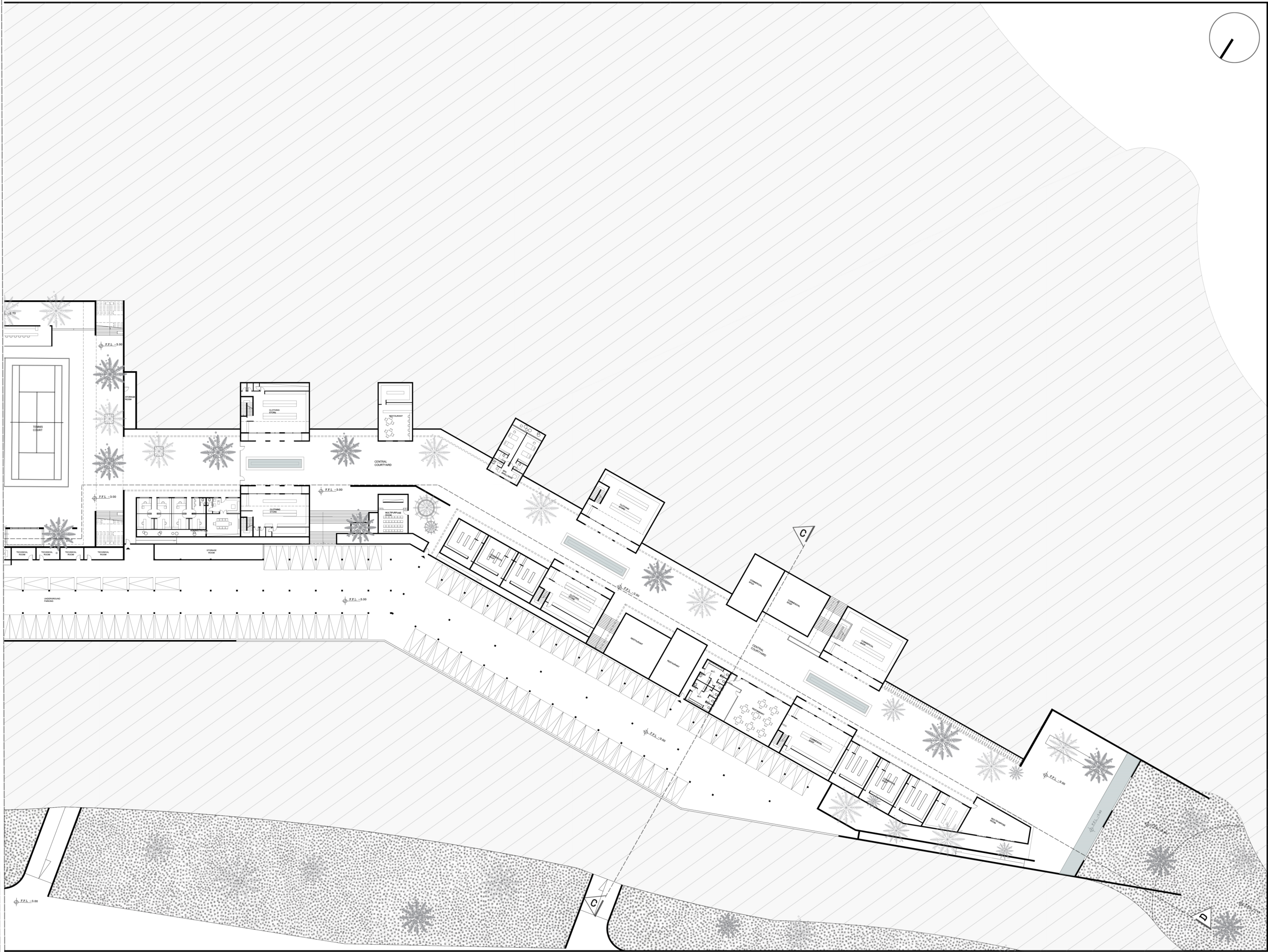
Goal:

To conserve and revive Alula's cultural heritage and vernacular architecture by integrating traditional design principles with contemporary approaches, creating a sustainable model that celebrates the region's identity and ensures its relevance for future generations.

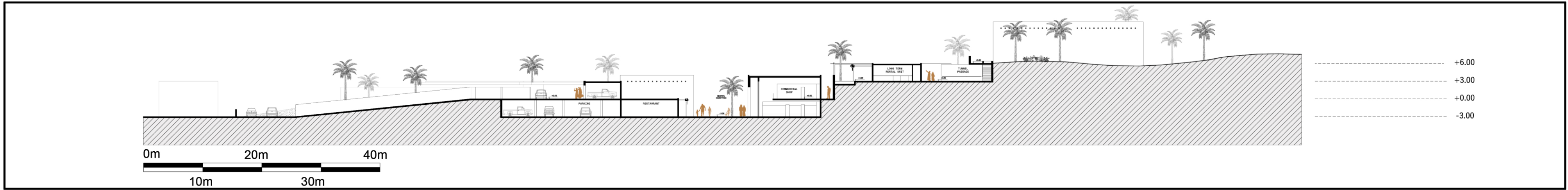
Objective:

To design a resort on a site in Alula that embodies the essence of vernacular architecture while promoting sustainable tourism. The project aims to attract visitors from all around the world, offering them an immersive experience of Alula's historical and cultural richness through contemporary vernacular architecture that harmonizes and blends with the natural and cultural landscape.





IV-Section C-C

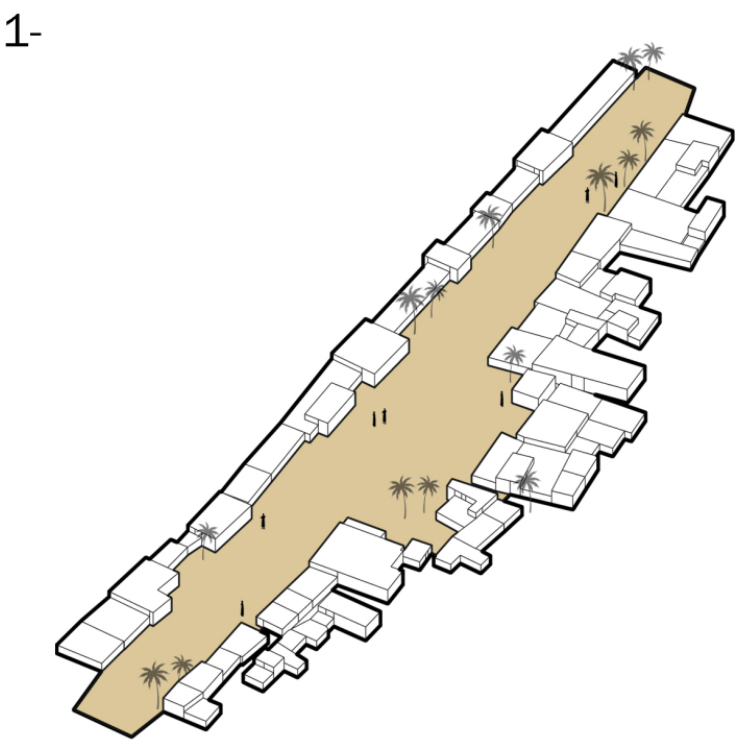


V- Renders - Marketplace



VI-Architectural Features

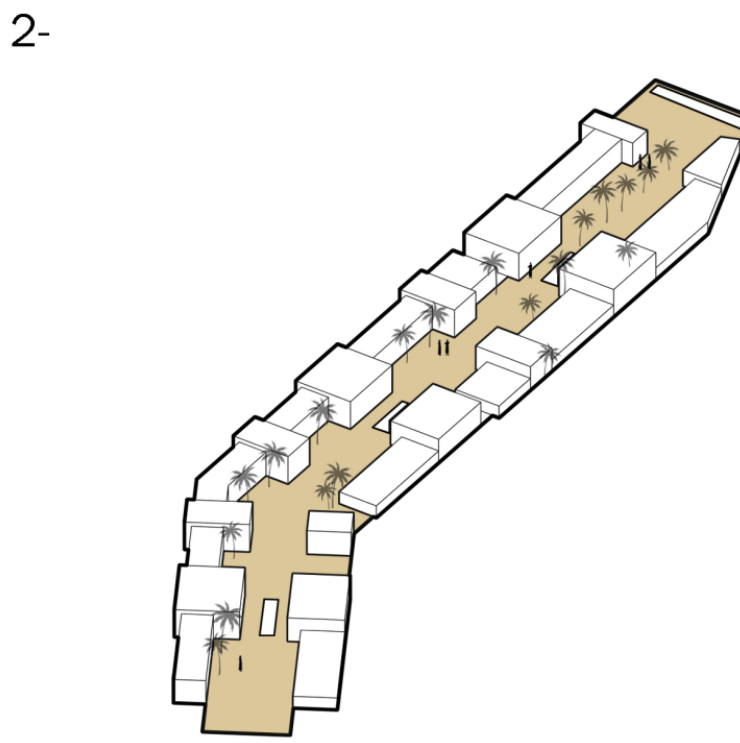
Courtyard



1-Courtyard in Alula Old Town

The following diagrams illustrates Alula old town's courtyard being a part of the local market street .
The unique characteristics of a courtyards within community markets :

- Provide historical and symbolic significance
- Open design encourages cool air circulation enhancing consumer comfort
- Provide additional spaces for market stalls and community activities

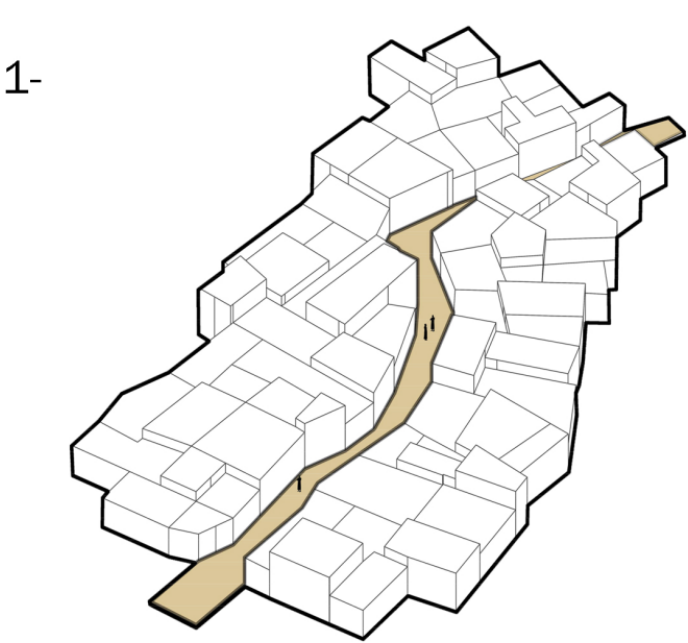


2-Courtyard in Project

Within the project design some important elements are to be added to the courtyard integrated within market place ,inorder to offer a visual and spacial break,hence blending shading structures and natural features such as:

- Water features(fountains-ponds)
- Trees & greenery
- Wooden & fabric shade structures

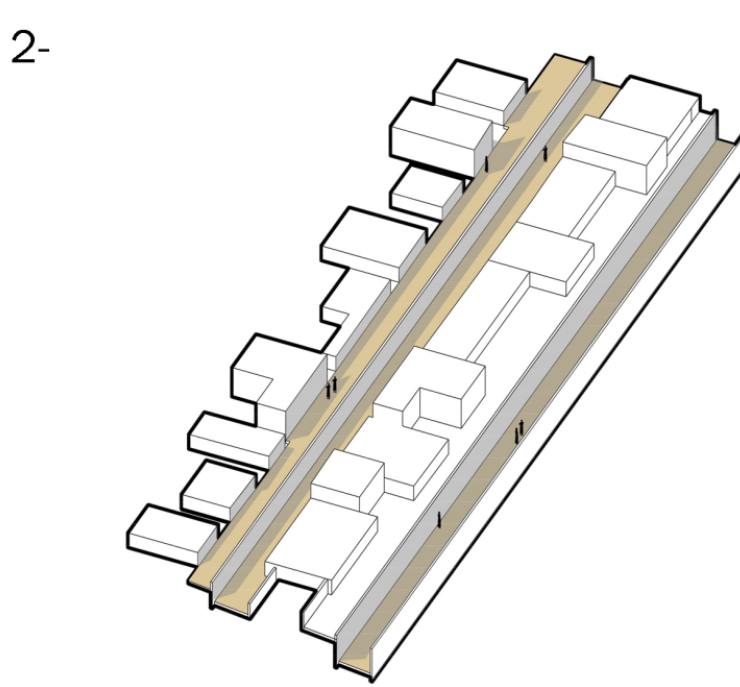
SEEKA Alleyway



1-SEEKA - In Alula Old town

The following diagrams illustrates Seeka alleyways, one of the 3 most important features in saudi architecture within communities and vernacular villages. Because of its narrow alleyways designed between housing units within the heart of the villages, it provides:

