

PORTFOLIO

Abdulelah Alhumaid
- Architect -

Selected Work | 2022 - 2024





Abdulelah Alhumaid
Architecture Designer

I am passionate for design and committed to creating spaces that enhance the lives of individuals and communities. Armed with fresh knowledge and a desire to make a positive impact through my work, I am ready to embark on a journey of creativity and innovation in the field of architecture.

With a blend of vision, technical expertise, and a desire to create spaces that matter, I am confident in my ability to contribute to the field of architecture and to shape a built environment that is both sustainable and inspiring.

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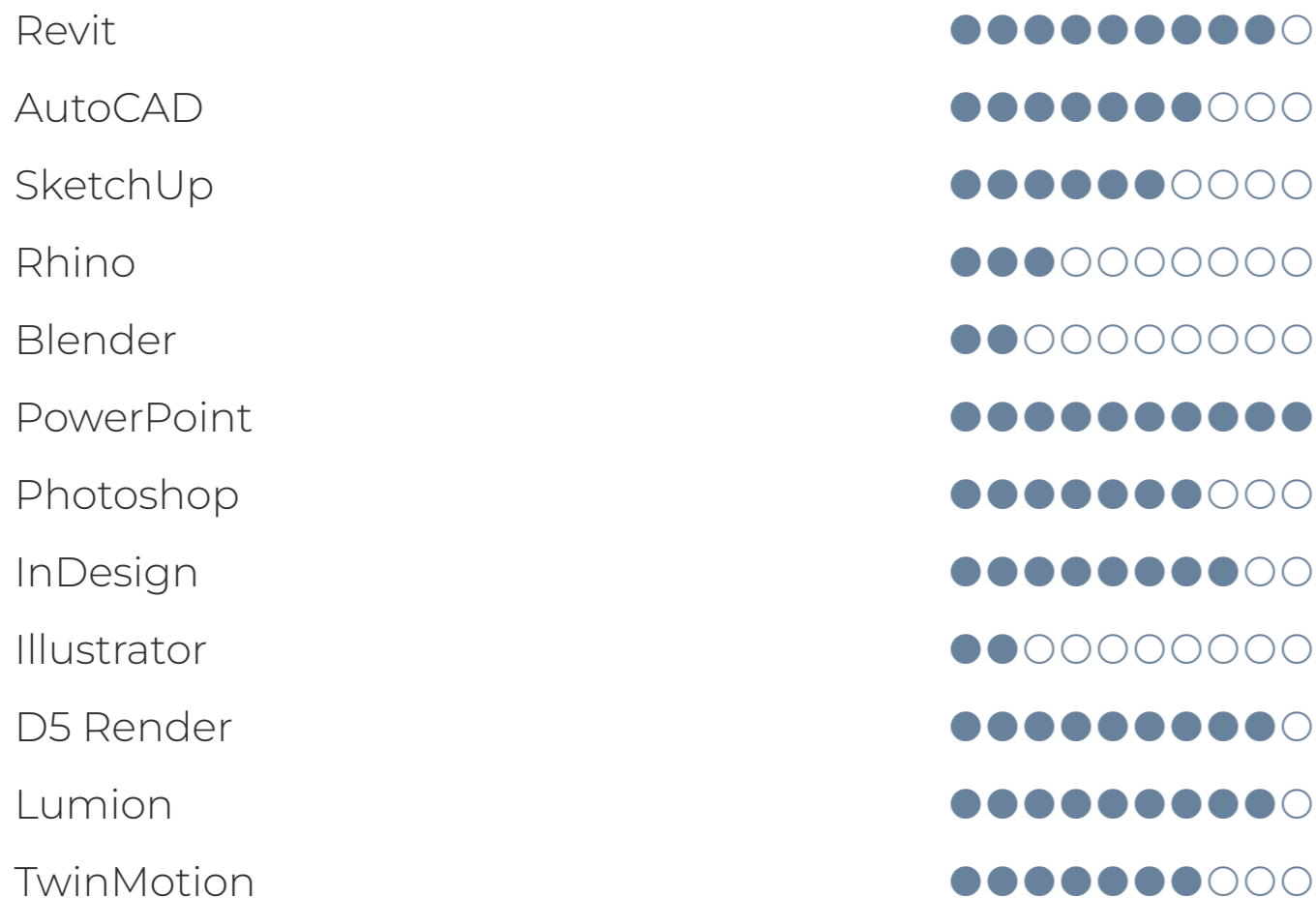
X: [@Abdulelah_Arch](https://twitter.com/Abdulelah_Arch)

EDUCATION

2019 - 2024 | King Saud University
Architecture and Building Science

GPA: 4.51 | Ranked 5th in The Architecture and Planning Class of 2024

SOFTWARE PROFICIENCY



LANGUAGE

Arabic	Native Proficiency
English	Full Professional Proficiency

EXPERIENCE

Jun - Aug 2023 | IQ Design for Engineering Consultancy
Architect Designer Intern (Co-op) | Riyadh, Saudi Arabia

Jul 2022 | Drwazah Engineering Consultant and safety
Architect Designer Intern | Riyadh, Saudi Arabia

12th - 18th Mar 2022 | Asian Universities Alliance Youth Forum
Uniting for a Sustainable Future Forum | Al-Ain, UAE

CERTIFICATES AND COURSES

Apr 2024 | McKinsey Forward Program
Mckinsey & Company

May 2023 | Misk Career Essentials Program
Mohammed Bin Salman Foundation (Misk)

INTEREST

- Humanities in Architecture
- Urban Design
- Graphic Design
- Cinema
- Reading
- Drawing



CON TENT

01. **Raam Mental Health Rehab**
Health & Hospitality | 2024
Graduation Project
02. **Al-Arid Villa**
Residential Architecture | 2023
Co-op Project
03. **Al-Diriyah Mosque**
Religious Architecture | 2023
Competition (Team-Work)
04. **Air Pollution Research Center**
Research & Education | 2023
Systems Integration
05. **Najd Cultural Village**
Heritage & Cultural | 2022
Urban Design

RAAM MENTAL HEALTH REHAB

- Location: Riyadh, Saudi Arabia
- Area: 66,000 m²
- Typology: Health & Hospitality Architecture
- Type: Graduation Project
- Year: 2024

OVERVIEW

The Graduation project is called Raam. A Mental Health Rehabilitation Center specializing in the treatment of Psychotic and Neurological mental health disorders. This is achieved through psychological counseling Clinics and Care Centers. The Project has 40 clinics and shelters 150 patients both male and female.

The meaning of the name Raam “رام” according to the dictionary is: He sought it, desired it, Wanted It. It has been used in the expressions: “كل شيء سيكون” “على ما يرام”, emphasizing an optimistic outlook and positive expectations.

01



To View Full
Presentation



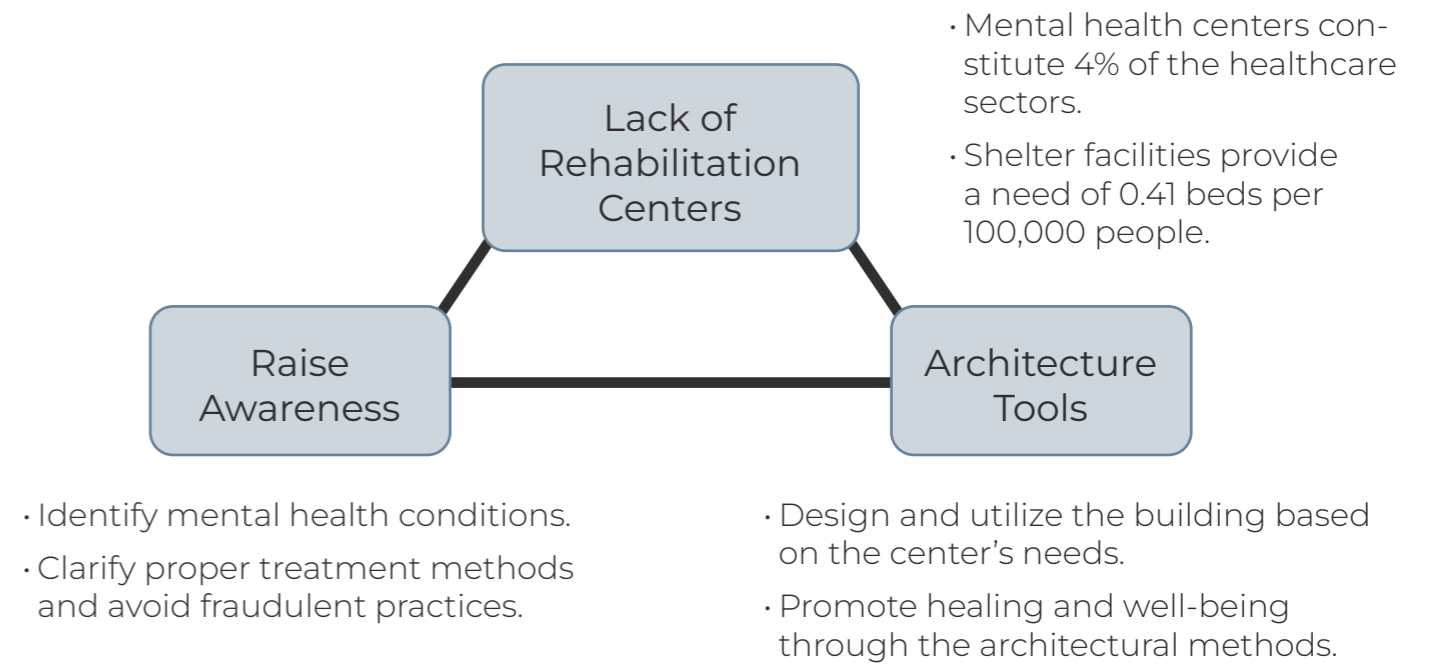
| Center Entrance

LOCATION

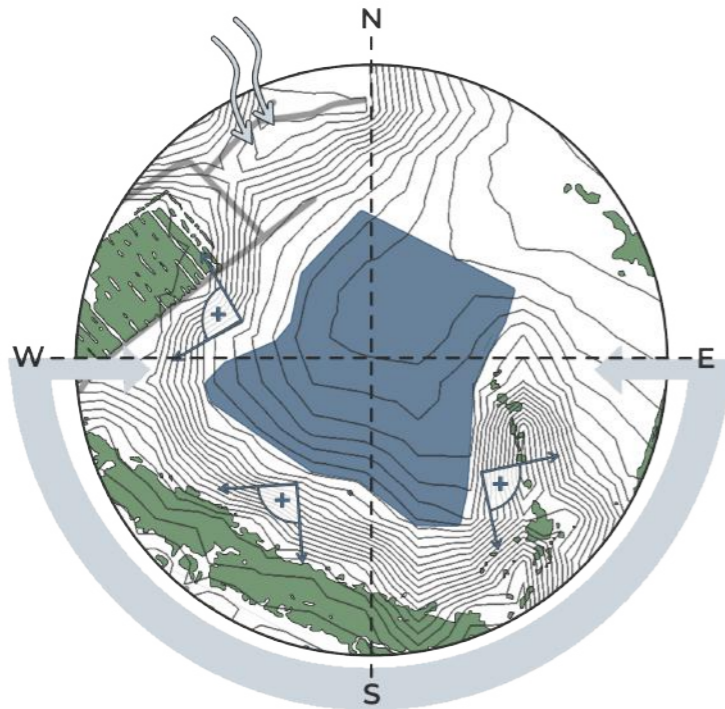
The Project is located in Al-Diriyah, with a land area of 66,000 m². The Site is in the top of the valley with a view on Wadi Hanifah road, and Prince sultan bin Abdulaziz farm.



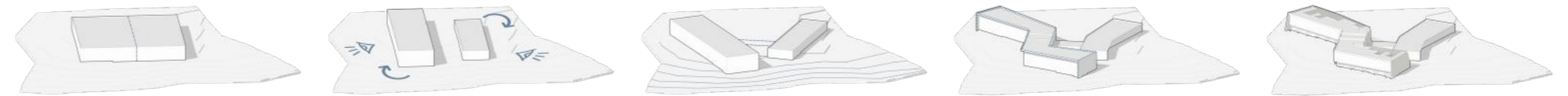
NEED OF THE PROJECT



SITE ANALYSES



CONCEPT



01. Starting with a Parallel Form at the middle of the Site

02. Dividing the form to two sections, based on their main Functions (Clinics/ Shelters)

03. Connecting and Rotating the forms to the best Viewpoint

04. Adapting the forms to the Topography of The site

05. Reflecting The Disorder on the outside shell, To Express The Difference between the forms.



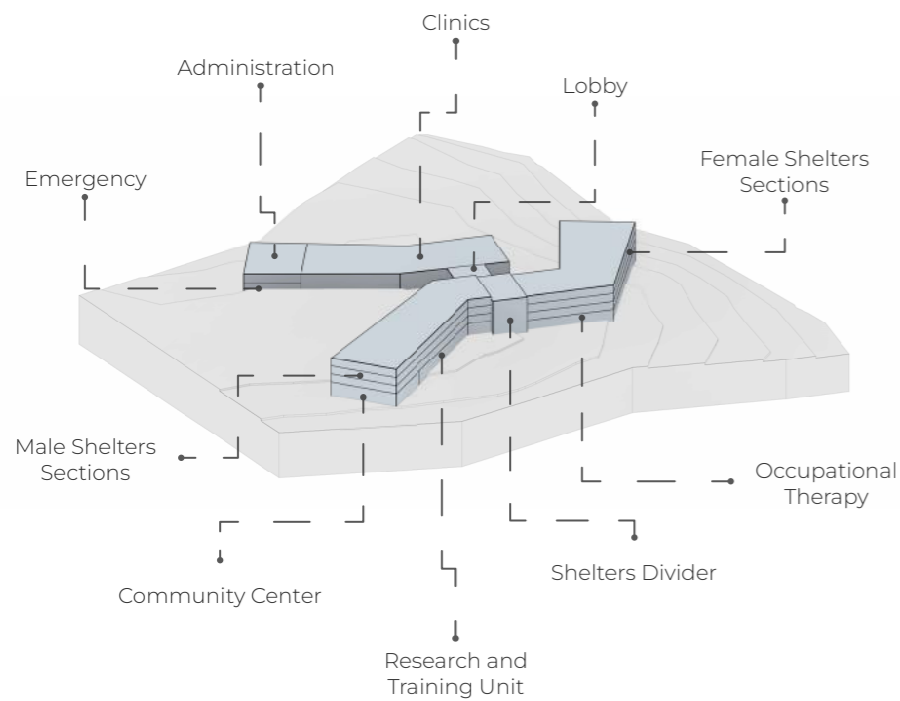
PROJECT ELEMENTS

- Psychiatric Clinics 967 m²
 - Shelter Facilities 10,608 m²
 - Occupational Therapy 2,052 m²
 - Emergency 298 m²
 - Research and Training 595 m²
 - Administration 387 m²
- Total: 14,907 m²

