

COMPLESSO
RESIDENZIALE
MAREA

LA SECONDA
VITA DI UN
LUOGO TRA
ARCHITETTURA
E PAESAGGIO
BATROUN, LIBANO



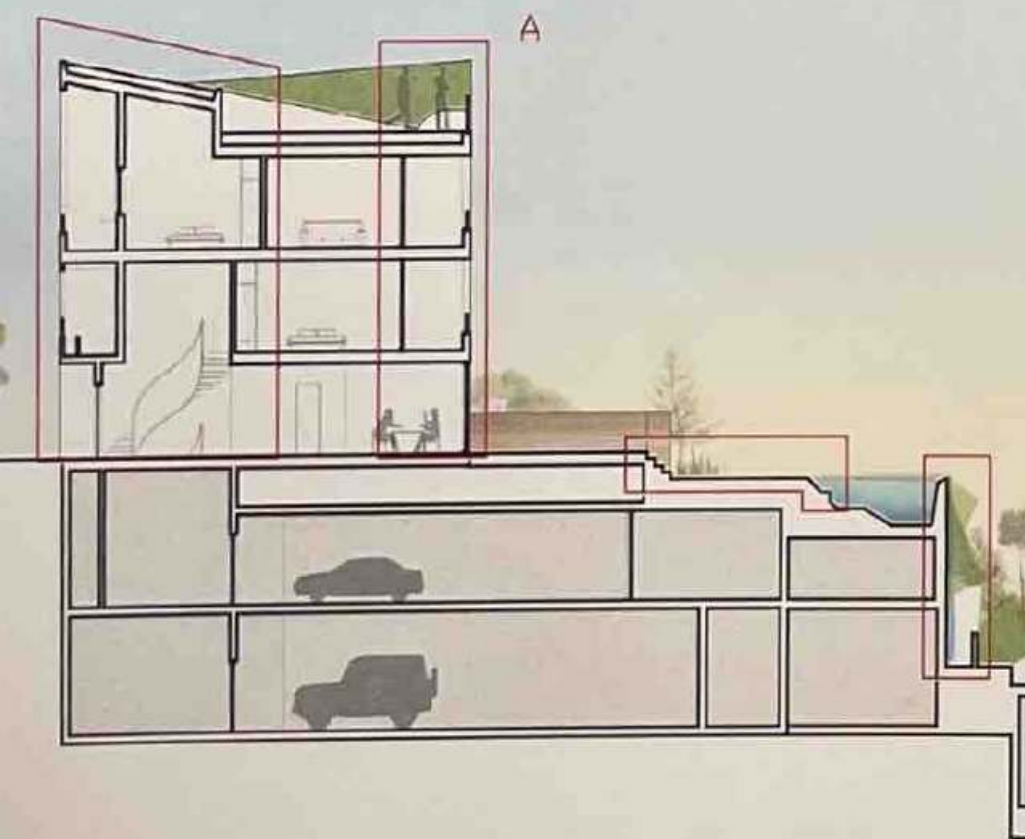
WORKac



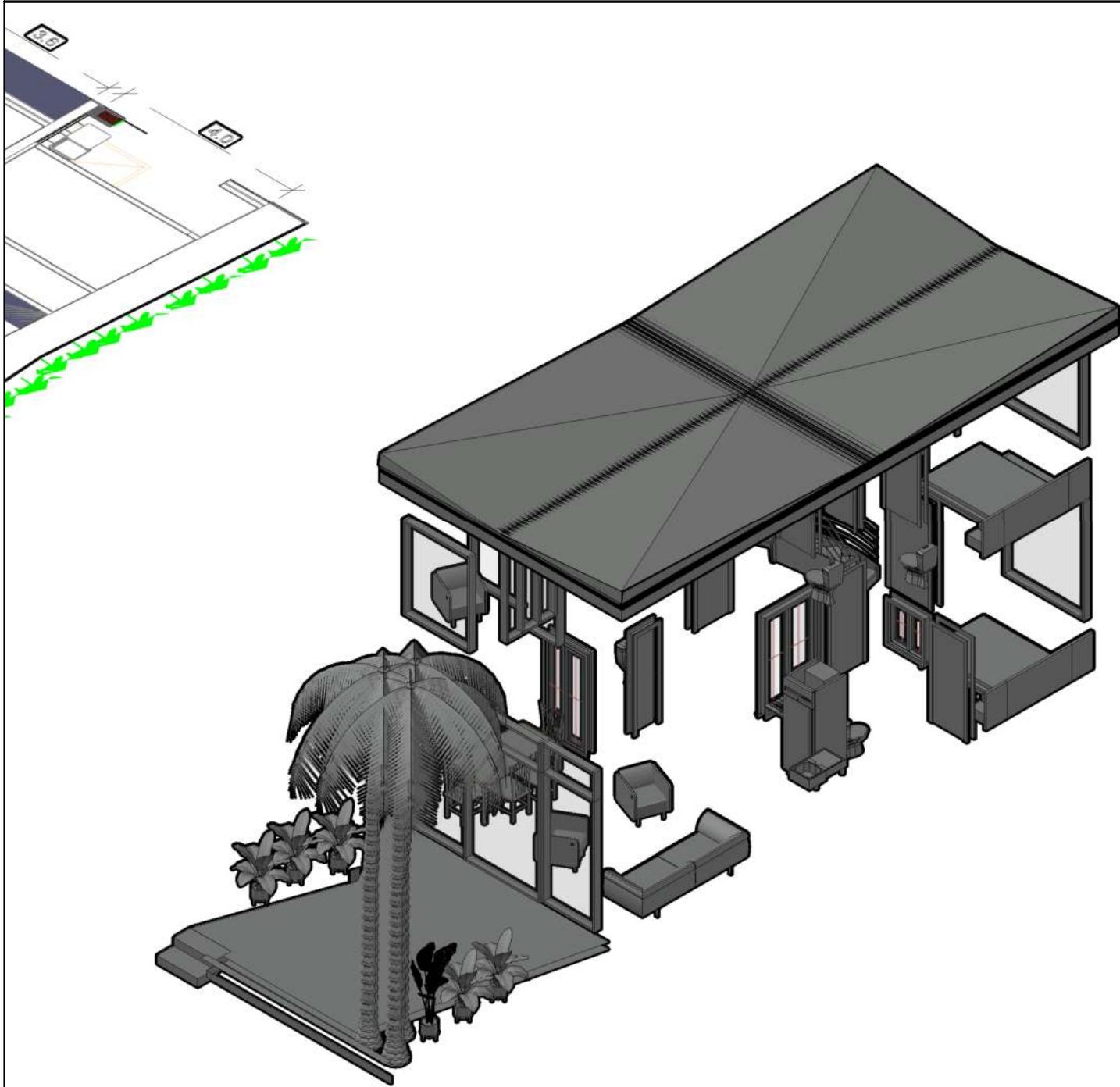
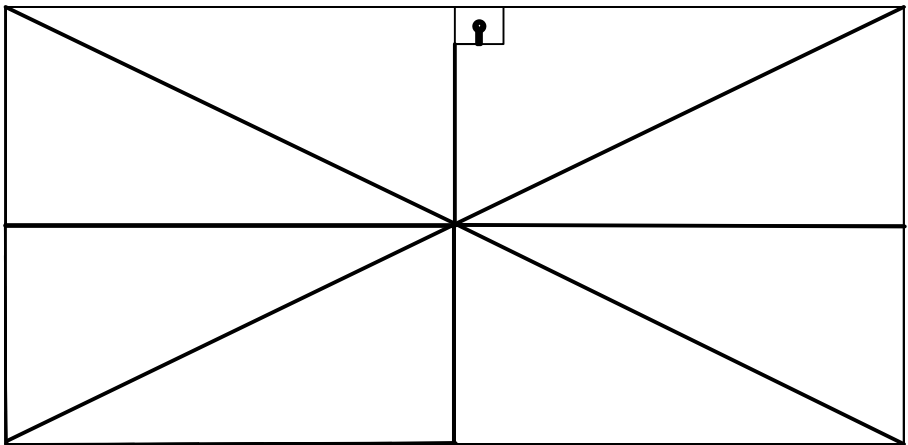
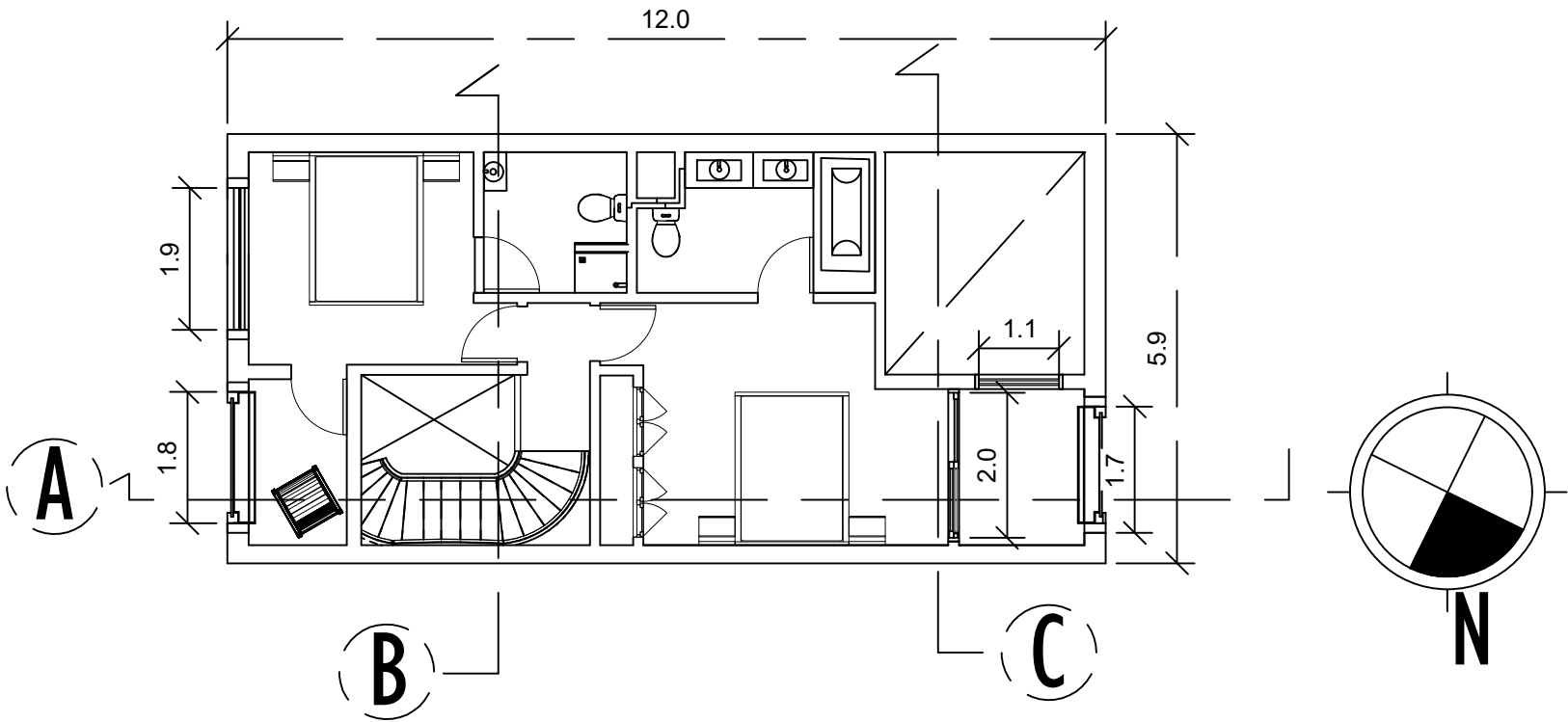
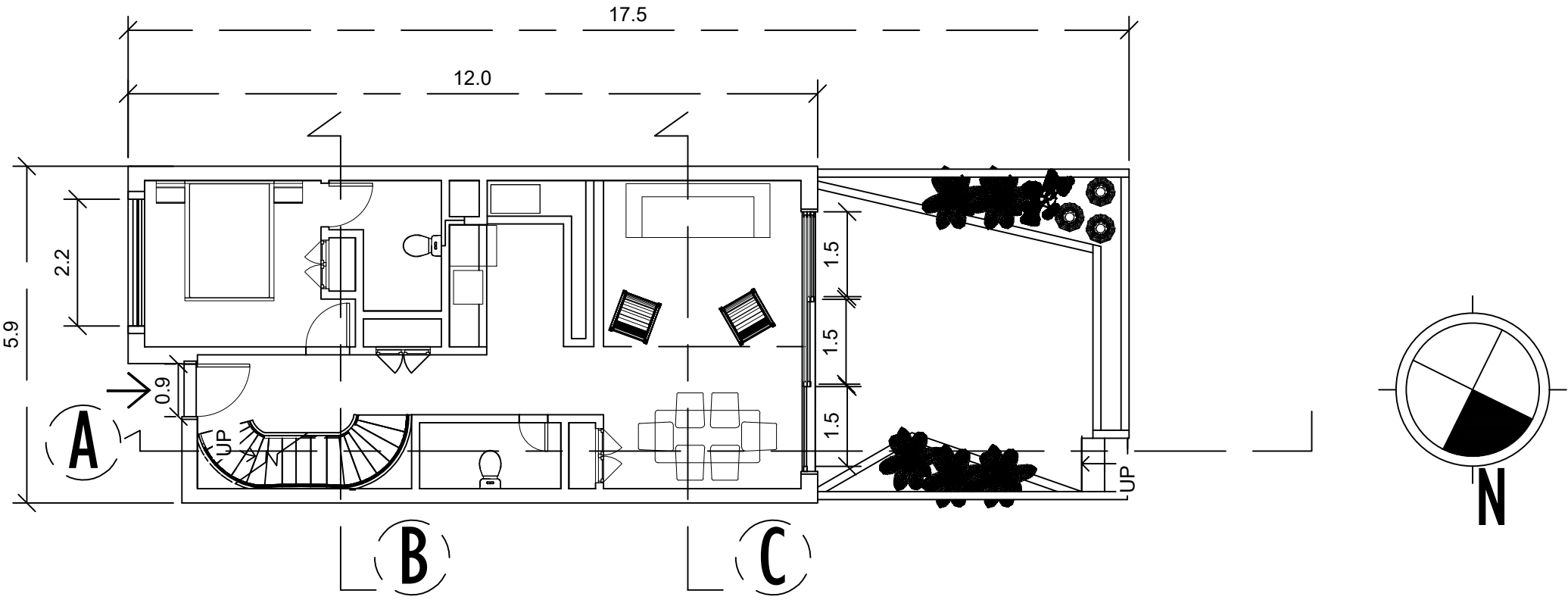
Amale Andraos e Dan Wood

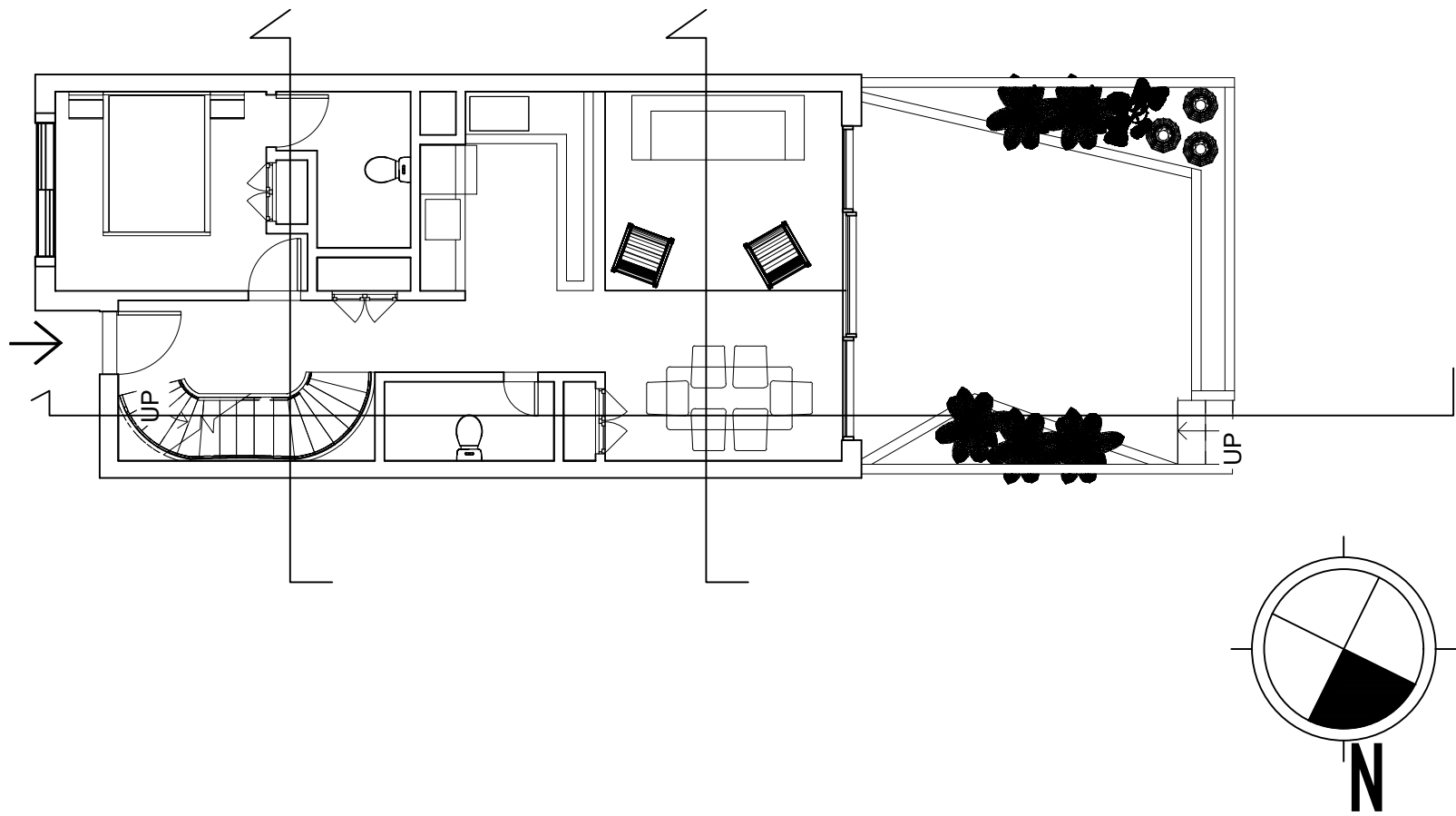
Il lavoro dello studio è focalizzato
su progetti pubblici, culturali e
trova nella commissione della facoltà
dell'architettura di affrontare problemi
ambientali e sociali.