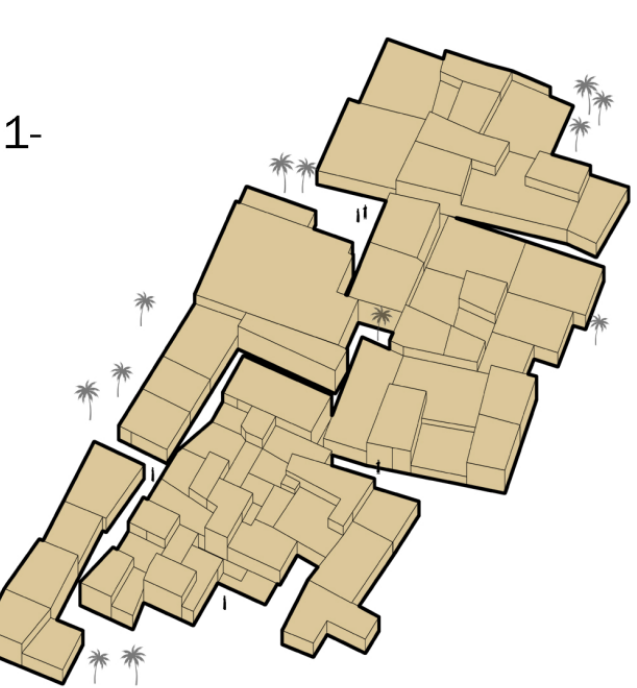
- heat control (by minimizing sunlight impact on pedestrian streets)
- Ventilation (its confined space creates a wind tunnel channeling natural cooling
- Community bonding and gathering



2-SEEKA - In Project

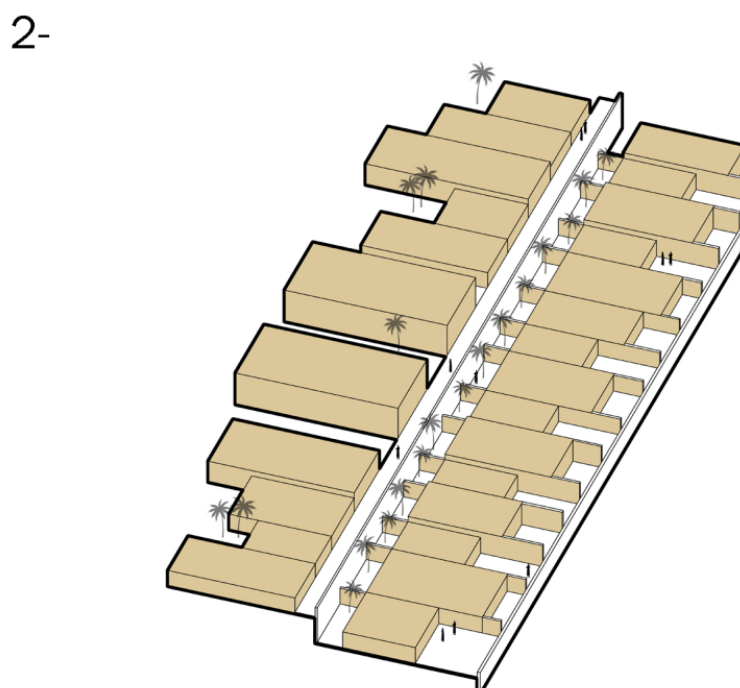
In addition Seeka alleyways is adapted in my project in a linear form prioritizing easy accessibility, safety and security, as well preserving the cultural and aesthetic value of alleyways being shaded by dense residential units as well as thick walls ,all made of local materials

Residential Units



1-Residential Units- In Alula Old

The following diagrams illustrates Alula old town's Residential units ,a unique form of architecture which helped locals survive for decades in its harsh cot climate. The unique characteristics of such wall to wall , and difference level architectural design helps develop Thermal performance by reducing sunlight exposure on building surfaces hence creating a cooler microclimate . Nevertheless such design helps protection against windbreaks and sandstorms



2-Residential Units - In Project

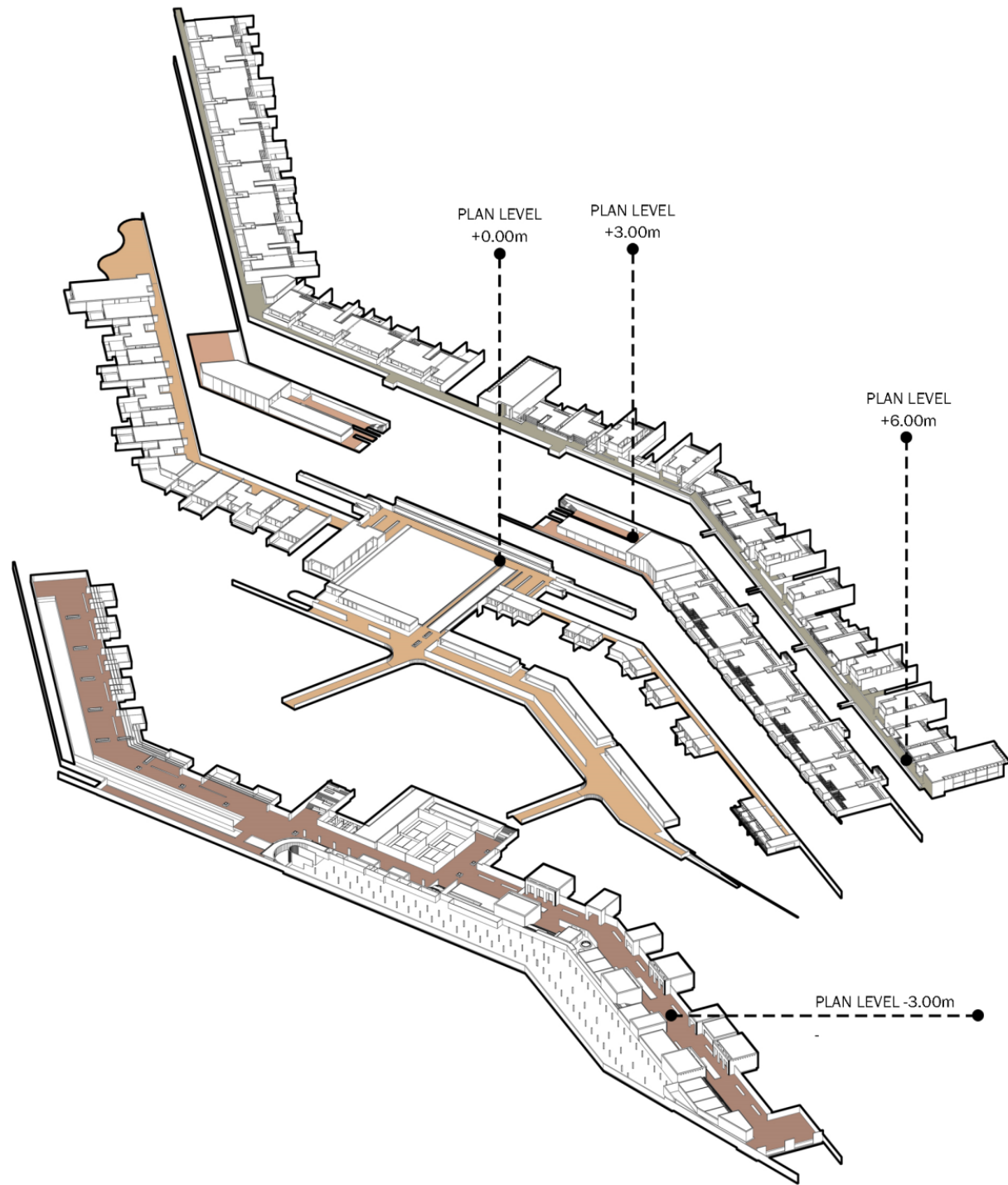
Inspired by Alula Old town's technique this project reflects the local vernacular architecture by its wall to wall architecture technique while using its local materials leading to sustainable project goals:

- Decreasing energy use
- Preserving/Reviving local architecture while providing cultural experiences
- Providing privacy for residential units as per local culture

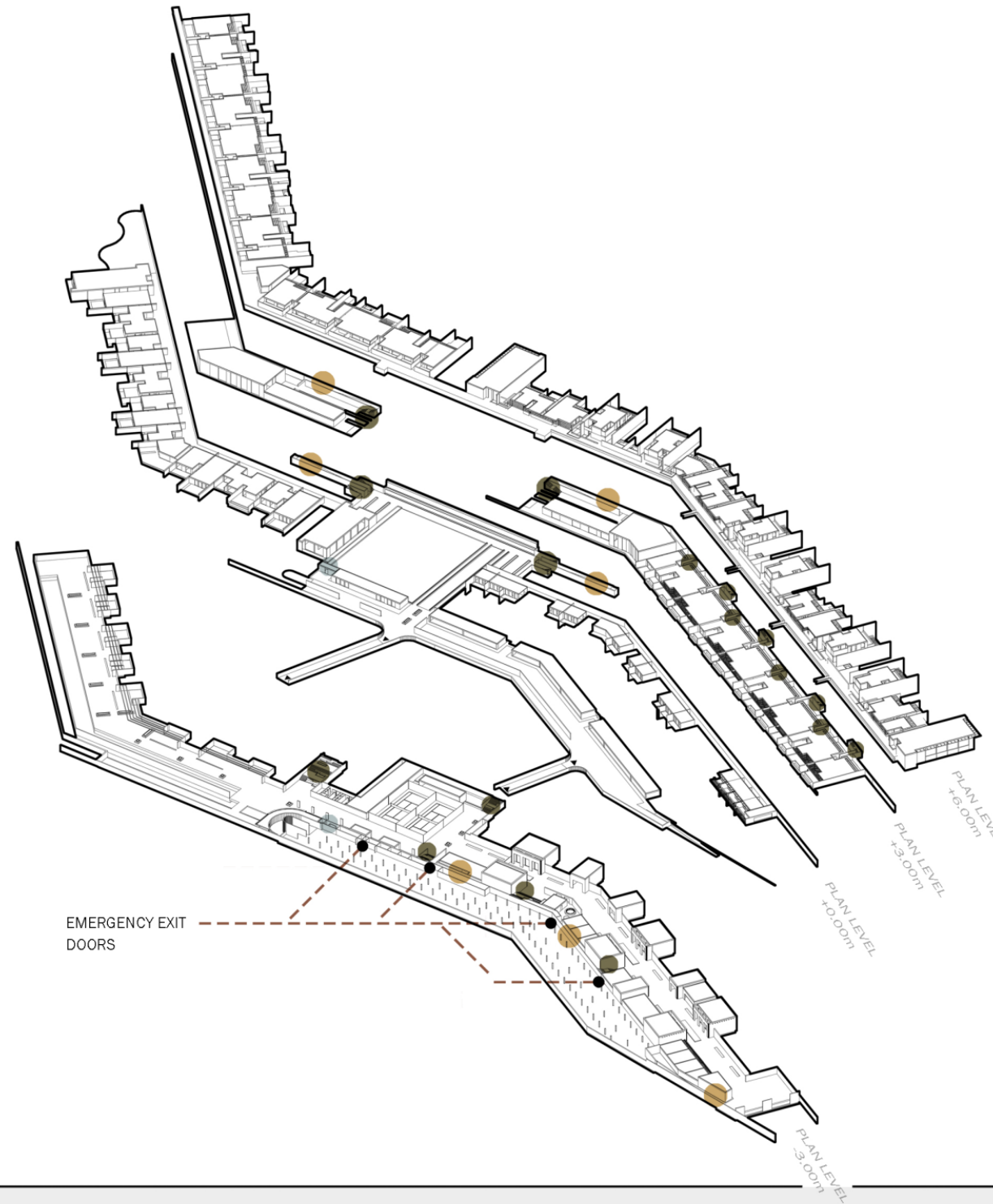
I- Project Levels & Circulation

Description :