SITE PLAN

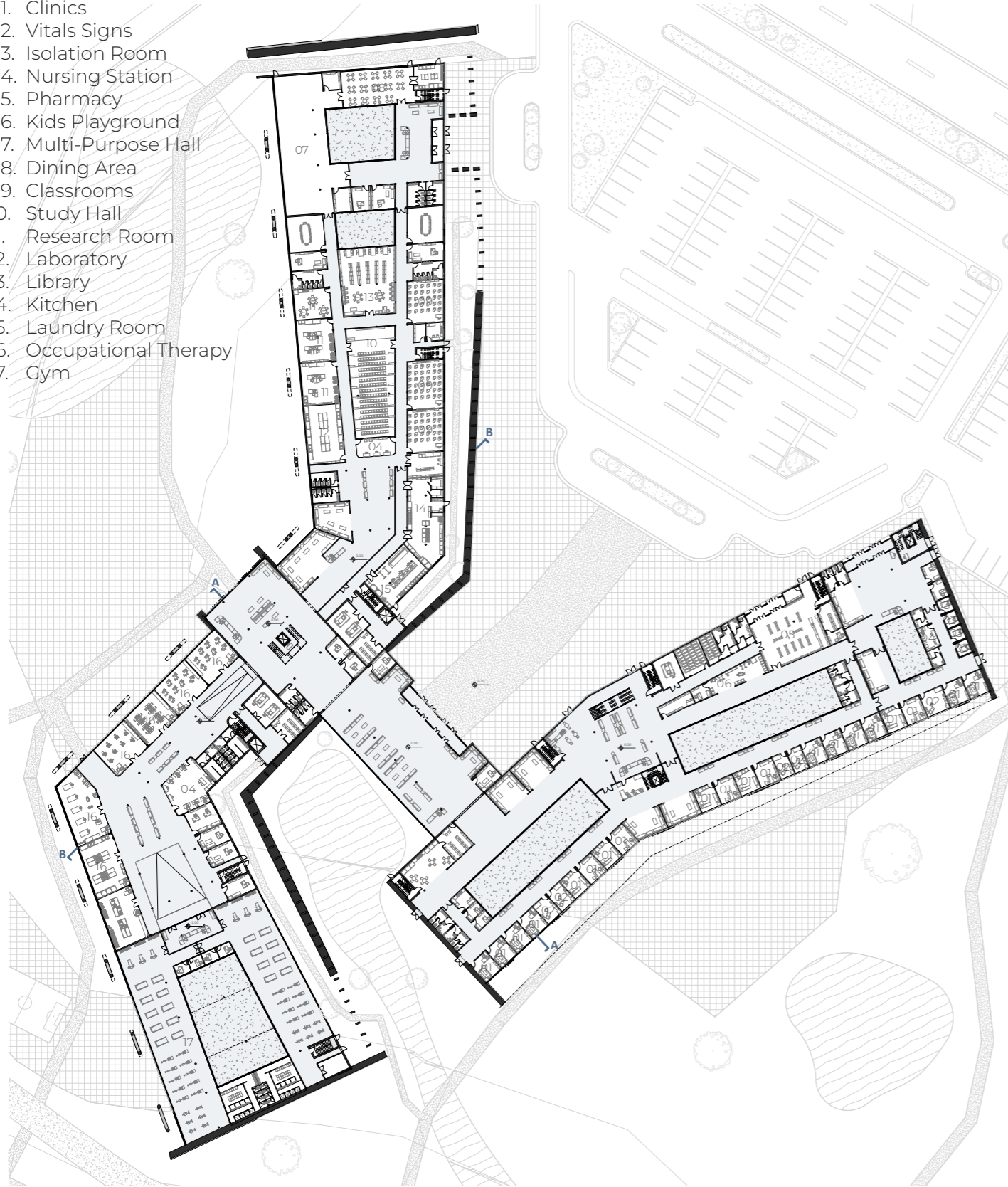


PROJECT ZONES



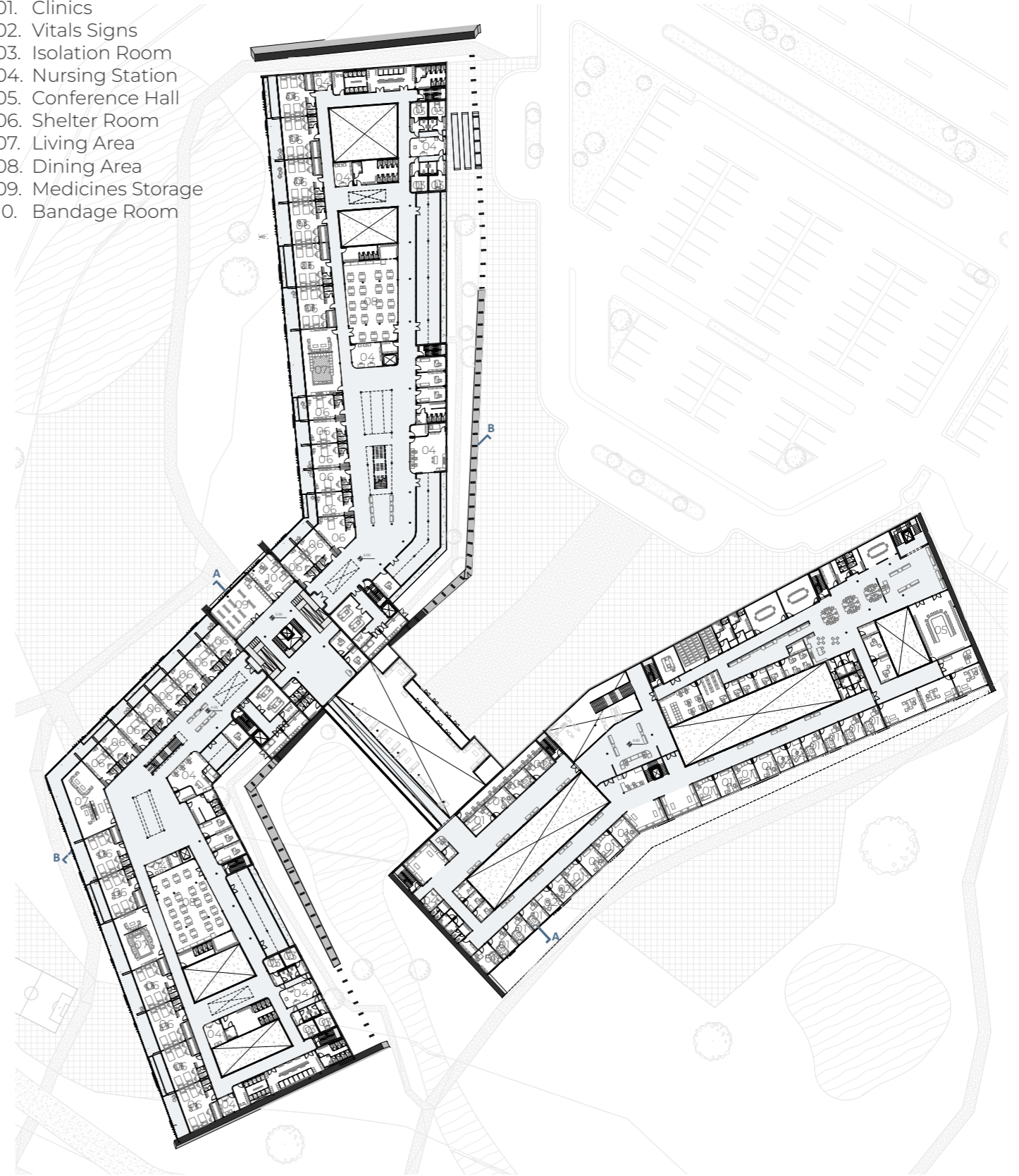
GROUND FLOOR PLAN

- 01. Clinics
- 02. Vitals Signs
- 03. Isolation Room
- 04. Nursing Station
- 05. Pharmacy
- 06. Kids Playground
- 07. Multi-Purpose Hall
- 08. Dining Area
- 09. Classrooms
- 10. Study Hall
- 11. Research Room
- 12. Laboratory
- 13. Library
- 14. Kitchen
- 15. Laundry Room
- 16. Occupational Therapy
- 17. Gym



FIRST FLOOR PLAN

- 01. Clinics
- 02. Vitals Signs
- 03. Isolation Room
- 04. Nursing Station
- 05. Conference Hall
- 06. Shelter Room
- 07. Living Area
- 08. Dining Area
- 09. Medicines Storage
- 10. Bandage Room

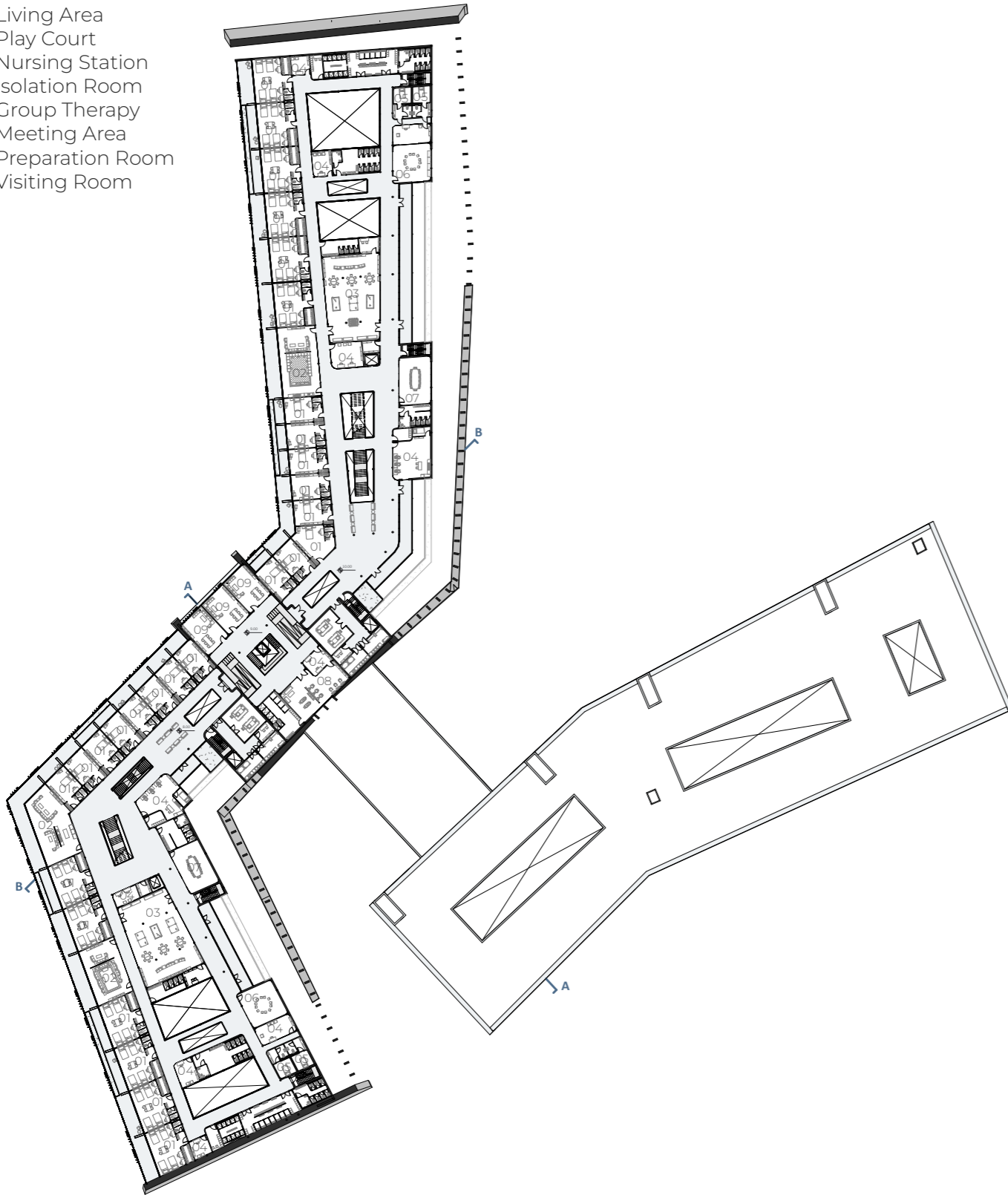




Shelter Common Area | Creating gathering spaces and using appropriate furniture to create a homely and comfortable environment, with the use of calming colors.

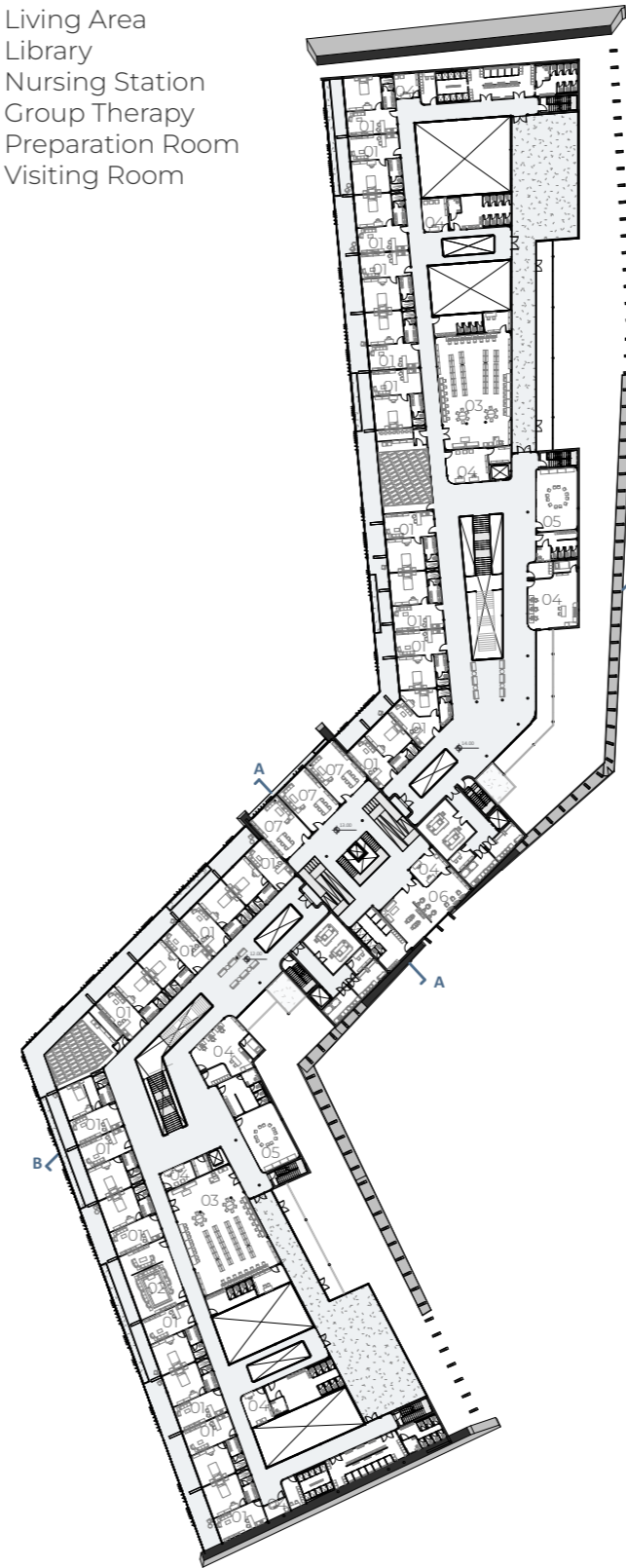
SECOND FLOOR PLAN

- 01. Shelter Room
- 02. Living Area
- 03. Play Court
- 04. Nursing Station
- 05. Isolation Room
- 06. Group Therapy
- 07. Meeting Area
- 08. Preparation Room
- 09. Visiting Room



THIRD FLOOR PLAN

- 01. Shelter Room
- 02. Living Area
- 03. Library
- 04. Nursing Station
- 05. Group Therapy
- 06. Preparation Room
- 07. Visiting Room



SECTION A - A



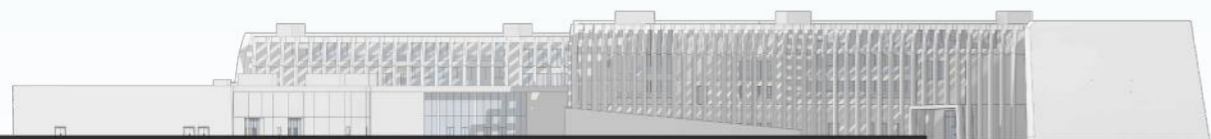
SECTION B - B



NORTH WEST ELEVATION



NORTH EAST ELEVATION

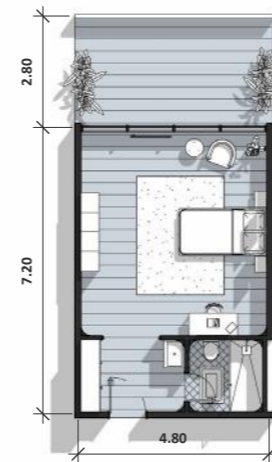


TRAUMA-INFORMED DESIGN

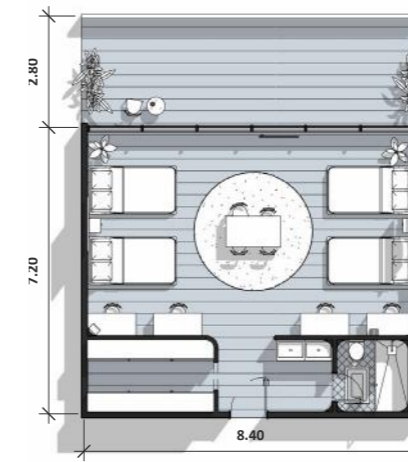
Trauma-Informed Design (T.I.D) is an approach to creating environments that consider the impact of trauma on individuals, aiming to promote healing and well-being. Examples of the approach that were use in the project:

- Provide clear circulation paths
- Provide access to nature
- Offer a variety of spaces
- Consider natural materials
- Use a healthy color palette
- Using Rounded Corners
- Offer artful spaces
- Feeding Animals
- Provide inclusive furniture

SHELTER'S ROOM LAYOUT



Layout 1 30 m²
1 Person Room
(32 Unit)



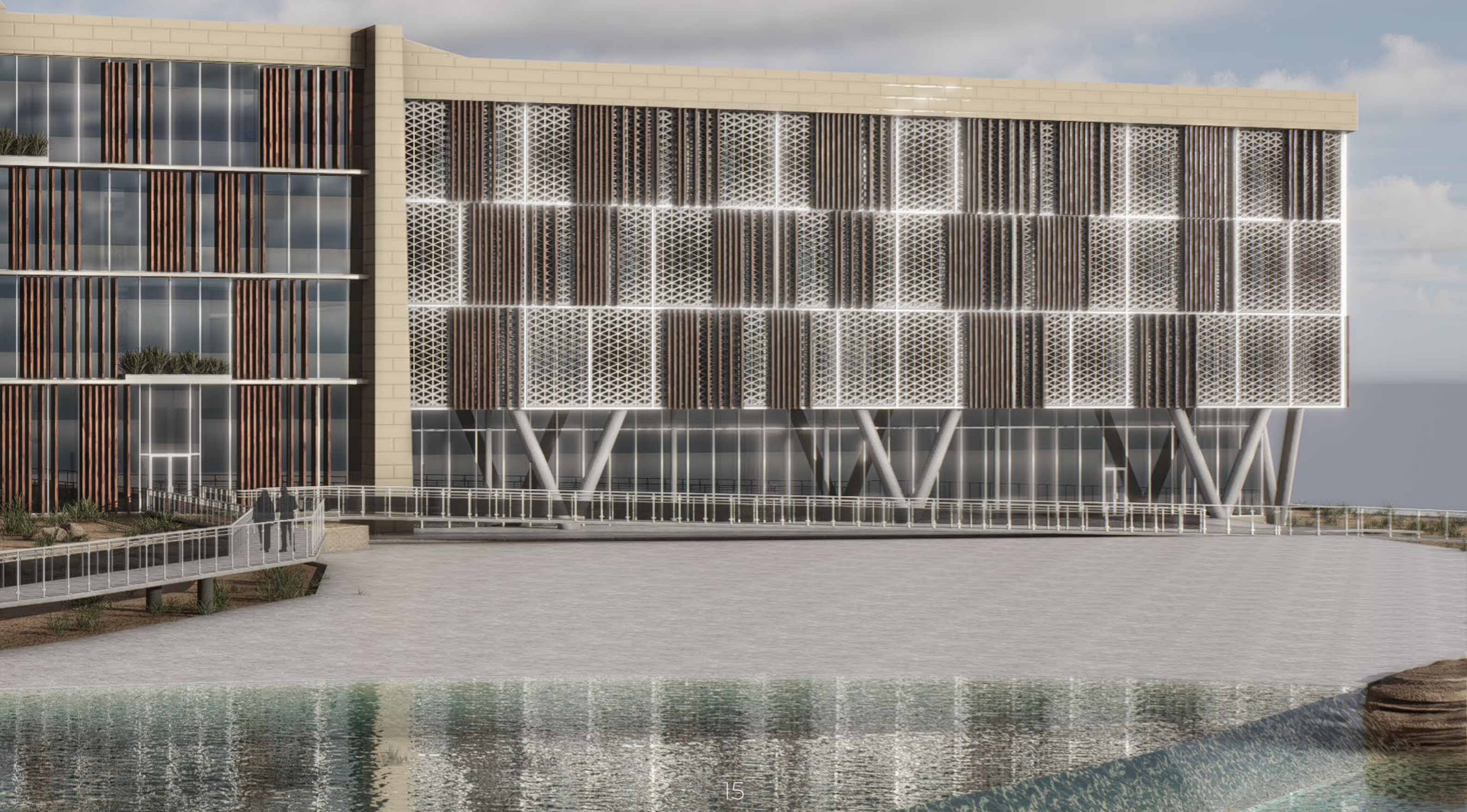
Layout 2 60 m²
4 Person Room
(42 Unit)



Layout 3 60 m²
1 Person Sweet
(22 Unit)



| Shelter's Elevation



AL-ARID VILLA

- Location: Riyadh, Saudi Arabia
- Area: 375 m²
- Typology: Residential Architecture
- Type: Co-op Training Project Program
- Year: 2023

OVERVIEW

This project stands as one of my **Proudest** achievements and marked my first significant step into the professional work environment. The villa design was developed during my co-op training internship at IQ Design for Engineering Consultancy. The project was based on a former client's requirements, allowing me full creative control over the design process while being supervised and guided by the architects in the office.

The design needed to be **Realistic** and **Suitable** for the market and align with the office's workflow. Additionally, it had to comply with the Building Permits Requirements Guide set forth by the Riyadh Region Municipality. This project not only honed my design skills but also provided invaluable experience in adhering to real-world regulations and standards.