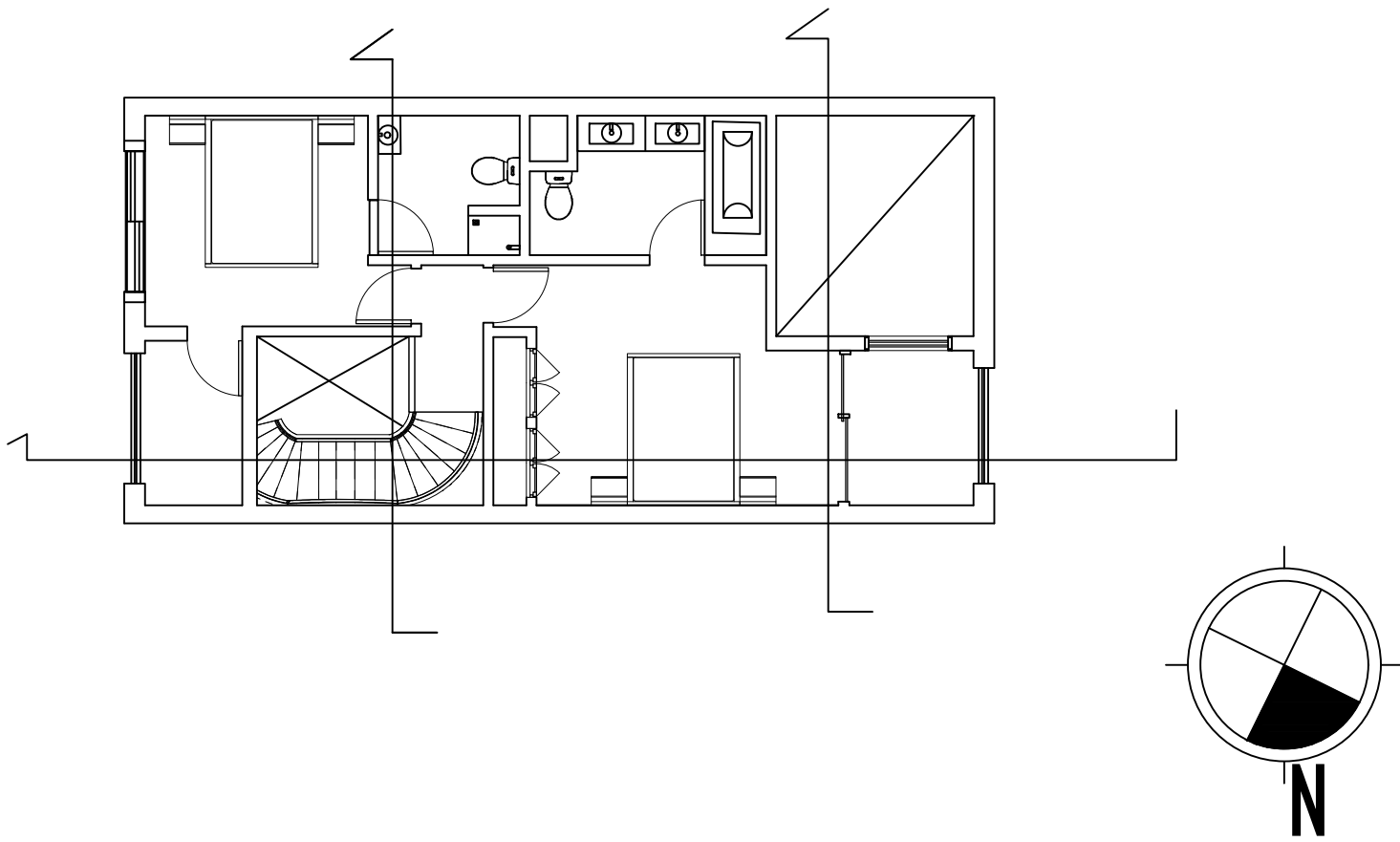


Sezione trasversale – Scala 1:400

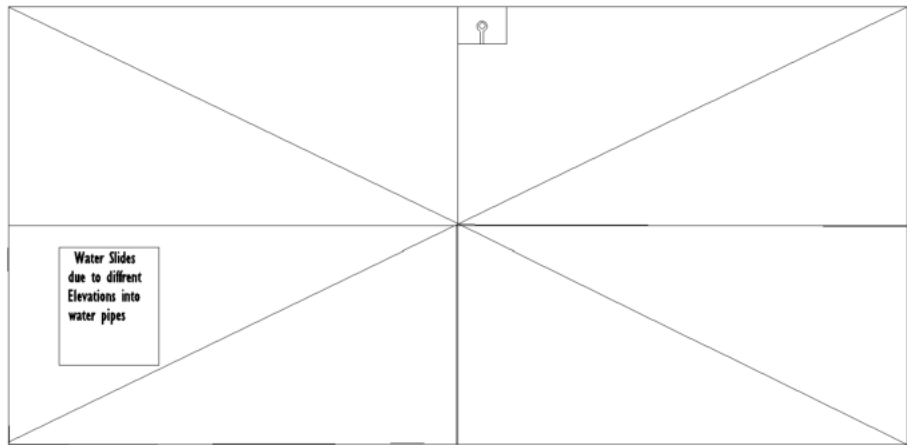




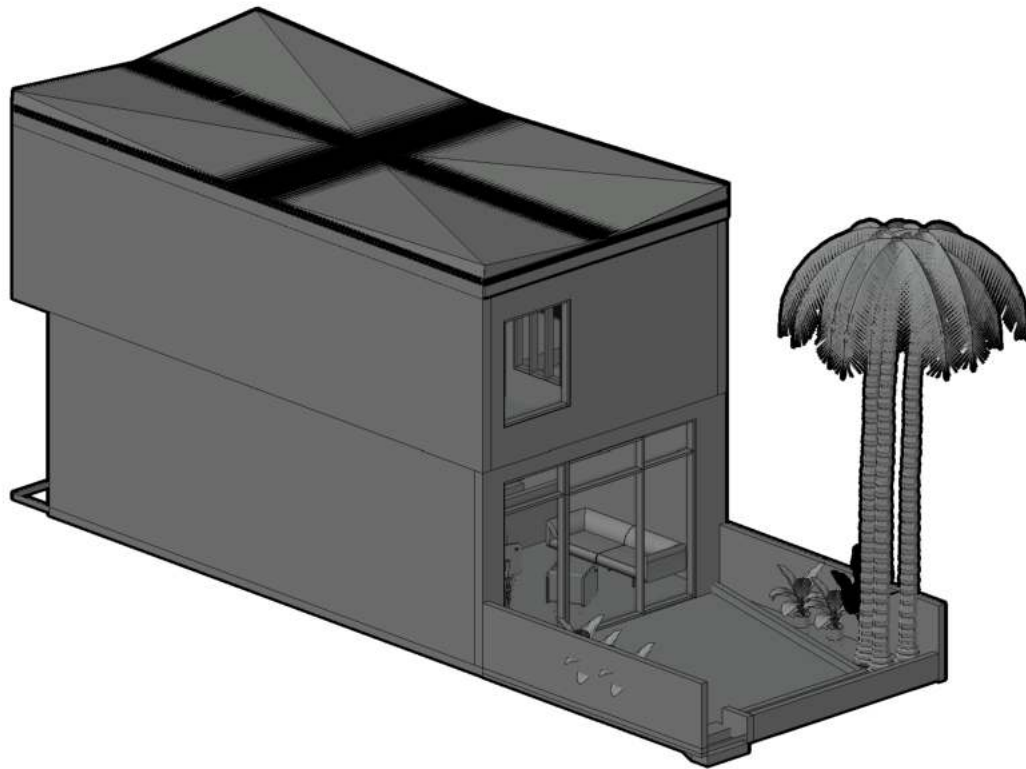
Level 0 plan, scale 1:100 |



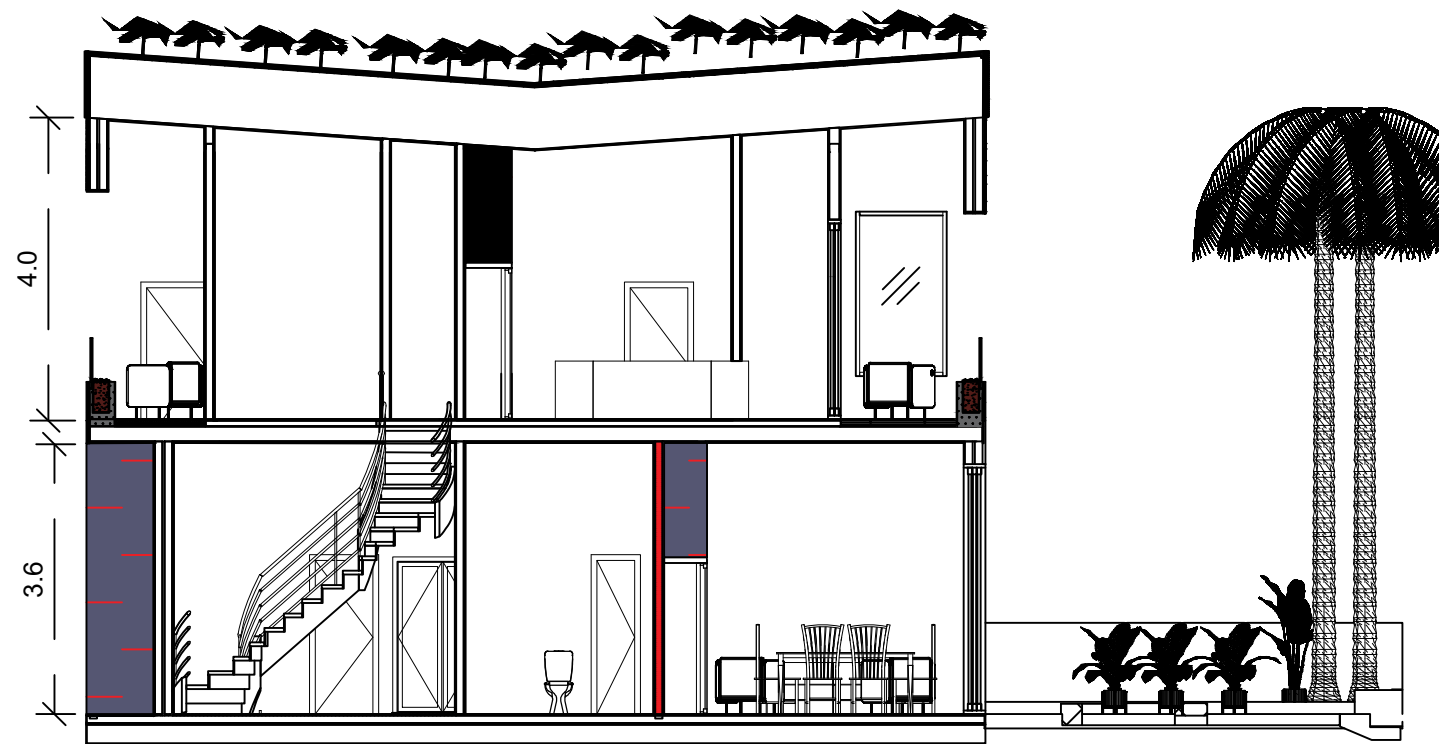
Level 1 plan, scale 1:100 |



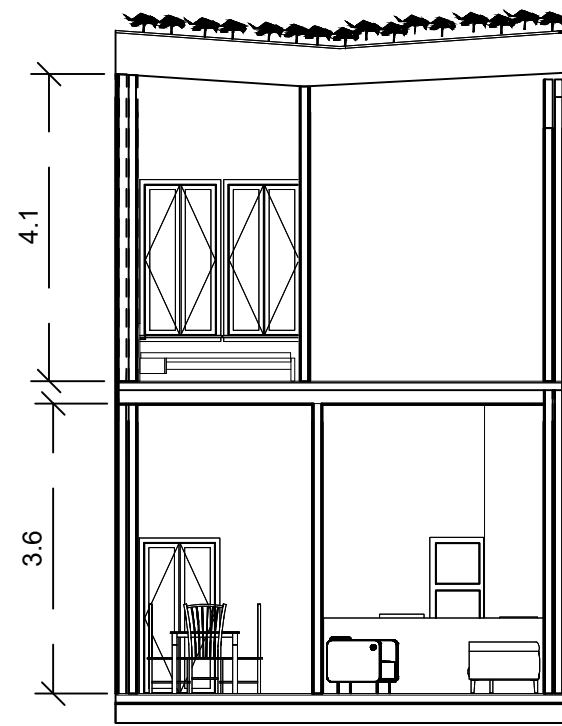
plan, scale 1:100 | Student name



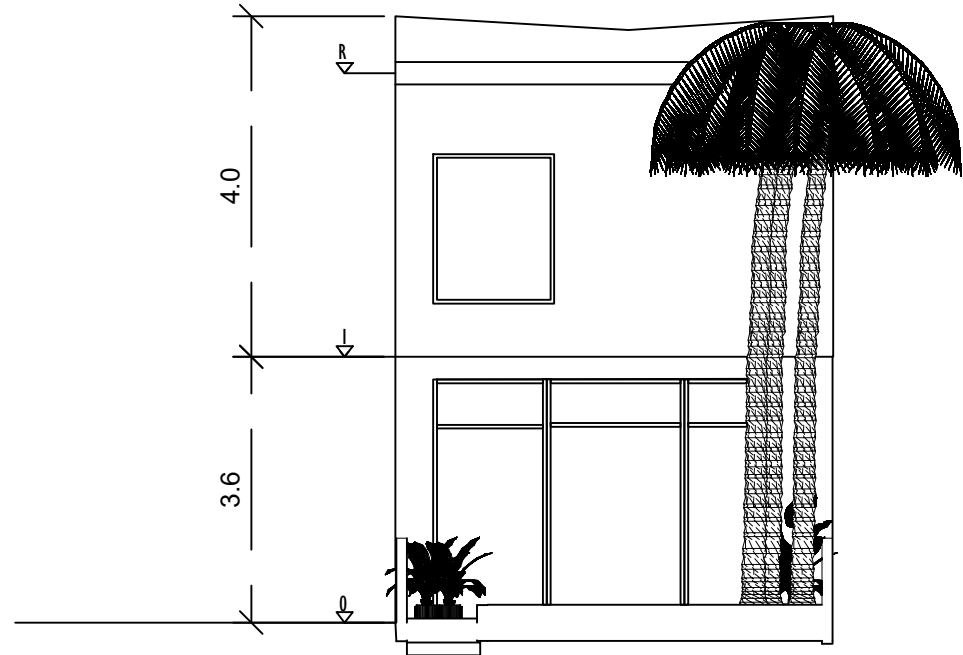
Axonometry, scale 1:100 |



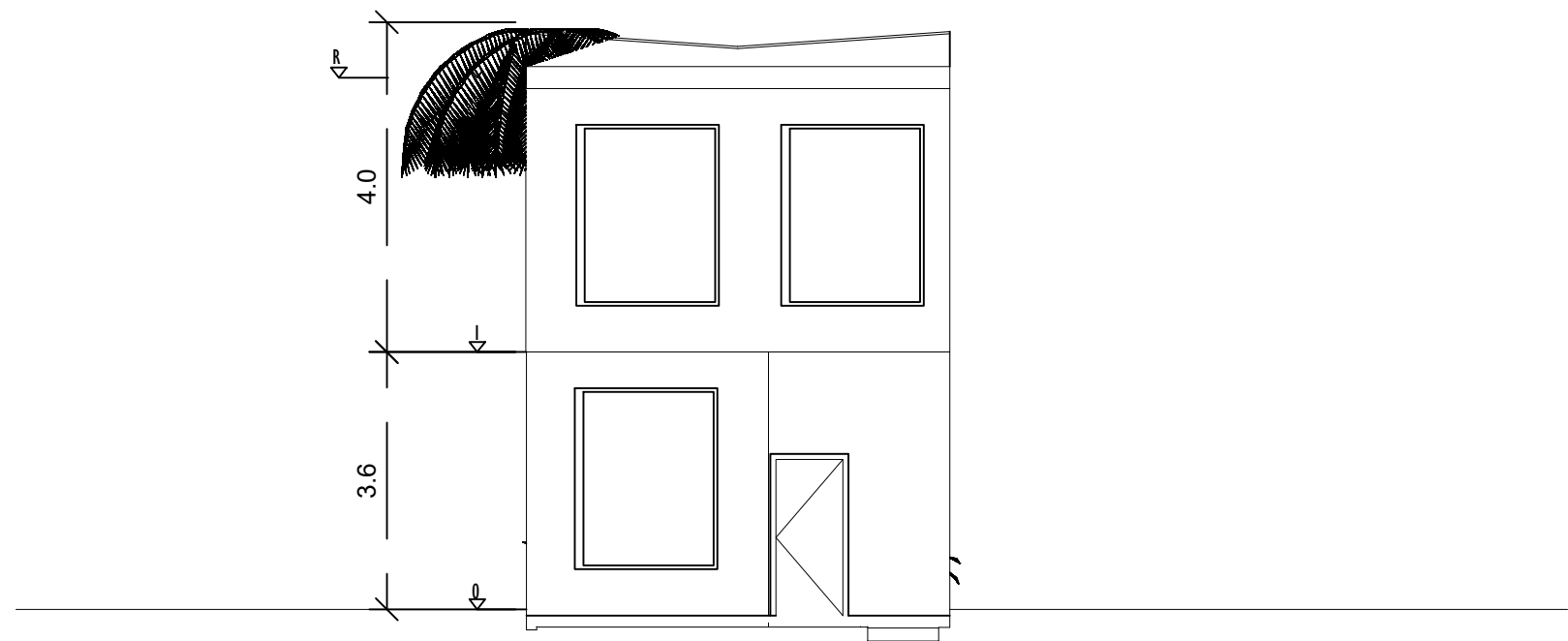
Section A scale 1:100 | Student name



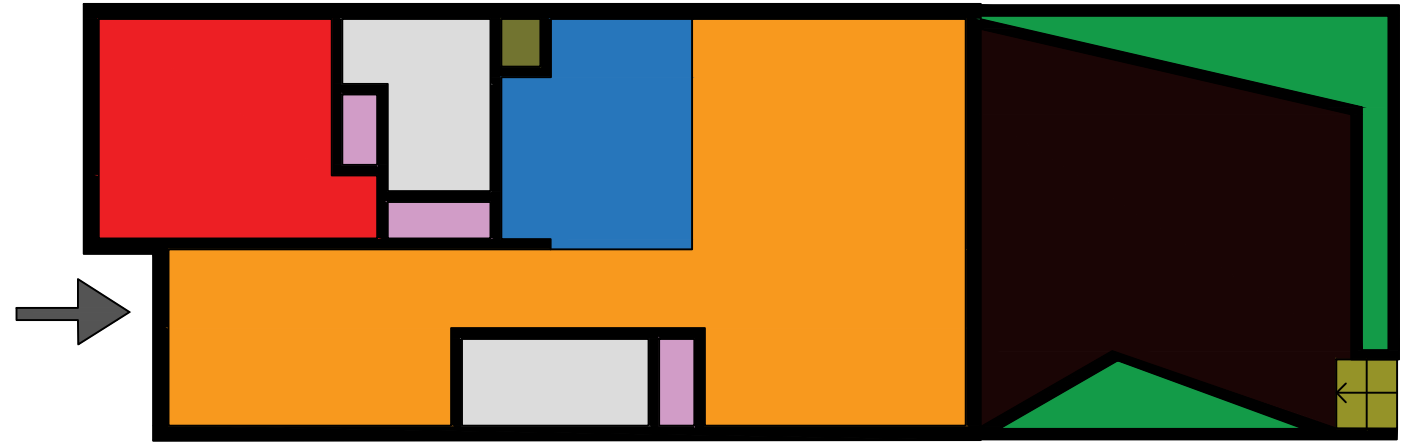
Section B, scale 1:100 | Student name



Section C, scale 1:100 | Student name

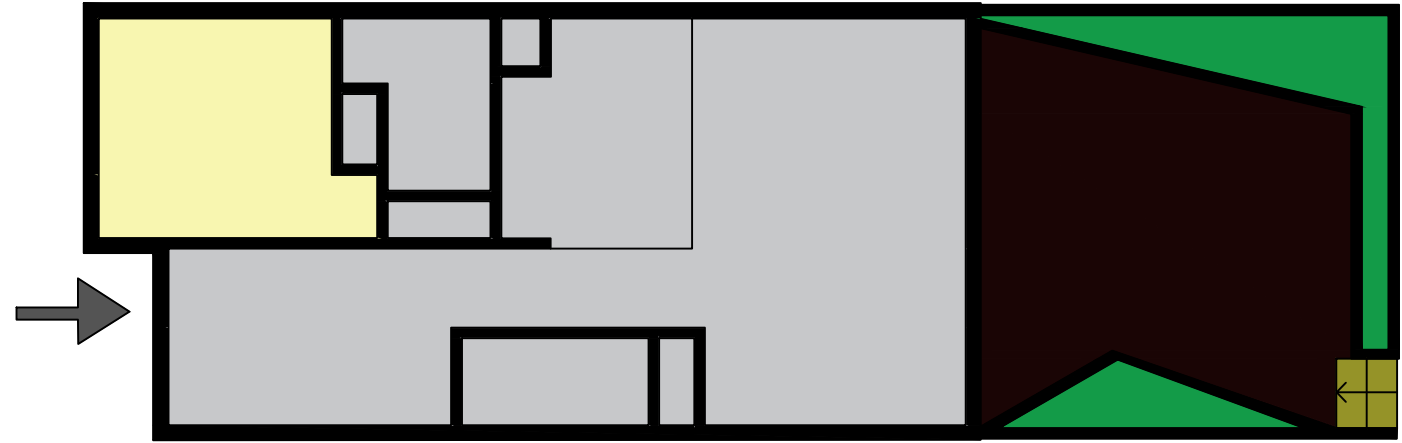


Longitudinal section, scale 1:100 | Student name

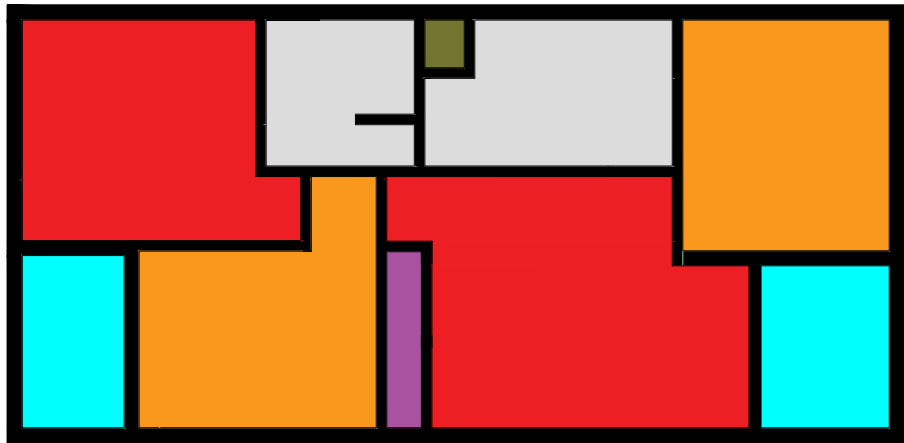


Legends	Colours	Area	Percentage
Bed Room			
Hall			
Toilets			
Balcony			
Wardrobe			
Kitchen			
Entrance			
Total Area			