Circulation is a critical aspect for such a Contemporary Vernacular Architectural resort, as it affects functionality,experience and sustainability of the design.
The circulation implemented in the project contributes to several positive impacts as followed:



- 1- Zoning,proper seamless circulation organizes spaces between public,semi-public,private zones ensurinfg functionality and privacy in such hospitality project.
- 2- Integrating vernacular principles:
 - a)"seeka" alleyways: incorporating seeka alleyways across plans level +0.00, +3.00, and +6.00
 - b)Courtyard: integrating a courtyard system within a marketplace along leisure and sports facilities at the plan level -3.00, for a comfortable circulation experience
- 3- Guest experience: offering a clear & comfortable navigation system that is easy to naviagate, as well as the easy and smooth trasition between indoors and outdoors, moreover offering scenic journeys through the integration of surrounding landscape and oasis within project.
- 4- Sustainability:
This project incorporates sustainability within the previous design strategies implemented ,leading to:
 - Logical circulation which reduces unnecessary movement,hence attaining better energy management
 - Natural shading and ventilation within seeka pathways and courtyards, which reduce reliance on mechanical systems.

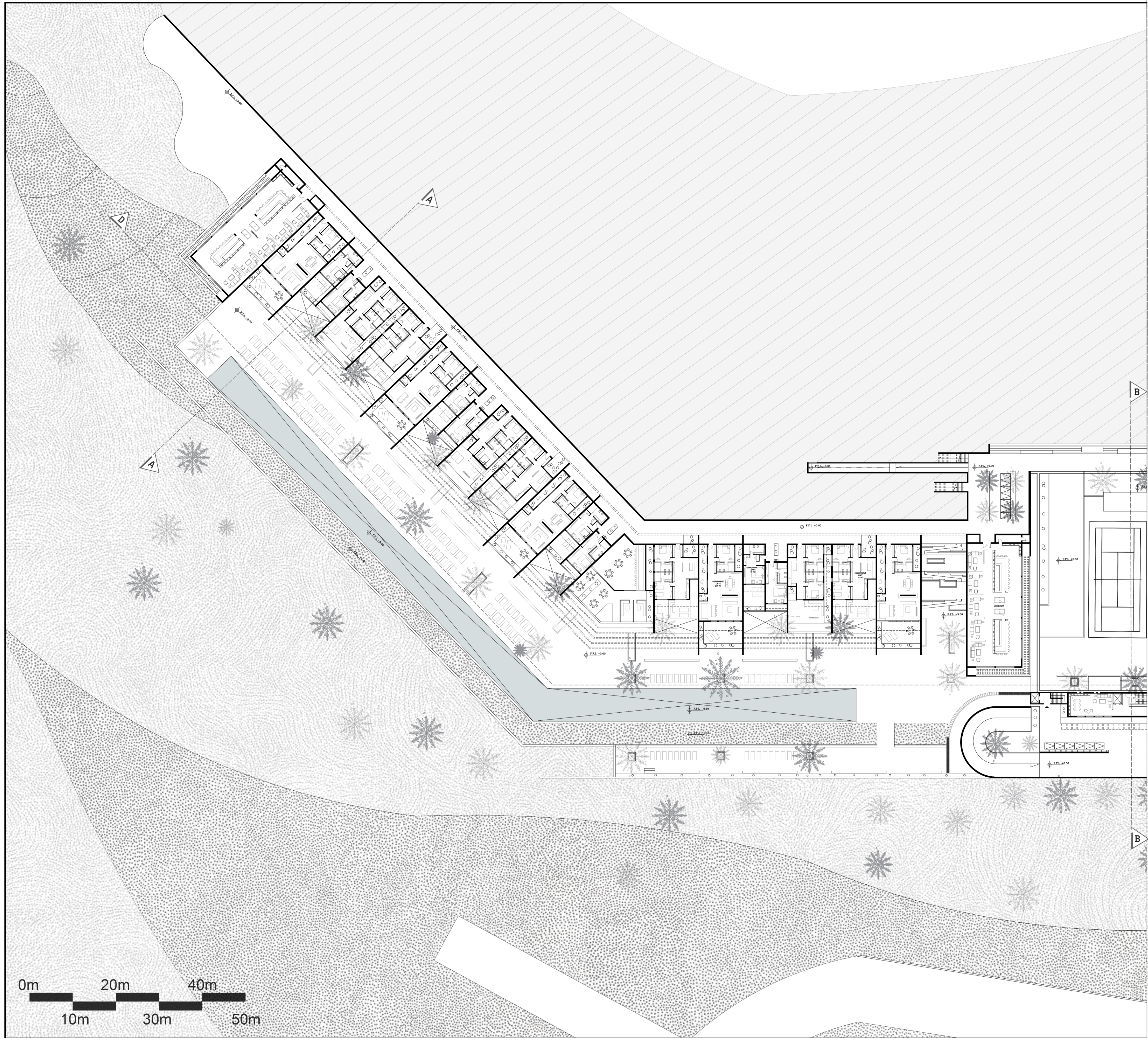


- 5- Accessibility and Inclusivity:
Insuring accessibility to all people "specially people with Disabilities",hence designing multiple modes of circulation such as :
 - Ramps (following ADA standards with slope ratio 1:12)
 - stairs
 - Lift
 - pedestrian pathways
 - bike+golf cart routes
 - Vehicular routes

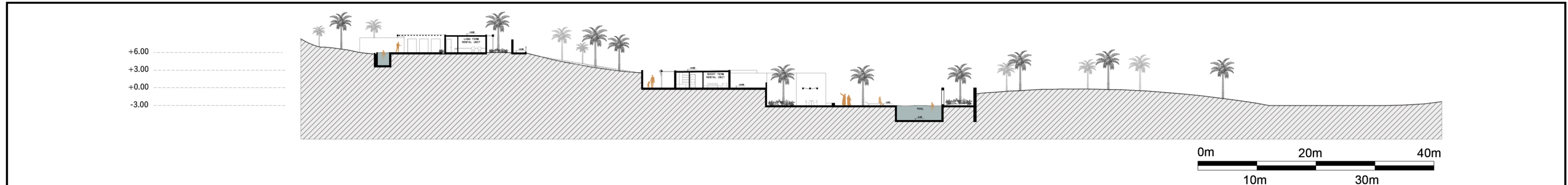
- 6-Safety &Emergency Considerations:
The easy Linear circulation paths helps prevent confusion during evacuation and ensures safety .
It is important to always have several public indoor emergency exists helping prevent danger and ensures safety

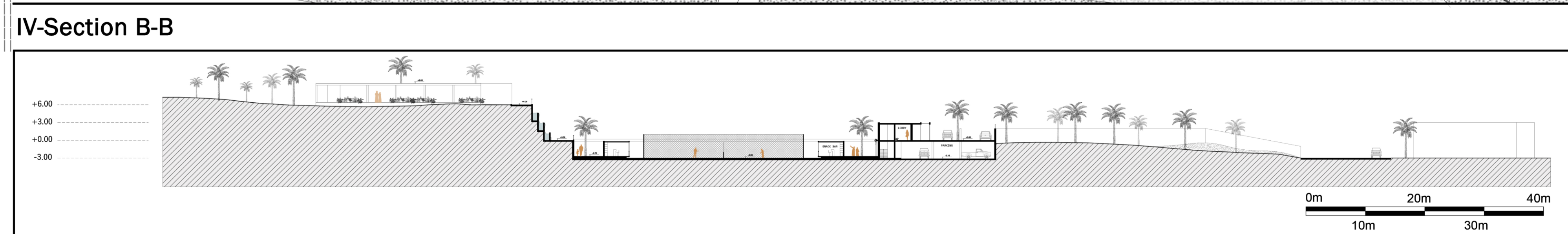
- Main features :**
- -Parking Emergency Exits
 - -Ramps for Disabled people
 - -STAIRS accessing private ,semi-private, and public spaces
 - -Elevator
 - -Linear alleyways for enhanced accessibility and safety evacuation

II-Plan Level +0.00



III-Section A-A





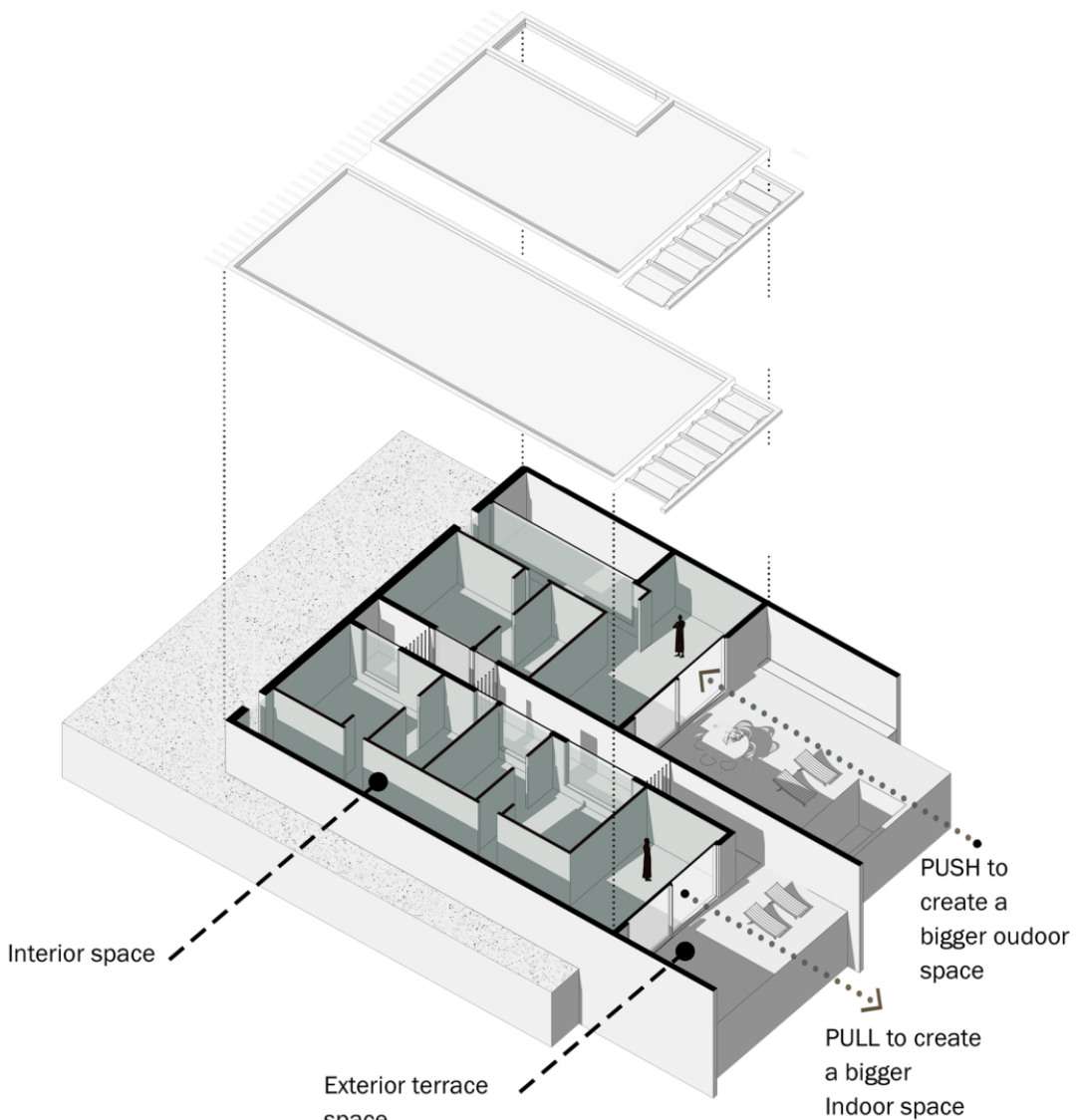
- Main features:**
- Private areas :long term/short term rental accomodation units
 - Private Meeting spaces: Restaurants/ lobbys/ entertainment areas
 - Public Commercial zone:Market place
 - Semi-public Leisure & sports facilities zone