To View Full
Presentation



| Villa's Elevation

LOCATION

The villa is located Riyadh in the Al Arid neighborhood, occupying a 375 m² land area, with a west elevation view facing a 15-meter wide street.



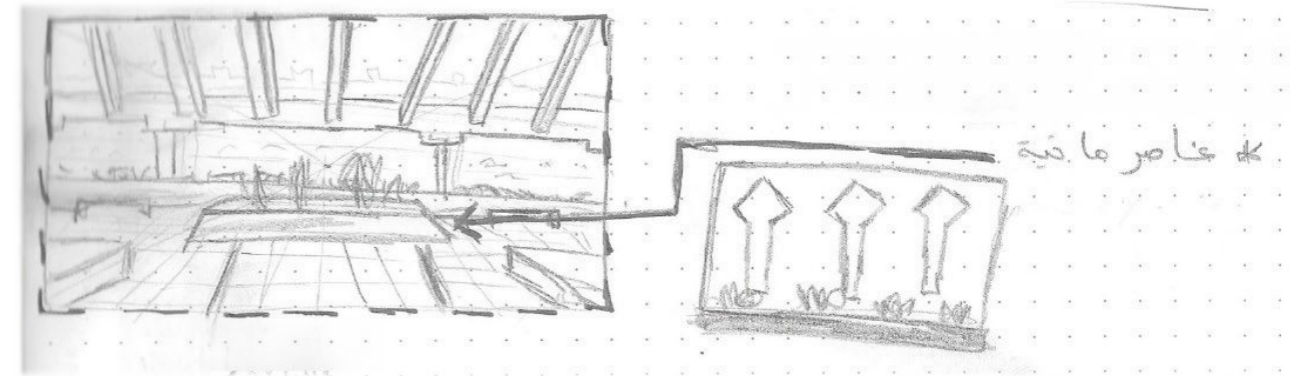
CONCEPT

The concept of the project was to apply the **The Salmani Style**, in the design of the villa's. This approach aligns with the Kingdom's Vision 2030, aiming to preserve originality and reflect it with a modern character.

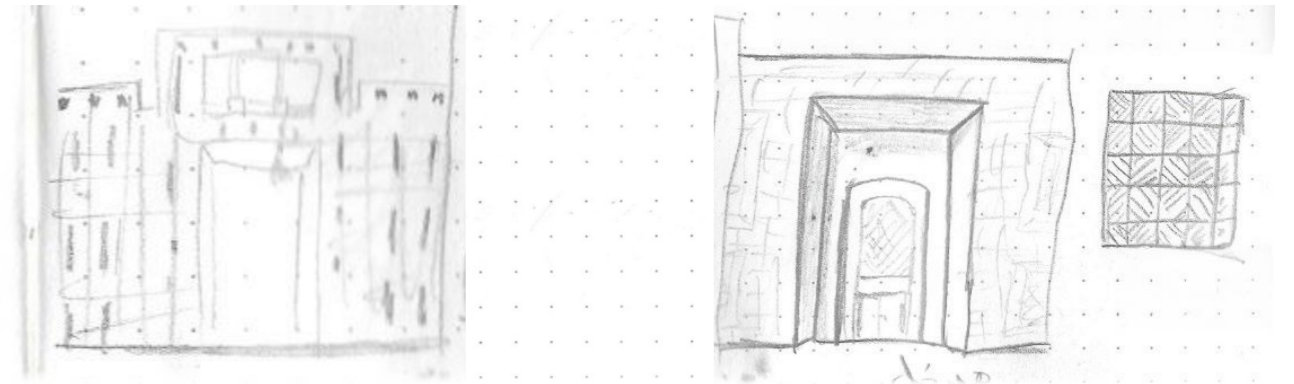


SALMANI STYLE RESEARCH

To understand The Salmani style, King Salman Charter for Architecture and Urbanism was referenced, along with a studying case studies that adopted the charter.

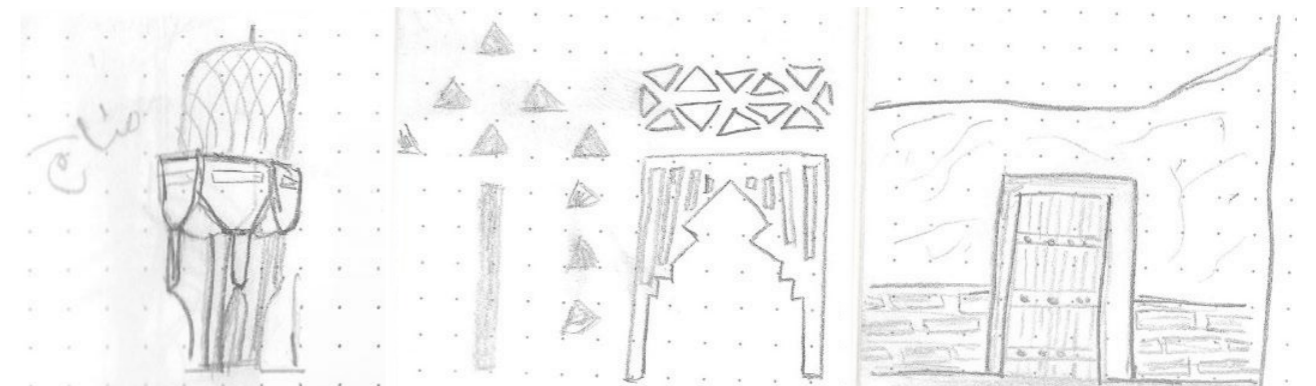


The Diplomatic Quarter (Al Safarat)



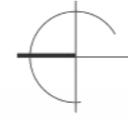
Riyadh General Court

Ministry of Foreign Affairs

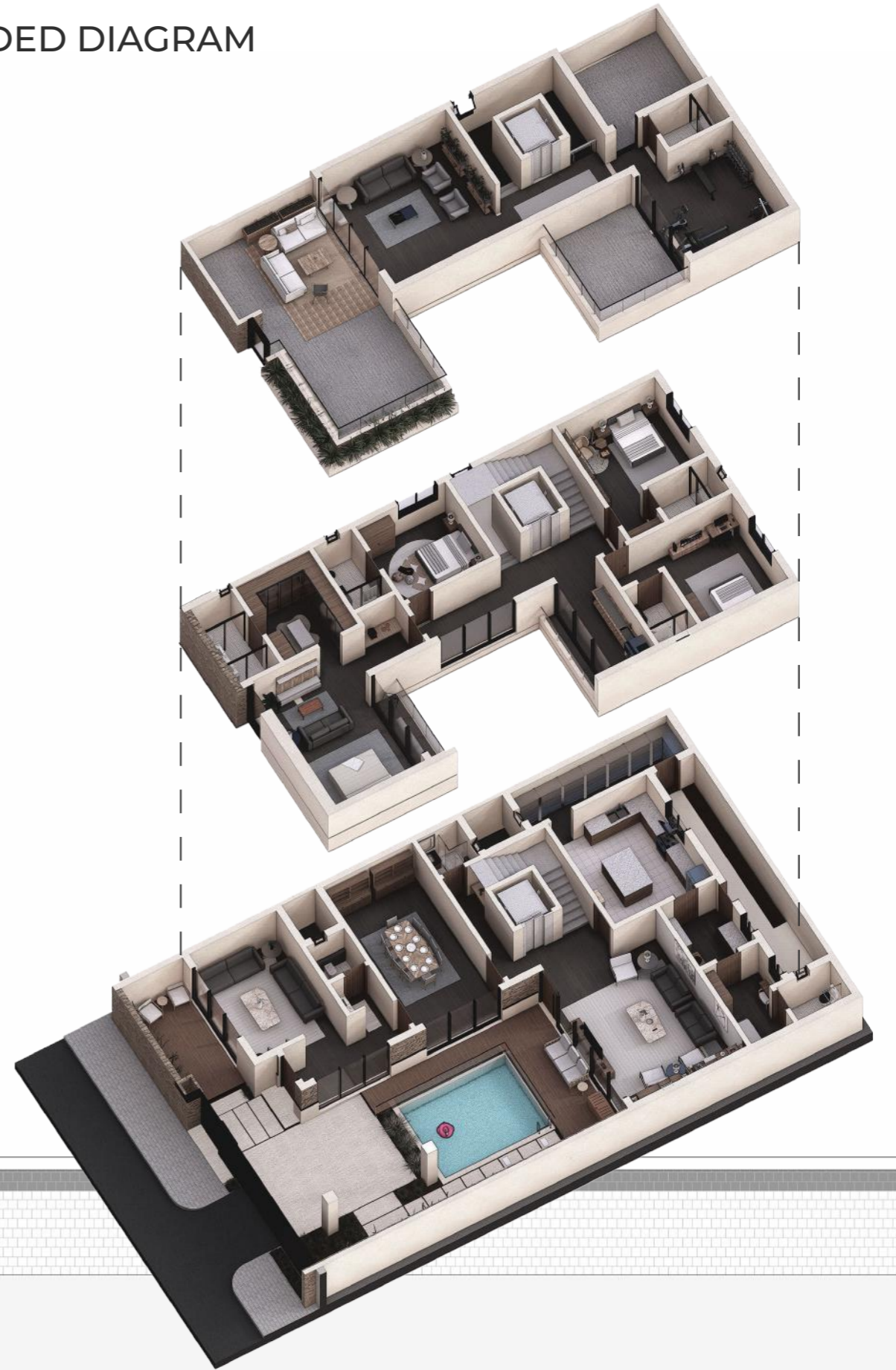
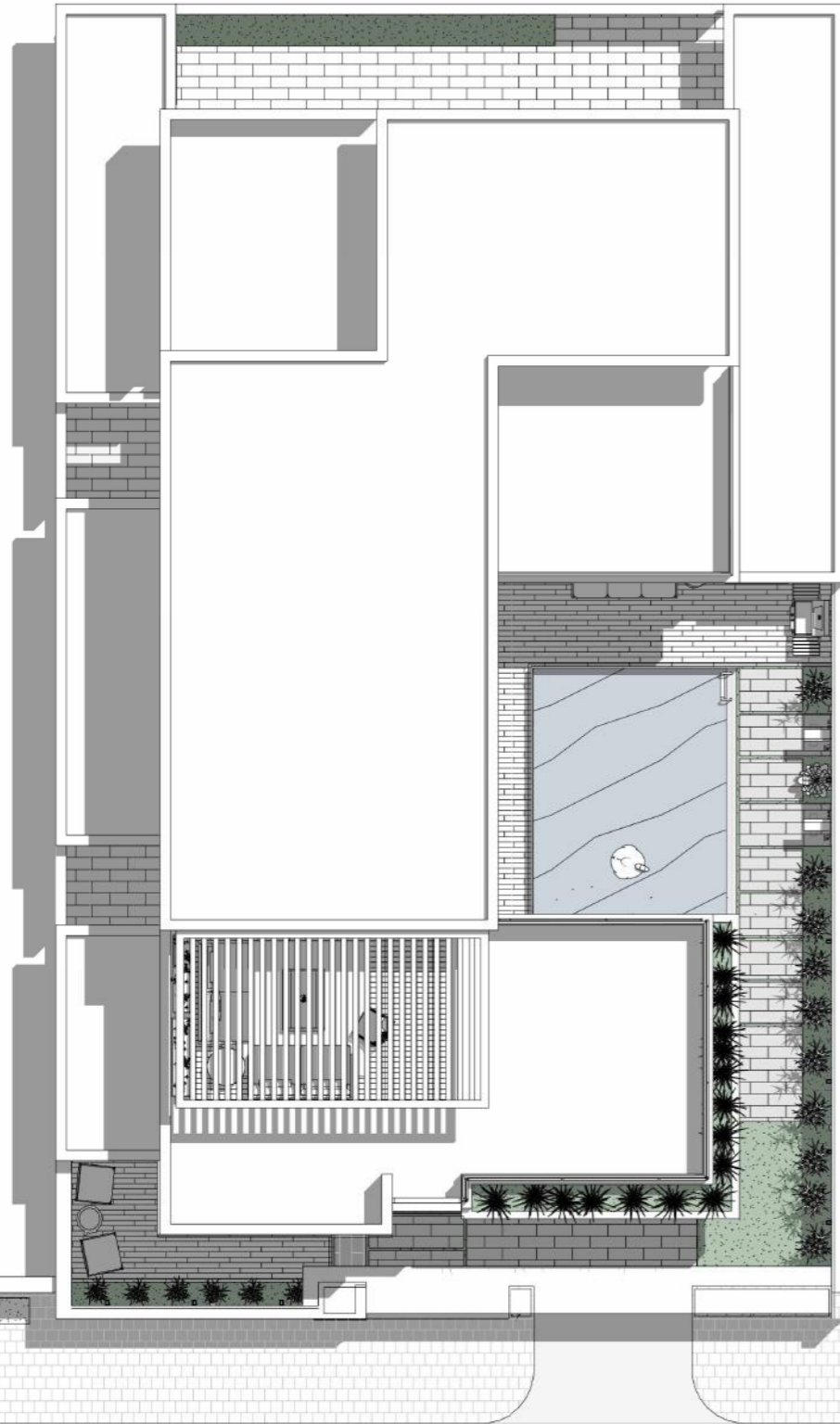


King Khalid International Airport Mosque

SITE PLAN



EXPLODED DIAGRAM



GROUND FLOOR PLAN



- 01. Guest Seating Area
- 02. Dining Room
- 03. Living Area
- 04. Kitchen
- 05. Laundry Room
- 06. Maid Room

FIRST FLOOR PLAN



- 01. Master Bedroom
- 02. Bedroom
- 03. Buffet

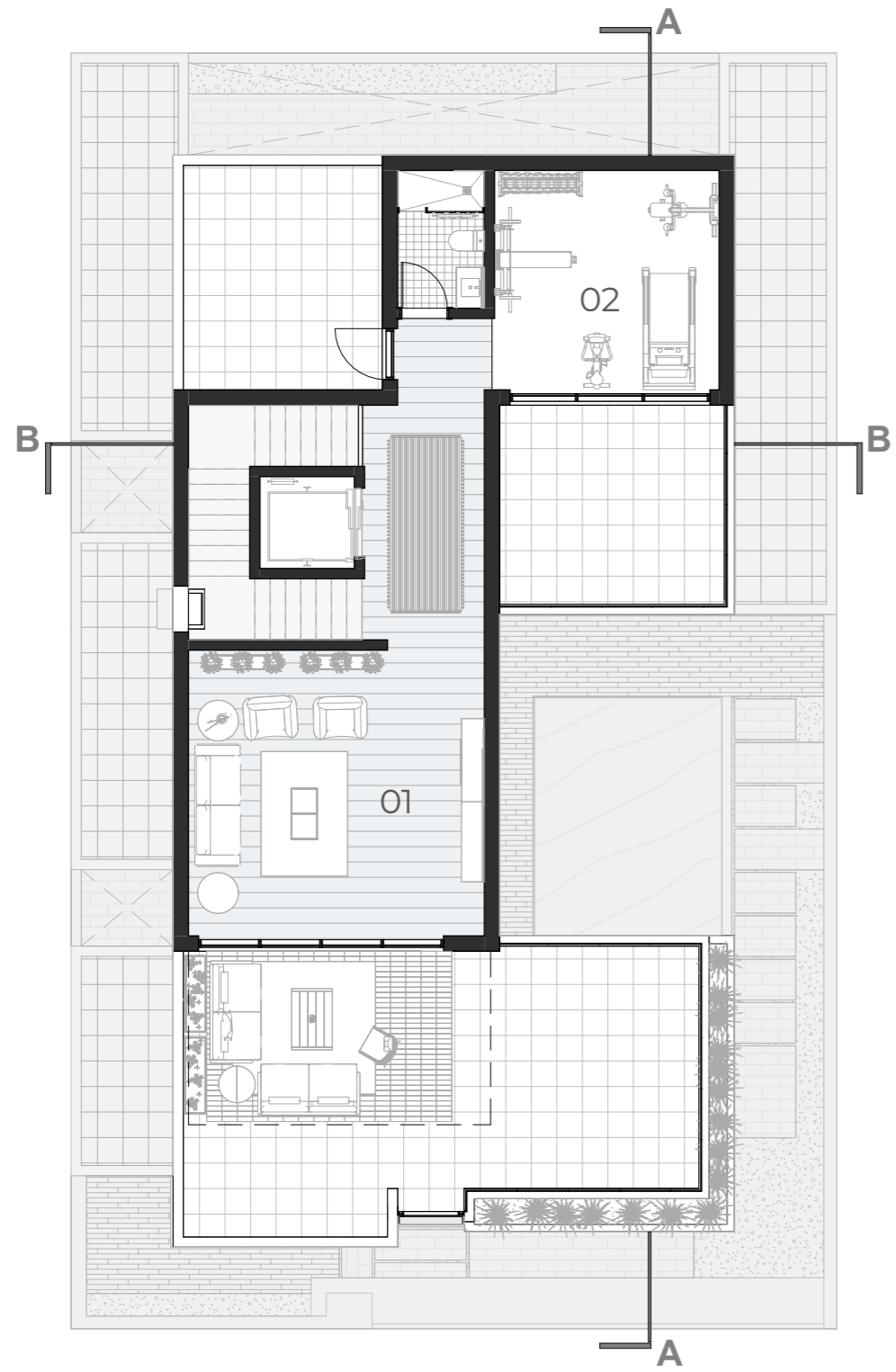


Courtyard Perspective 1 | Creating an environment that aligns with the style and setting of the region.



Courtyard Section | Achieving a simple and clear design without ornamentation and excessive detailing.

