

Başak Günalp  
Architecture Portfolio

basakgunalp@hotmail.com






+90 539 262 72 62

2019

## Curriculum Vitae

Başak Günalp / BArch



 01.01.1996  
 Ankara, Turkey  
 (+90) 539 262 72 62  
 basakgunalp@hotmail.com  
 <https://issuu.com/basakgunalp>

## Academic

2014-2018 Bilkent University, Ankara  
Bachelor of Architecture  
CGPA 3.35  
Standing: Honour

2010-2014 TED Ankara College Private High School,  
Ankara  
International Baccalaureate Diploma Program  
(IBDP)

## Work Experience

July-August 2016 Yasamkule, METAG-SMK, Ankara, Turkey  
Construction Worksite Internship

June-July 2017 AS Architects, Ankara, Turkey  
Office Internship

## Training Programmes and Workshops

February 2016 "Children & Architecture"  
Chamber of Architects, Ankara, Turkey

June 2016 "Dwelling Space"  
Politecnico di Bari, Italy

November 2018 "Architect@Work İstanbul"  
İstanbul, Turkey

## Extracurricular Activities

2011-2015 EYP (European Youth Parliament)  
Member

2011, July Pasch Project Scholarship  
Goethe Institute Summer School,  
Freiburg, Germany

2014-2015 Design & Architecture Society (DAS)  
Member

2015-2017 Design & Architecture Society (DAS)  
1M1M Coordinator

2015 Examination of Restoration of Bomonti Factory, Istanbul  
Participant

2018 Archi-World Academy Awards Competition  
Participant

2018 eVolo Skyscraper Competition  
Participant

## Achievements and Certificates

2017-2018 Bilkent University Full Merit Scholarship

2017 Cappadocia Retreat Center exhibited on Nevsehir Municipality  
Selected Student Works Exhibition

2017 Institutional Archaeological Research Center Project exhibited on  
TSMD Ankara  
Student Works Exhibition

2017 Institutional Archaeological Research Center Project exhibited on  
Bilkent University  
Annual Student Works Exhibition

2016 Detached House Project exhibited on Bilkent University  
Annual Student Works Exhibition


2014 CAS (Creativity-Action-Service) Activity Certificate


2014 IB Diploma Programme Certificate (Total 35 points out of 45)


2013 Organiser, Literature Critics Symposium, TED Ankara College,  
Turkey


2011-2015 Goethe Zertifikat B1, Goethe Sprachkurs, Freiburg, Germany


## Skills


 AutoCAD ●●●●●●●●


 Rhinoceros ●●●●●●○○


 Adobe Photoshop ●●●●●●○○


 Lumion ●●●●●●○○


 Keyshot ●●●●●●○○


 3DS Max ●●●●●●○○


 V-ray for 3DS Max ●●●○○○○○


 Adobe Illustrator ●●○○○○○○

 Adobe InDesign ●●●○○○○○


 SketchUp ●●●●●●○○


 Microsoft Office ●●●●●●●●


 Physical Model ●●●●●●●●

 Laser Cut ●●●○○○○○

## Language Skills

 Turkish  
(Mother tongue)

 English (Proficient)  
IELTS Academic 7.5

 German (Intermediate)  
Goethe B1 Certificate

## References

Prof. Dr. Giorgio Gasco  
giorgio.gasco@bilkent.edu.tr  
Ayşin Sevgi Karakurt  
as@aysinsevgi.com