I- Residential Unit Conceptual Analysis

Description :
Typology 1 :Units B&A

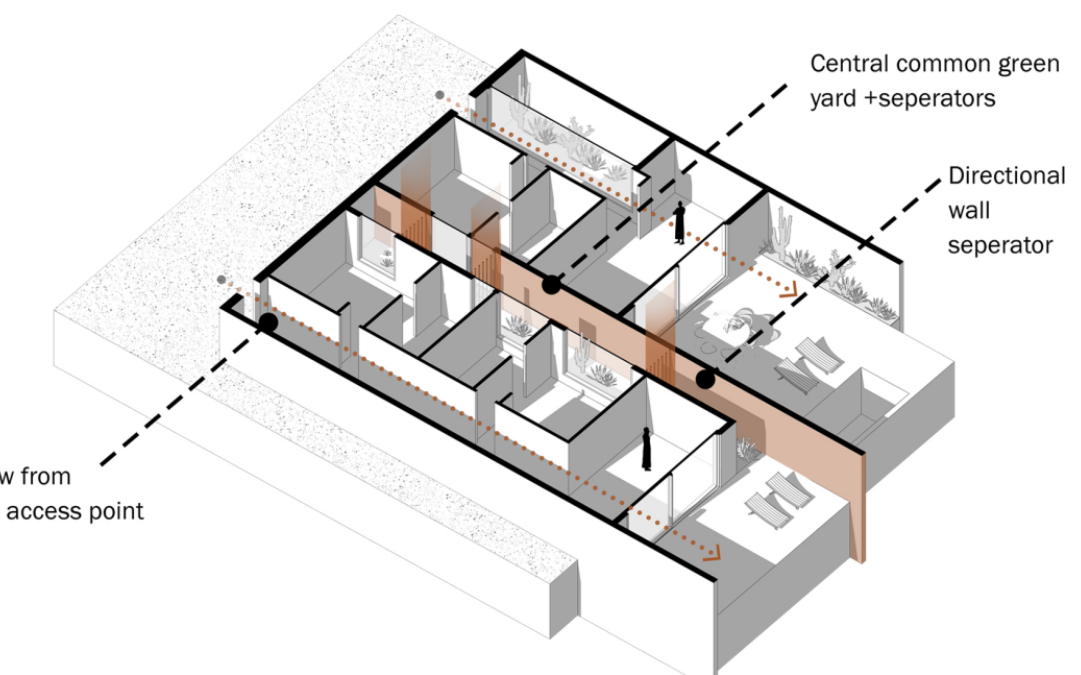
1

Push-Pull effect



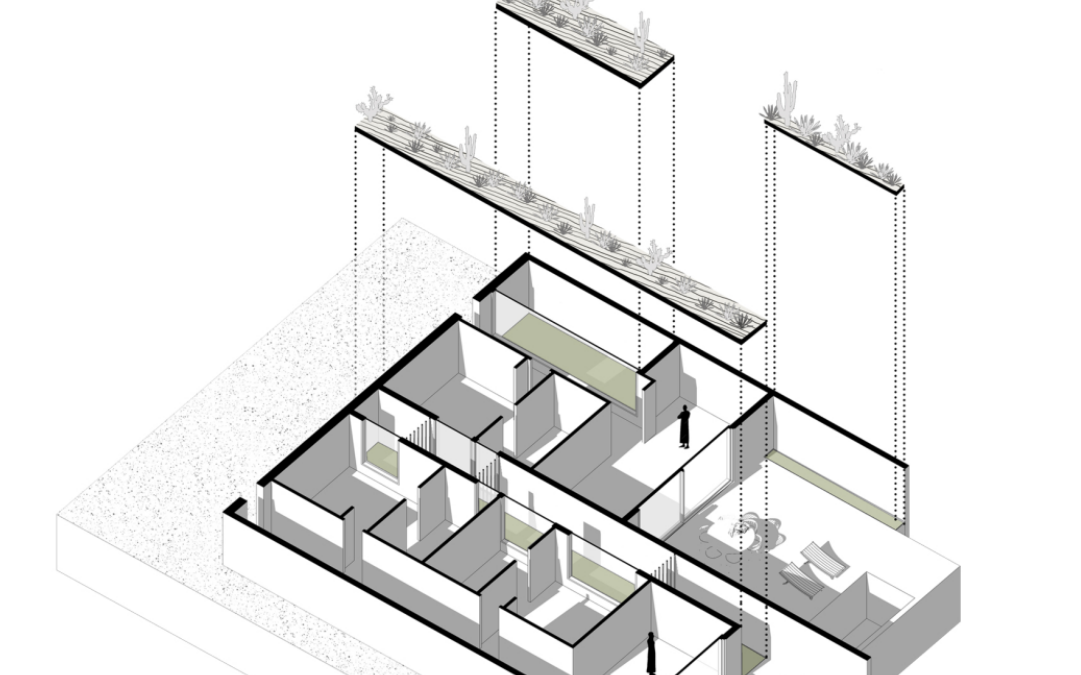
2

Indoor-outdoor Transparency & Privacy control



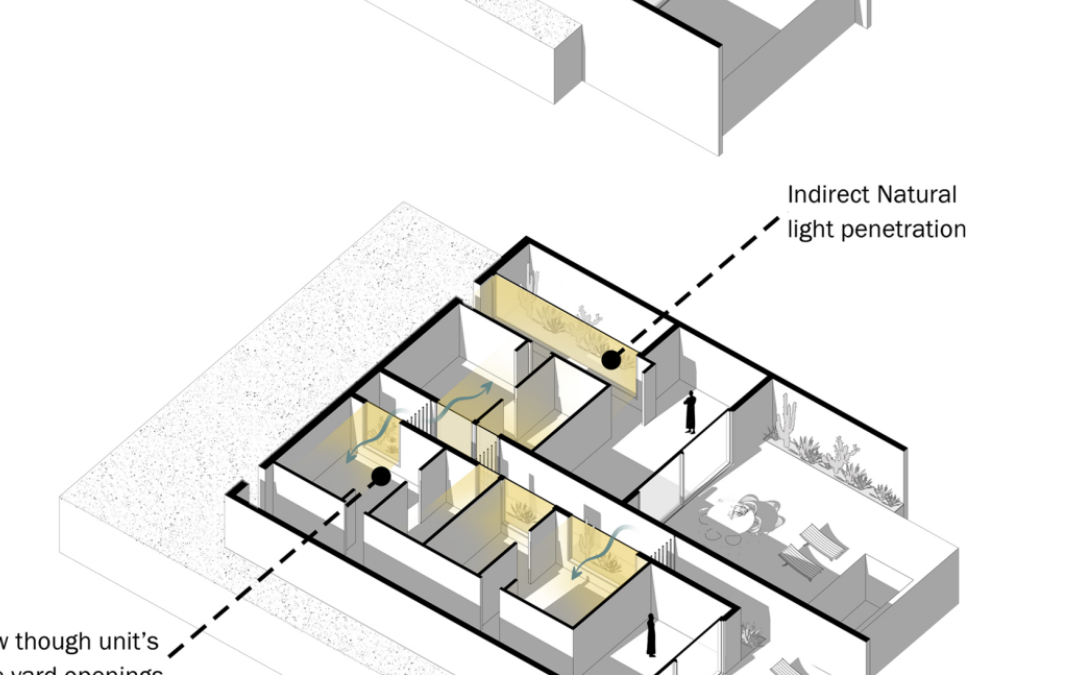
3

Vegetation in private and common spaces

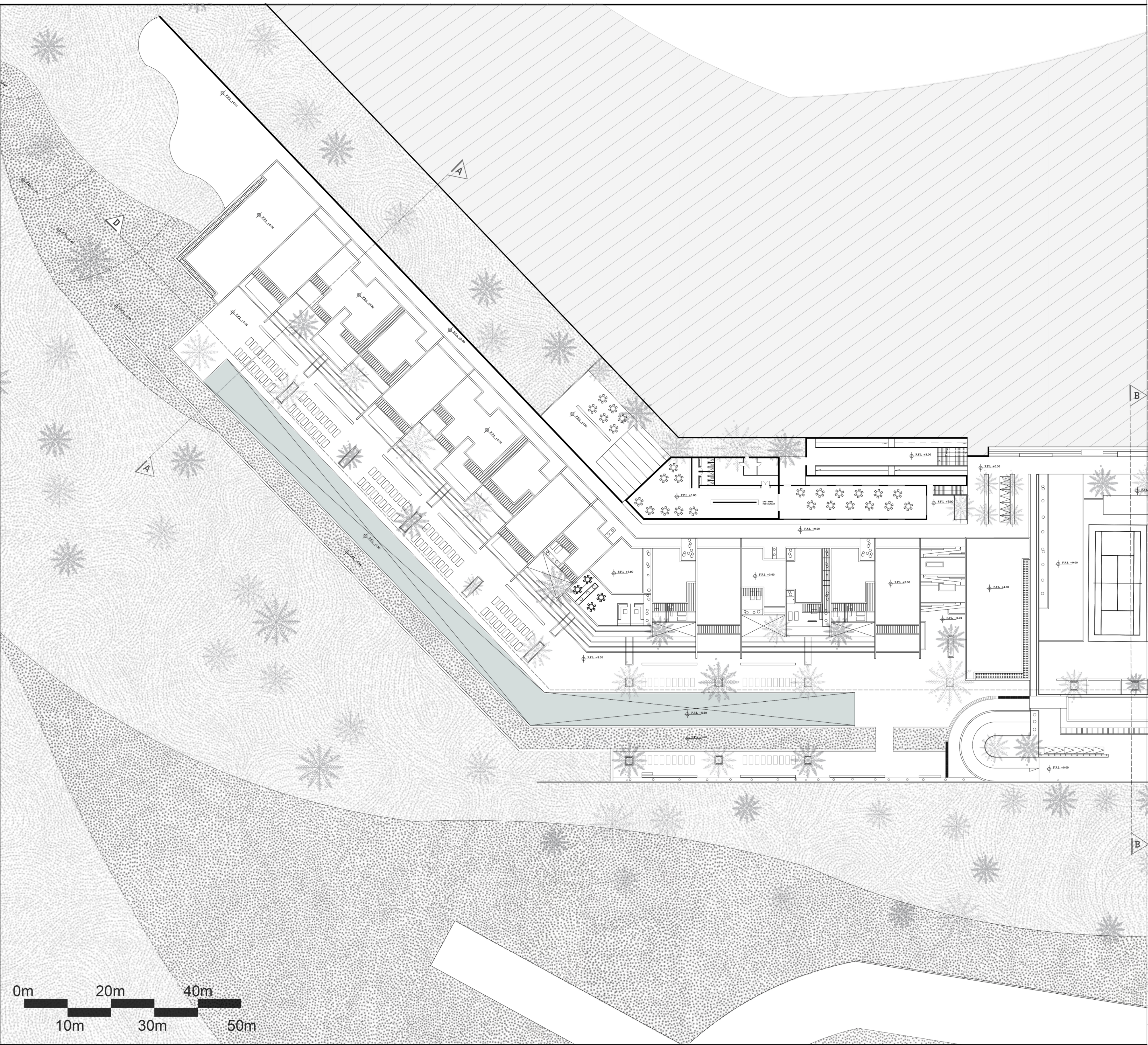


4

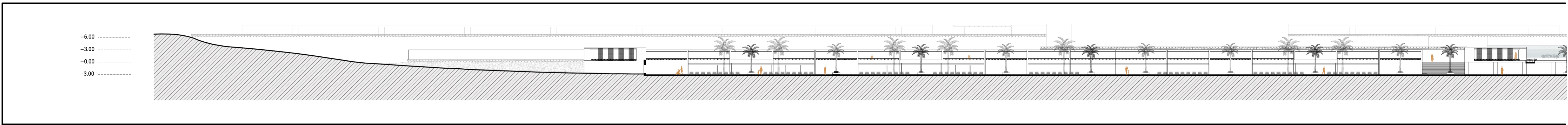
Microclimate effect through interior/exterior yards integration