Legends	Area	Percentage
Total Area		100
Main Area		
Service Area		

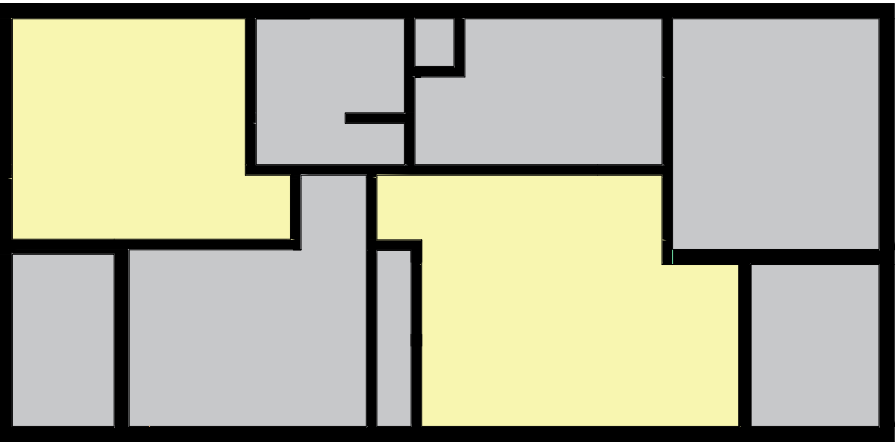


Level 0 plan, scale 1:100 | Student name

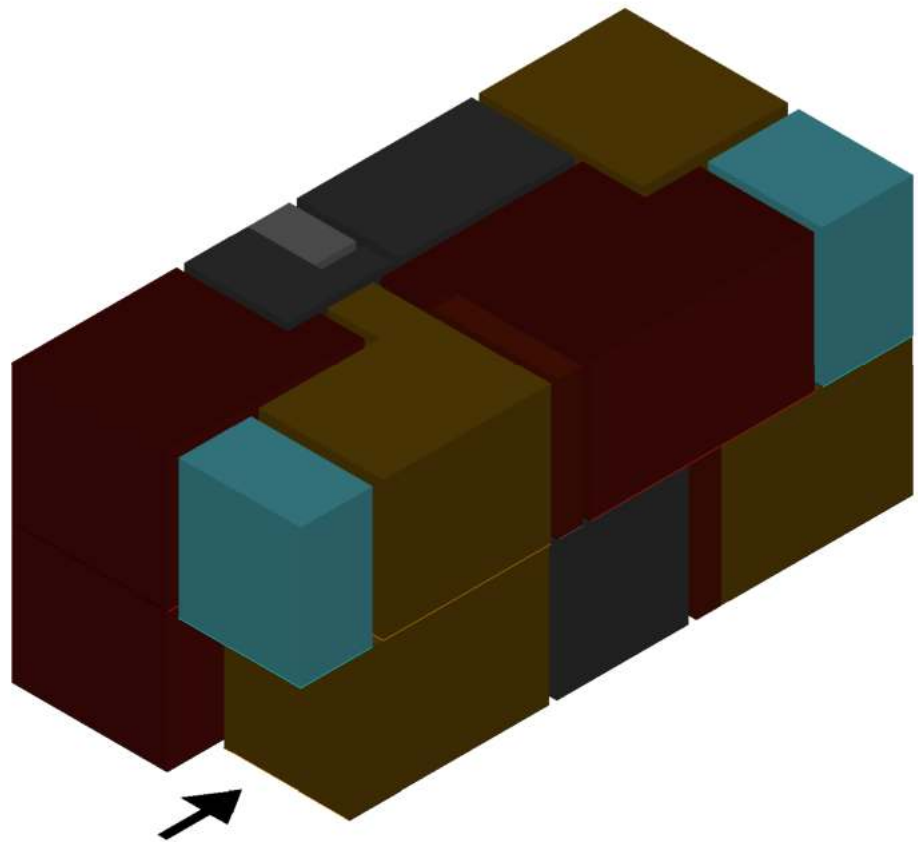


Legends	Colours	Area	Percentage
Bed Room			
Hall			
Toilets			
Balcony			
Wardrobe			
Kitchen			
Entrance			
Total Area			

Legends	Area	Percentage
Total Area		100
Main Area		
Service Area		

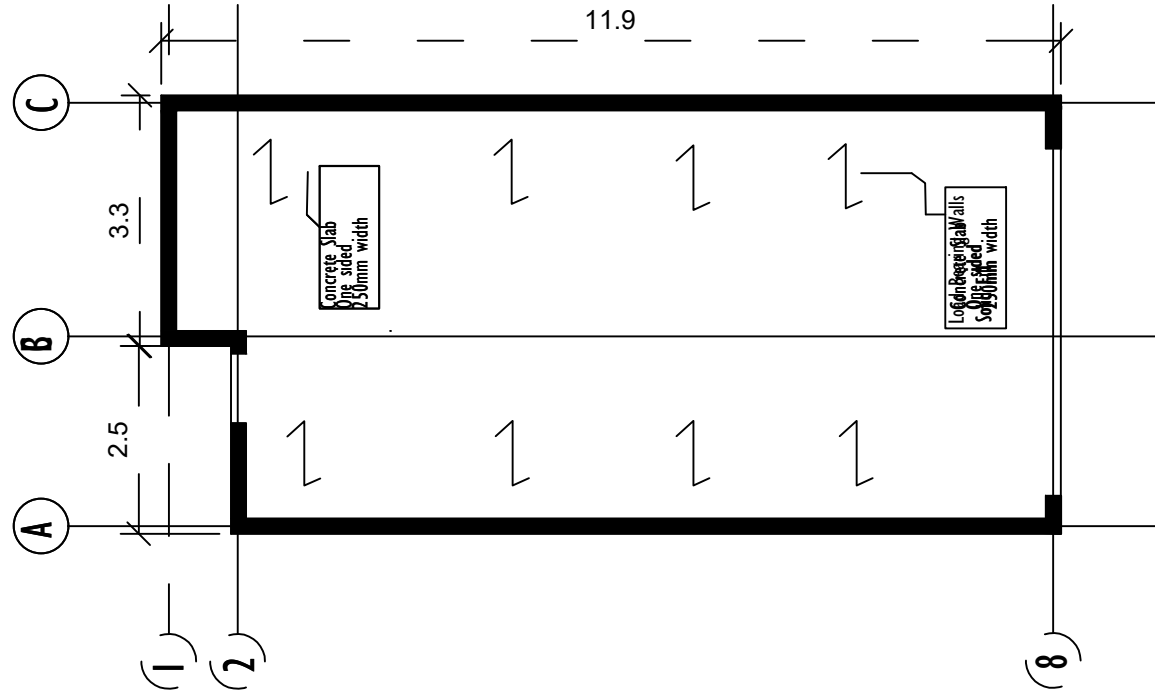


Elevation A, scale 1:100 | Student name

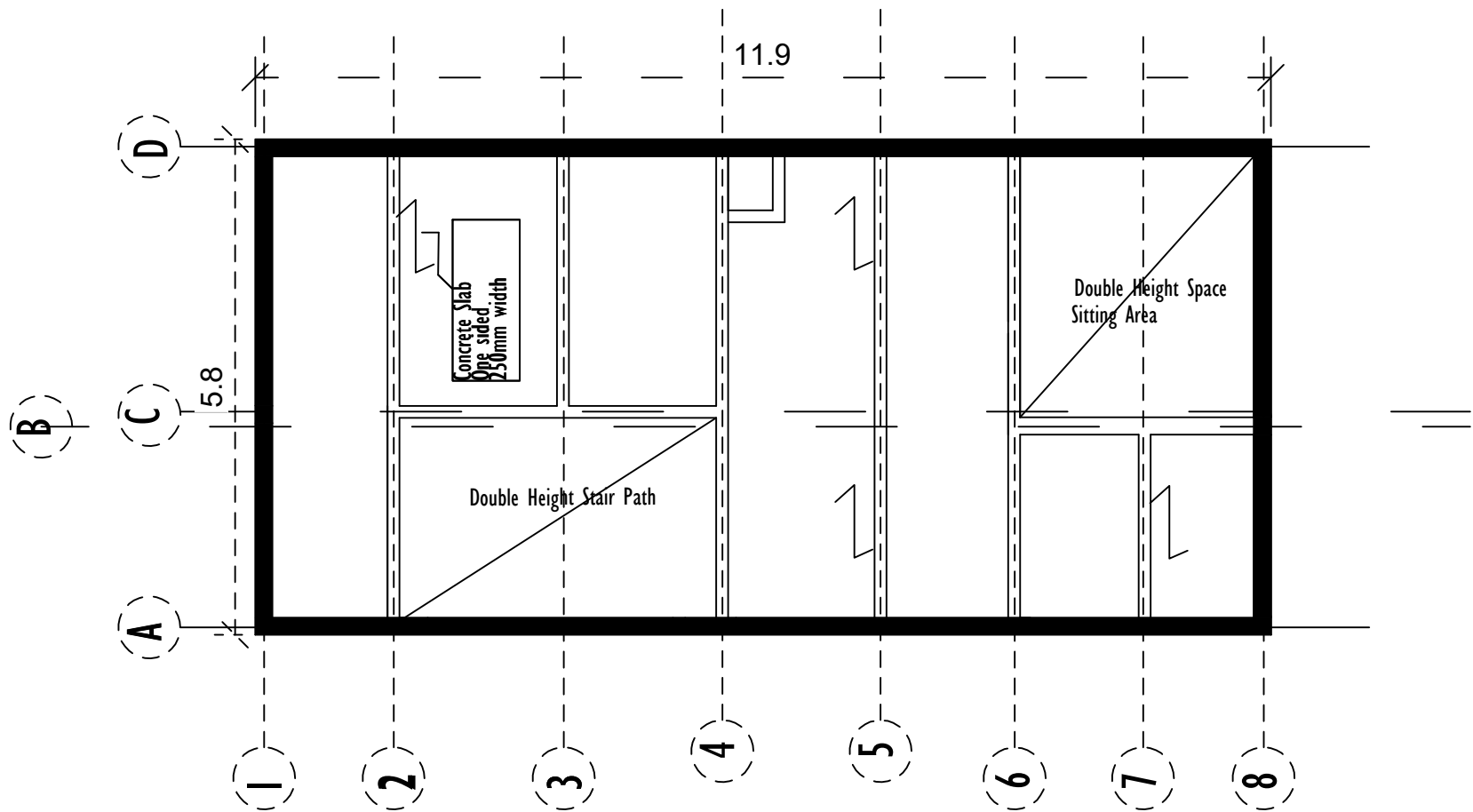


Level I plan, scale 1:100 | Student name

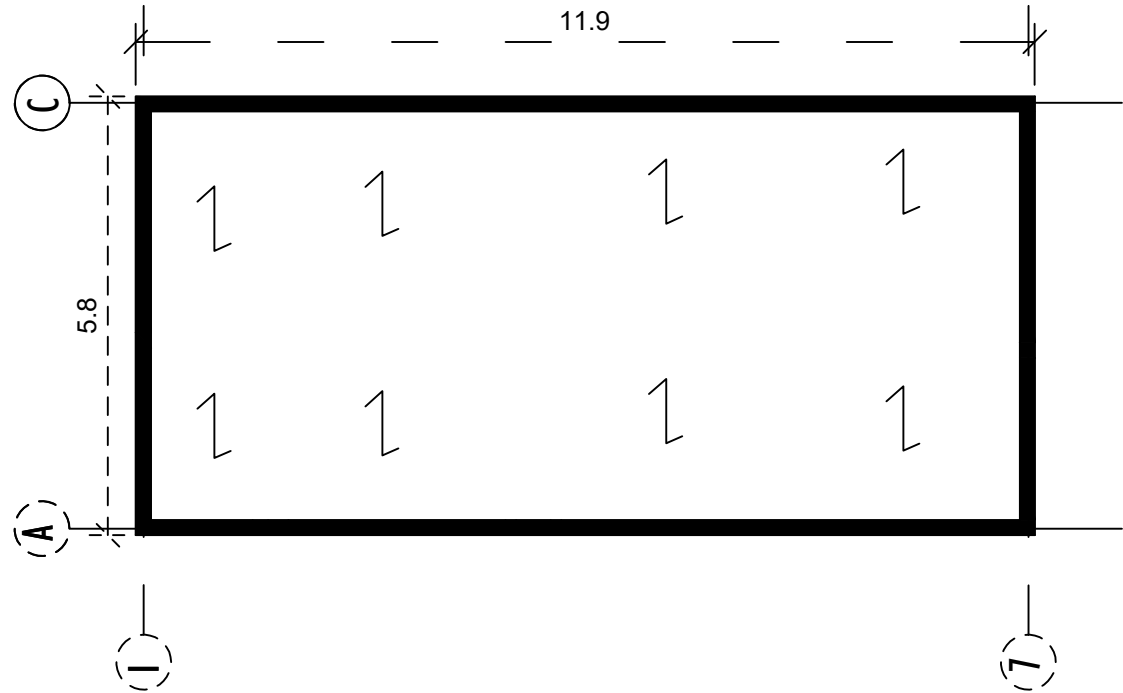
Elevation B, scale 1:100 | Student name



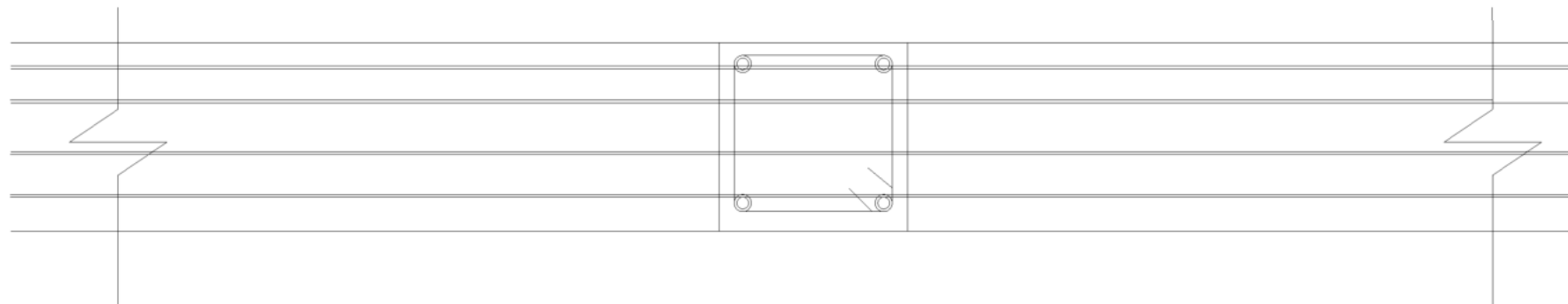
Level 0 plan, scale 1:100 | Student name



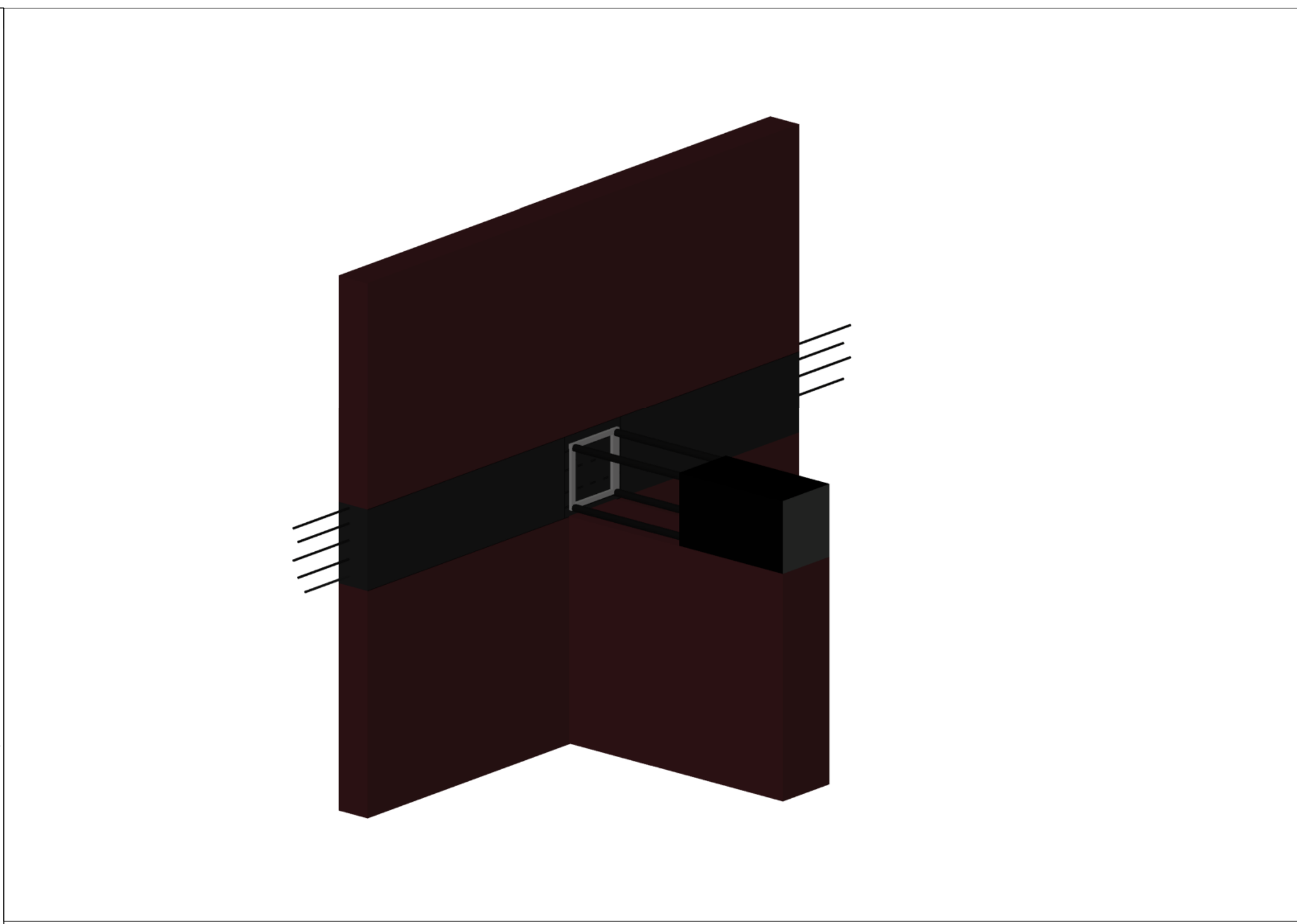
Level I plan, scale 1:100 | Student name



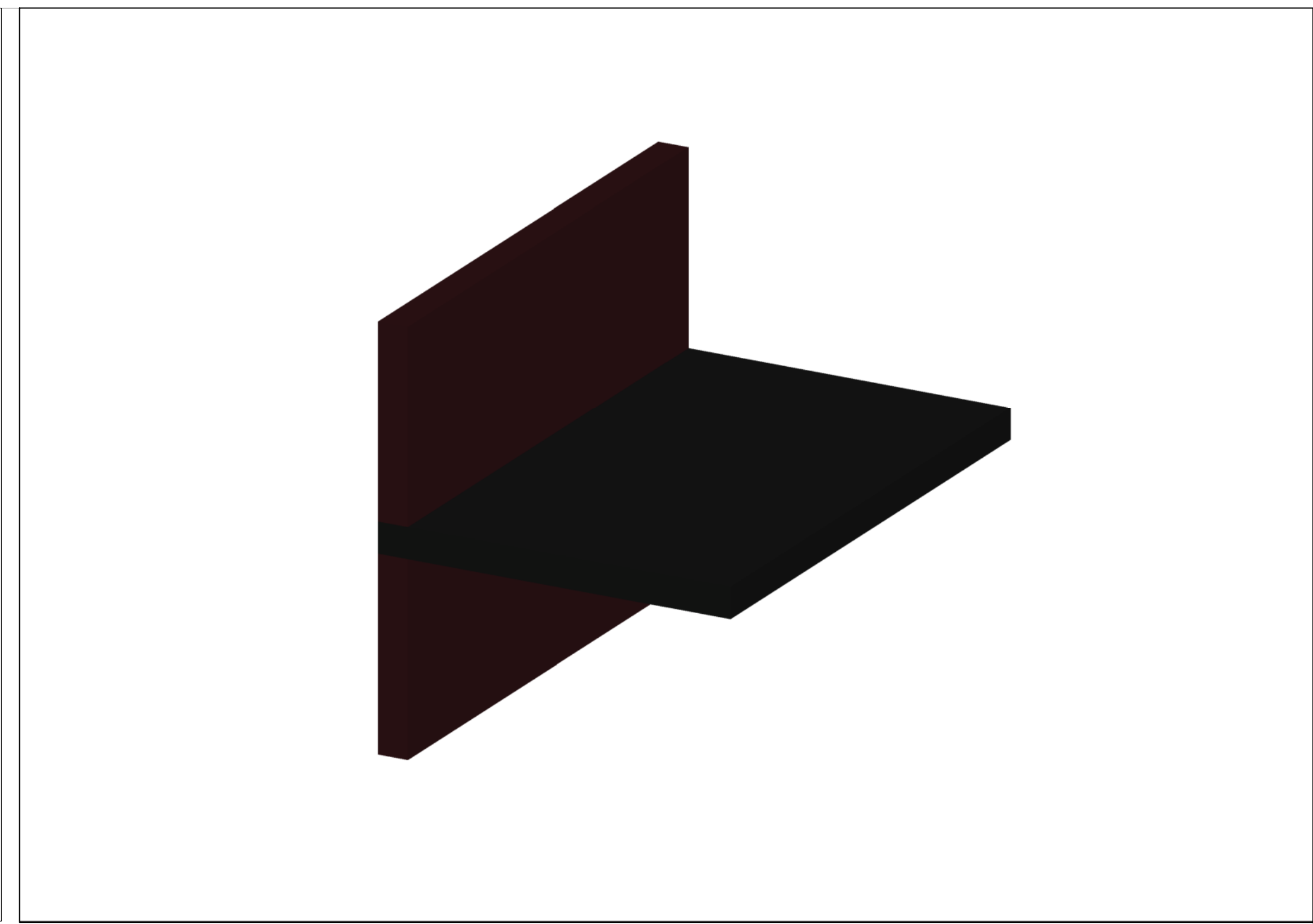
Roof Structure, scale 1:100 | Student name