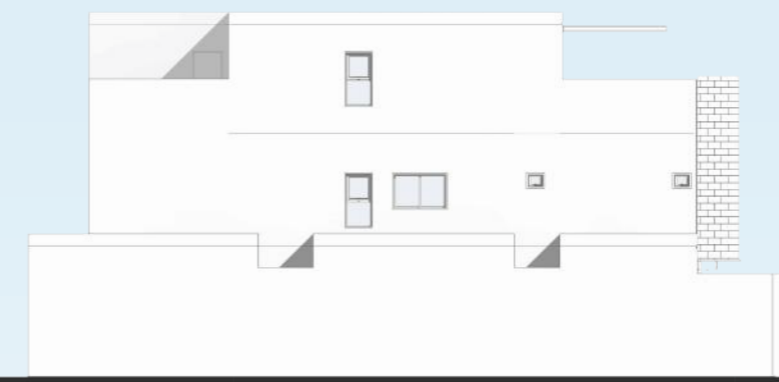
SECOND FLOOR PLAN



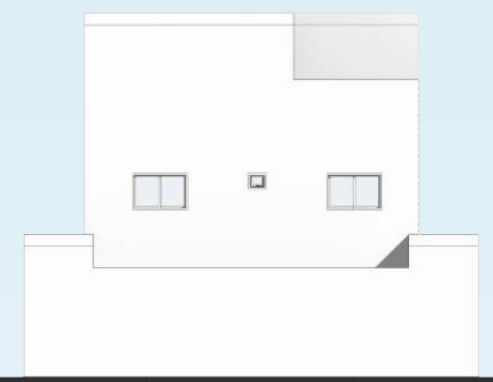
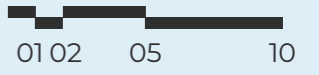
01. Seating Area

02. Gym

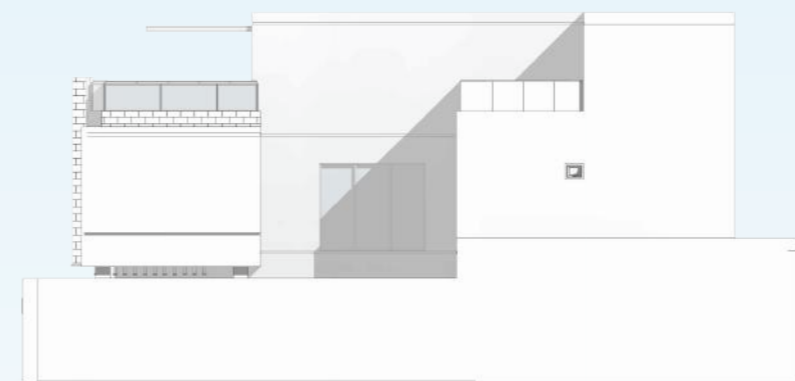
WEST ELEVATION



NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



SECTION A - A



SECTION B - B





Courtyard Perspective 2 | Using appropriate greenery that suits the environment.



Living Room Interior Design | Designing a modern interior with a spacious layout suitable for a family.





AL-DIRIYAH MOSQUE

- Location: Riyadh, Saudi Arabia
- Area: A - 1,865 m² | B - 1,363 m²
- Typology: Institutional Architecture
- Type: Mosques Architectural Design Competition
- Year: 2023

OVERVIEW

DGCL hosted an architectural design competition for Saudi university architecture students. The challenge was to design One traditional Najdi mosque that could be Adapted To Two different plots within the Diriyah Gate master plan. The design had to meet specific guidelines, construction techniques, materials, and spatial requirements. Submissions were evaluated by a specialized jury panel.

Myself and Mohammed Aloqayli and Nawaf Alotaibi, two of my university colleagues. Participated in the competition. The design was a collaborative effort between us. We advanced to the second stage, along with 50 teams out of +250, unfortunately we didn't make it to the top 10. Nevertheless, It was a challenging and rewarding experience.



To View Full
Presentation

03



| Mosque Entrance

LOCATION

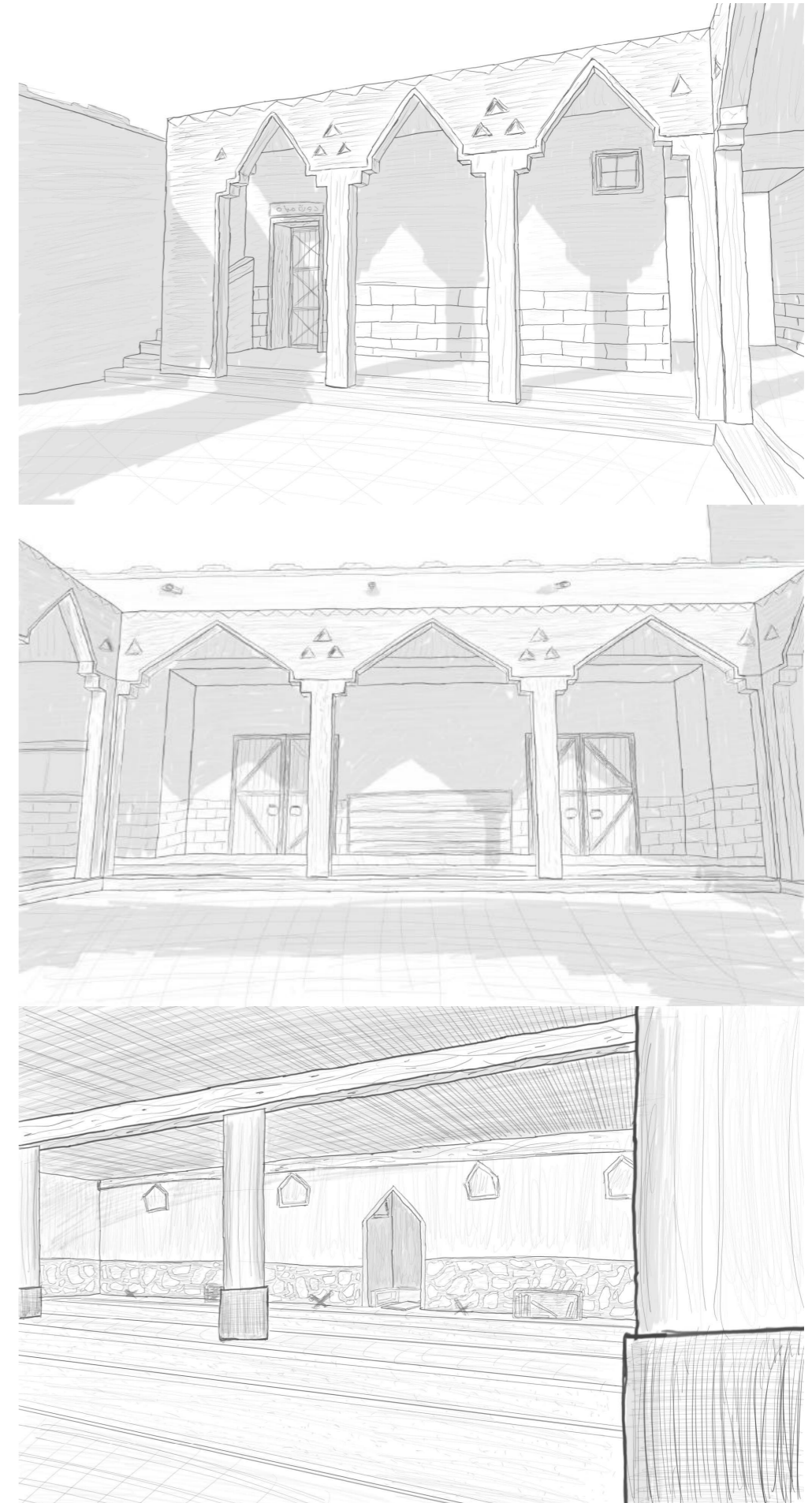
The two local mosques are located within the DG Masterplan in Diriyah Gate. Site A with a plot area of 1,865 m², and Site B with a plot area of 1,363 m². with a 700 m² GFA.



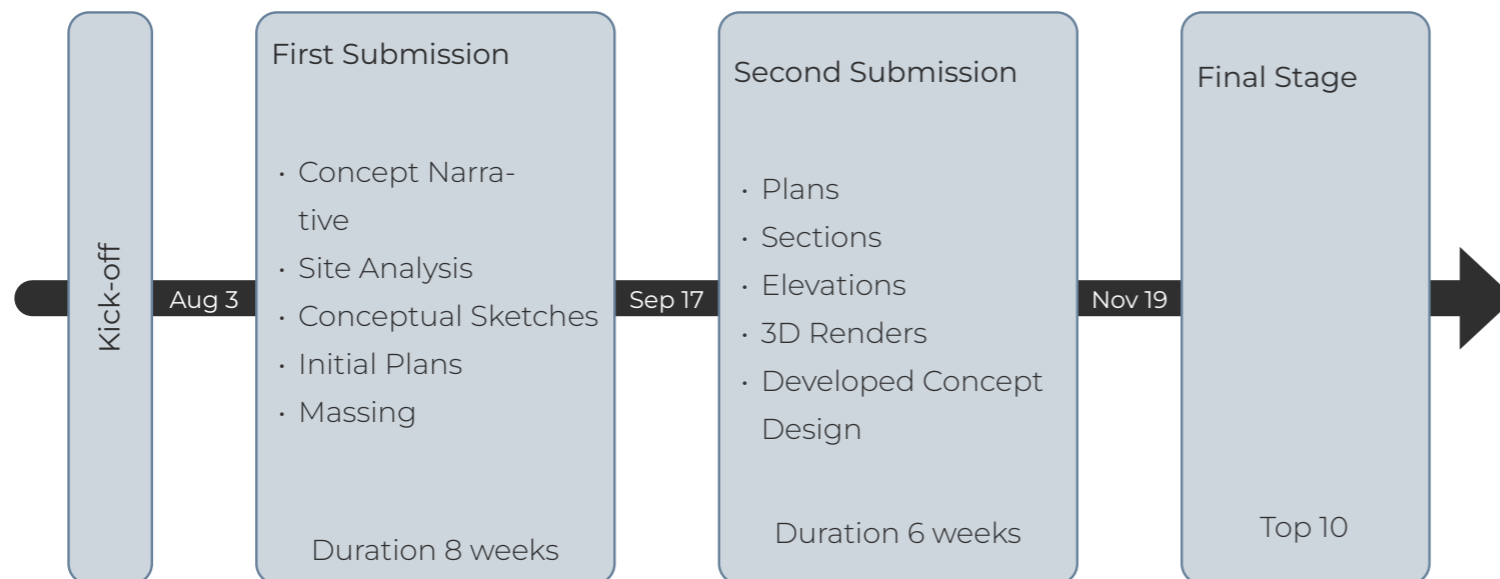
CONCEPT

The goal was to create a mosque that embodies the **Najdi Style** elements while meeting the needs of the present time.

The mosque should be an **integral part** of the neighborhood, with its courtyards serving the **community**, making the mosque more than just a place for prayer.



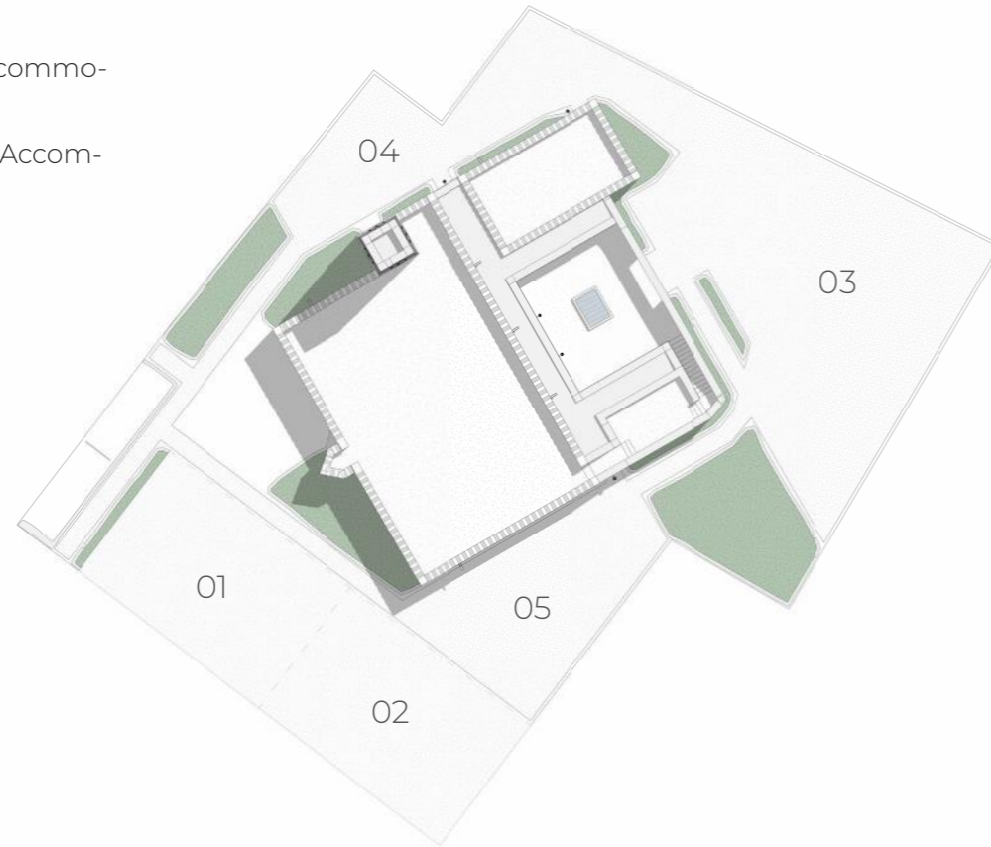
COMPETITION STAGES



SITE PLAN A

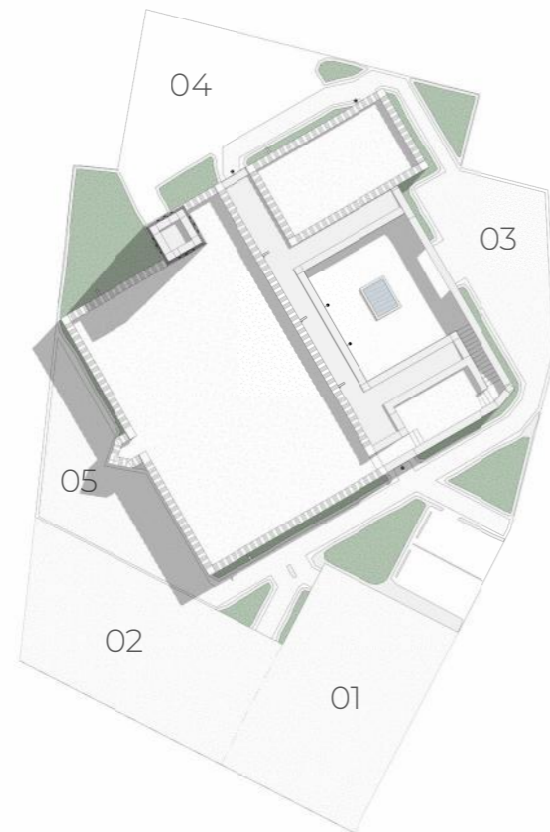


- 01. Imam's Accommodation.
- 02. Moathen's Accommodation.

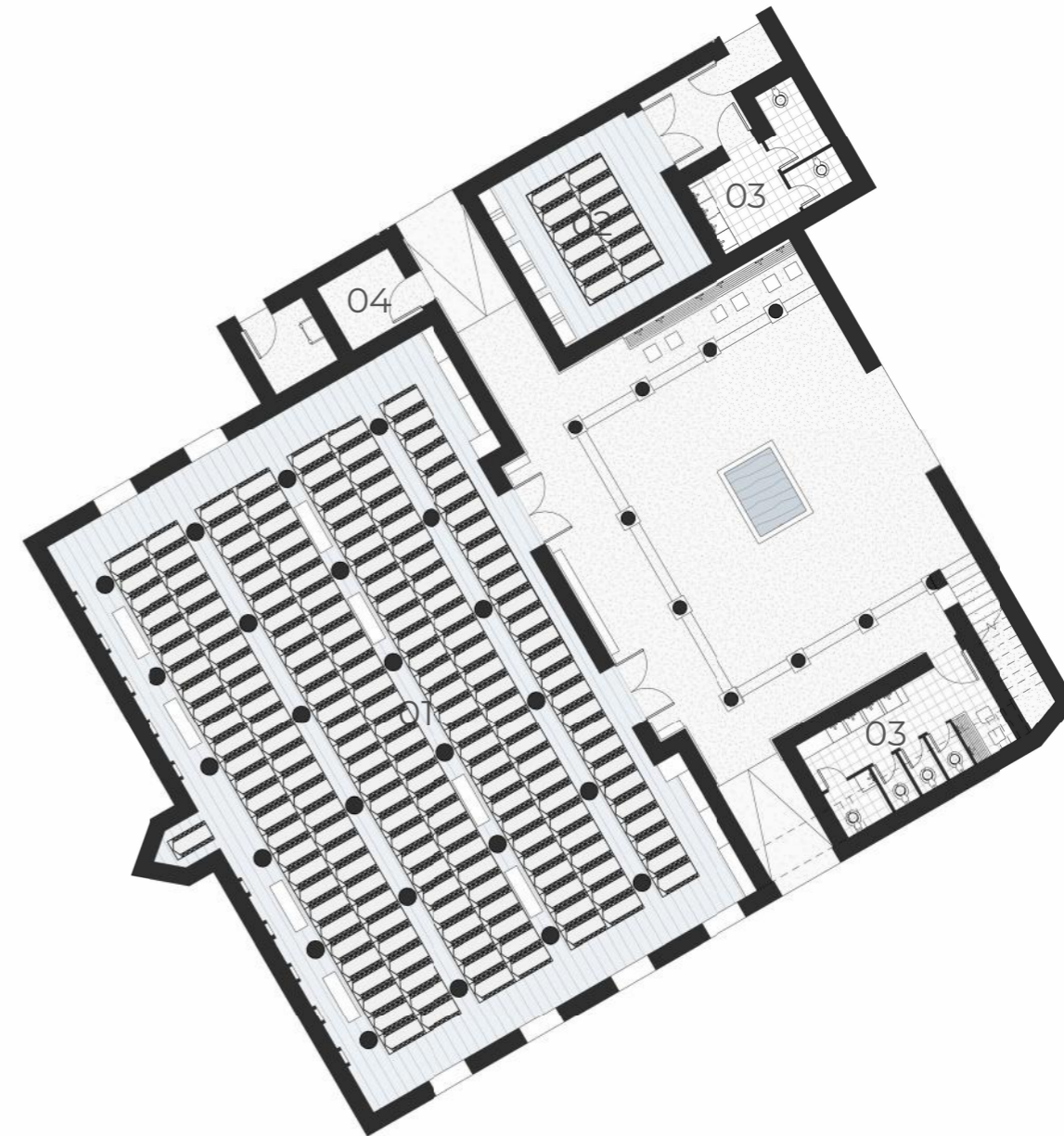


SITE PLAN B

- 03. Entrance yard.
- 04. Neighborhood Privet Gathering Area.
- 05. Multi-Purpose Yard.