II-Plan Level +3.00



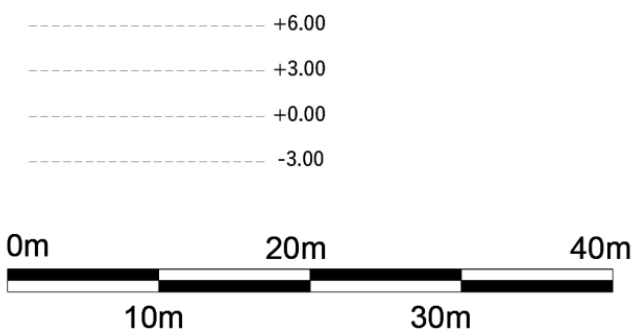
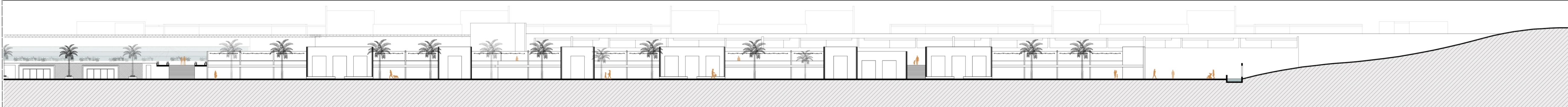
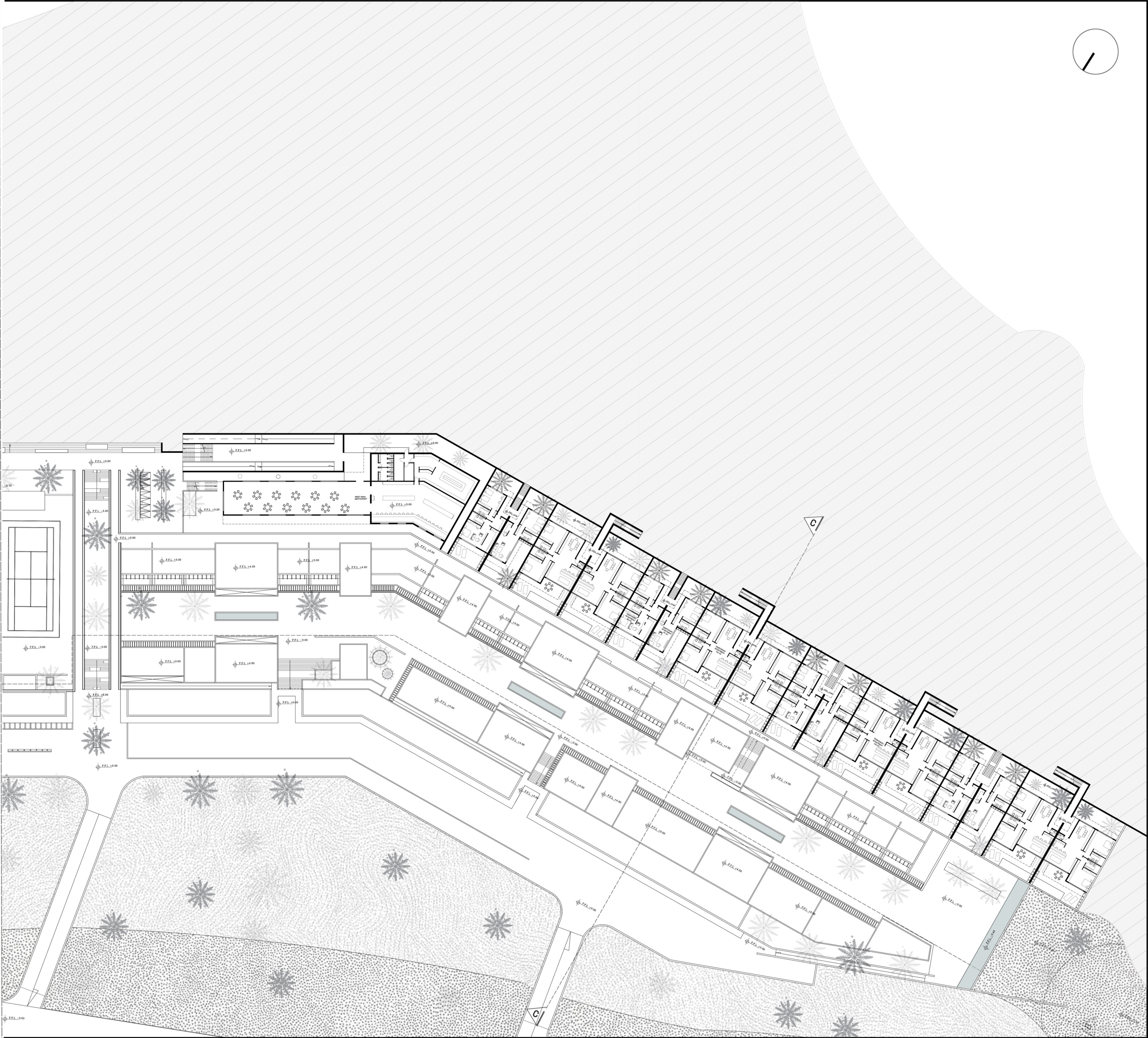
III-Section D-D



IV-Renders -Project Central Area

Description :

The following images are set in the heart of the project, where a huge courtyard is perceived .
the centryal yard is a place of gathering and social interaction ,where people share different cultural moments and enjoy with local facilities .
The current center point is a place of distribution as well as a meeting point .
Through this central area people can experience different sports activities as well as access pool zone or the marketplace .



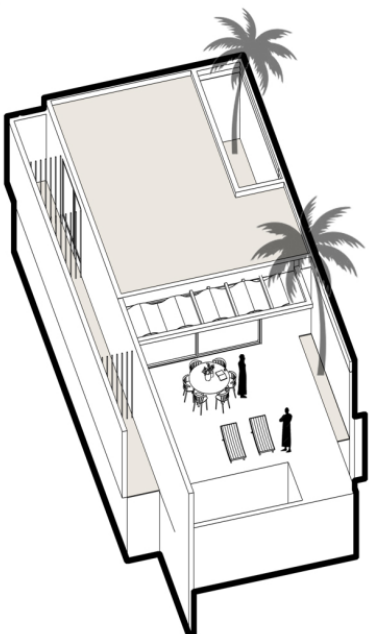
I-Plan Level +6.00

II-Accomodation Typology 1

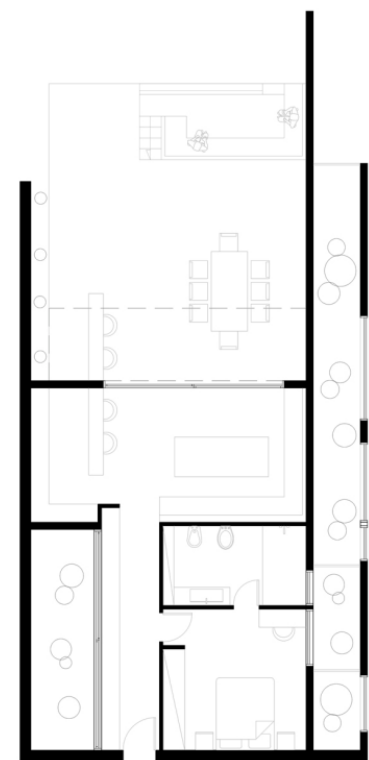
Accomodation Units: Typology 1
Inspired by Alula's old town architecture, the following units provide privacy, sustainable characteristics for natural aeration & lighting as well as natural integration.