Connection Beam to Beam, scale 1:100 | Student name



Primary Beam To Secondry Beam Connection 3D



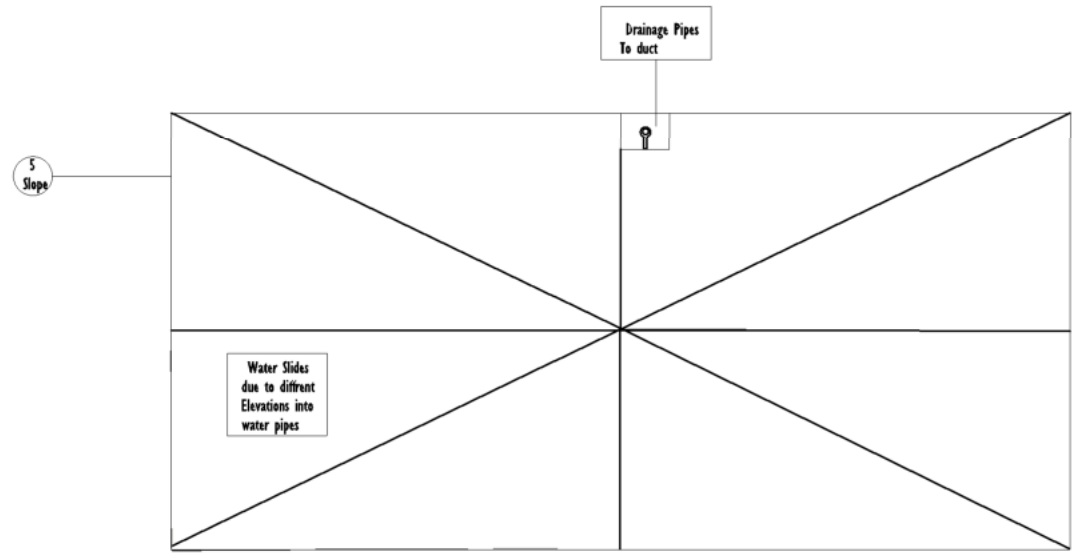
Floor To Wall 3D



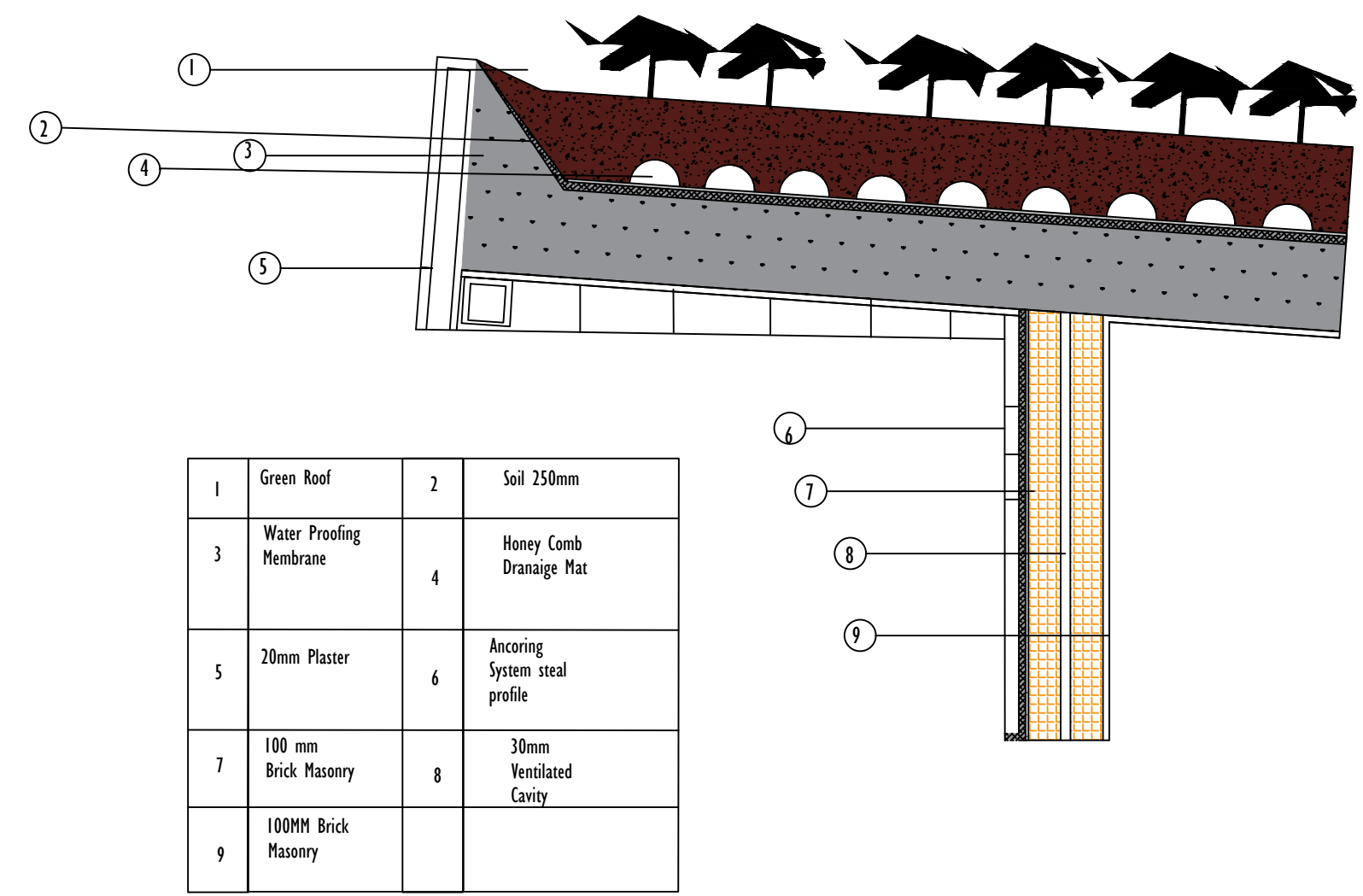
Elevation D, scale 1:100 | Student name



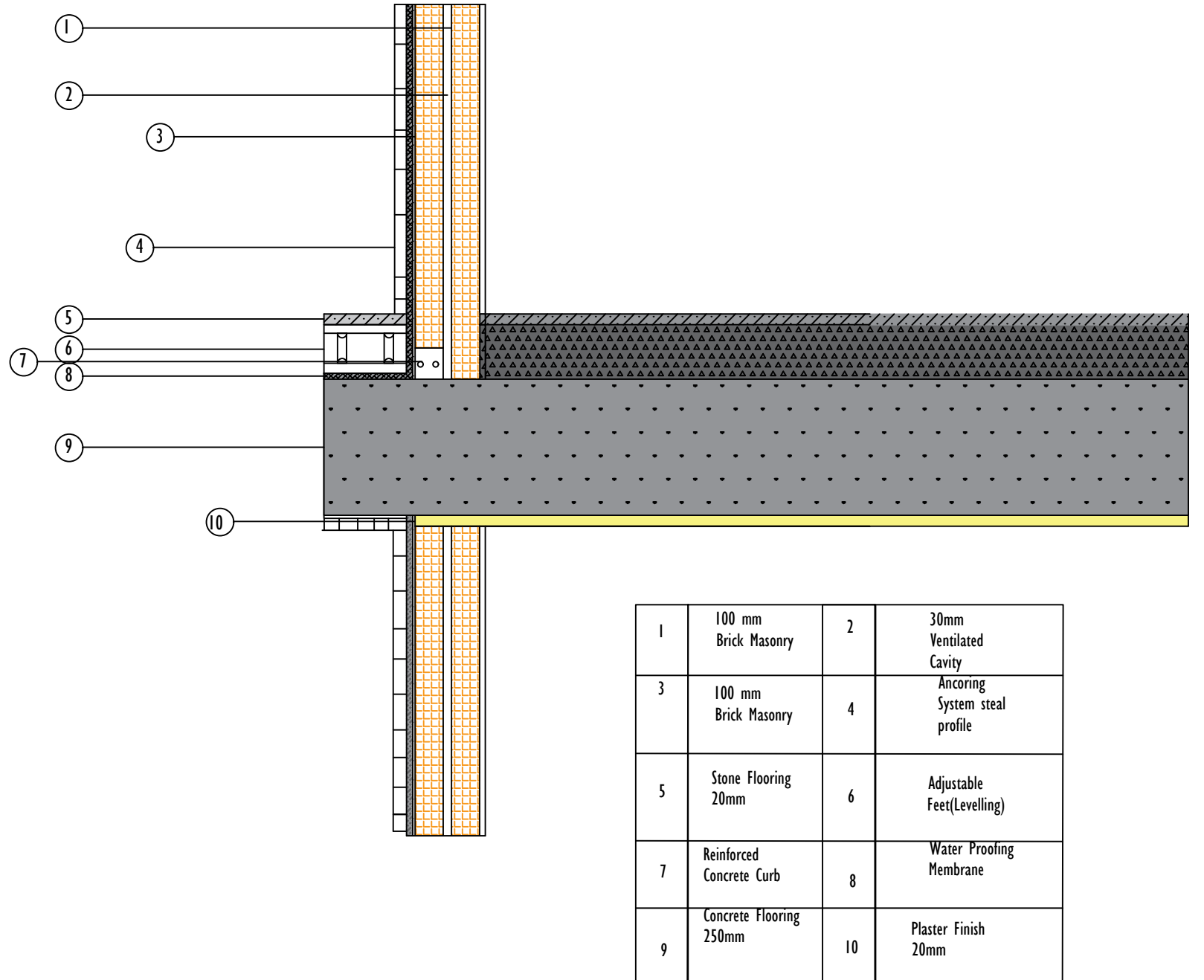
Longitudinal section, scale 1:100 | Student name