GROUND FLOOR PLAN



- 01. Men's Prayer Hall
- 02. Women's Prayer Hall

- 03. Ablution Facilities
- 04. Storage



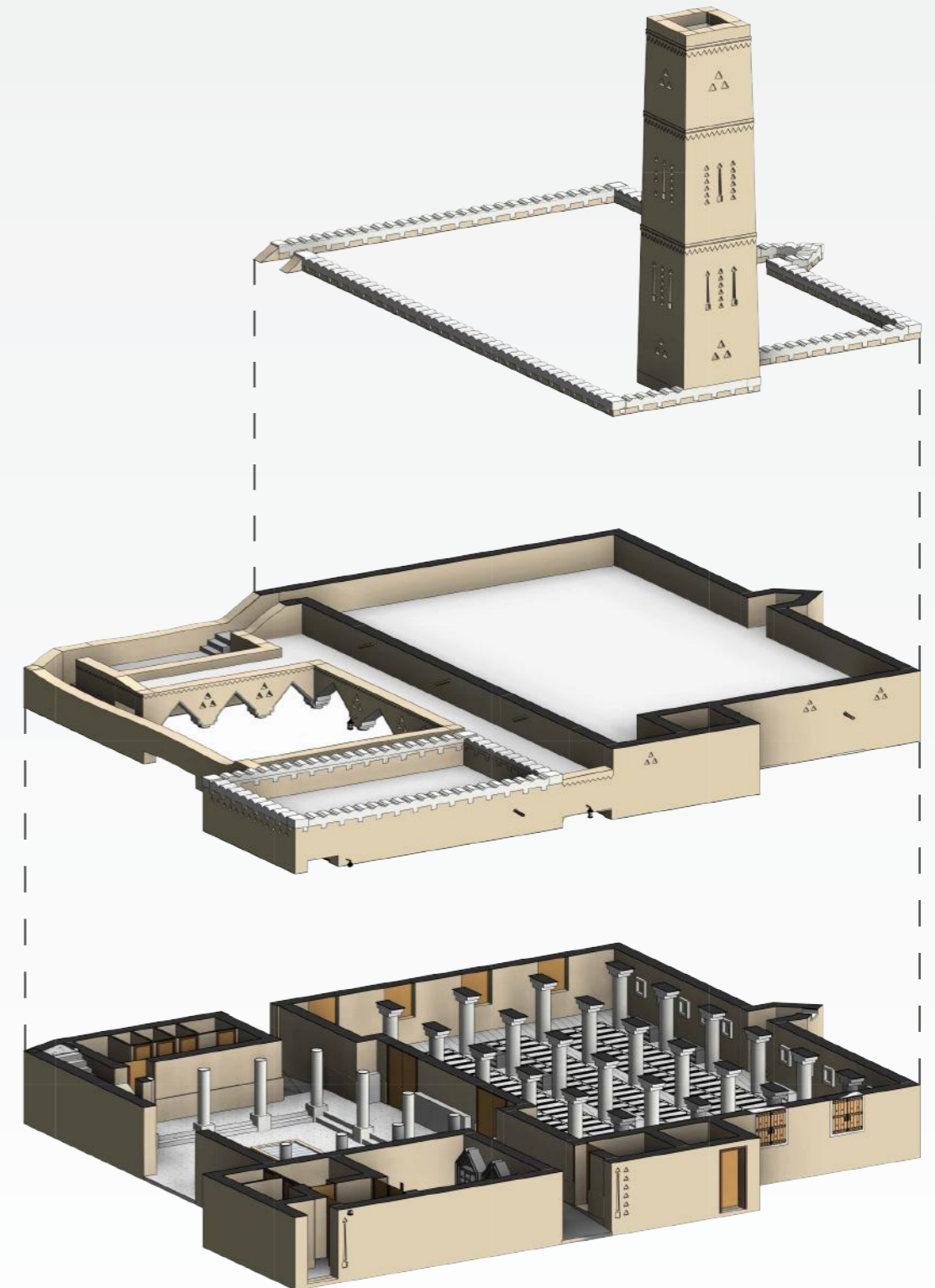
Mosque's Courtyard | Applying elements of the Najdi style and considering environmental aspects such as shading and water features.

NORTH ELEVATION

EAST ELEVATION



EXPLODED DIAGRAM



PERSPECTIVE SECTION

Mihrab

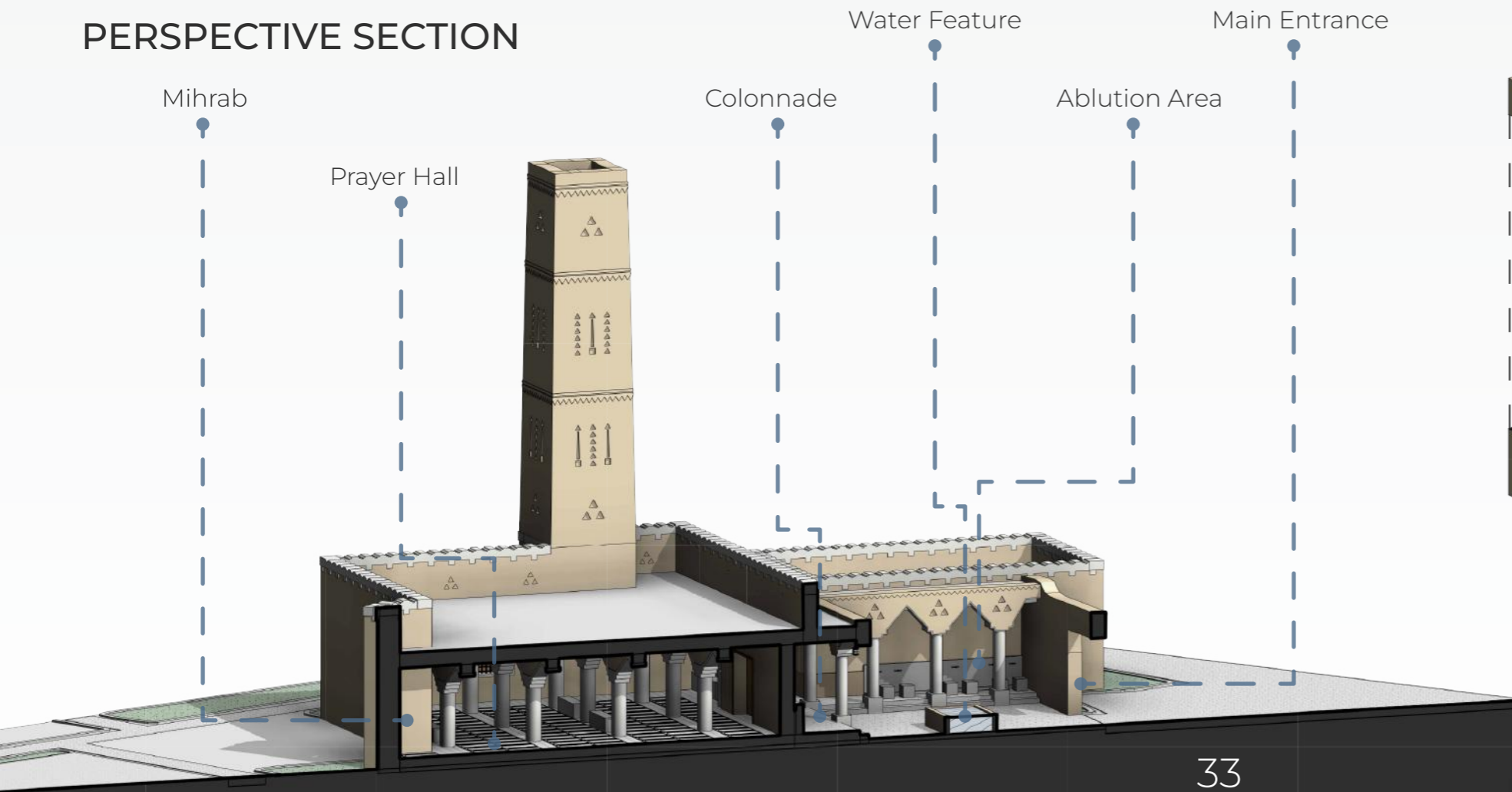
Prayer Hall

Colonnade

Water Feature

Ablution Area

Main Entrance





| Prayer Area



AIR POLLUTION RESEARCH CENTER

- Location: Riyadh, Saudi Arabia
- Area: 11,700 m²
- Typology: Educational Architecture
- Type: Systems Integration | Studio Project
- Year: 2023

OVERVIEW

The “Air Pollution Research Center” is a dedicated facility for Research and Training aimed at promoting environmental protection and raising public awareness about city air pollution and Indoor Air Quality (IAQ). Sponsored by King Abdul-Aziz City for Science and Technology (KACST), the center is strategically located within the KACST campus. Enhances its accessibility and impact.

This project was assigned in the seventh studio design course at college. This studio focuses on The Systems in the design process, including structural, mechanical, lighting, and safety systems. The advisor selects a specific zone where all these systems are applied and Integrated to function cohesively.



To View Full
Presentation



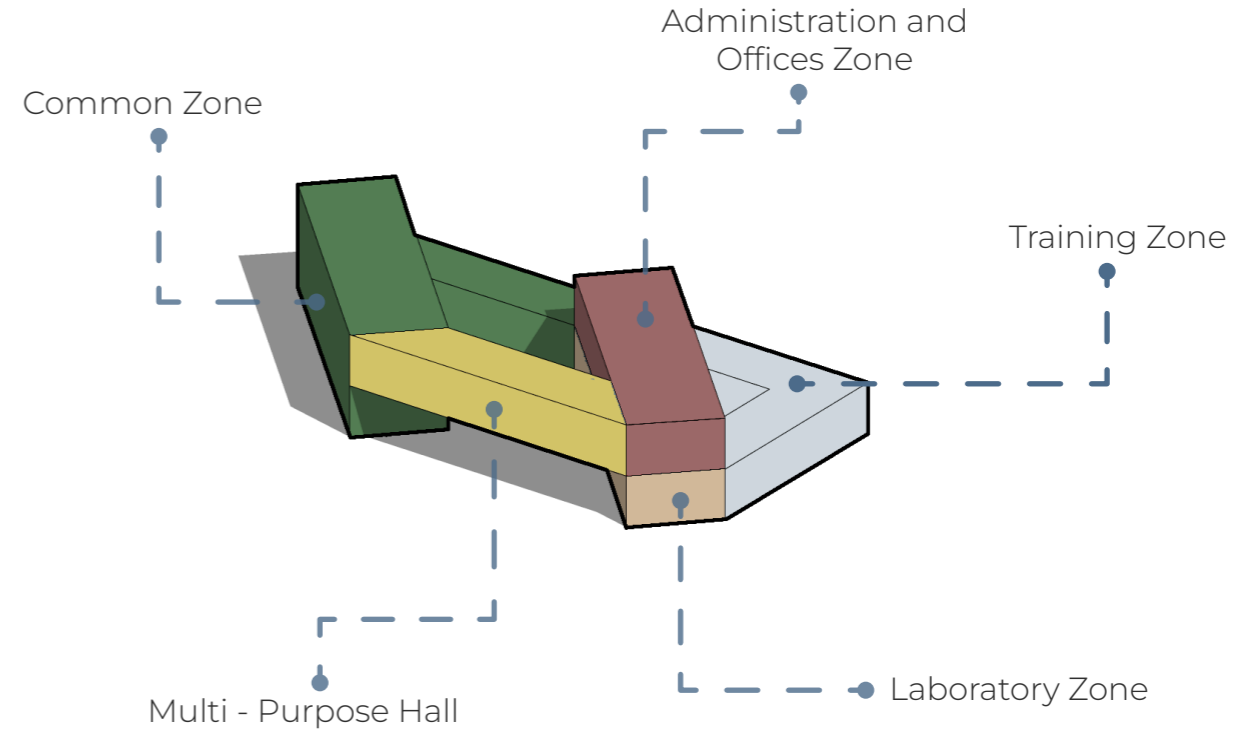
| Center's Entrance

LOCATION

The Project is located in Riyadh, in Al Raed neighborhood. Beside King Abdulaziz and his Companions Foundation for Giftedness and Creativity "Mawhiba". with land area of 11,700 m².

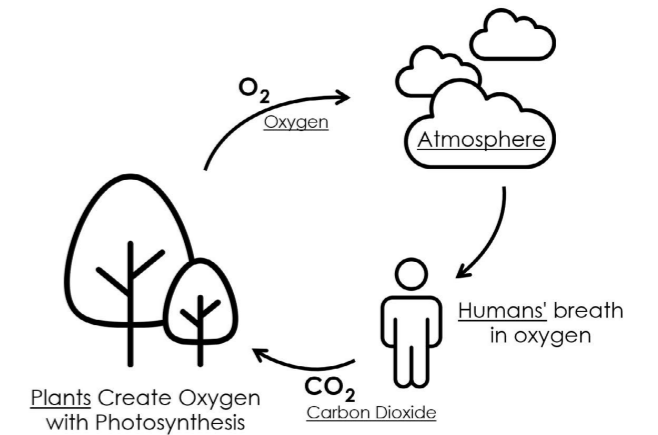


ZONES DIAGRAM

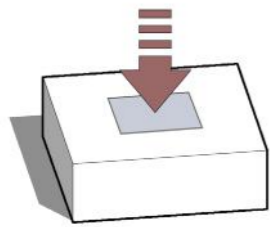


DESIGN PHILOSOPHY

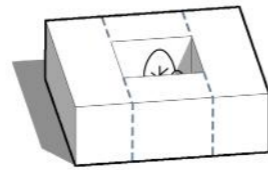
The idea was to integrate the building's function with user needs by using plants as a sustainable air-purifying solution. Through Photosynthesis, plants absorb carbon dioxide and release oxygen, providing pure air and mitigating the harmful effects of carbon dioxide, thus helping to prevent global warming.



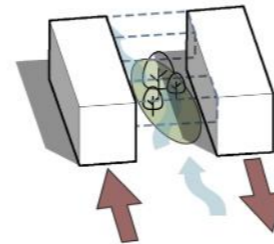
CONCEPT DEVELOPMENT



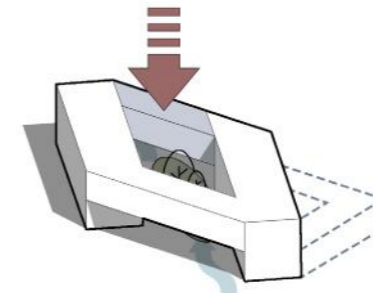
01. Add a courtyard planted with greenery



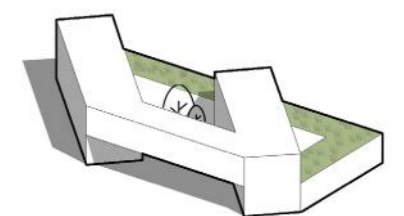
02. Opening the courtyard to air to reduce the heat and help with the ventilation