01

Life-long  
Education  
Center

Ankara,  
Turkey

02

Archaeologic  
al Research &  
Informatics  
Center

Konya,  
Turkey

03

Mix - Use  
Co-housing  
Proposal in  
Akköprü

Ankara,  
Turkey

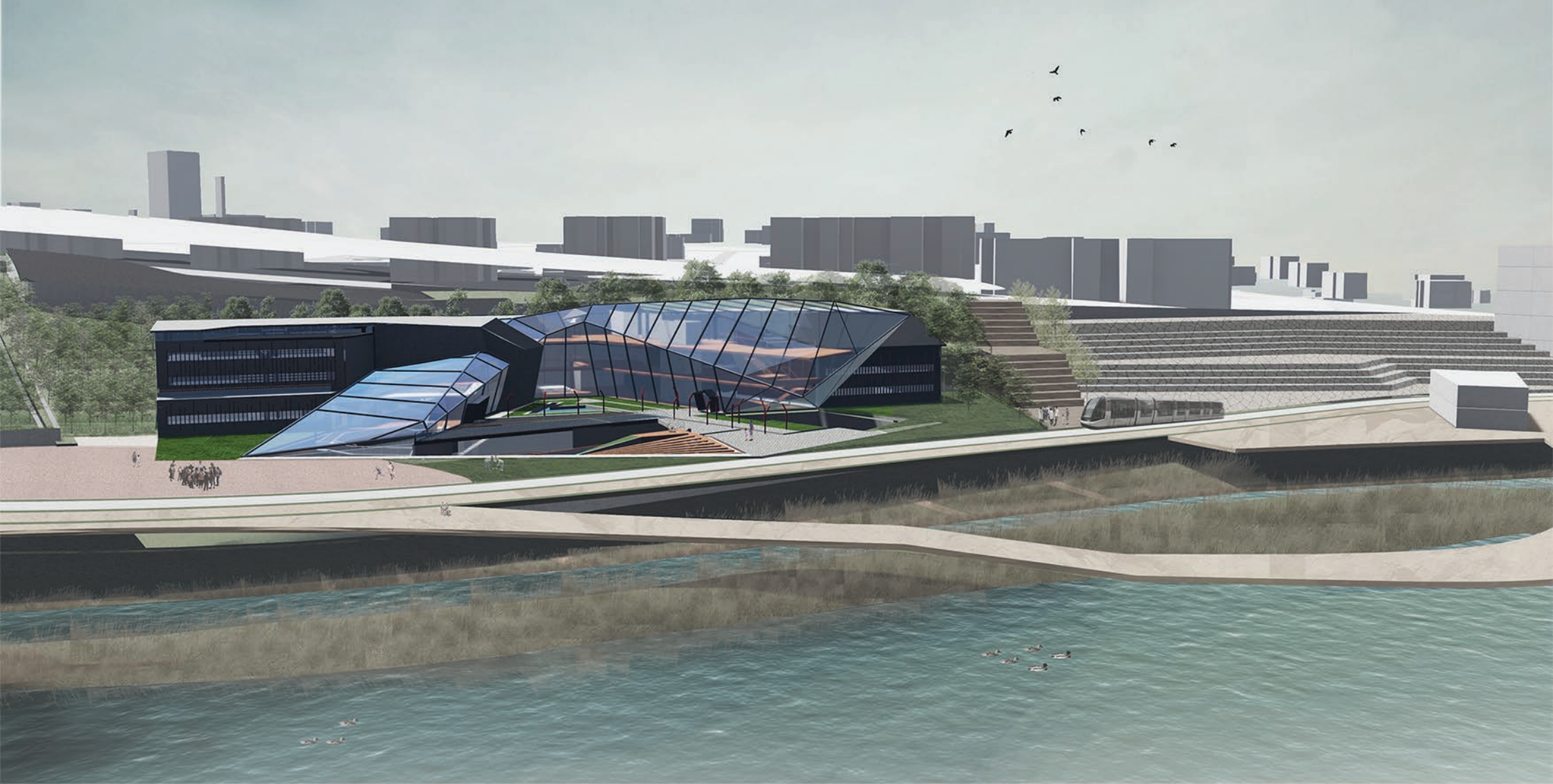
04

Dwelling  
Space and  
Character of  
Places

Bari, Italy

05

Seismarine  
Istanbul,  
Turkey



# 01 connected-u

## Life-long Education Center

Type	Academic / Graduation Project / Individual Work*
Time	2017-2018 Spring Term
Location	Ankara / Turkey
Instructor	Dr. Segah Sak / <a href="mailto:segah@bilkent.edu.tr">segah@bilkent.edu.tr</a>
Role	Conceptual Development, Representation, Architectural Solutions