1- Unit A

Unit A
60m2

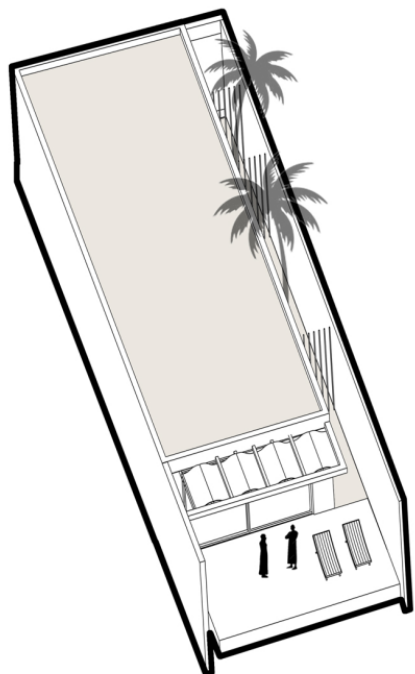


Unit A: Long term rental
60 m2

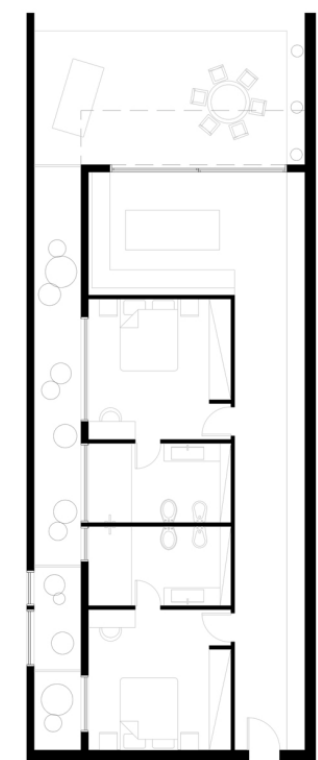


2- Unit B

Unit B
100m2

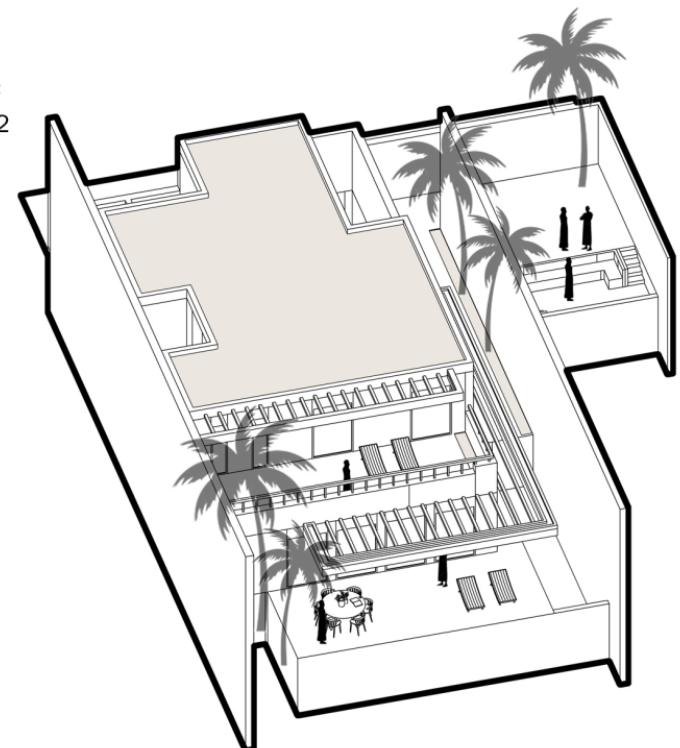


Unit B: Short term rental
100m2

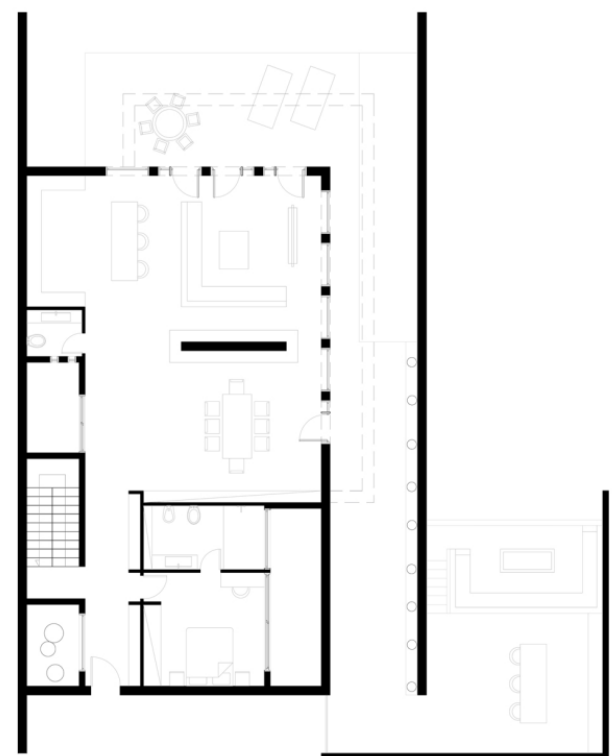


3- Unit C

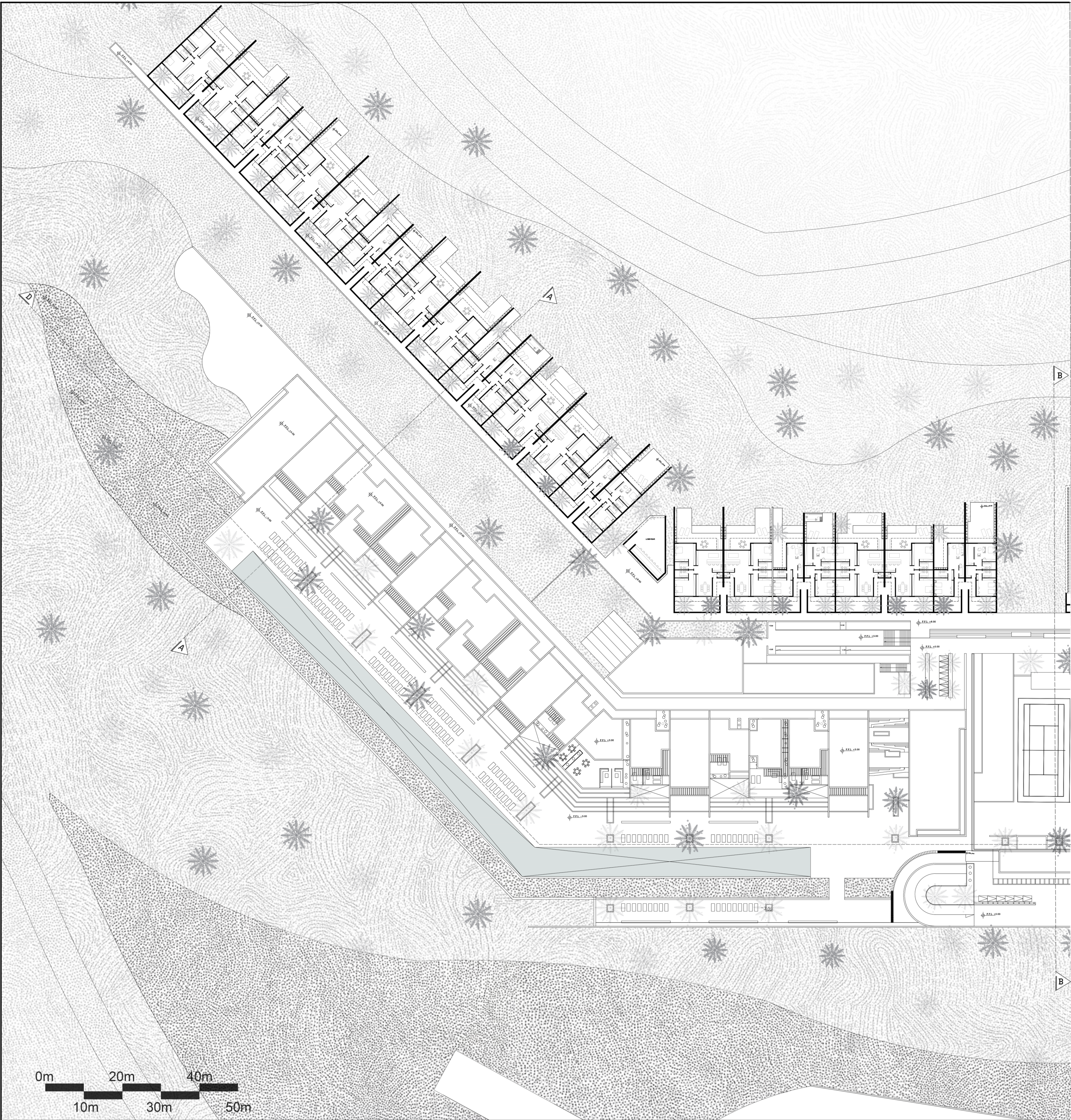
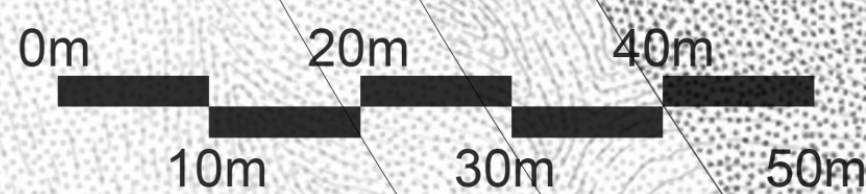
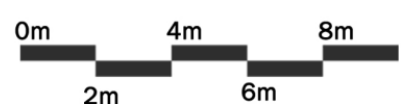
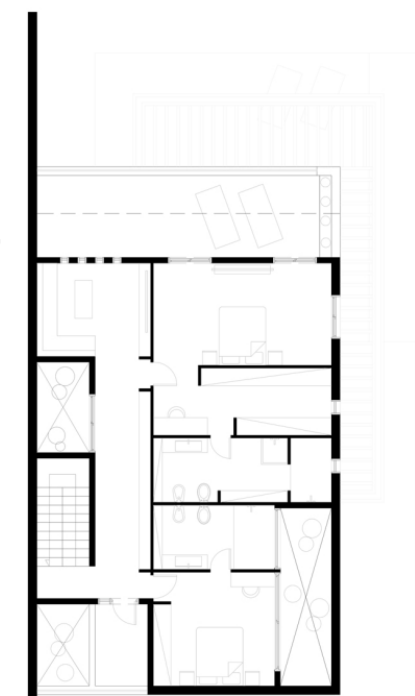
Unit C
270m2