03. Connecting the two Buildings to increase the wind velocity through the tight opening

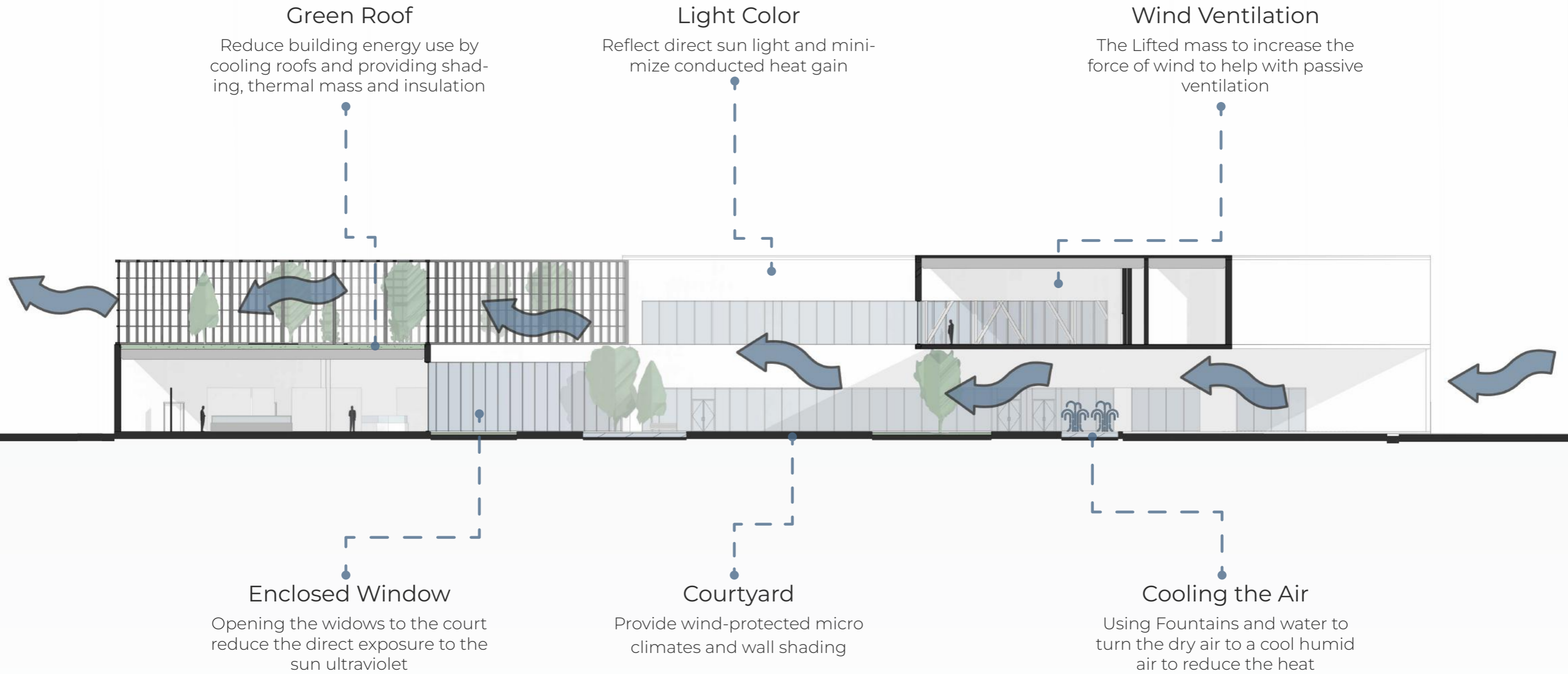


04. Lowering the back part to help with the air to rise, adding a part to cover the space program



05. Adding a green roof to help with the air purifying

ENVIRONMENTAL SECTION



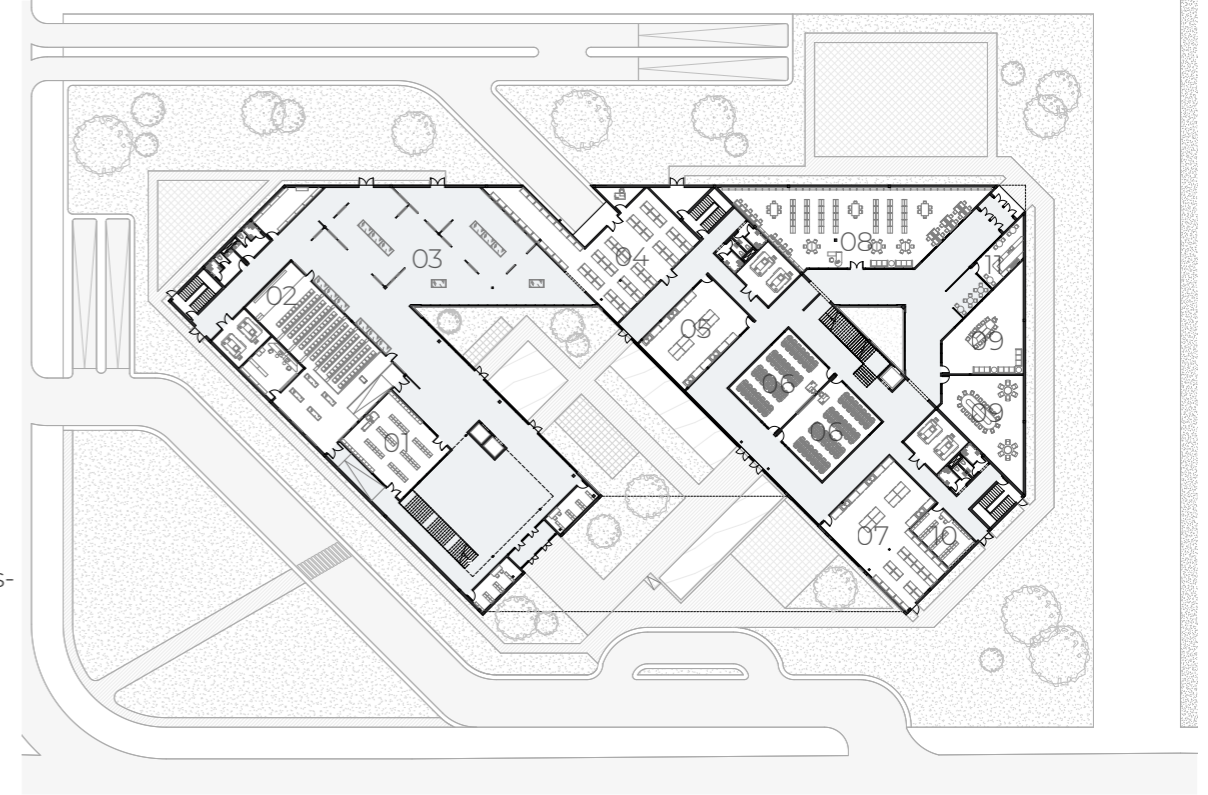
SITE PLAN



GROUND FLOOR PLAN

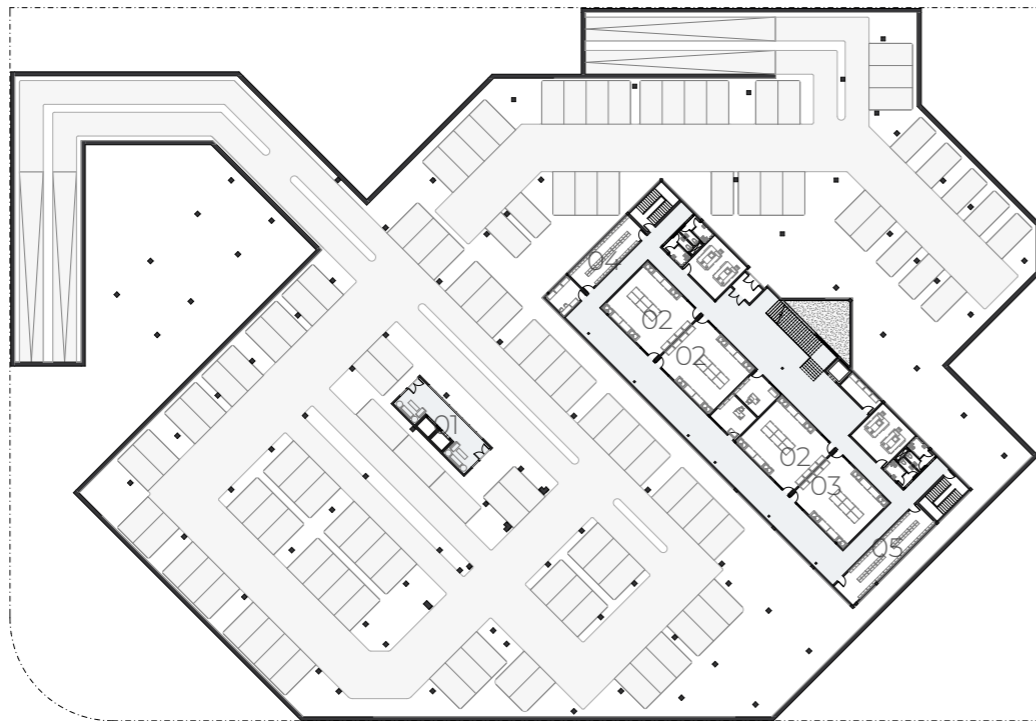


- 01. Gift-Shop
- 02. Auditorium
- 03. Gallery
- 04. Storage and Drop-off
- 05. Research Lab
- 06. Computer Class-rooms
- 07. Training lab
- 08. Library
- 09. Meeting & Discussion Room
- 10. Resource Room
- 11. Cafe Shop



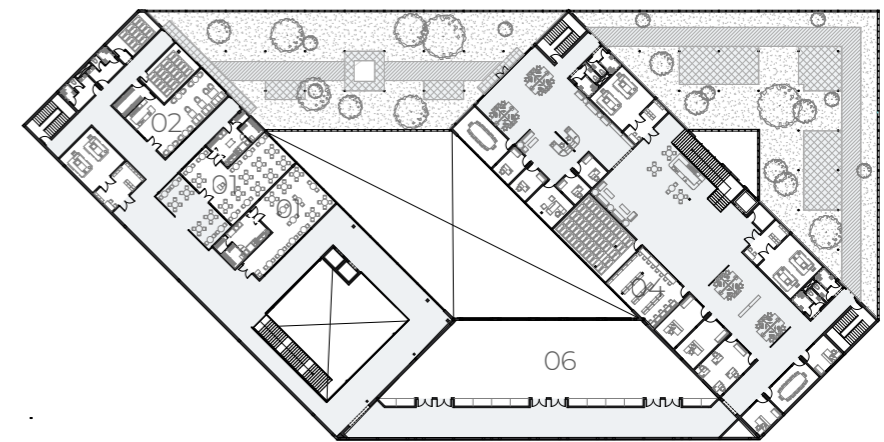
UNDERGROUND FLOOR PLAN

- 01. Lobby Entrance
- 02. Research Lab
- 03. Technology Lab
- 04. Resource Room
- 05. Equipment Room



FIRST FLOOR PLAN

- 01. Restaurant
- 02. Cafe Shop
- 03. Multi-Purpose Hall
- 04. Library

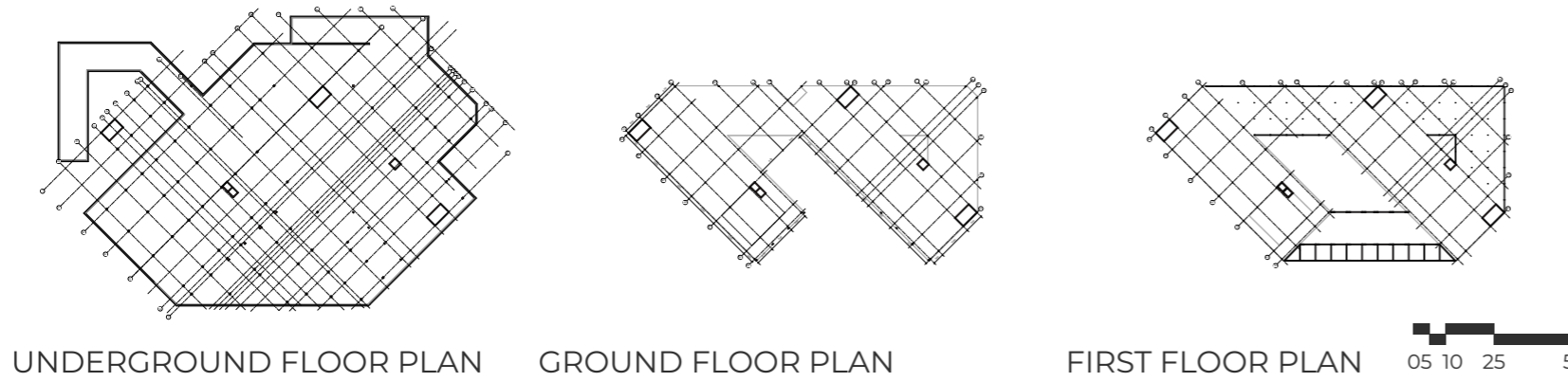
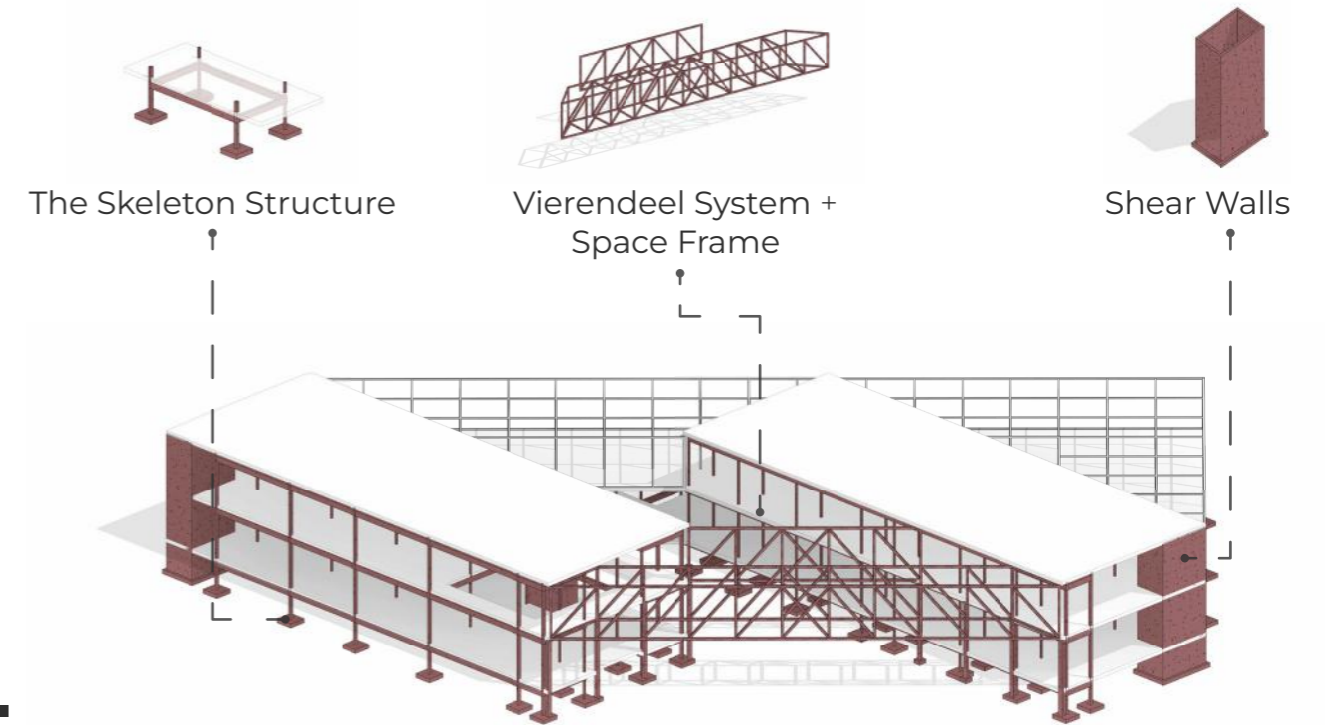




Courtyard | The fountain and water features help cool the incoming wind, providing a cooling effect for the courtyard and visitors in the communal area.

STRUCTURE SYSTEM

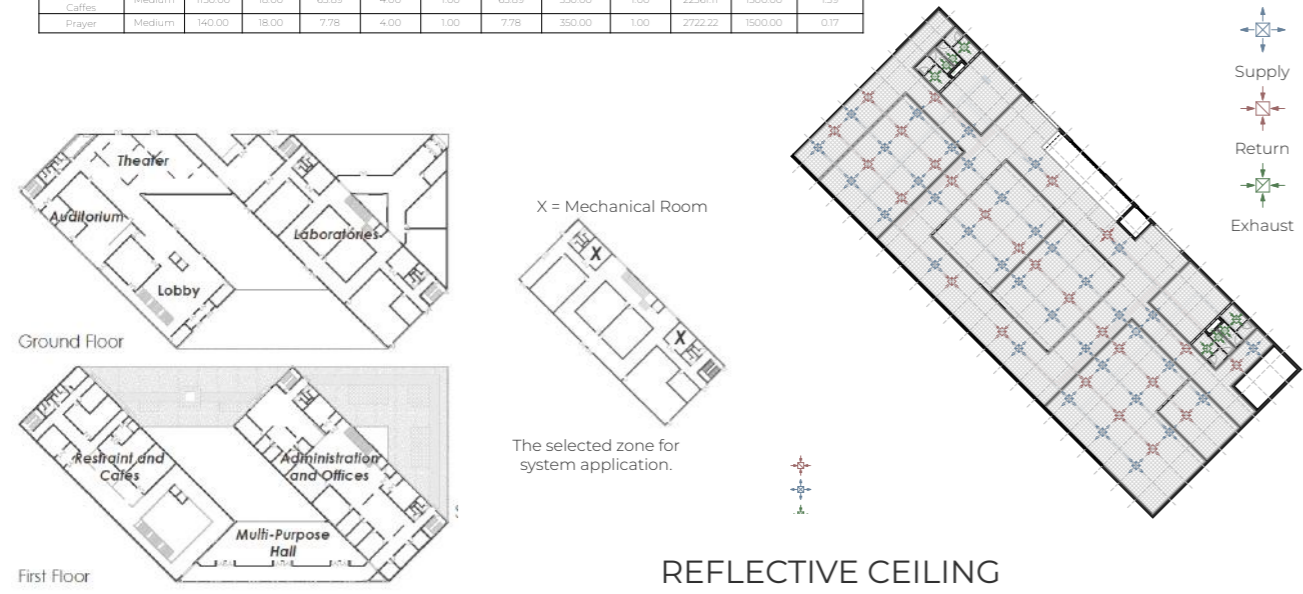
The Skeleton Structure was chosen for its design flexibility, providing an adaptable interior layouts. Shear Walls were used for their stiff resistance on vertical forces. For the lifted mass, a combination of Vierendeel System and Space Frame was selected due to the trapezoid shape, providing optimal load distribution and support-free middle spans.



AIR CONDITIONING SYSTEM

Chilled water systems provide cooling to facilities by using chilled water to absorb heat from the building's spaces.

Space	Activity Type	Area (m²)	Ton Capacity	Tons Required	Net Floor Height	Height Factor	Cooling Rack	Air Volume Per Minute	NO. of Machine	AHU Capacity	Air Speed	Duct Area (m²)
Lobby	Medium	400.00	20.00	20.00	12.00	1.60	32.00	350.00	1.00	10200.00	1500.00	0.69
Theater	Medium	450.00	24.00	18.75	6.00	1.20	22.50	350.00	1.00	7875.00	1500.00	0.49
Auditorium	Medium	30.00	18.00	167	6.00	1.20	2.00	350.00	1.00	700.00	1500.00	0.04
Administration and Offices	Medium	180.00	18.00	63.89	4.00	1.00	63.89	350.00	1.00	22361.11	1500.00	1.39
Multi-Purpose Hall	Medium	370.00	18.00	20.56	4.00	1.10	22.61	350.00	1.00	7913.89	1500.00	0.49
Research Lab	Medium	400.00	20.00	20.00	4.00	1.10	22.00	350.00	1.00	7700.00	1500.00	0.48
Technology Lab	Medium	72.00	20.00	3.60	4.00	1.10	3.96	350.00	1.00	1386.00	1500.00	0.09
Training Lab	Medium	120.00	20.00	6.00	4.00	1.10	6.60	350.00	1.00	2310.00	1500.00	0.14
Training Section	Medium	700.00	20.00	35.00	6.00	1.20	42.00	350.00	1.00	14700.00	1500.00	0.91
Restraint and Cafes	Medium	180.00	18.00	63.89	4.00	1.00	63.89	350.00	1.00	22361.11	1500.00	1.39
Prayer	Medium	140.00	18.00	7.78	4.00	1.00	7.78	350.00	1.00	2722.22	1500.00	0.17

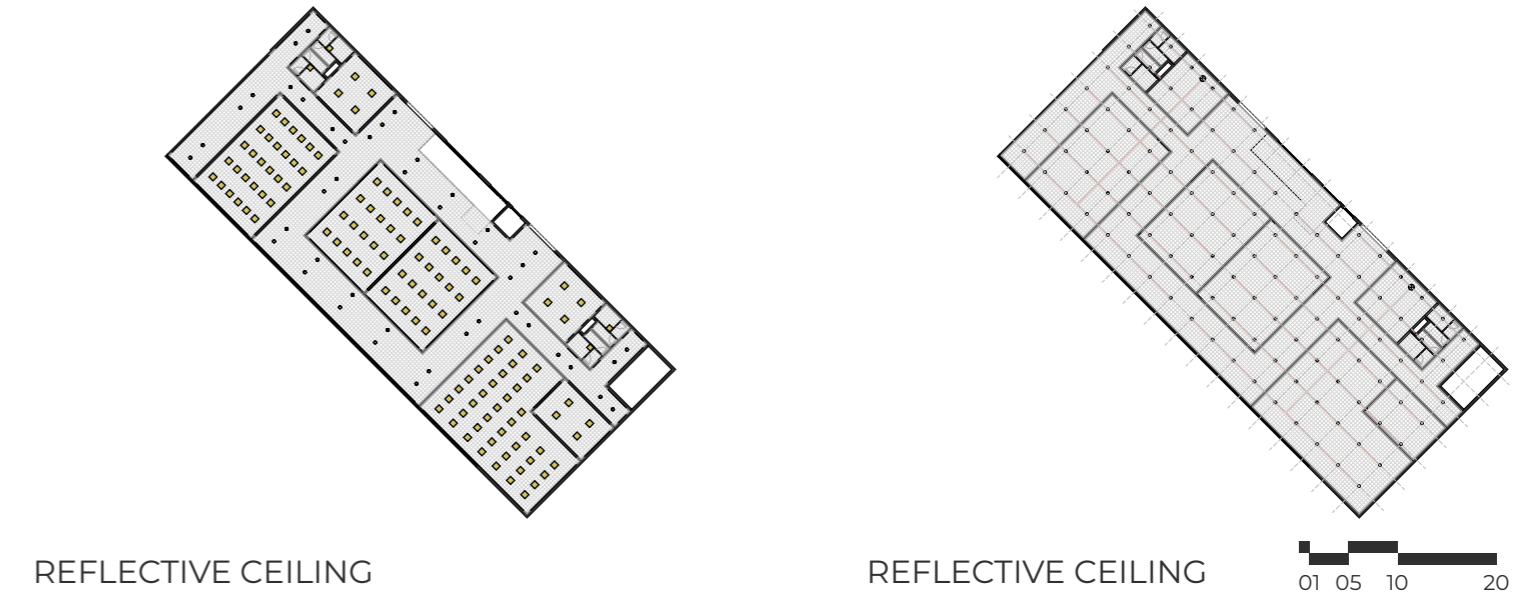


LIGHTING SYSTEM

The types of lighting vary depending on the type of project and the type of space.