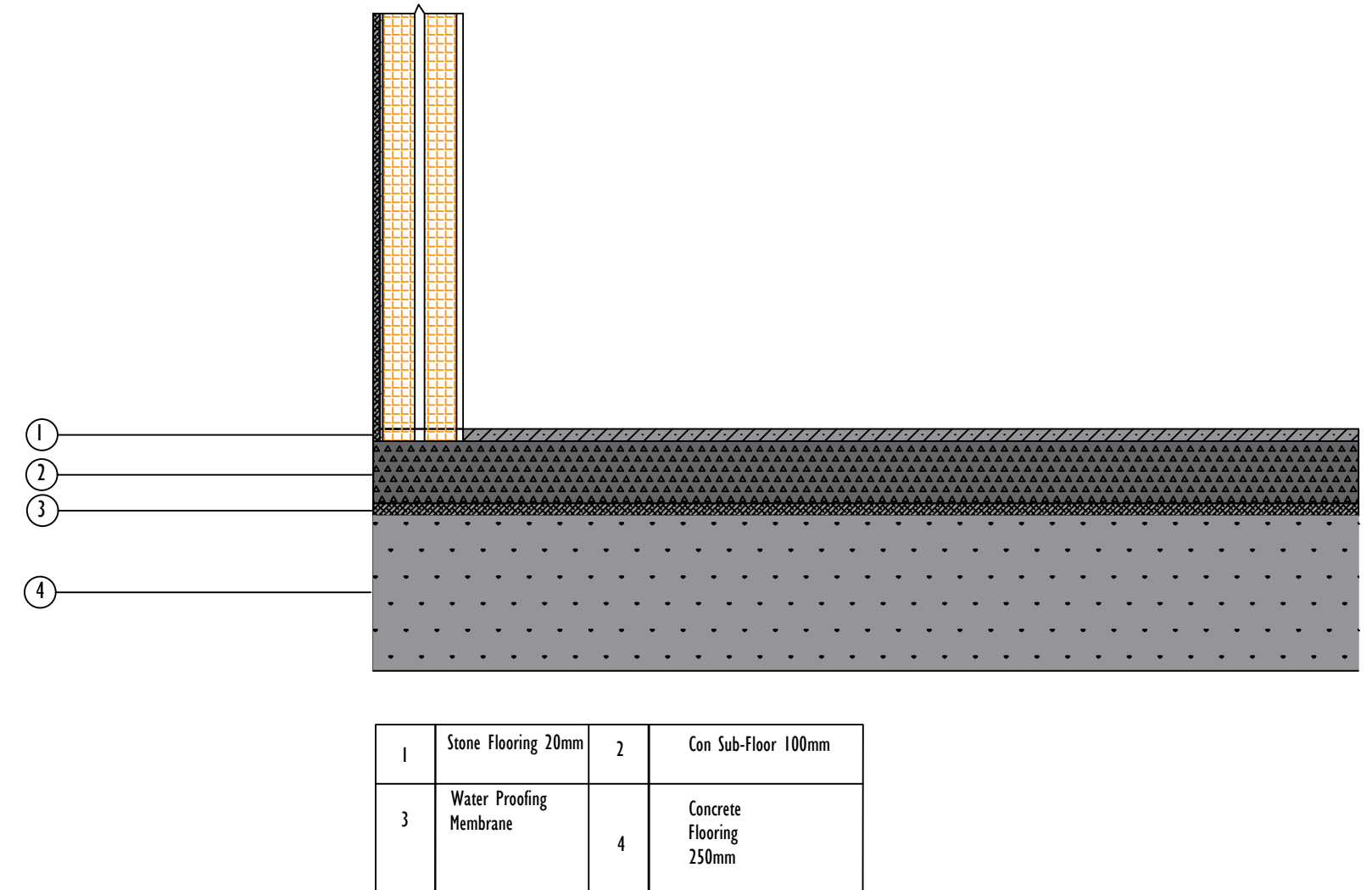
Roof Plan, scale 1:100 | Student name



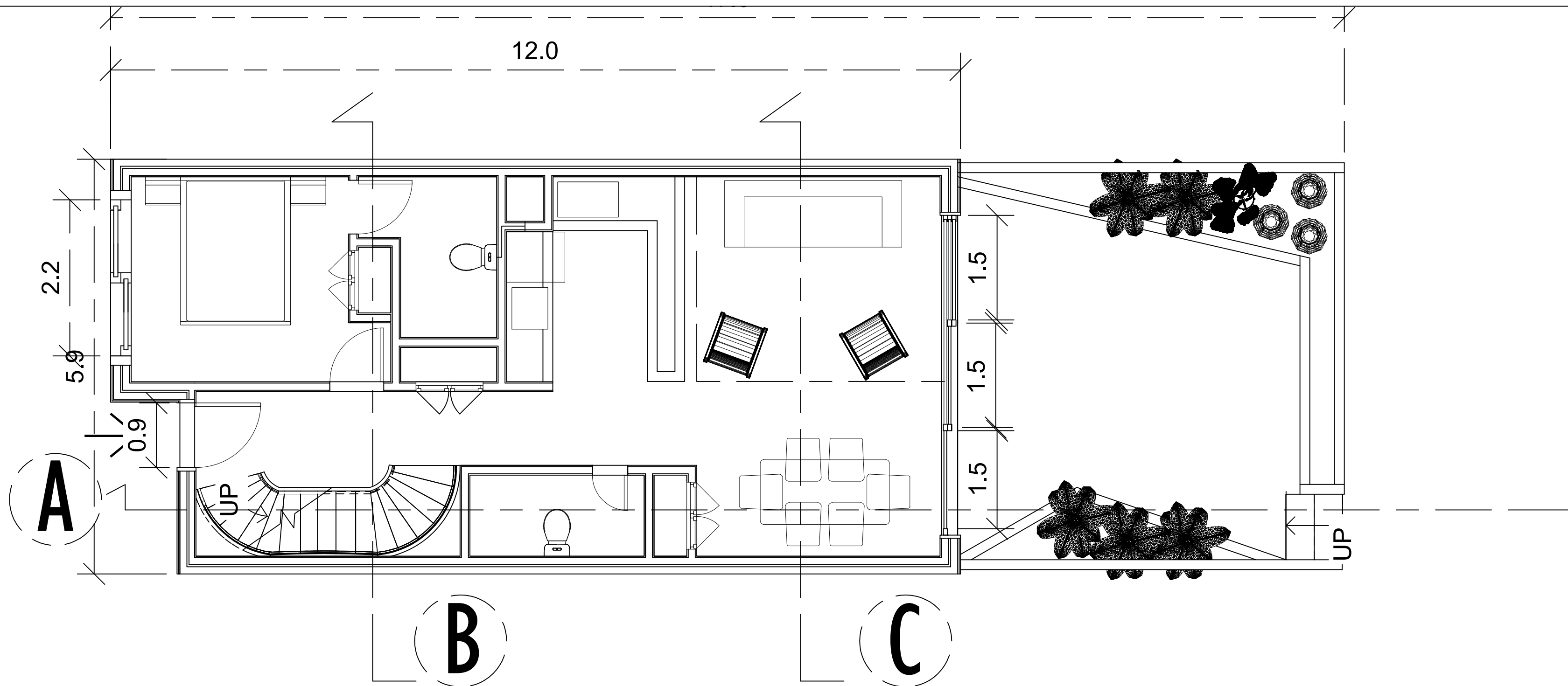
Roof Layering, scale 1:20 |



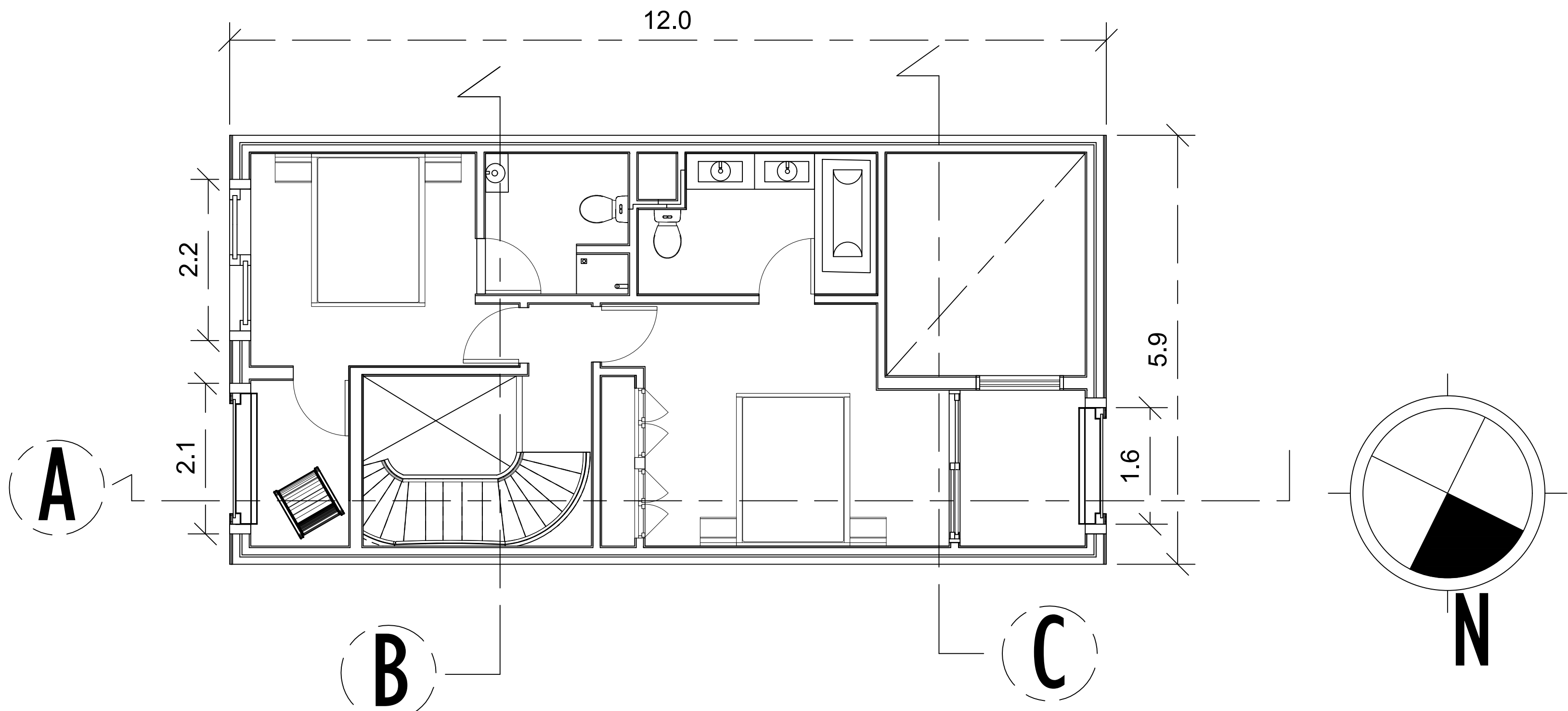
Floor Layering, scale 1:20 |



Ground Layering, scale 1:20 |



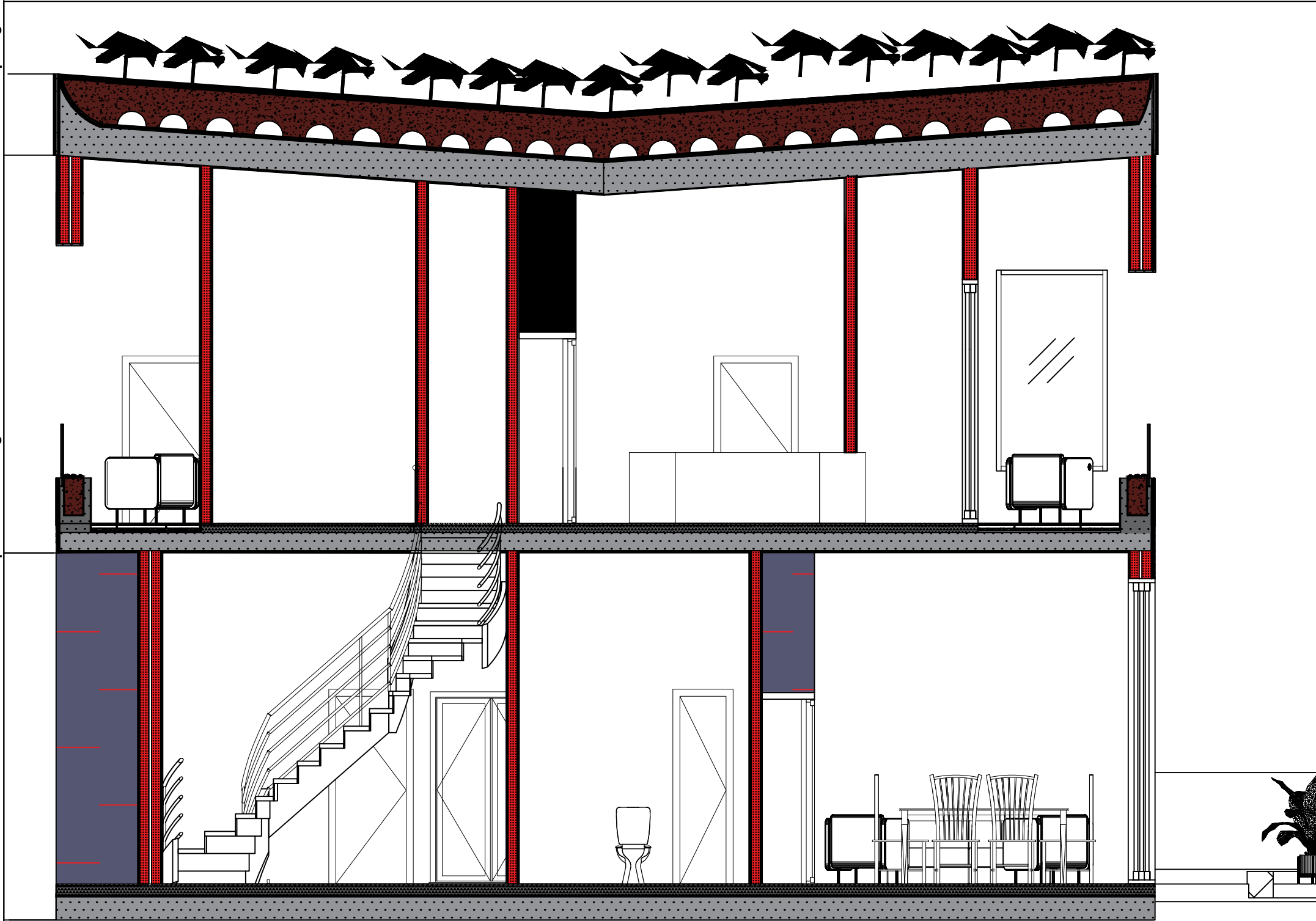
Level 0 plan, scale 1:50



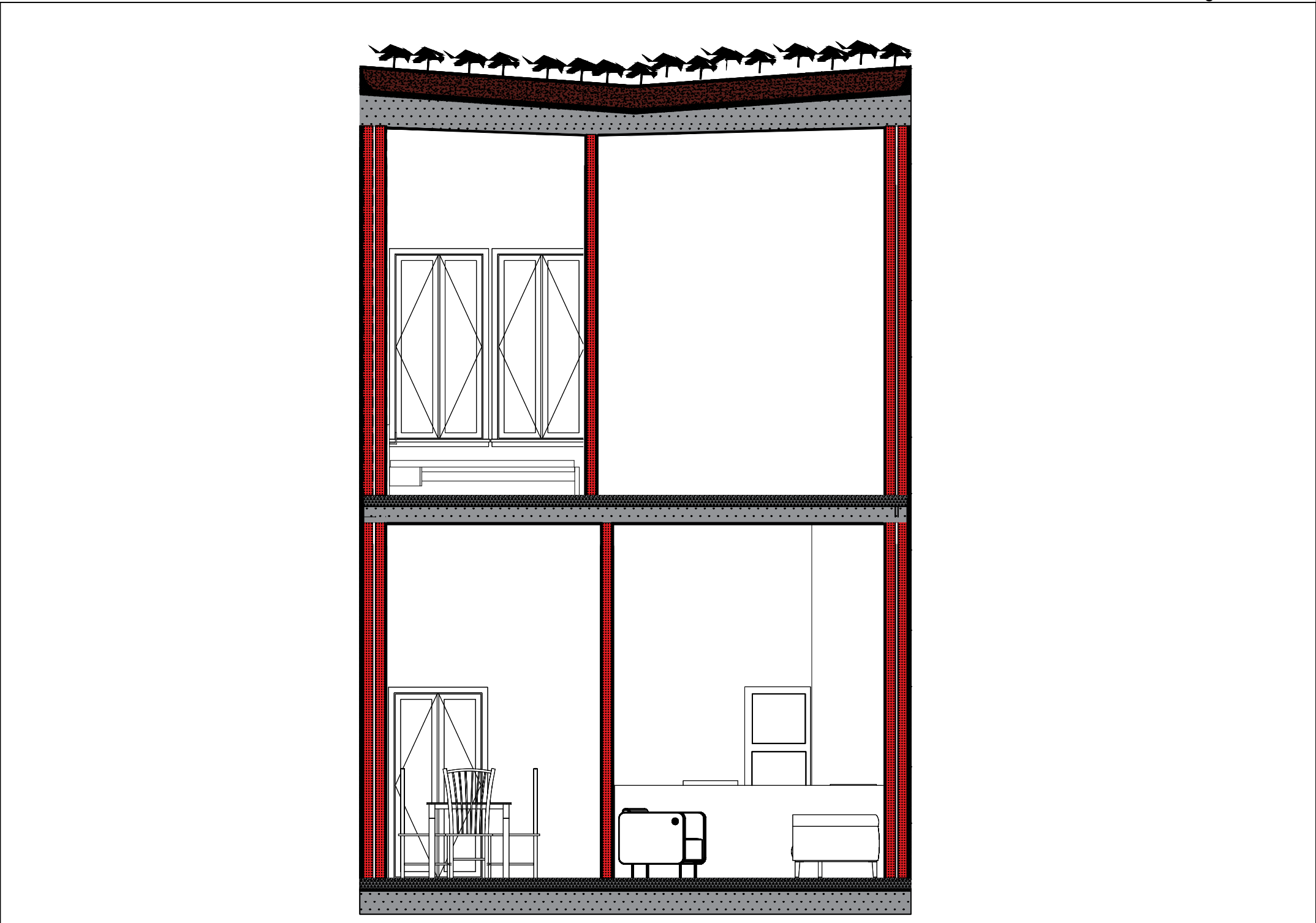
Level I plan, scale 1:50



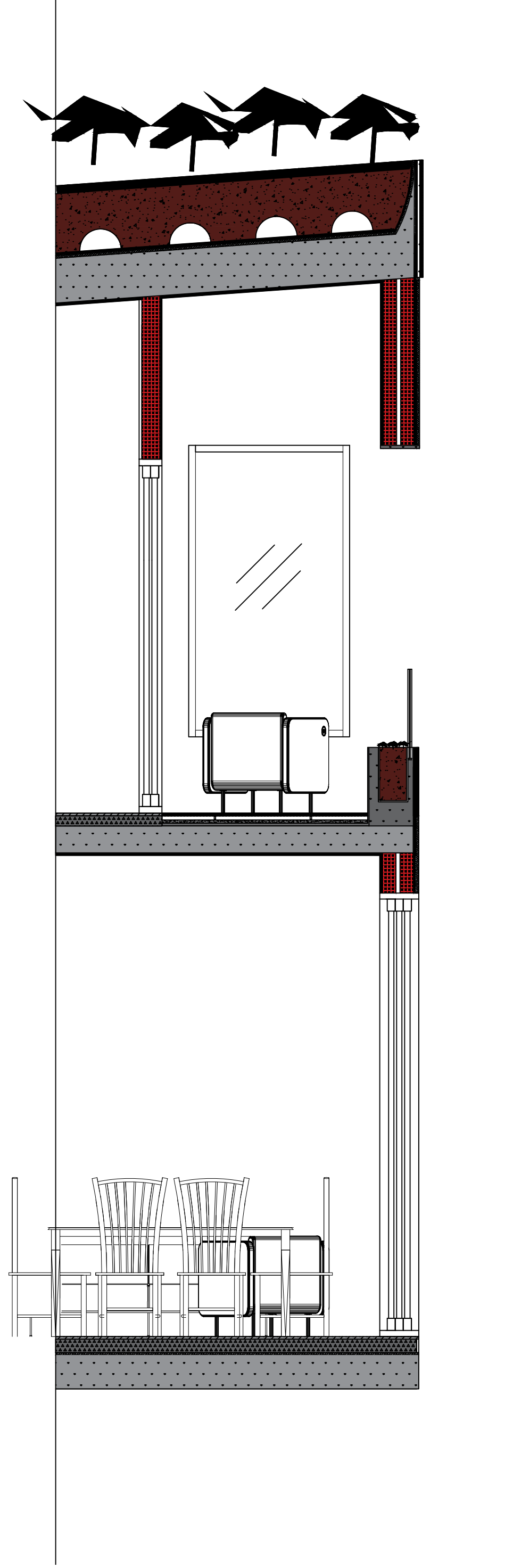
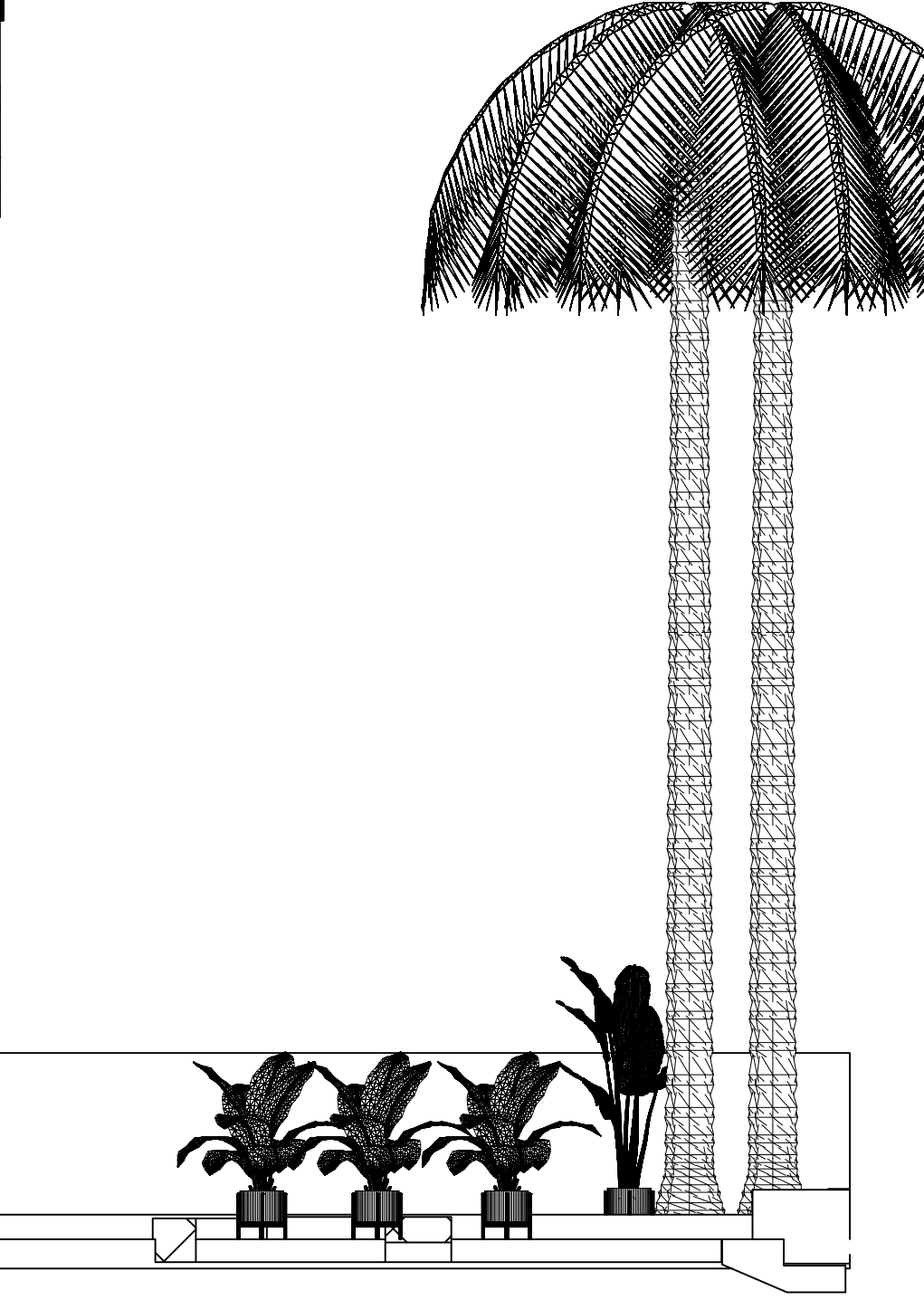
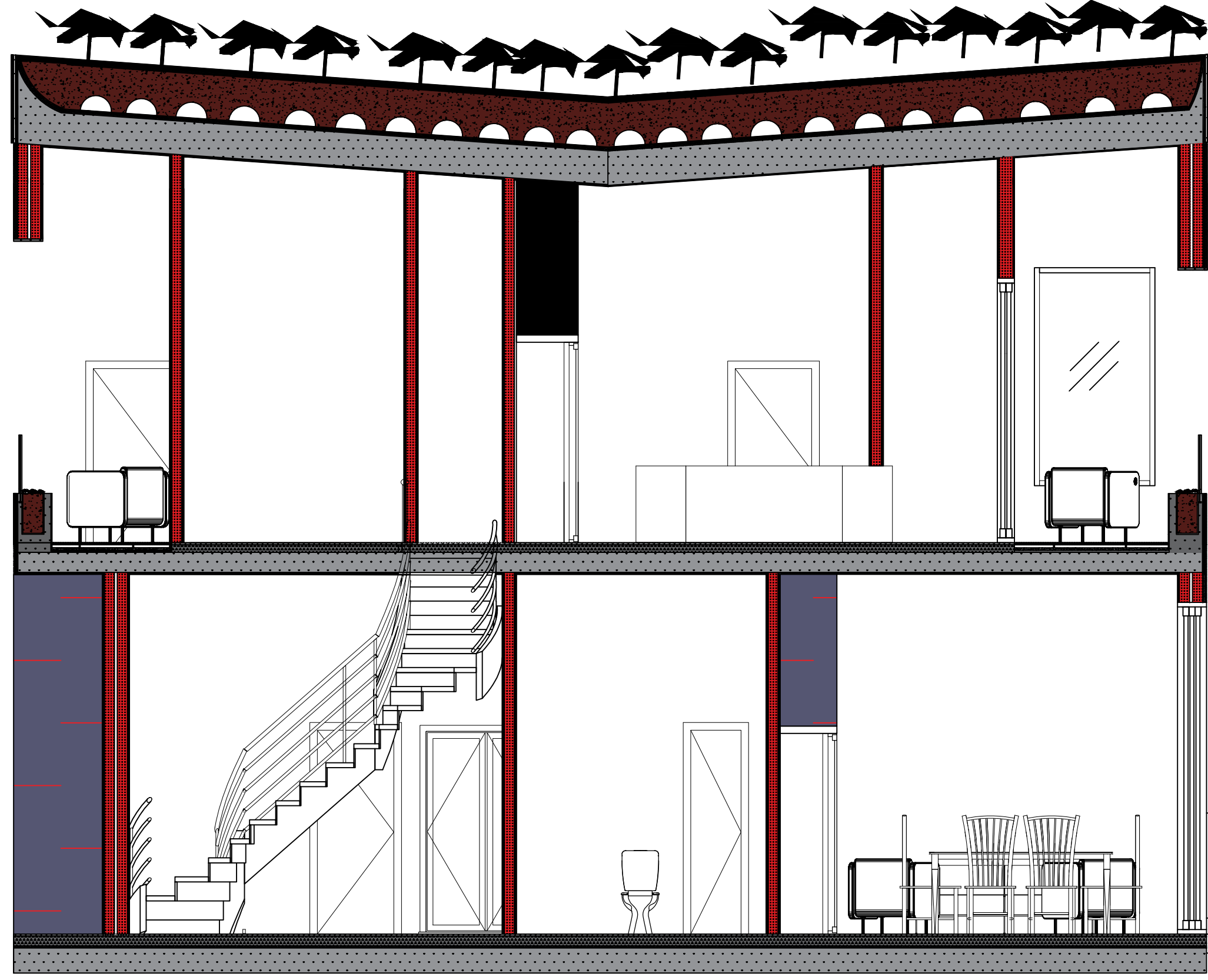
Roof Detailing scale 1:50