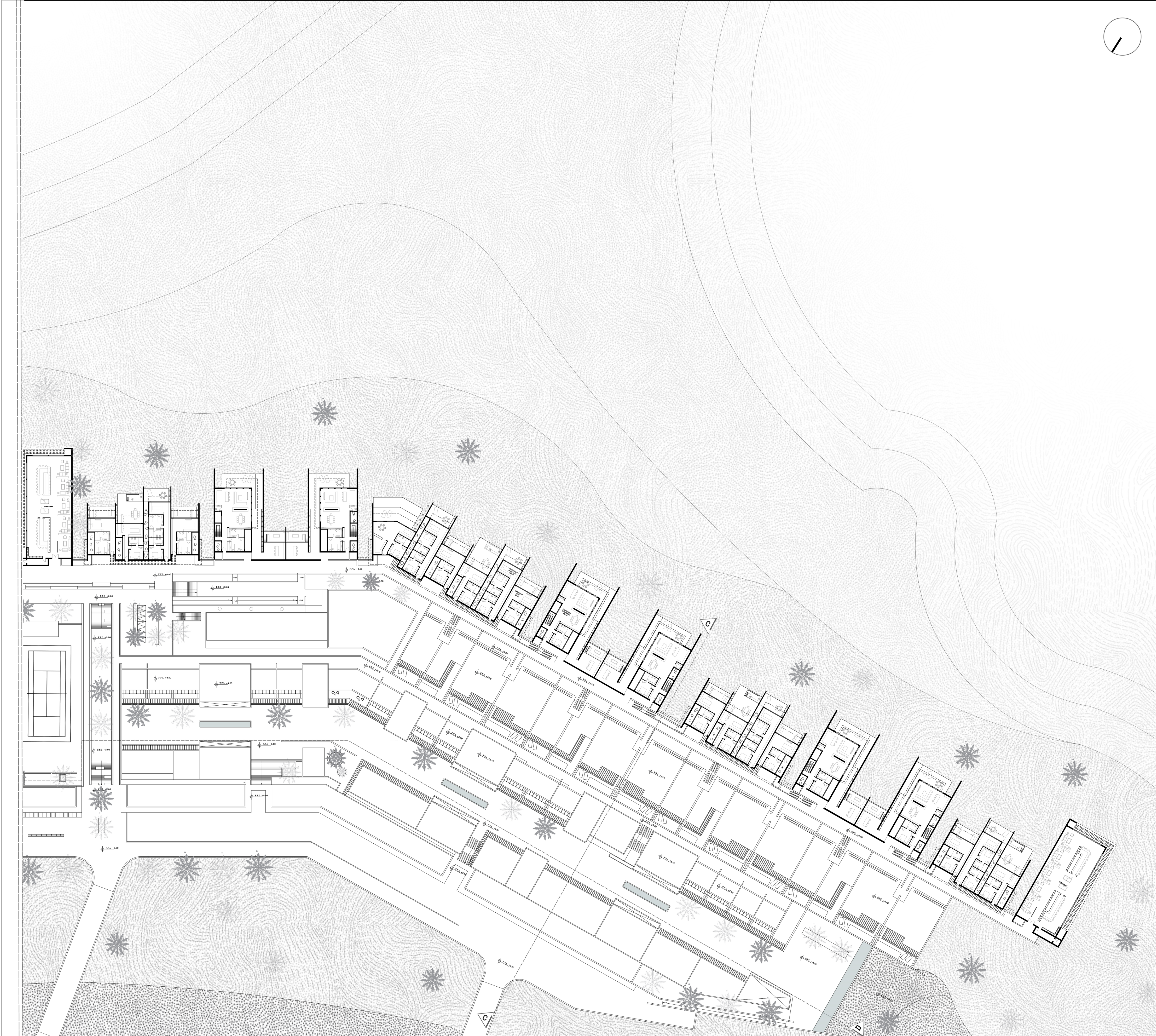


Unit C: Ground Floor Plan
Long Term Rental

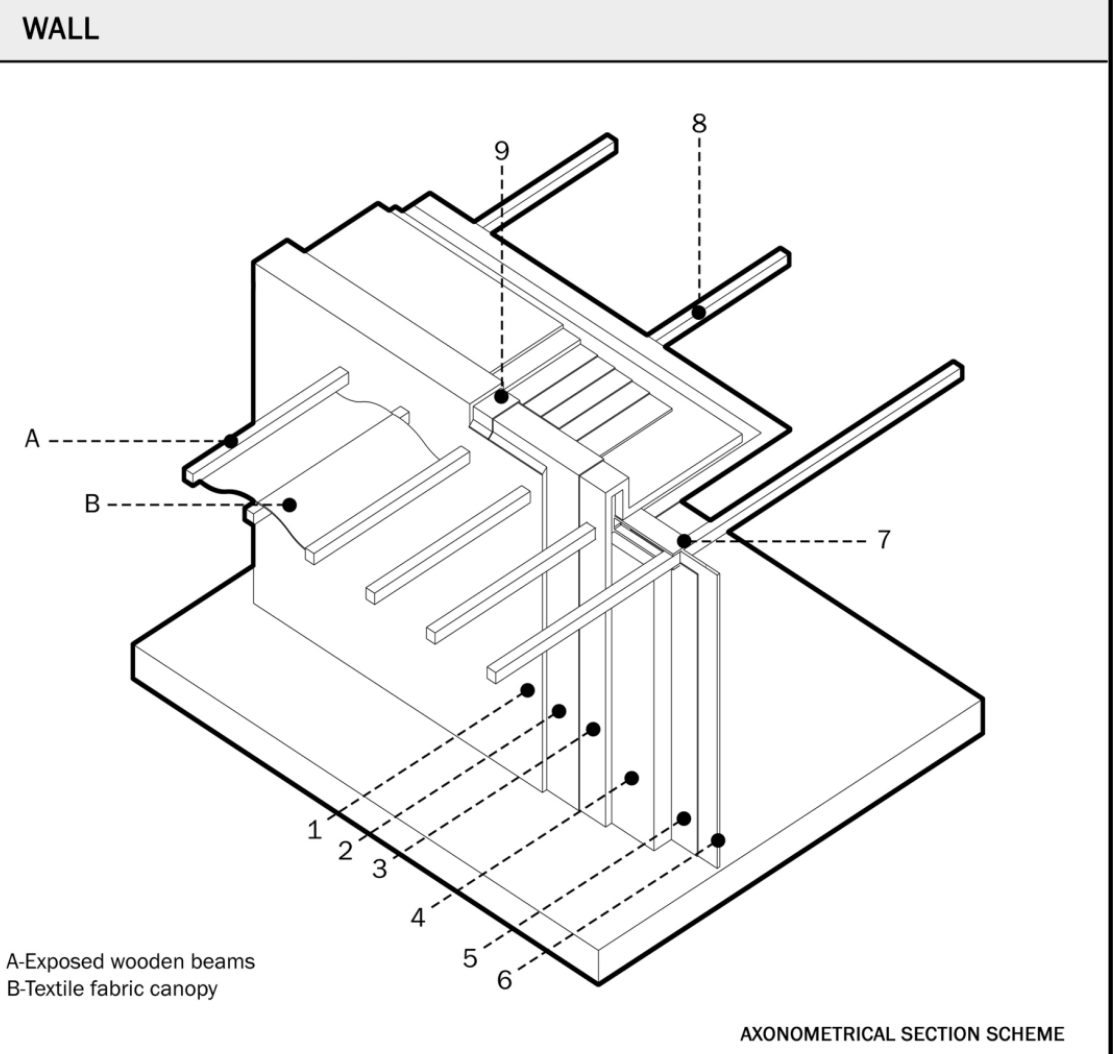


Unit C: First Floor Plan
Long Term Rental





III-Exploded Detail Diagrams



Layering
Wall layering

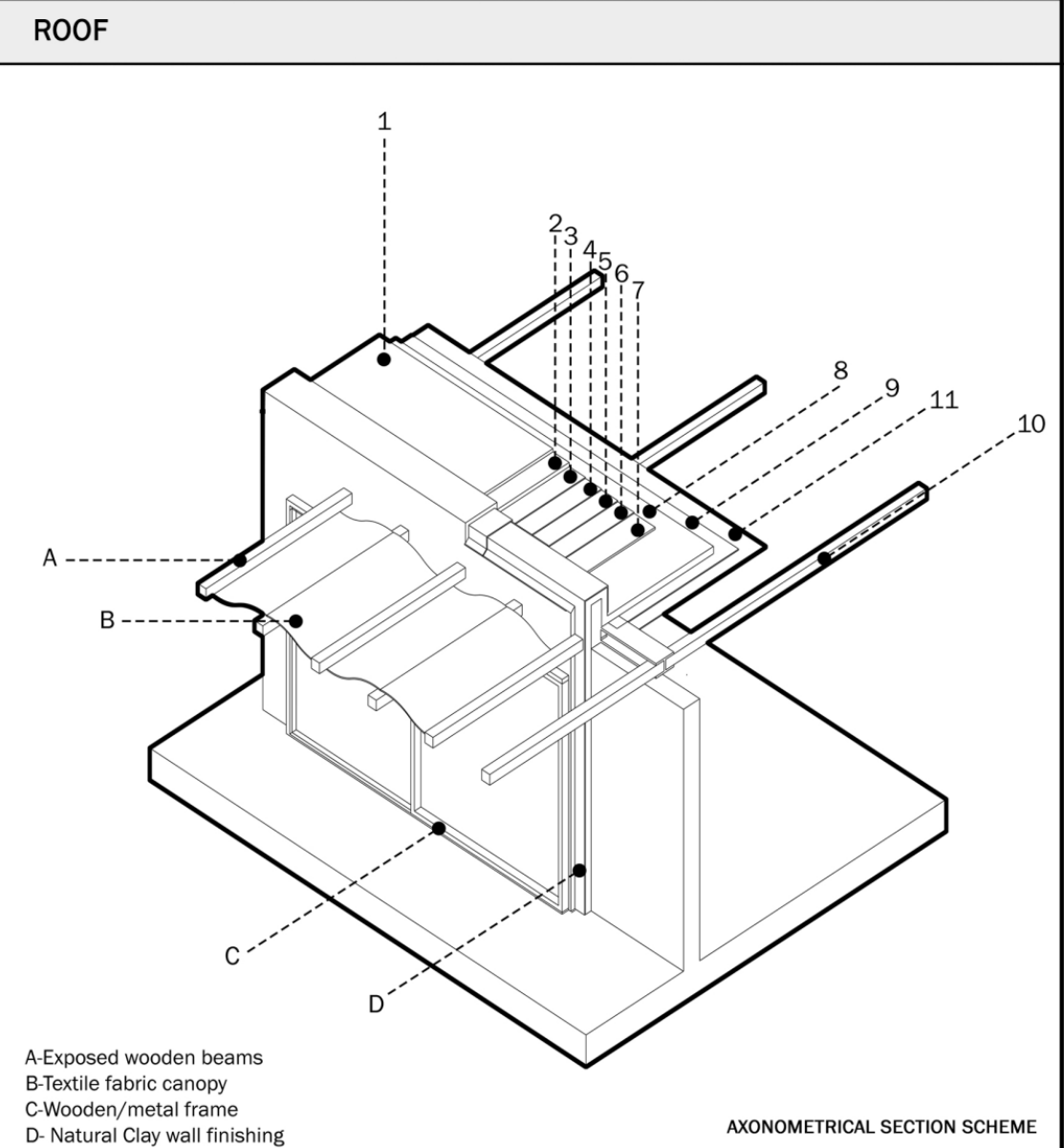
In a hot climate such an Alula , it is crucial to have modern interventions to vernacular construction techniques while still preserve sustainability, and minimize machinery usage emitting CO2 in every single way.

The best way to intervene is to build using local materials with local workers helping and preserving Alu ia's historical continuation:

For that this project preserves Alu las cultural identity through its vernacular Architecture while enhancing their way of building considering long term maintenance needs, increase thermal comfort, and waterproof enhancement.

Wall stratigraphy:

1-Clay plaster (pigmented with natural earth tones to blend with landscape) Purpose: natural weather resistant surface/reduce erosion/protects against uv damage/humidity control/harmonize with surrounding landscape)
2-Waterproof membrane EPDM (vapor permeable)
3-Natural Thermal+Acoustic insulation(strawbale/hemp/cork) purpose:Having high R-value insulation,providing thermal efficiency, and decreasing energy need
4-Mud-brick CSEB (Treated durable mud-bricks using: CSEB compressed stabilized earth blocks/controlled chamber dring and curing)
5-Vapor membrane
6-Clay plaster finish (with natural fiber reinforcement as straw) Purpose: provide additional thermal insulation/humidity control/preserve natural indoor climate)



Layering
Roof layering

In a hot climate such an Alula , it is crucial to have modern interventions to vernacular construction techniques while still preserve sustainability, and minimize machinery usage emitting CO2 in every single way.

The best way to intervene is to build using local materials with local workers helping and preserving Alu ia's historical continuation:

For that this project preserves Alu las cultural identity through its vernacular Architecture while enhancing their way of building considering long term maintenance needs, increase thermal comfort, and waterproof enhancement.