Space	Room Area m²	No. of Rooms	Total Area m²	Recommended lux	Fixture lux	LLF	Total No. of Fixtures	Fixtures Tag
Computer Classroom	87	2	174	300	23289.2	0.65	40	A
Research Lab	100	1	100	500	15384.6	0.65	30	A
Training Lab	155	1	155	500	36961.5	0.65	41	A
Resource Room	32	11	32	500	1575.4	0.65	4	A
Toilet	18	2	36	150	996.9	0.65	4	A
Mechanical Room	34	2	68	150	3556.9	0.65	8	A
Corridor	435	1	435	100	29115.4	0.65	44	B

Tag	Symbol	Mounting	Manufacturer	Count	Flux (lm)	CCT (K)	Watt (W)	Picture	Chart
A	■	Ceiling	3F Filippi	127	3207	3000	27		
B	●	Ceiling	ARIA	44	818	3000	18		



SPRINKLES SYSTEM

A sprinkler system consists of pipes along a ceiling that contain water under pressure.

SAFETY SYSTEM

Safe escape routes must be provided from any point in a building to an unenclosed safe area. Escape paths should be designed with appropriate distances to ensure the safety of visitors and staff.



Fire Exit Sign



Fire Extinguisher Sign



Fire Hoes Cabinet Sign



UNDERGROUND FLOOR PLAN



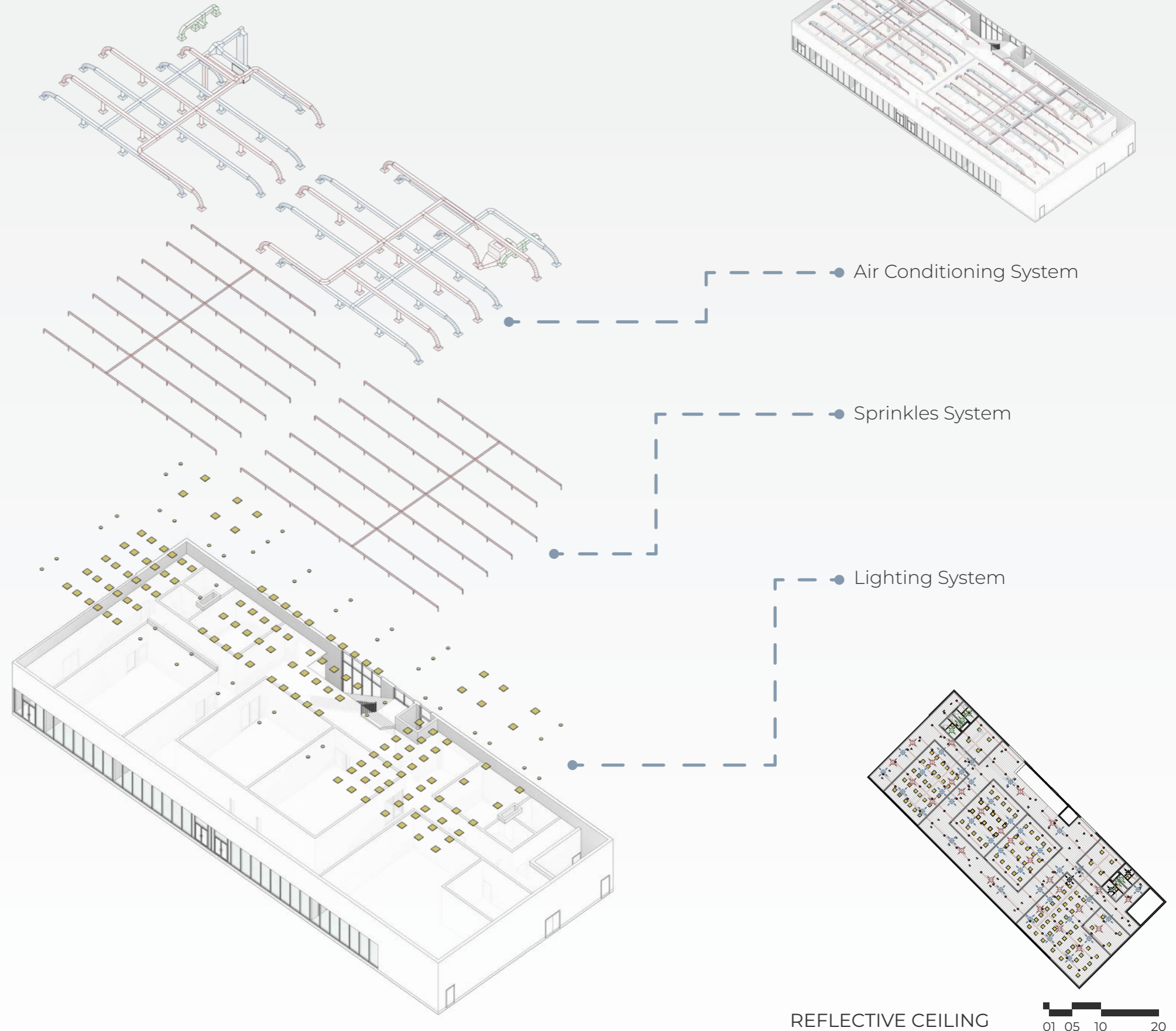
GROUND FLOOR PLAN



FIRST FLOOR PLAN

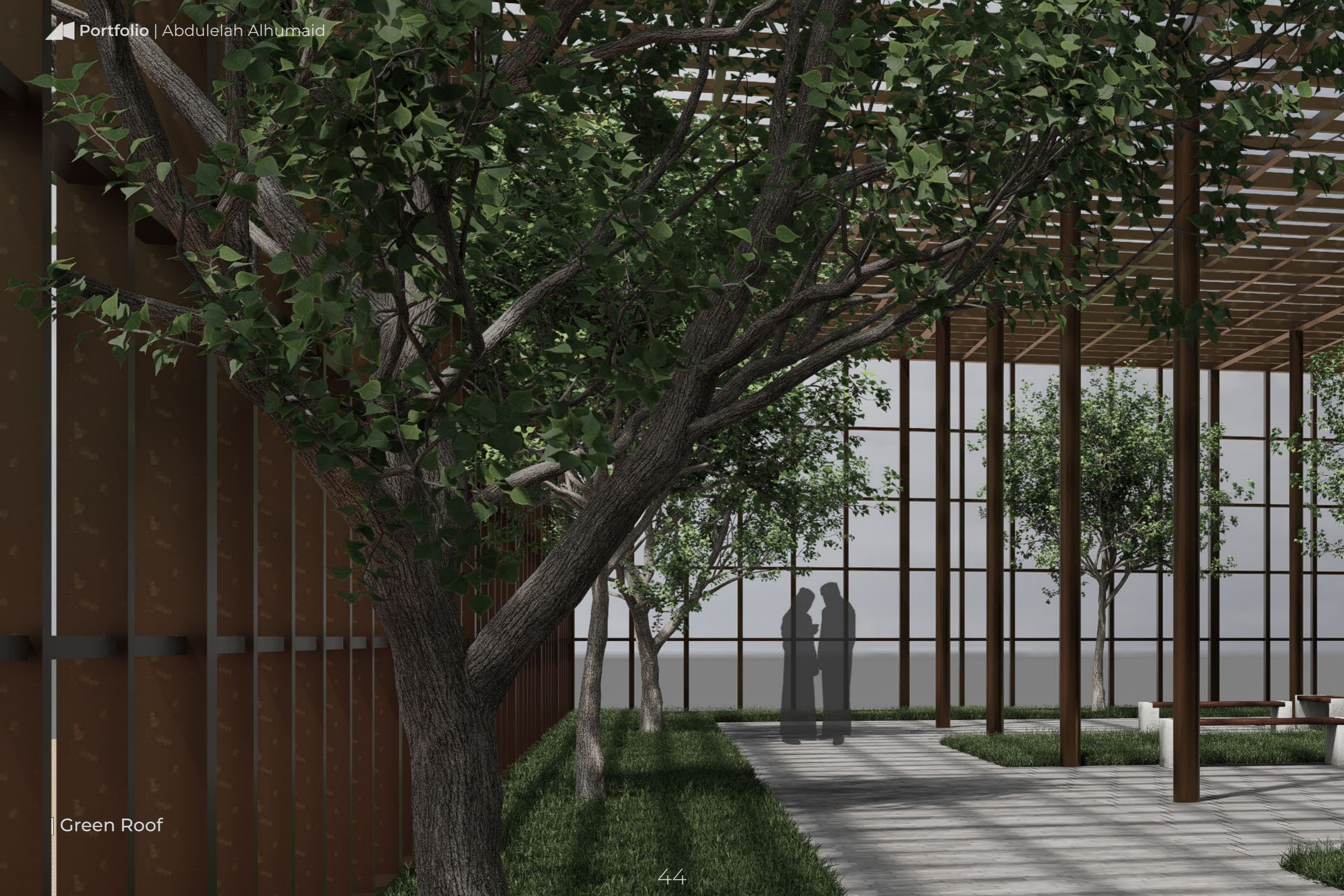


SYSTEM INTEGRATION



REFLECTIVE CEILING





| Green Roof



NAJD CULTURAL VILLAGE

- Location: Riyadh, Saudi Arabia
- Area: 185,000 m²
- Typology: Cultural & Recreational Architecture
- Type: Urban Design | Studio Project
- Year: 2022

OVERVIEW

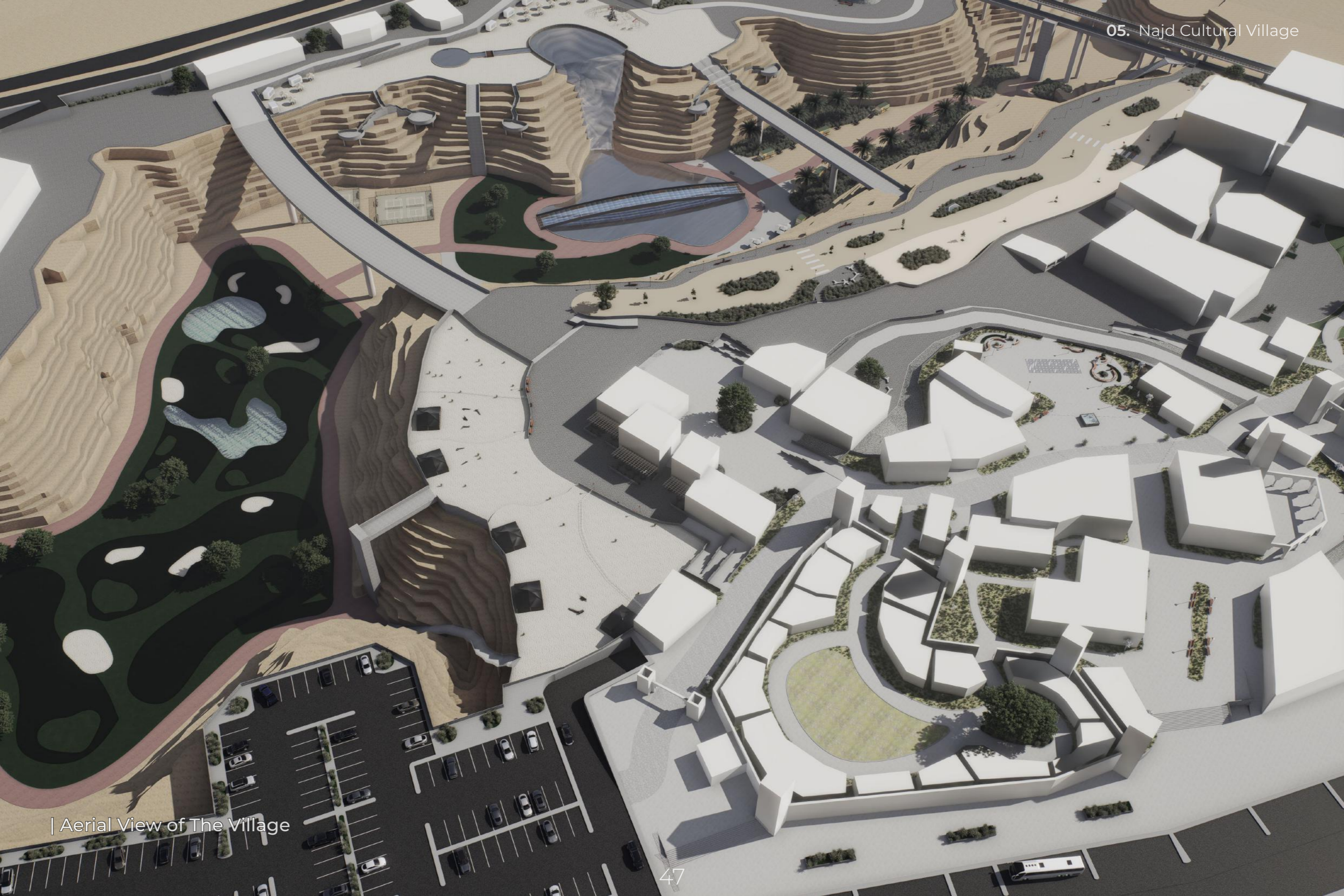
The project aims to be a Destination where visitors can experience the cultural Najdi heritage of Saudi Arabia. Visitors to the village will enjoy testing, exploring, learning about, and experiencing various aspects of Saudi life and artifacts as they were known in the past. The main message of this project is to present a Cultural Dialogue with the past in order to interpret the future.

The project was assigned in the fourth studio design course at collage, Focusing on Urban Design. Each Section had the choose to choose between the upper or Lower half of the site. The first month involved researching and analyzing the site in groups, after which individuals continued the design process as usual.

05



To View Full
Presentation



| Aerial View of The Village

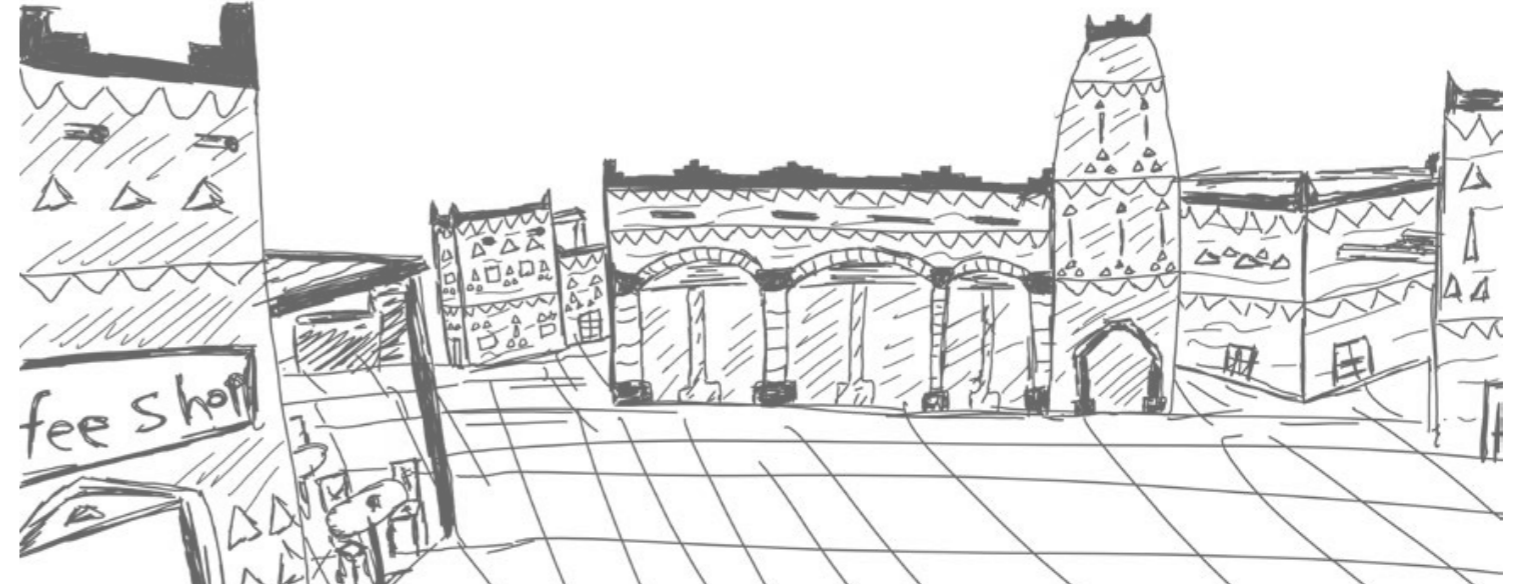
LOCATION

The project is located in Riyadh's Al-Rafiah neighborhood, covering 185,000 m². A 20-meter deep valley runs through the site. Being within Wadi Hanifa's boundaries, the Wadi Hanifa urban code must be applied, particularly for the valley.



CONCEPT

The concept is to create a modern heritage Najdi village that reflects the comfort and warmth of its Organic and Narrow Alleys. The design blends traditional Najdi patterns with modern building aesthetics.



SITE ANALYSES

SITE

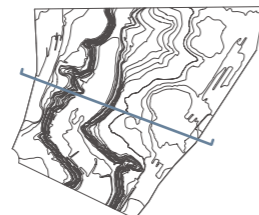


MATRIX

Museum	○
Handcraft Workshop	●
Mosque	○
Furnished Apartments	○
Hotel	○
Chalets	●
Recreation Zone	●
Street Mall	○
Administrative Office	○
Information Center	○
Family Social Club	○

● Must
○ Should

TOPOGRAPHY



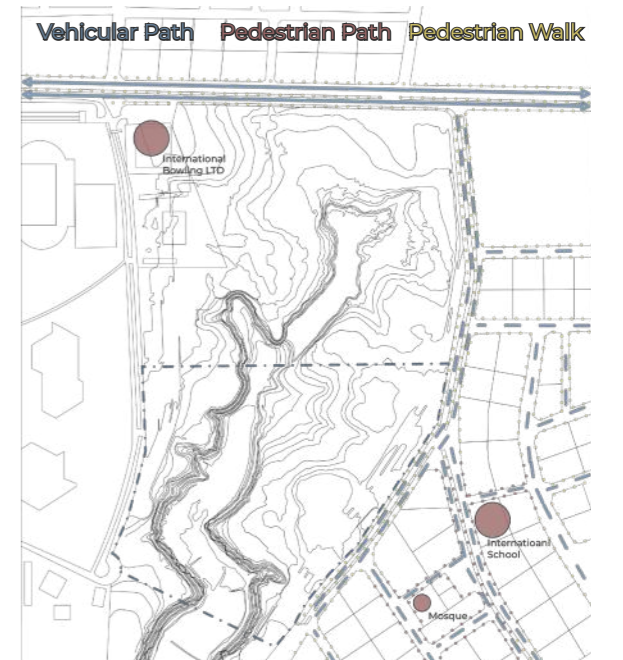
ACCESSIBILITY AND LANDMARKS

King Fahad Rd
Takhassusi Rd
King Khaled Rd

Ministry of interior (13 min)
Ritz-Carlton (8 min)
Al-Faisal University (7 min)



CIRCULATION





PROJECT ZONES

Busy Zone
The Village, Out Door Activity.