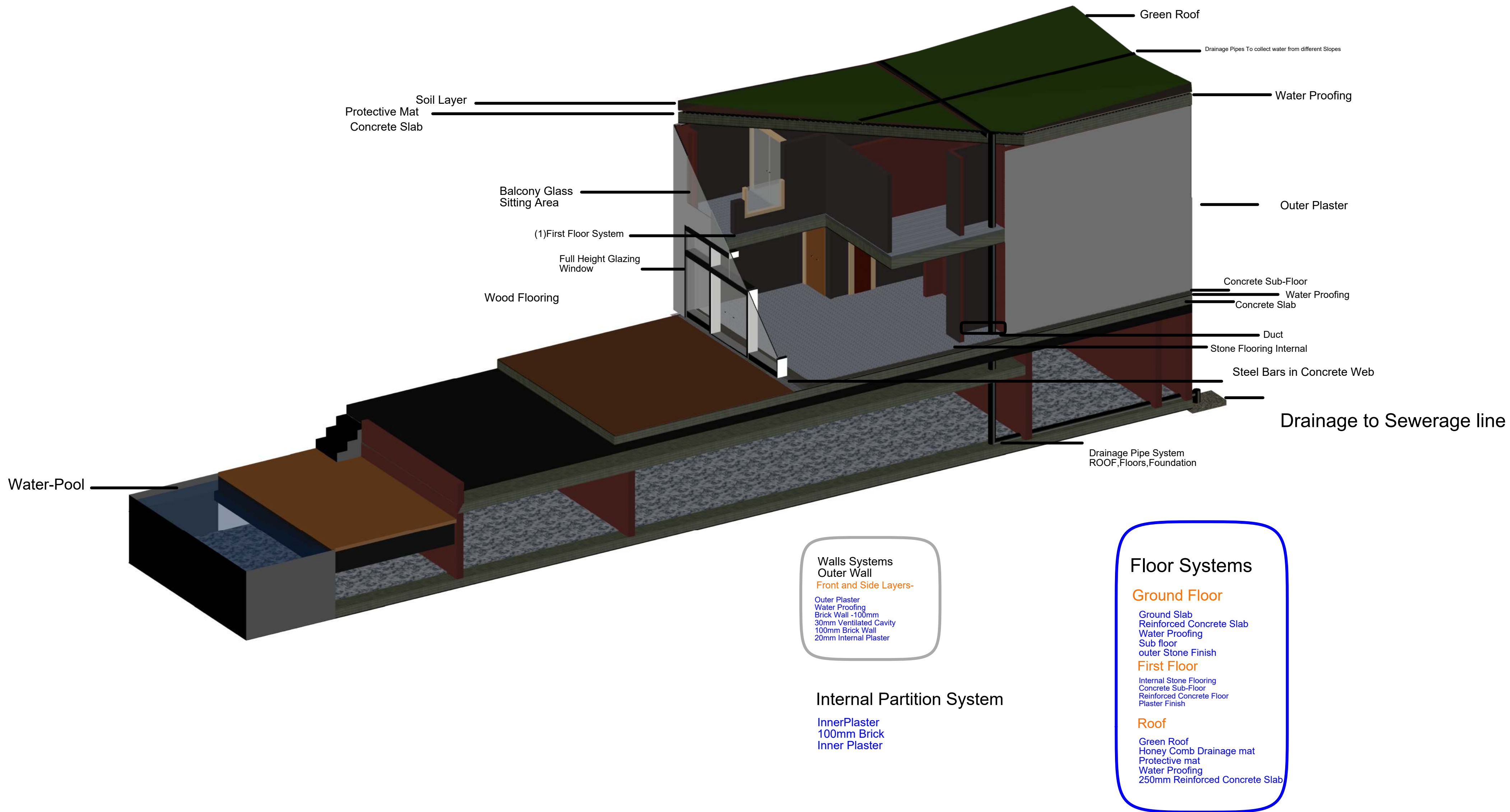


Section Detail, scale 1:20



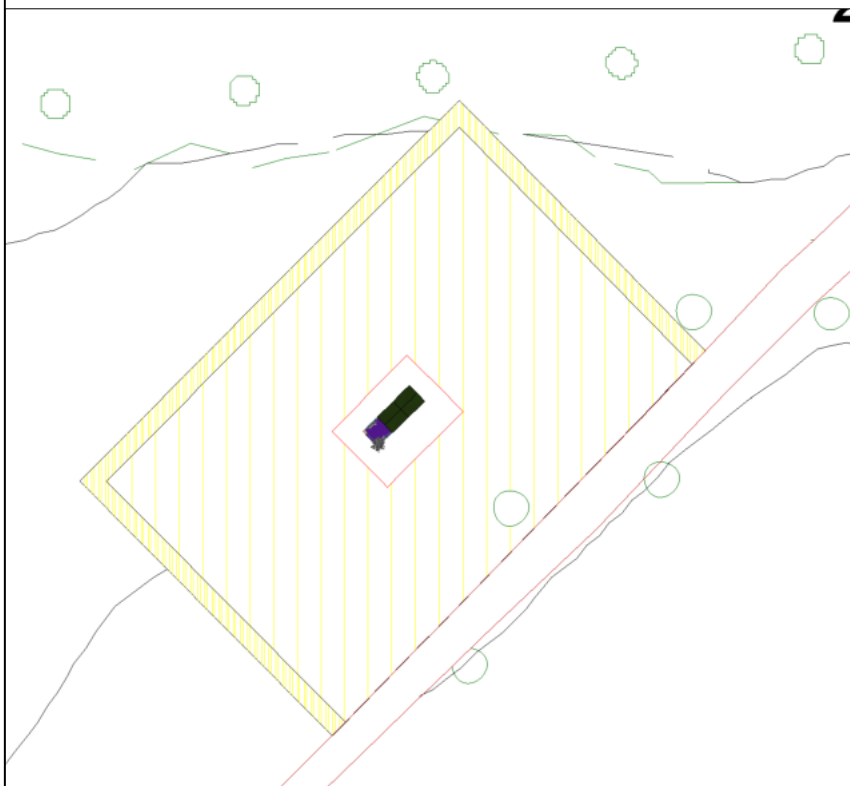
Section Detail, scale 1:20



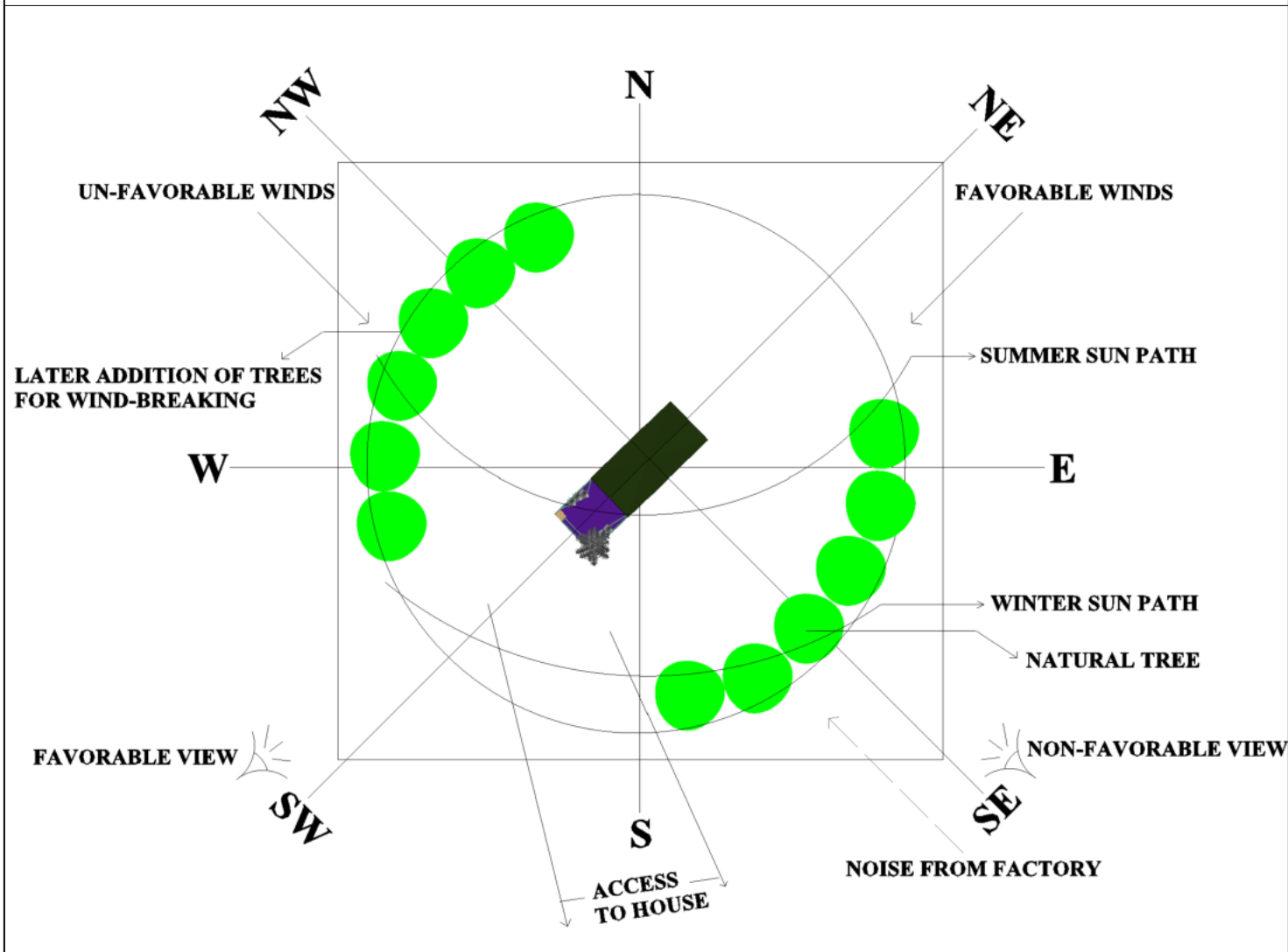




Location: Tokyo, Japan
Latitude: 35.65 North
Longitude: 139.83 East



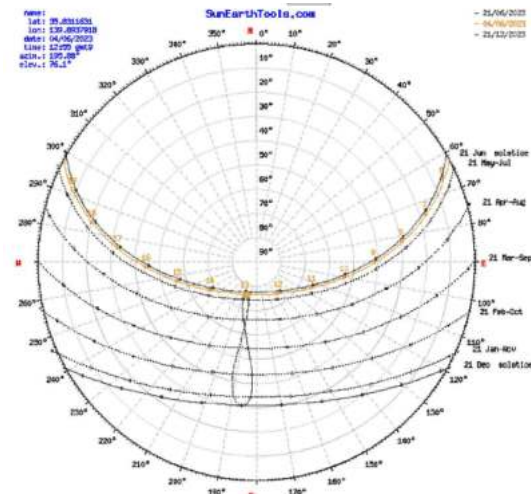
SITE ANALYSIS			
TOTAL PLOT AREA	1328829 m ²	100%	
CONSTRUCTION AREA	43156 m ²	3.24%	
NON-CONSTRUCTION AREA	1037020 m ²	83.54%	
BUFFER ZONE	159699 m ²	12%	



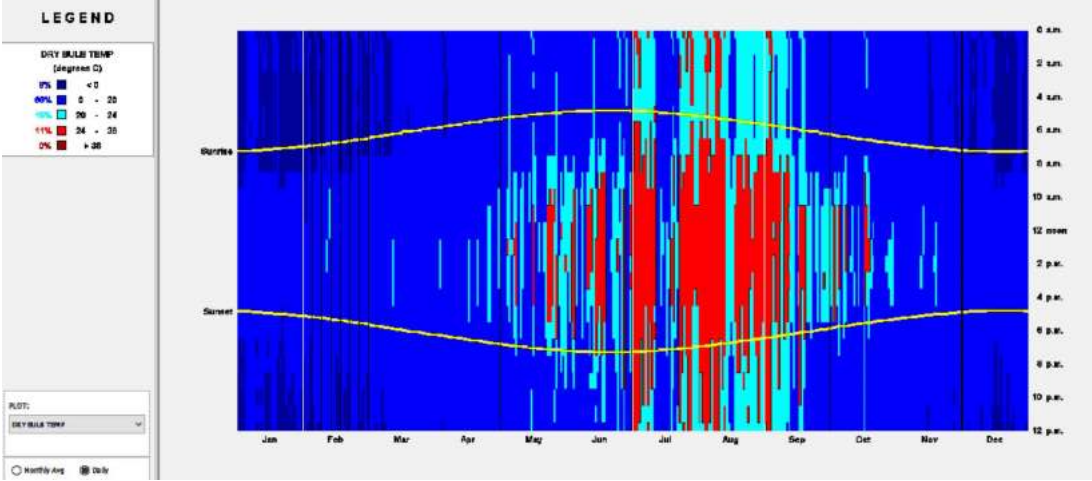
PLOT CLIMATE ANALYSIS

- Temperature:
 - Tokyo experiences a humid subtropical climate with hot and humid summers and mild winters.
 - Average summer temperatures range from 25°C to 35°C (77°F to 95°F), with occasional heatwaves.
 - Winter temperatures range from 0°C to 10°C (32°F to 50°F).
 - The transition seasons of spring and autumn are characterized by moderate temperatures.
- Rainfall:
 - Tokyo receives most of its rainfall during the summer months (June to September).
 - The wettest month is typically June, with the arrival of the rainy season (tsuyu).
 - Typhoons can bring heavy rainfall and strong winds from late summer to early autumn.
- Humidity:
 - Tokyo has high humidity levels throughout the year, especially in the summer months.
 - Humidity can exceed 80% during the rainy season and typhoon season.

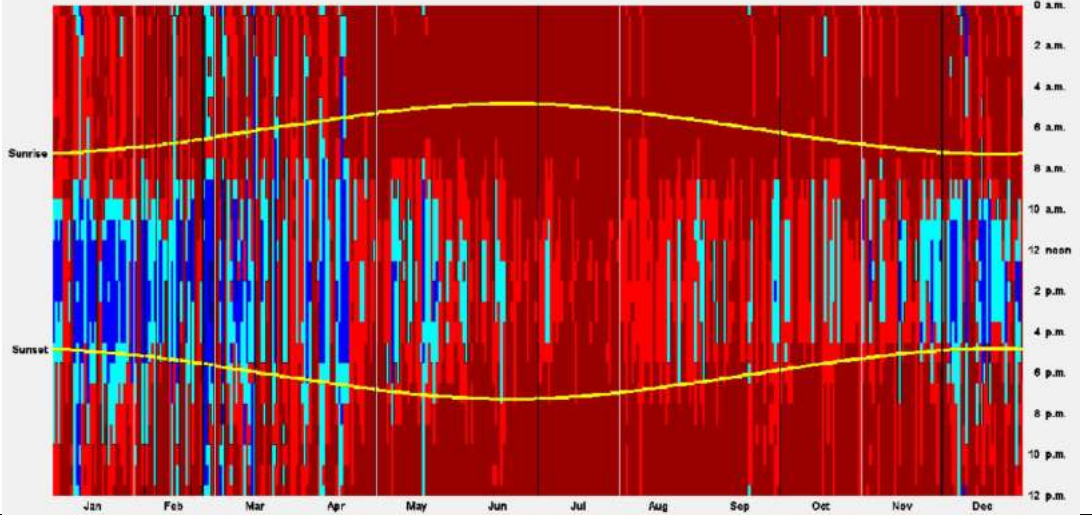
SOLAR GEOMETRY



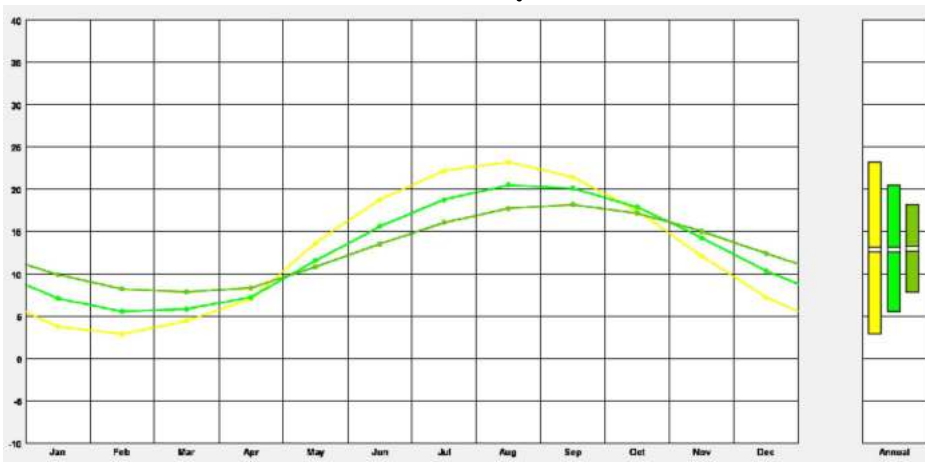
DRY BULB TEMPERATURE



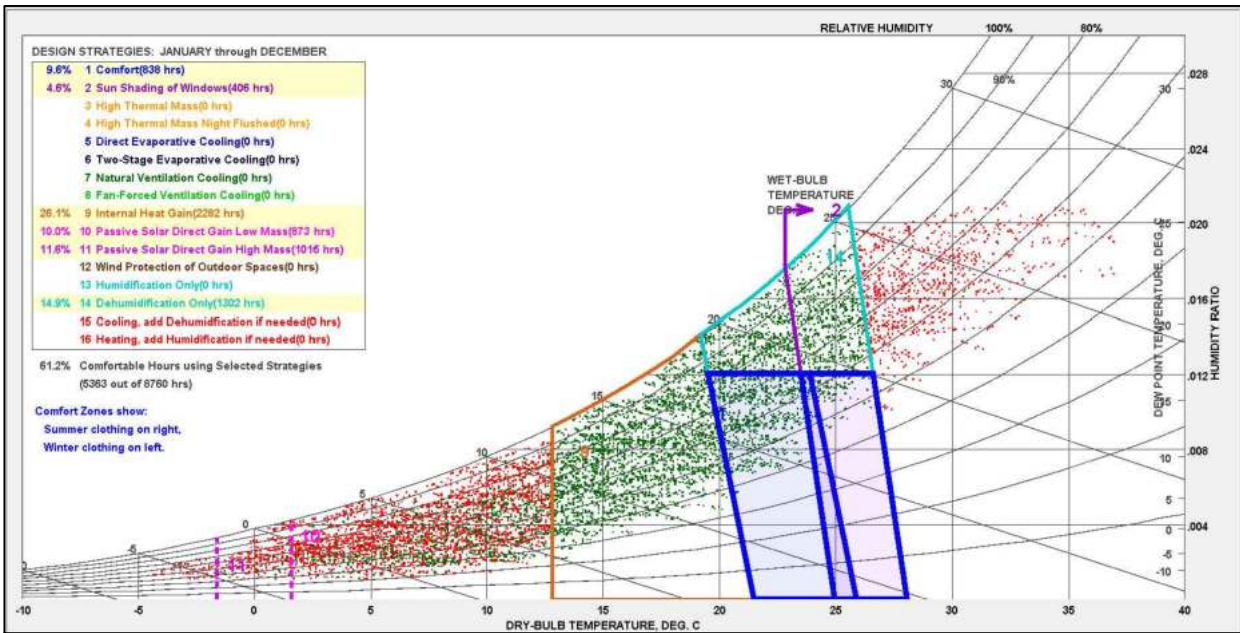
HUMIDITY



Ground temperature



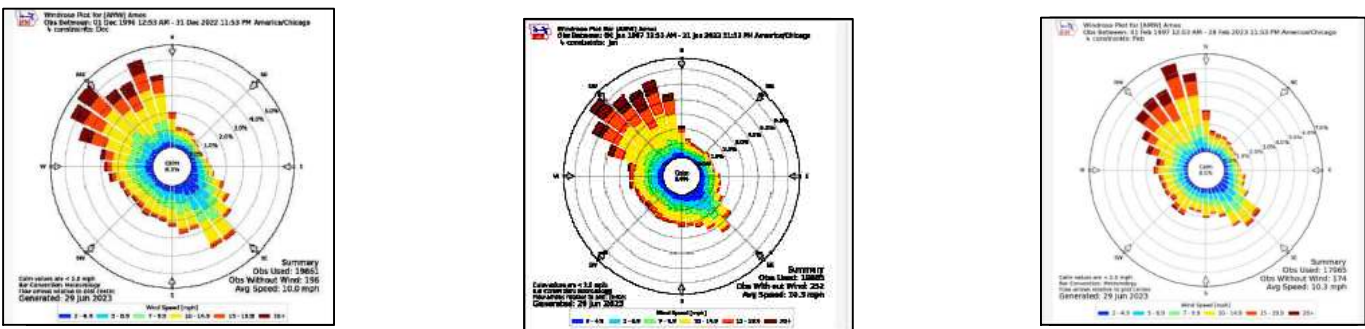
PSYCHROMETRIC CHART



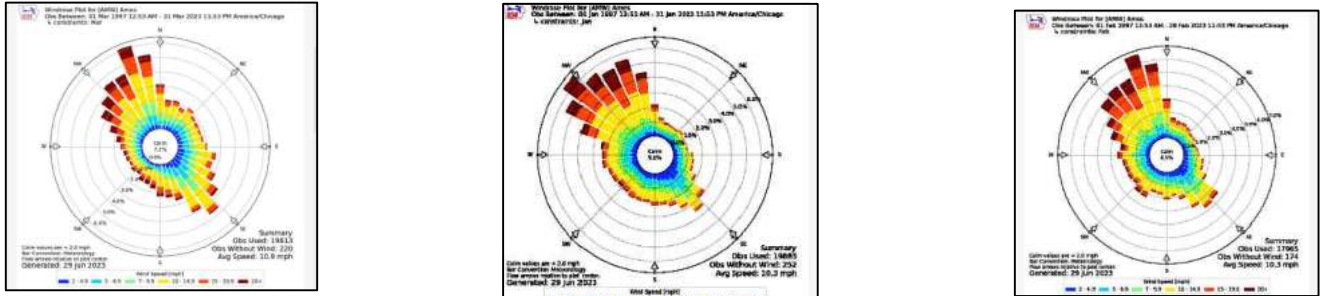
STRATEGIES USED FOR BUILDING

- Internal Insulation
- Dehumidification
- Passive Solar Direct Gain
- Passive Solar Direct Gain

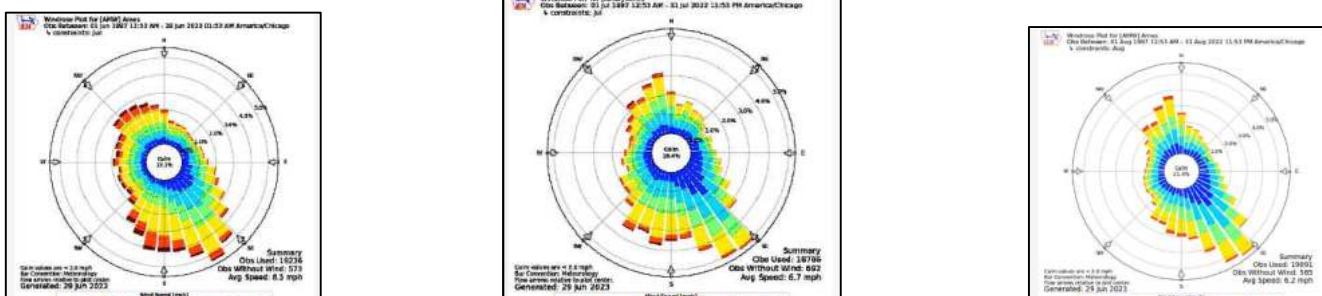
WIND ROSES



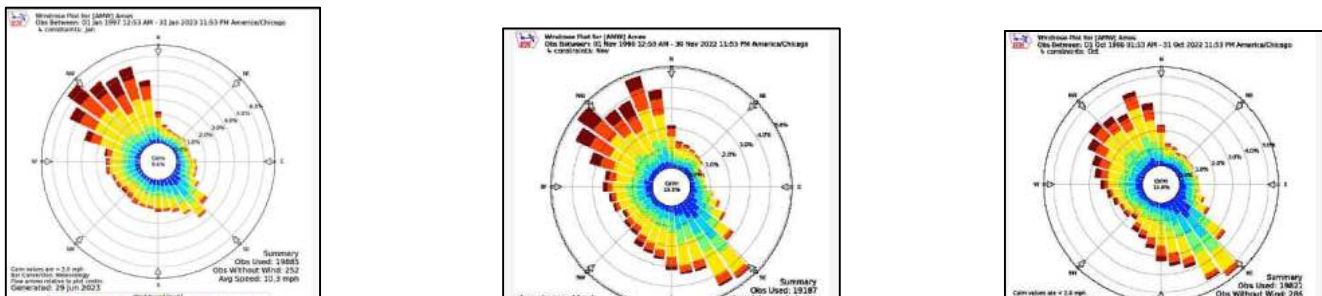
WINTER



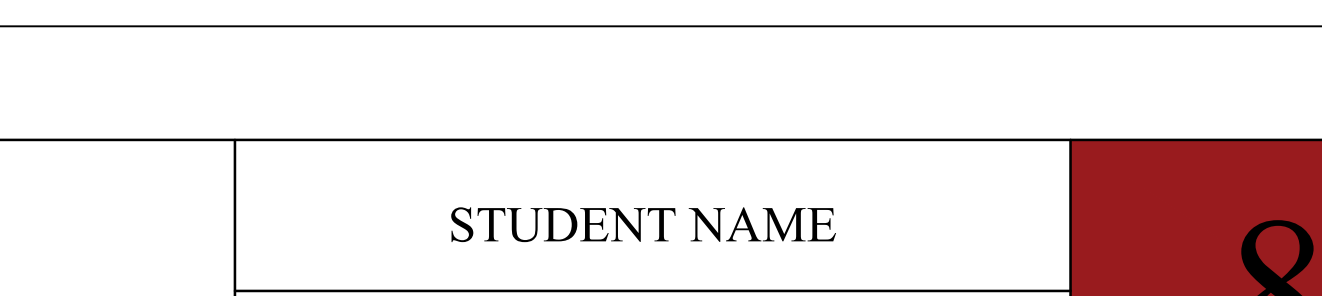
SPRING



SUMMER



AUTUM



PLOT & CLIMATE ANALYSIS | Scale 1:2000

Sapienza University of Rome
Environmental and Sustainable Building Engineering
Building designing For Sustainable Architecture
Academic Year: 2023-24

Markhor

Project # 8

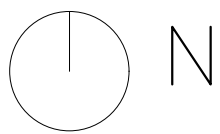
"ASSIGNMENT # 8"