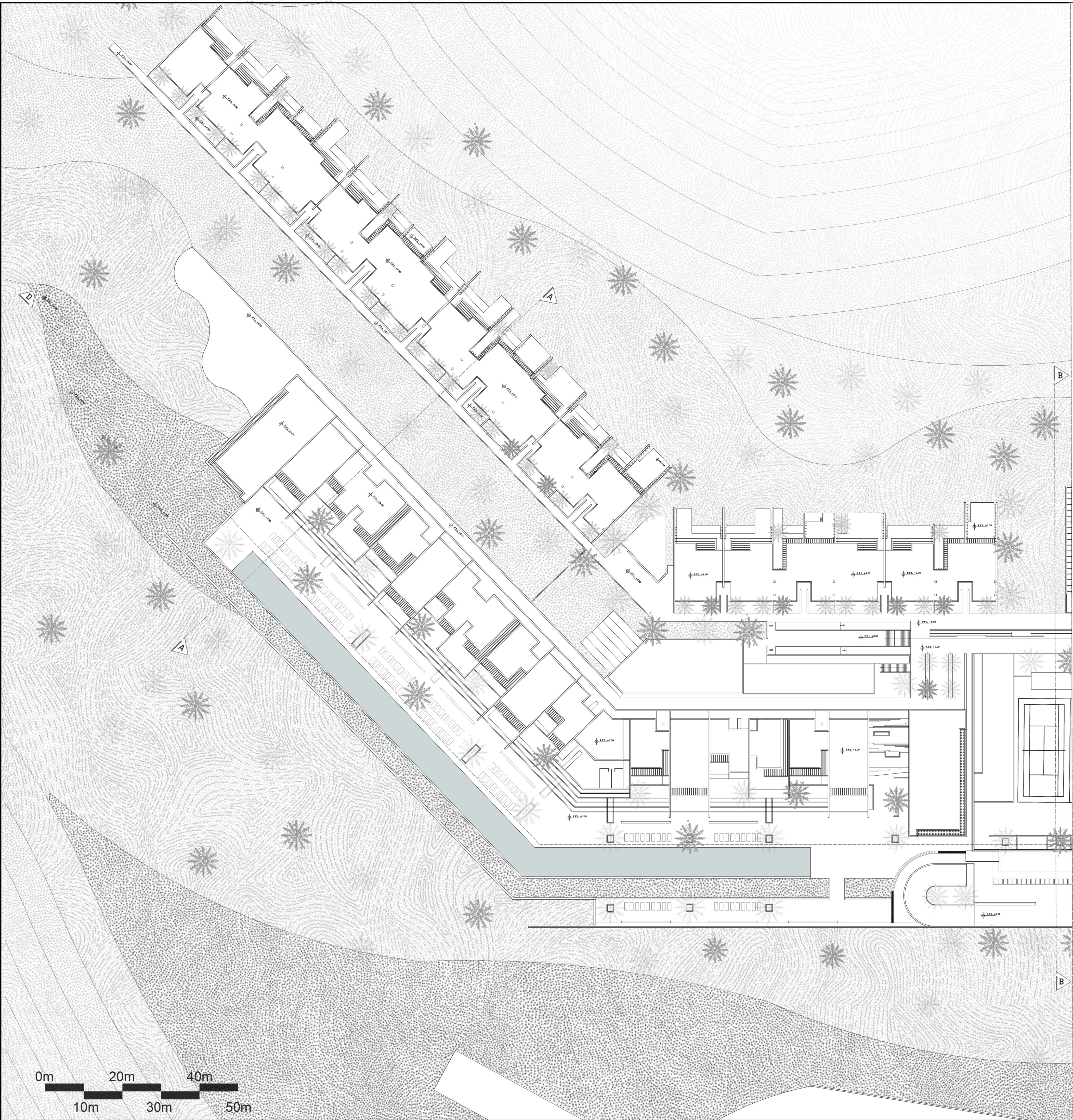
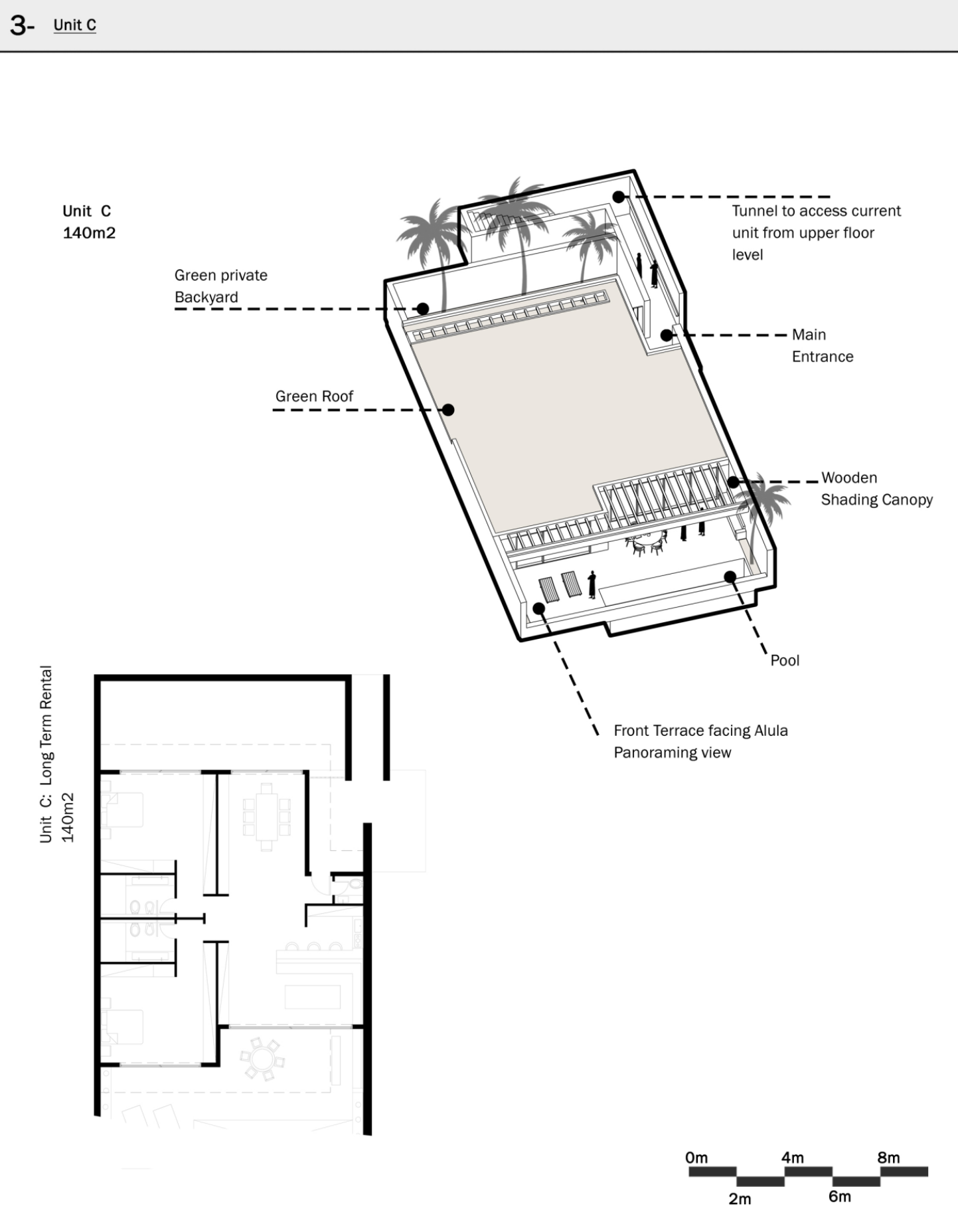
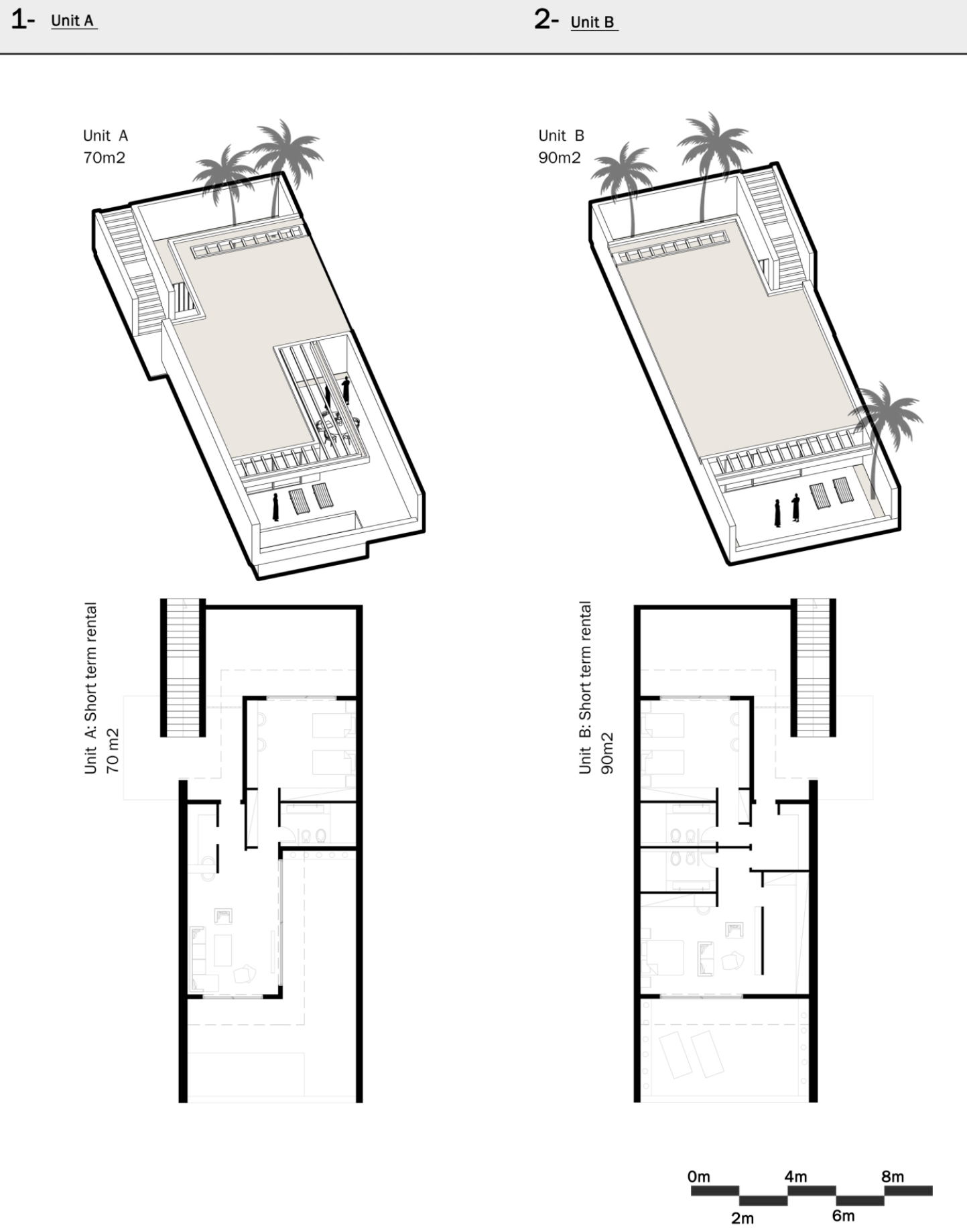
Roof stratigraphy:

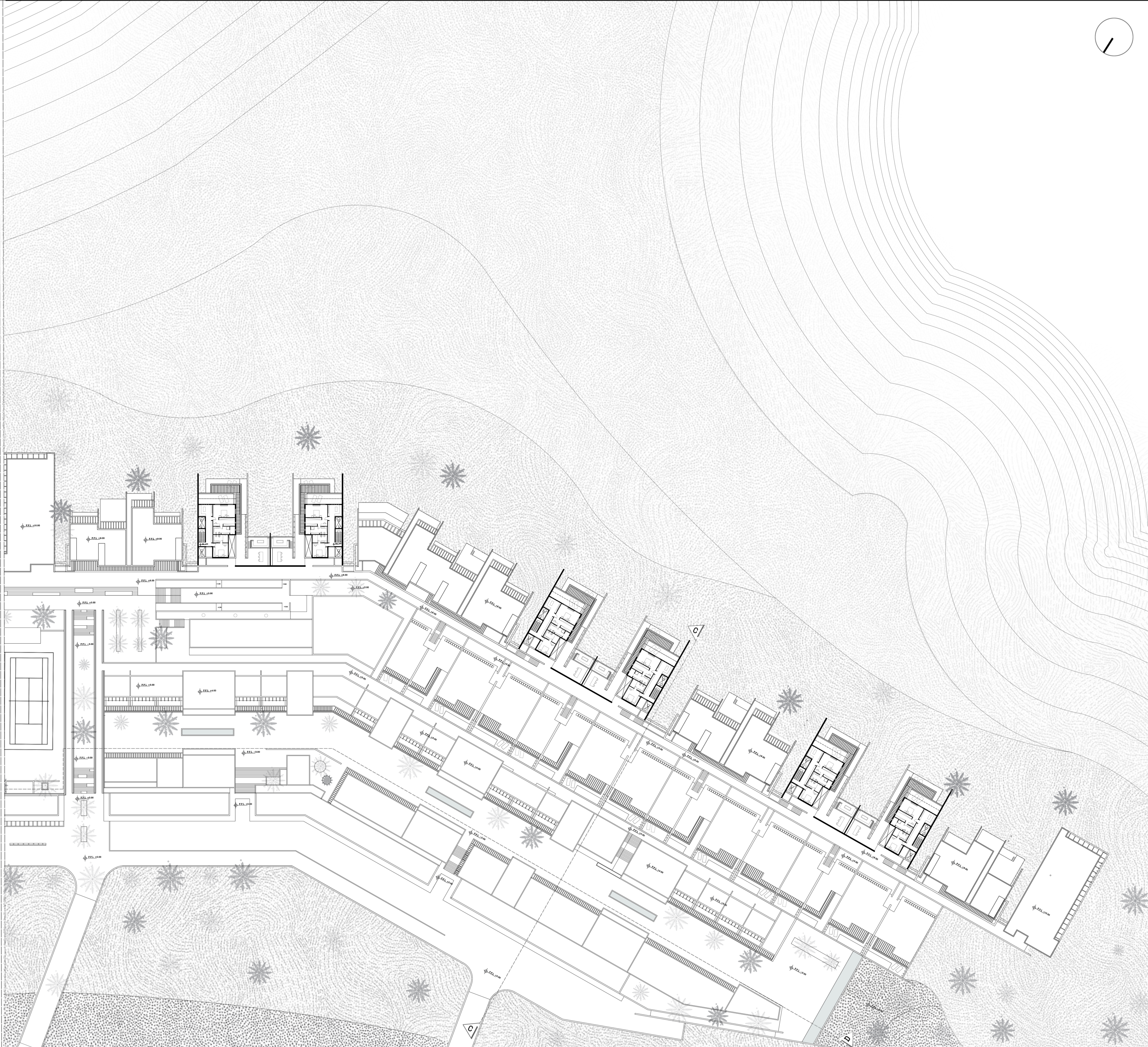
1-Sand +engineered soil
2-Gravel (for water runoff)
3-UV-resistant Geotextile layer
4-Drainage board + root barrier
5-waterproof membrane (EPDM)
6-Thick natural clay (for acoustic insulation)
7-thermal insulation of local materials:straw bale,or cork,or hemp fiber (Considering high R-value insulation,providing thermal efficiency &reducing energy need)
8-Vapor retarder
9-wood panel
10- local wood structural beams
11- finishing layer (Optional, according to design:clay plaster, or exposed wooden structure)

I-Plan Level +9.00

II-Accomodation Typology 2

Accomodation Units: Typology 2
Inspired by Alula's old town architecture, the following units provide privacy, sustainable characteristics for natural aeration & lighting as well as natural integration.





Description :

The below images shows insights of the project from different perspectives, in order to perceive the project's features, elements, and space.