Residential Zone
Residential Area, Chalets.

Quite Zone
Commercial Area, Out door Seating.

Official Zone
Administration and office Building.

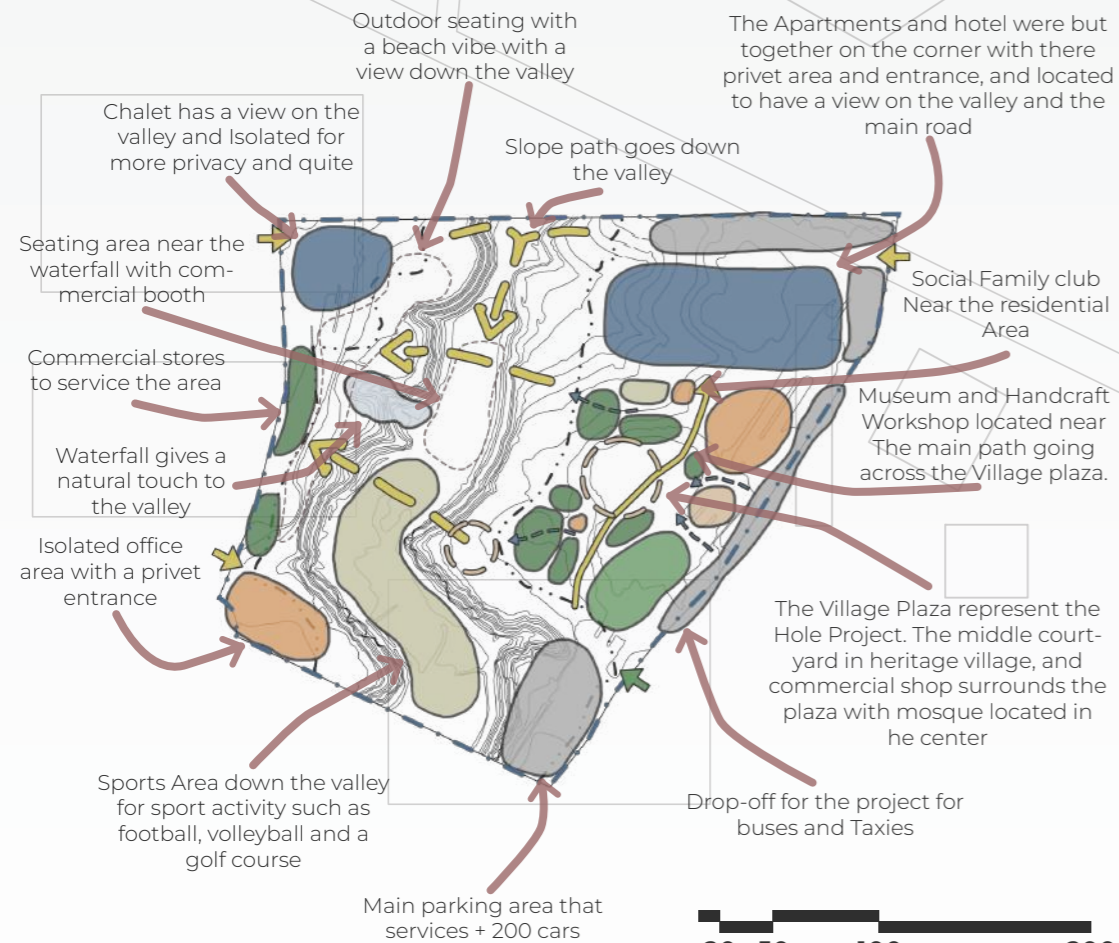
Valley Activity Zone
Sports Area, commercial both.



MASTER PLAN



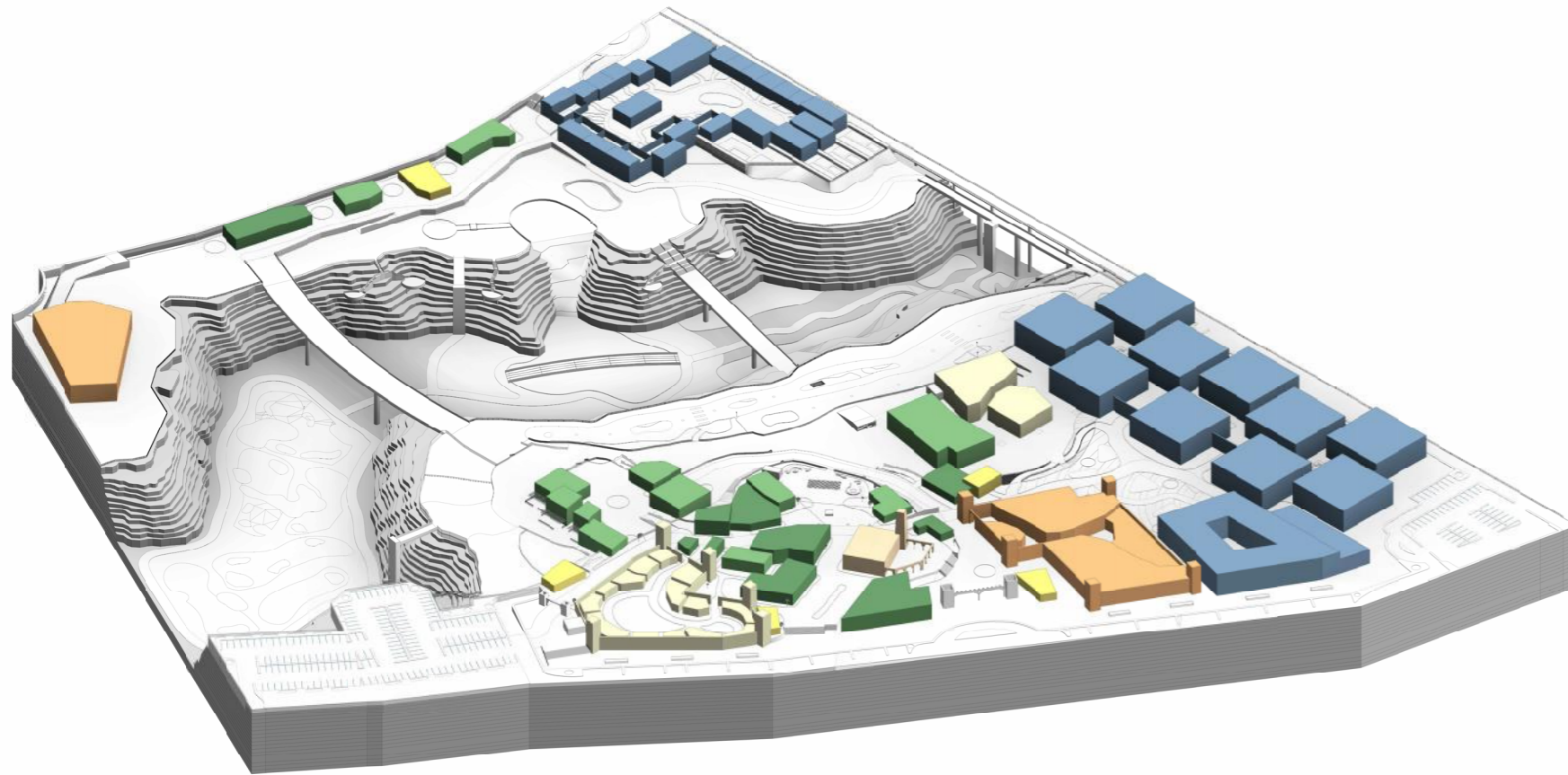
LAYOUT REASONING



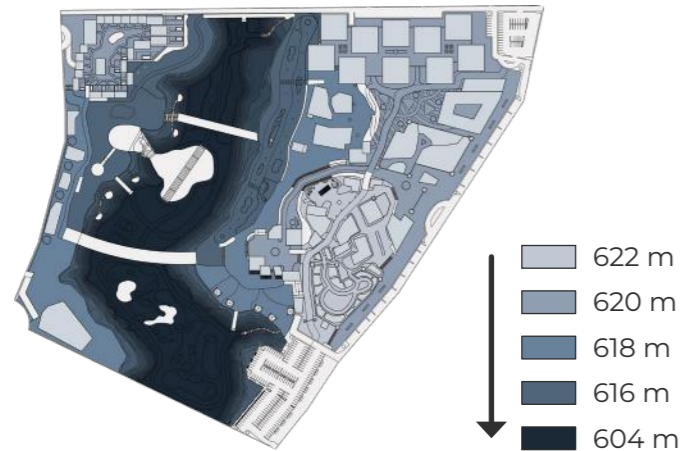


Main Plaza | Creating diverse communal spaces, incorporating greenery and water features to help cool the plaza.

MASTER PLAN LEGEND



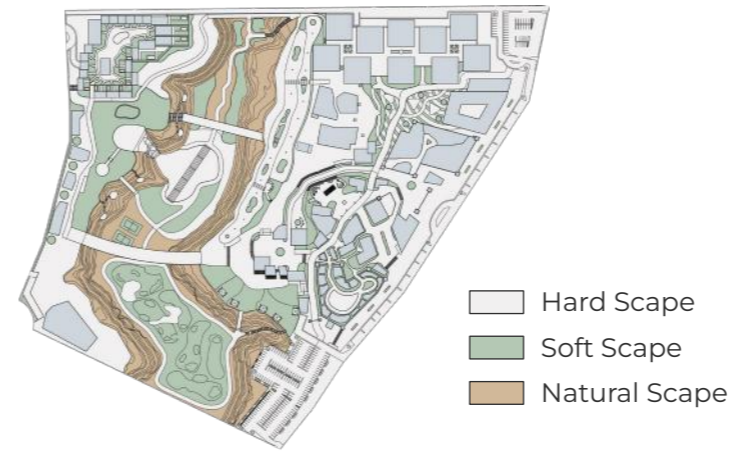
PLAN LAYOUT LEVELS



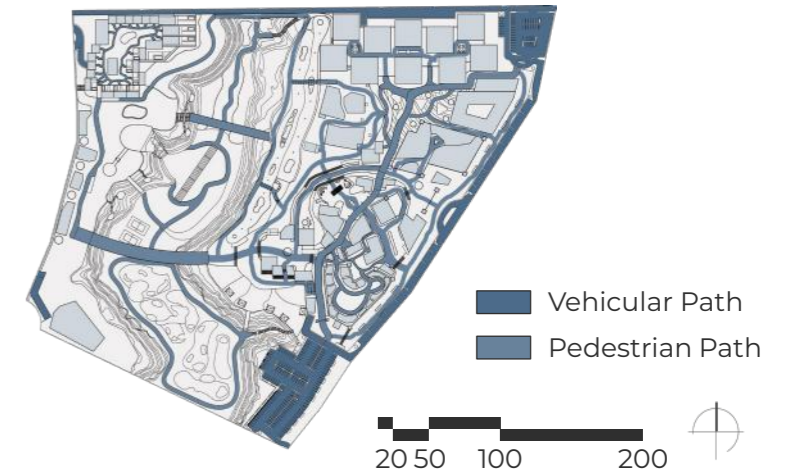
SOLID & VOID DIAGRAM

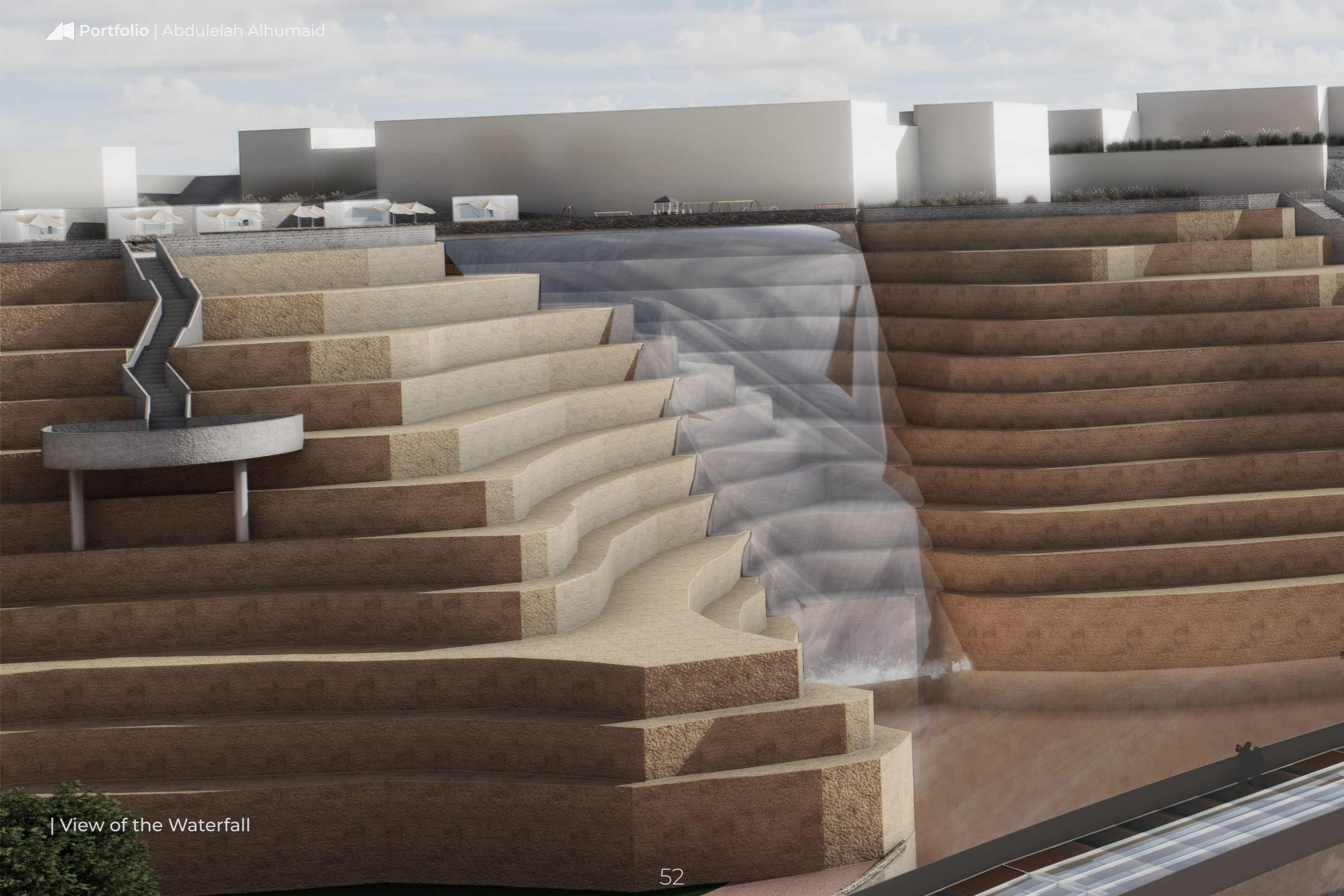


HARD & SOFT SCAPE

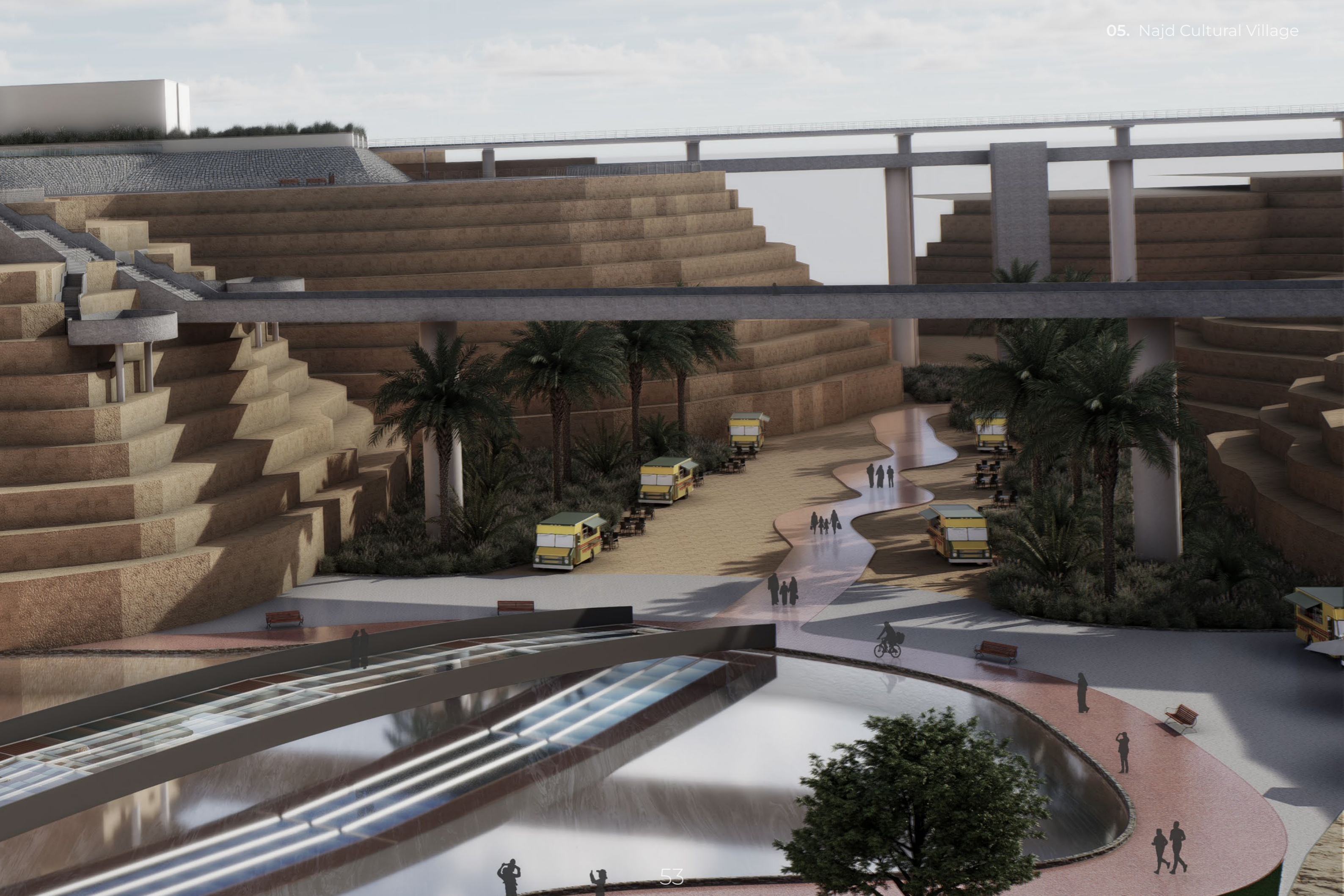


CIRCULATION DIAGRAM





| View of the Waterfall



LESS IS MORE

- Ludwig Mies van der Rohe



Abdulelah Al-Humaid