Professor | Michele Morganti

STUDENT NAME

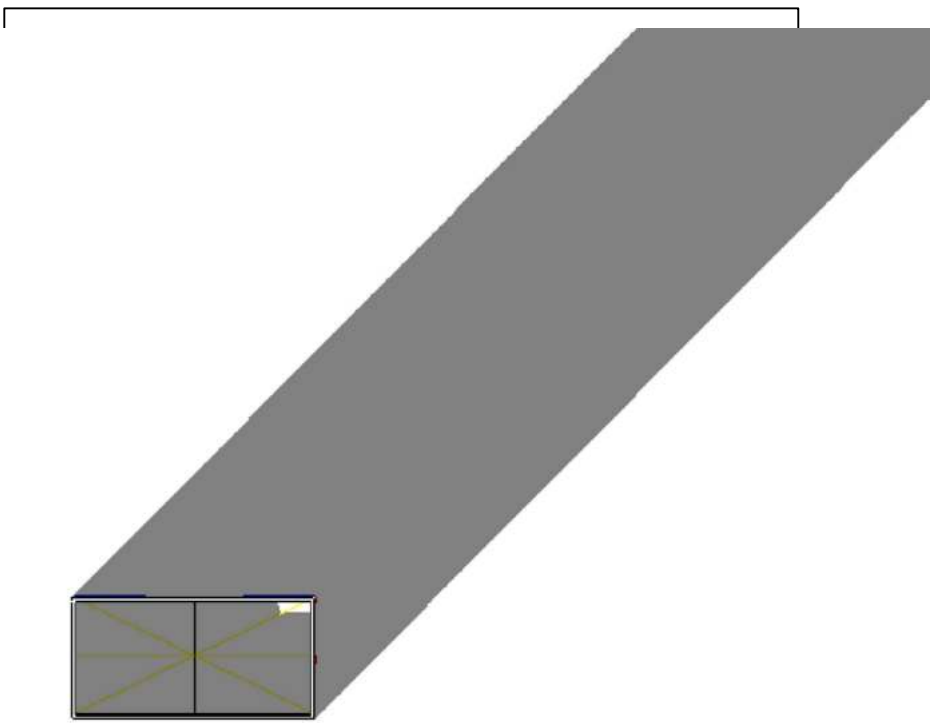
MarKhor

8A



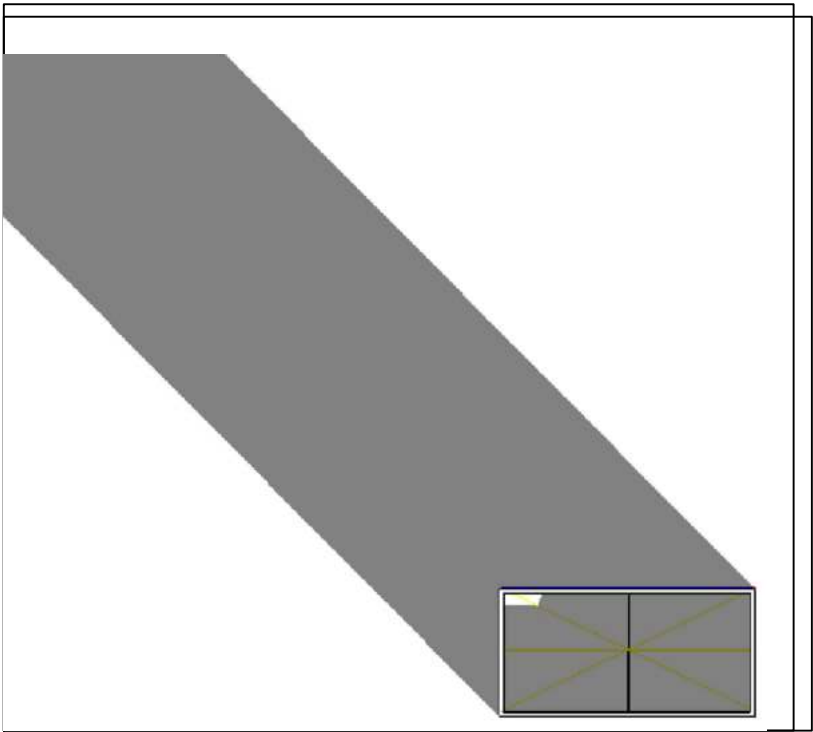
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h - 9:00

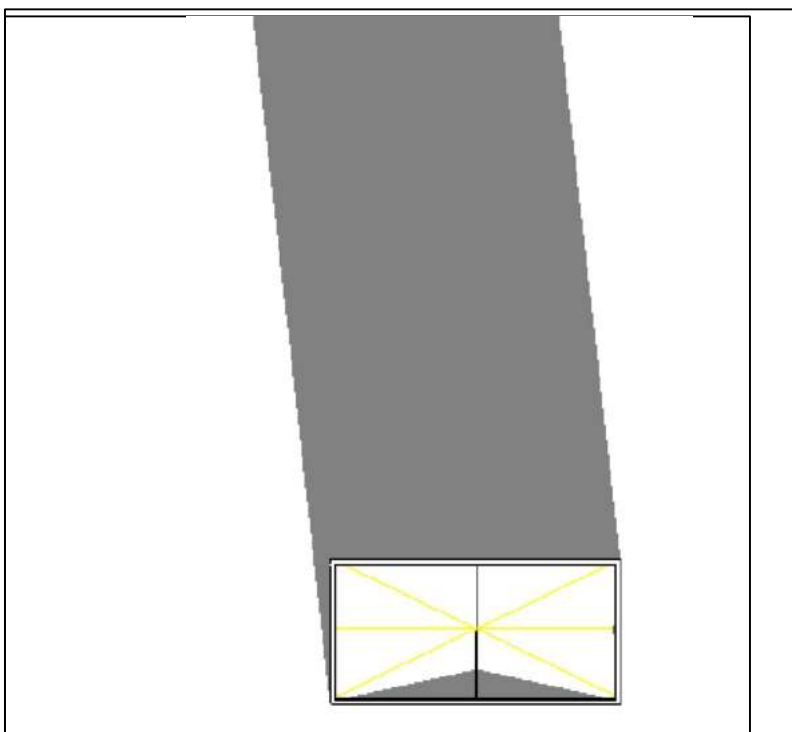


h - 12:00

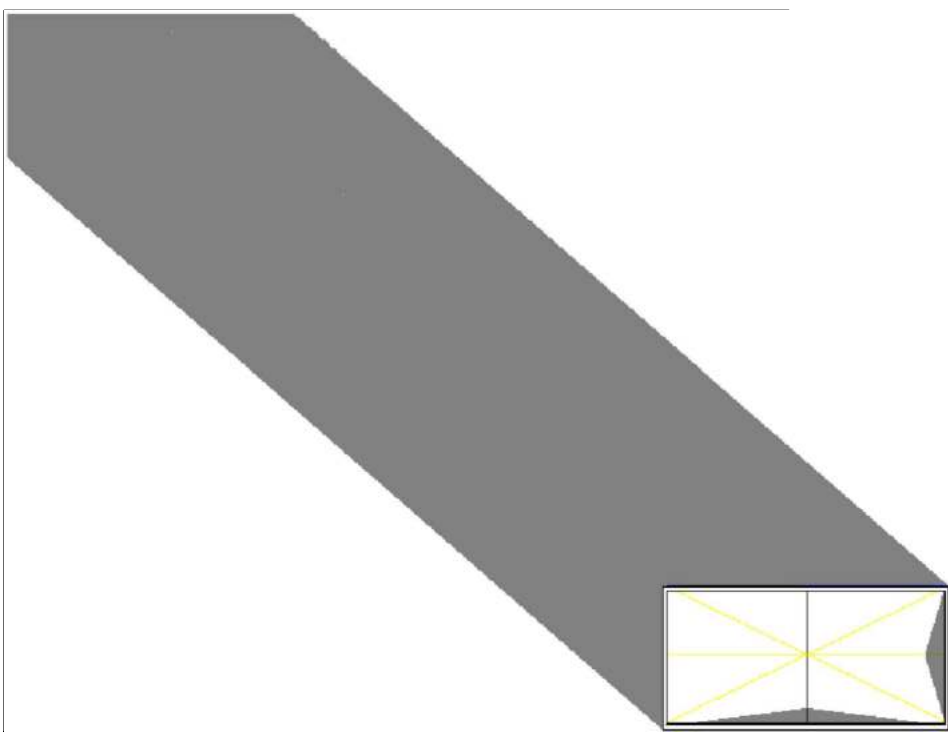
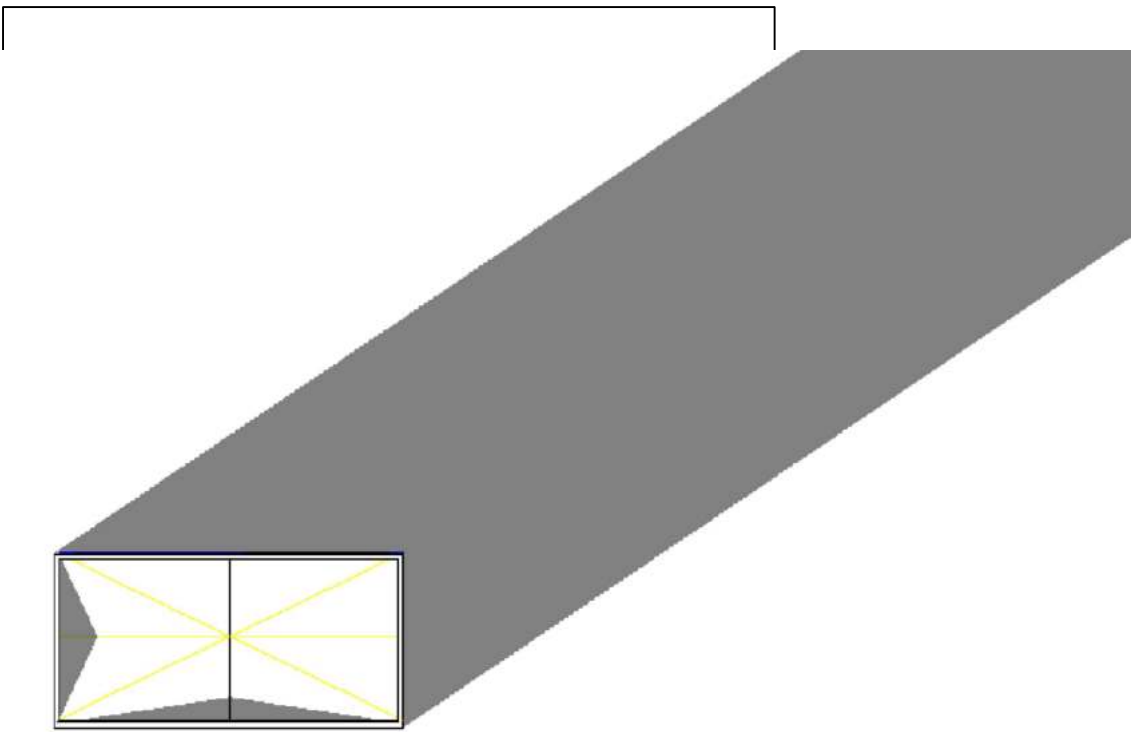
Summer Solstice



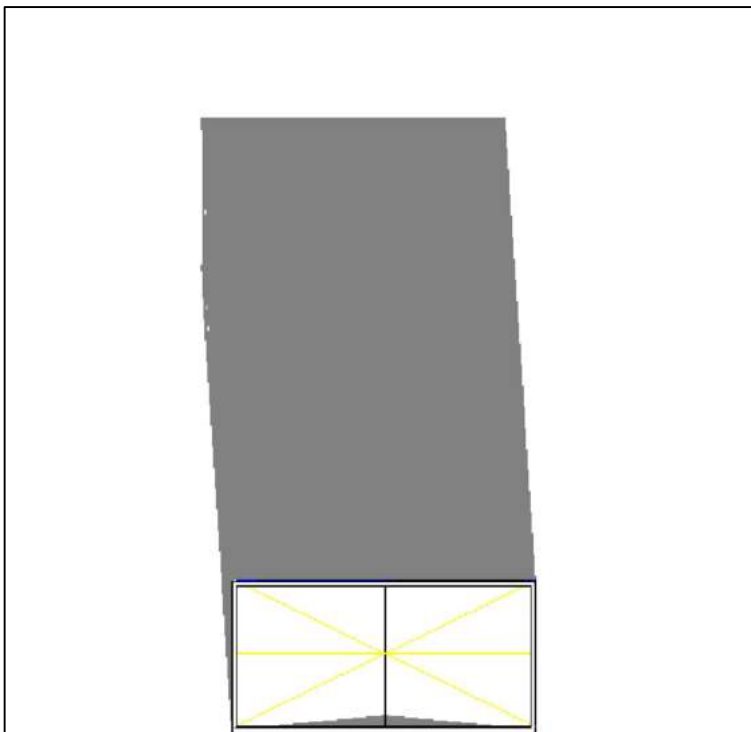
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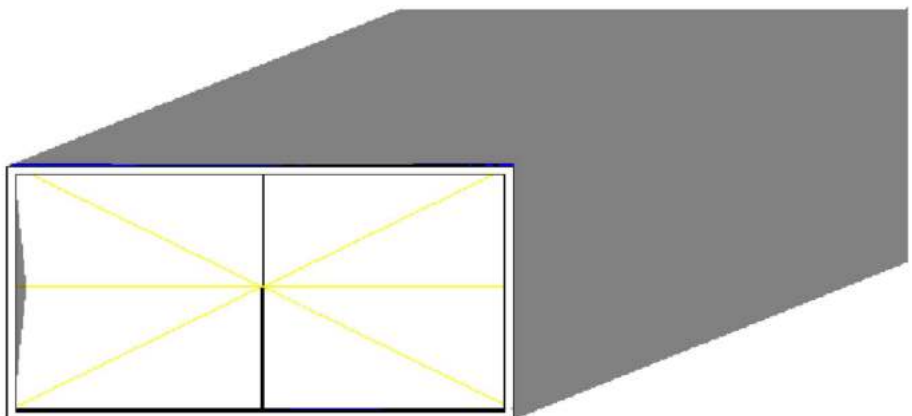
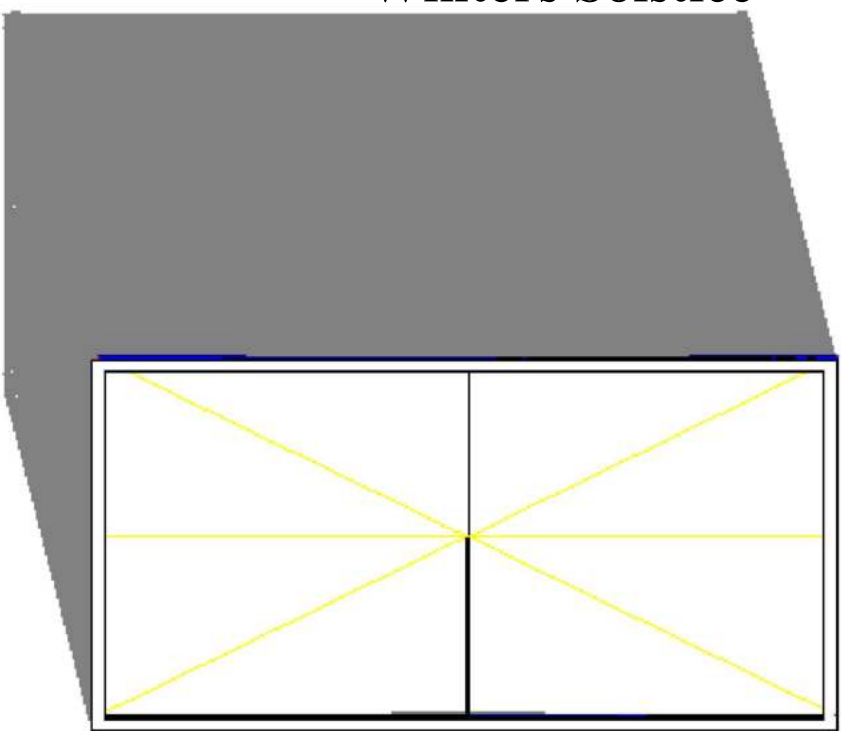
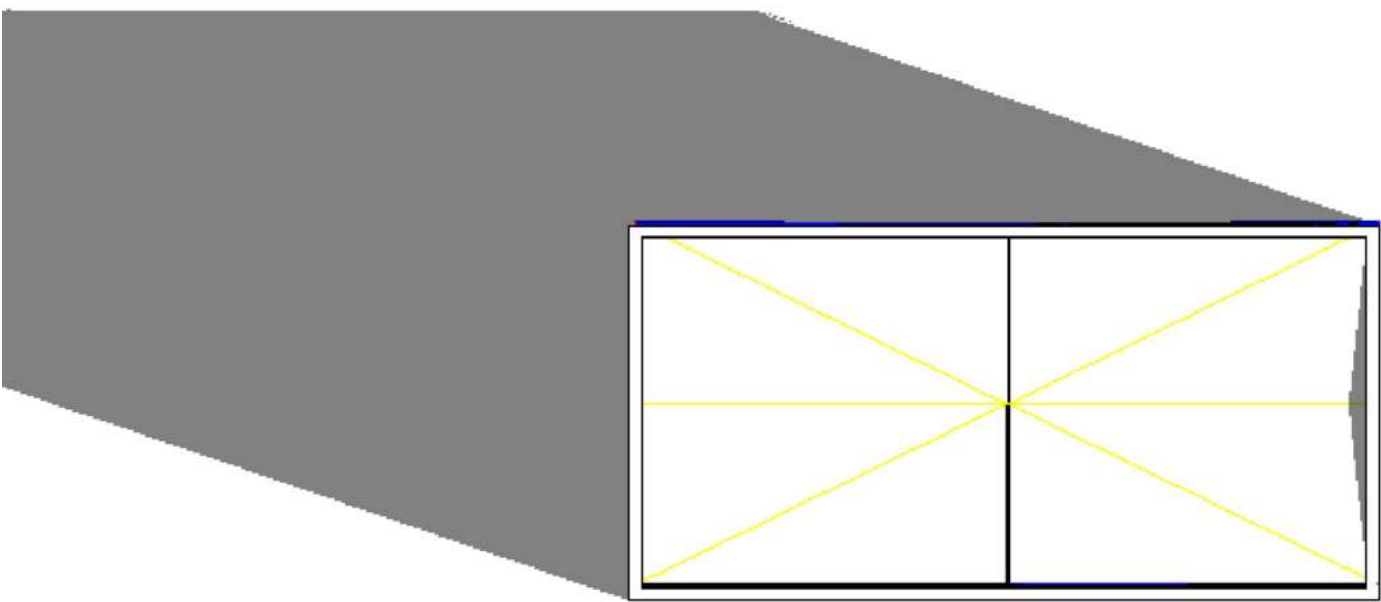
Autum AUNIOX



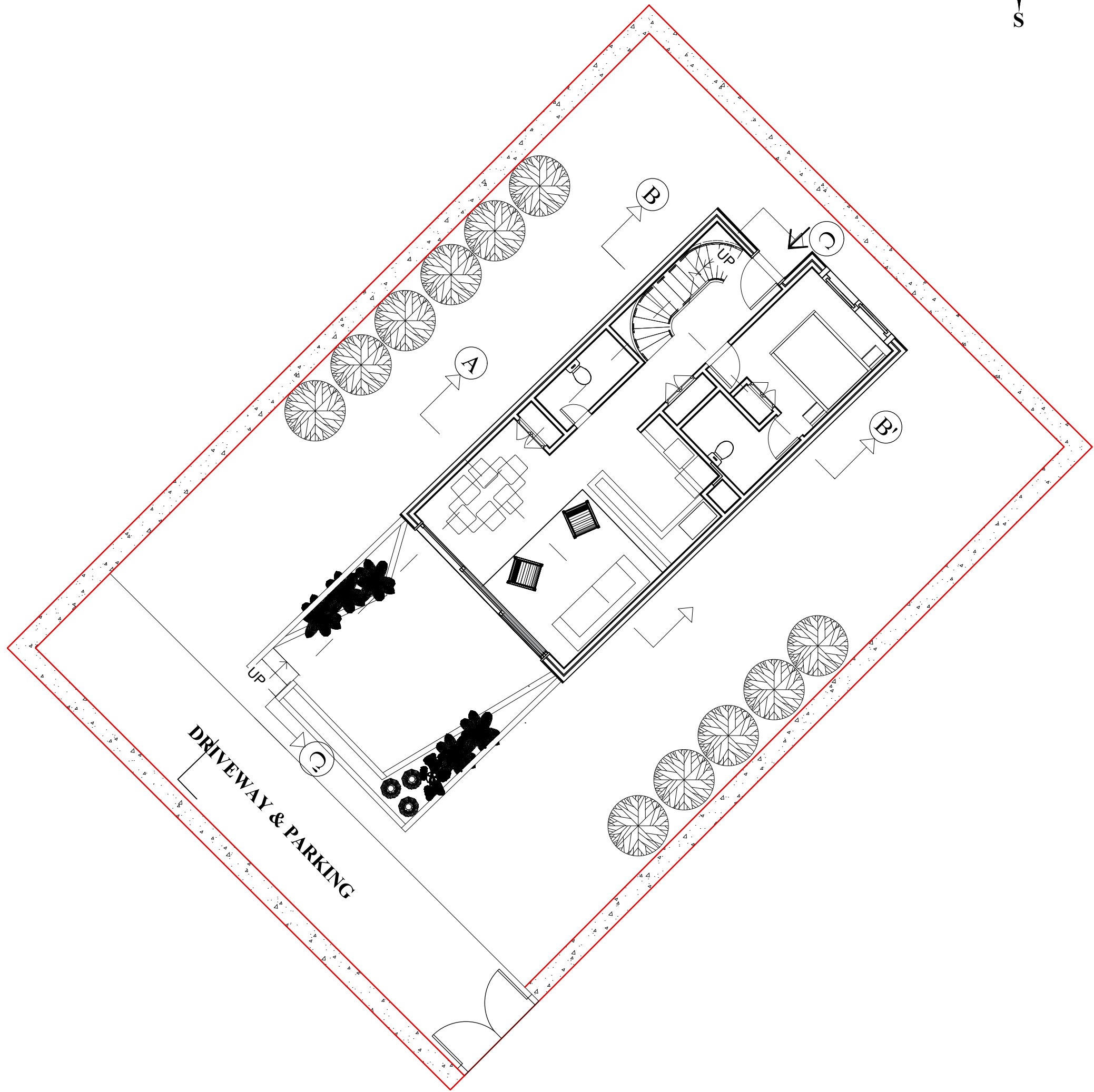
AT NOON (12:00 PM)



Winters Solstice

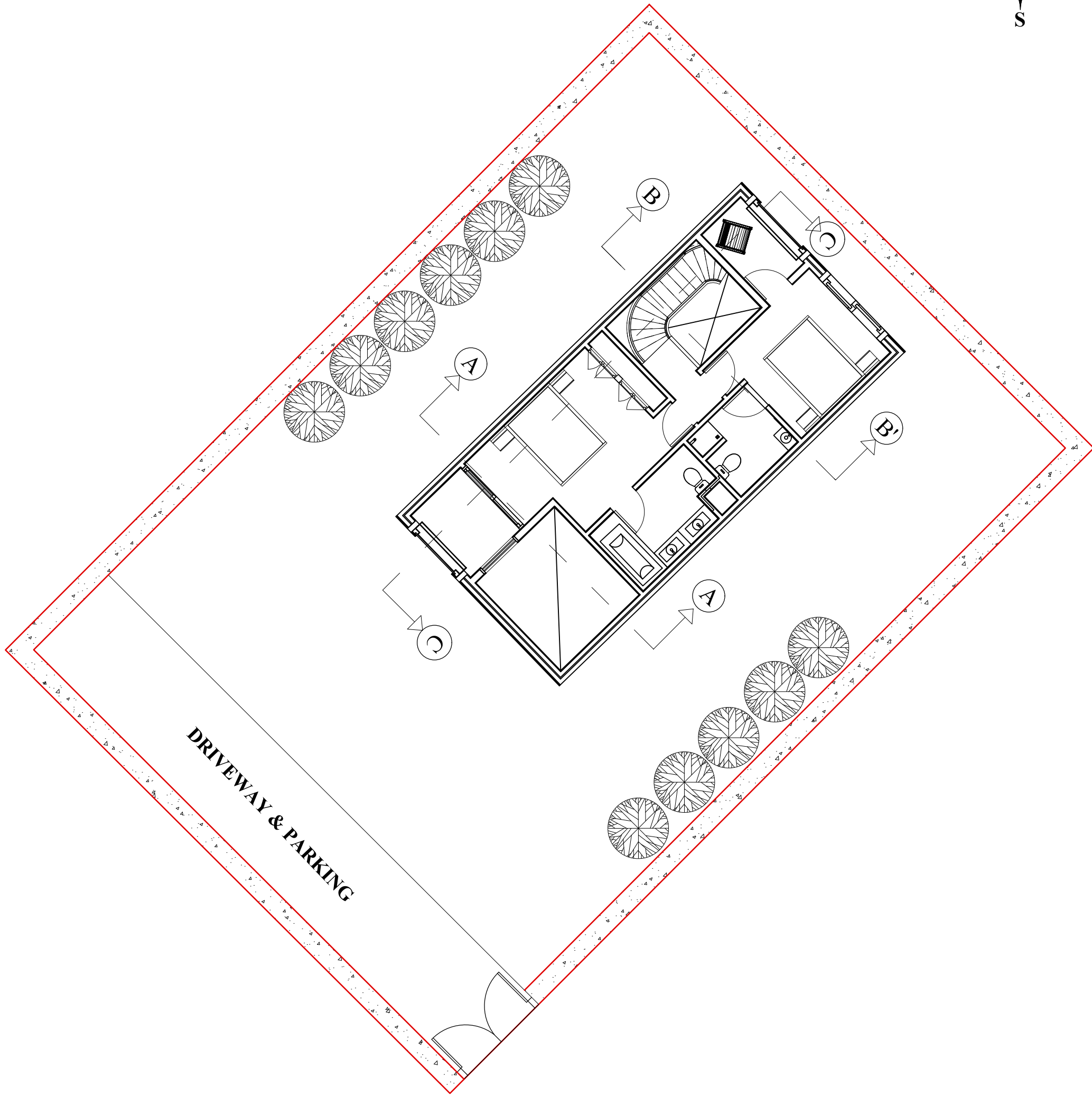


SHADOW ANALYSIS WITH RESPECT TO BUILDING | Scale 1:200



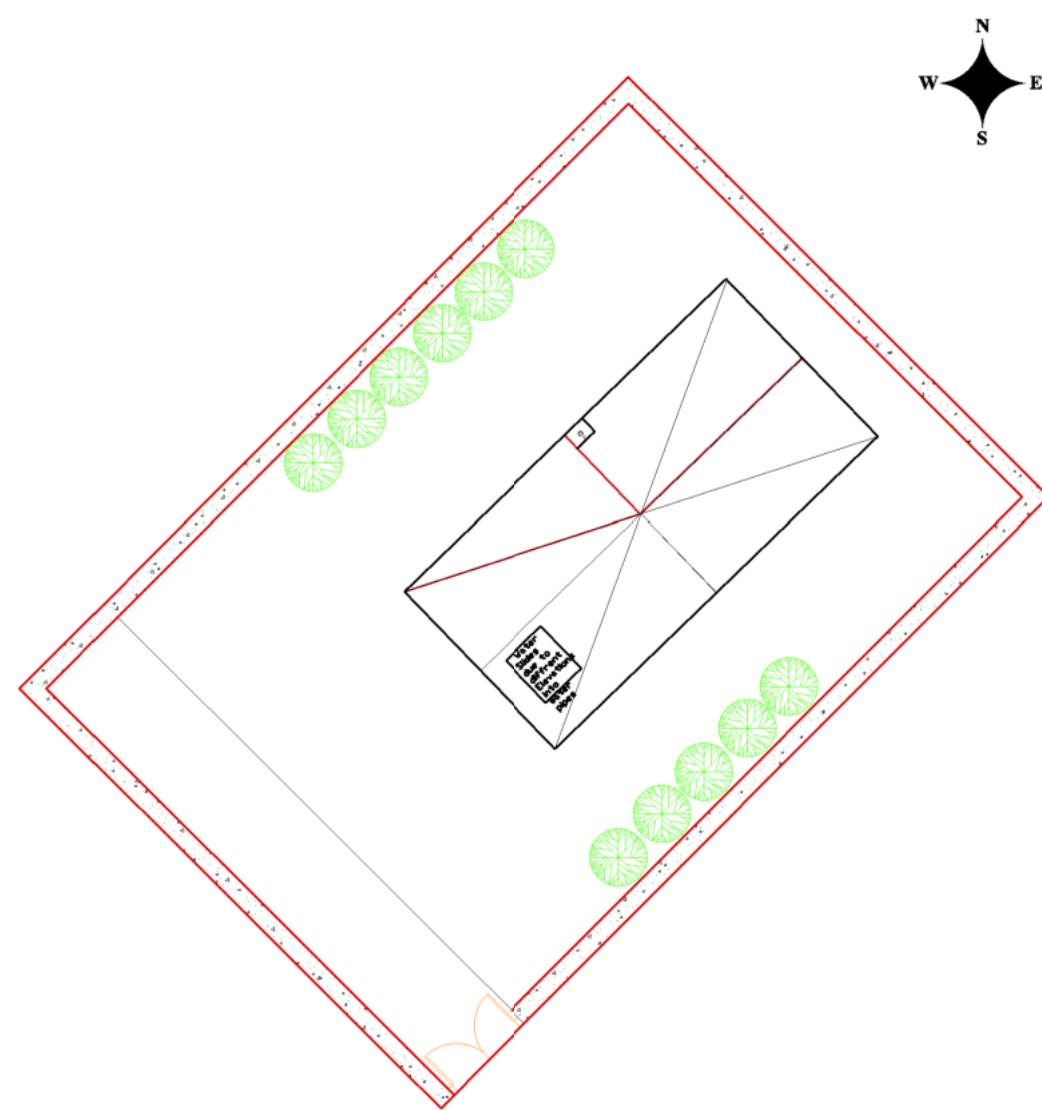
GROUND FLOOR PLAN

Ground PLAN | Scale 1:100



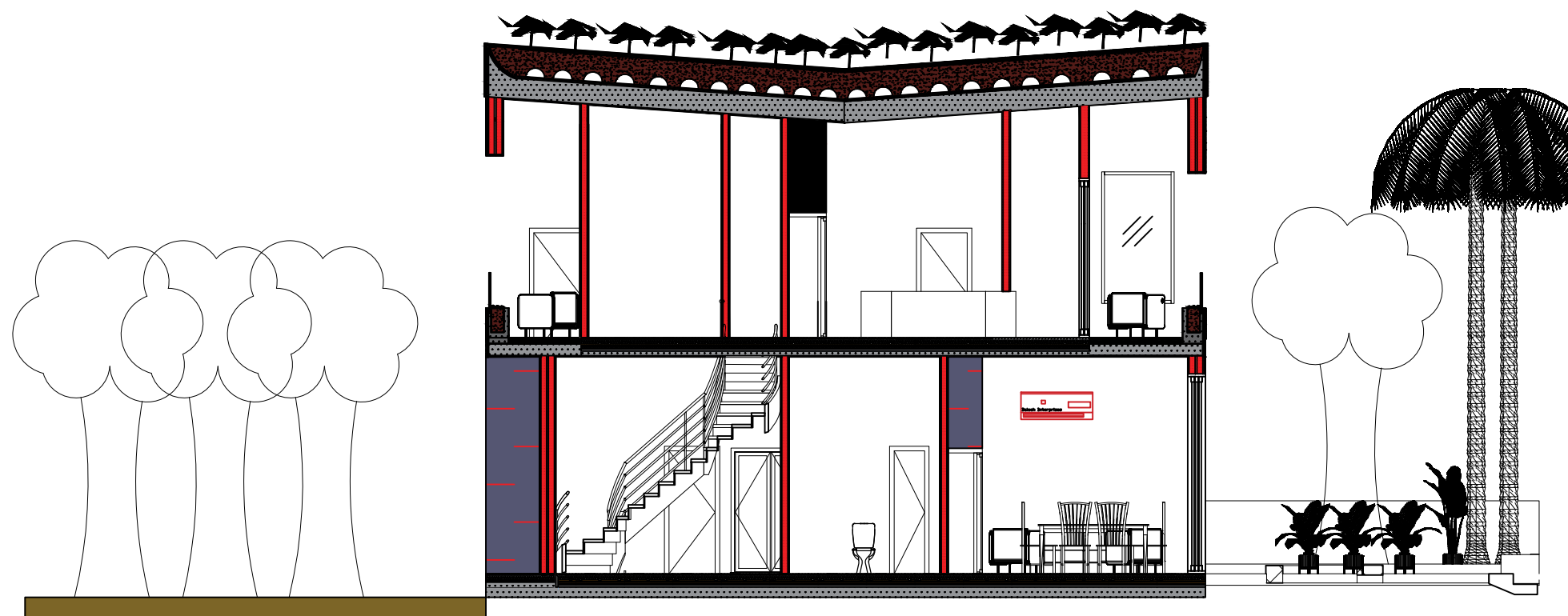
FIRST FLOOR PLAN

First | Scale 1:100

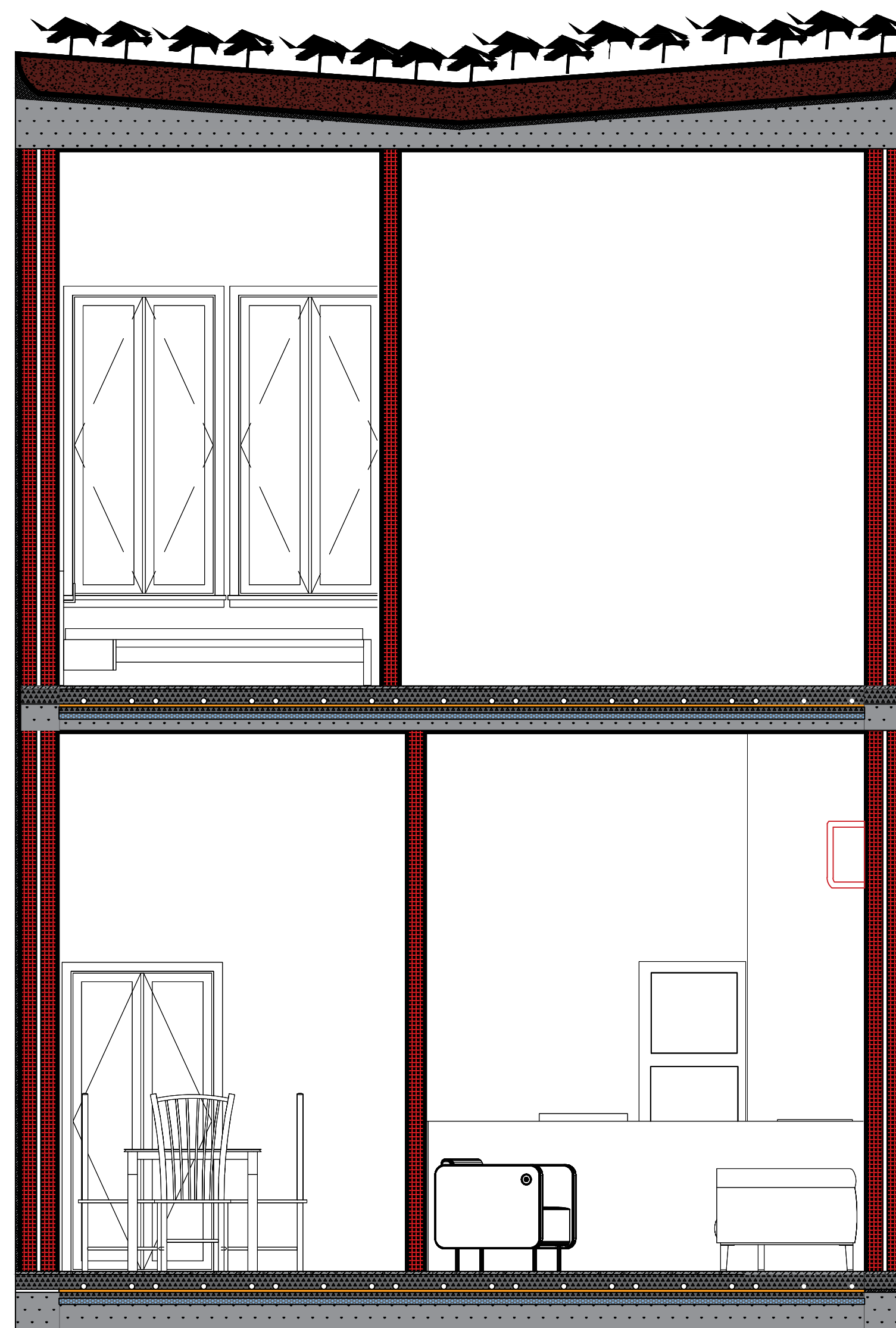


ROOF PLAN

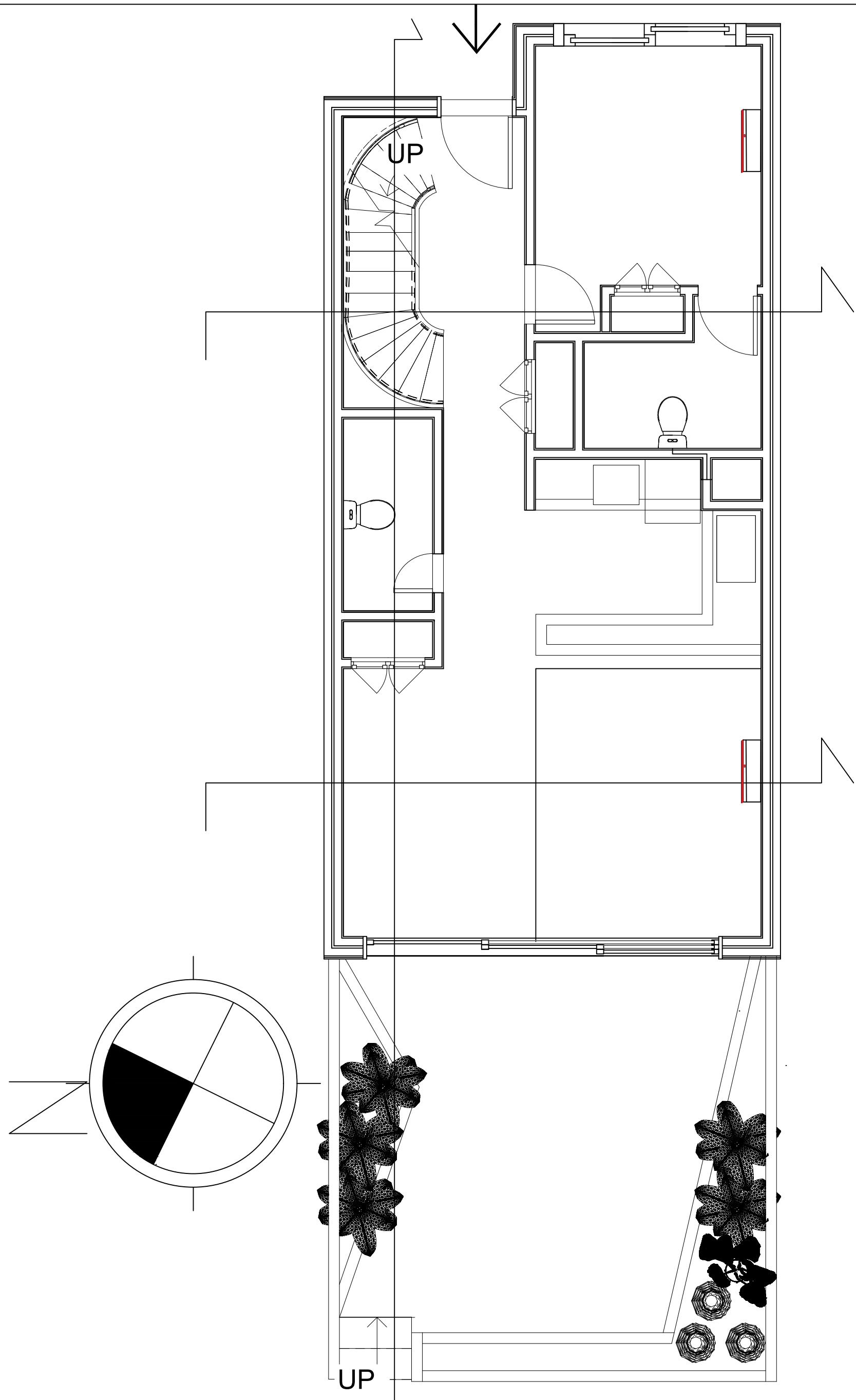
BIOCLIMATIC STRATEGIC PLAN OF THE BUILDING | Scale 1:200



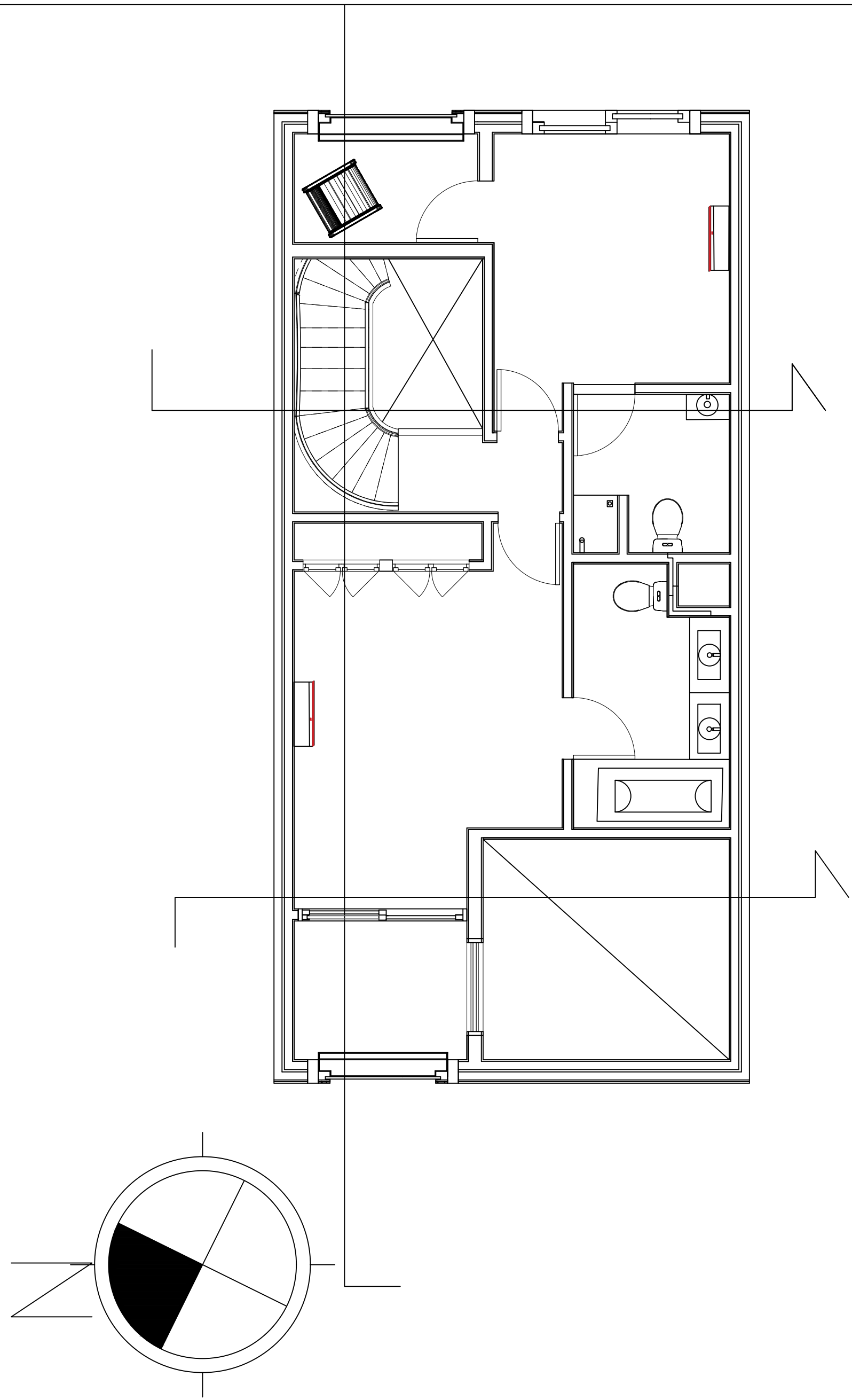
MODIFIED LONGITUDNIAL SECTION | Scale 1:100



| Scale 1:40



MODIFIED GROUND FLOOR PLAN | Scale 1:50



MODIFIED FIRST FLOOR PLAN | Scale 1:50