\*Masterplan phase as a group work, further phases as individual

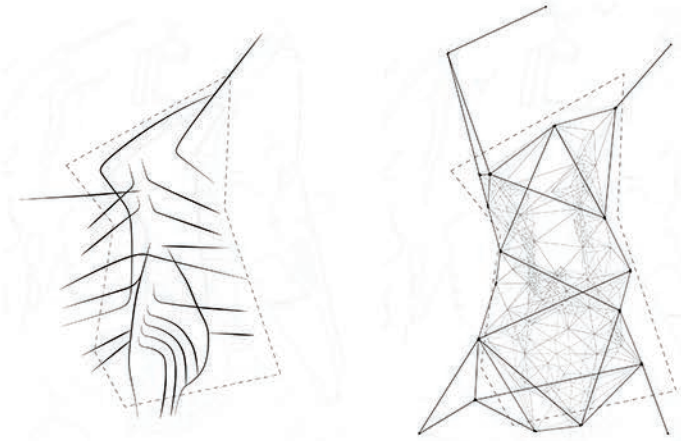
The site is found in a contrary zone which is in the middle of crowded urban settlement of Bilkent and tranquil lake area of Bilkent. Around the Bilkent Lake this contrary is balanced with the life-long education center's system. The learning mechanism starts on the day we born and it is continuous. The main motto of this life-long education center is to support the non-stop learning system and enable its sustainability in many aspects. This approach is a critique to the loss of creativity and flexibility in time through education that creates solid boundaries. The building aims to dissolve these boundaries and structures in its spaces and experiences. The main mass works as a common learning center, including classrooms, open classrooms, library, conference hall and workshop areas, whereas the continuous mass includes the developmental functions for differentiating user profiles in terms of generation, such as motor coordination playground, life consultancy and entertainment and herbal treatment center. With the variety, the continuous mass also welcomes every user profile to use every kind of space, without any boundaries.



**Access Diagram**  
 Bus Stops  
 Proposed Bus Line  
 Existing Bus Line  
 Telpher Line  
 Bicycle and Pedestrian

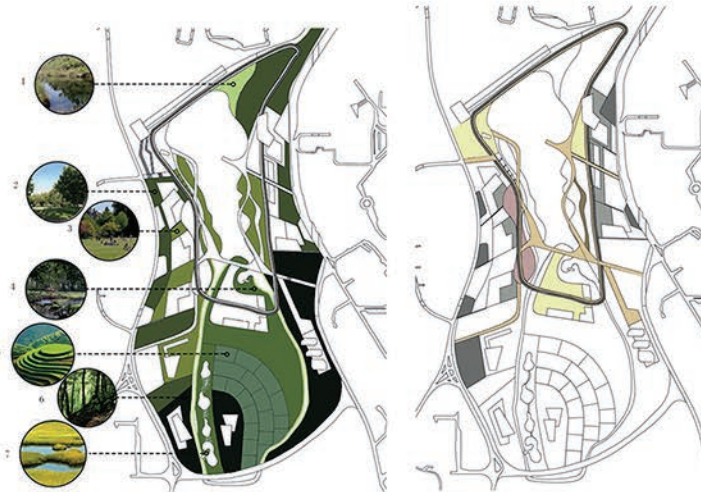
The master plan proposes a unique solution to combine the history of Ankara's universities to today's cultural richness of Ankara in Bilkent Lake, with a self-sufficient site that invites people of the city, primarily the profiles of Hacettepe University, Bilkent University and METU with various facilities that are enhanced by sustainable solutions in cultural, economic and environmental aspects.

The aim is to highlight the natural and tranquil characteristic of the site located in the middle of a urban settlement, connects three universities together offering an escapade on a research and experience. Self-sufficiency is a key term on the project to create a supply demand equilibrium for society.



Topography lines create reference lines, that creates the features of the site such as main plazas, drainage lines and forms by forming a local characteristic. Also, reference lines support the concept of "maximizing the lake view" by spreading at a great angle from south to north, offering views of water and greenery.

In order to introduce the density of people, the focal points which invite people into the site are indicated. By connecting these, sub points are created and this network represents the continuation of the site.

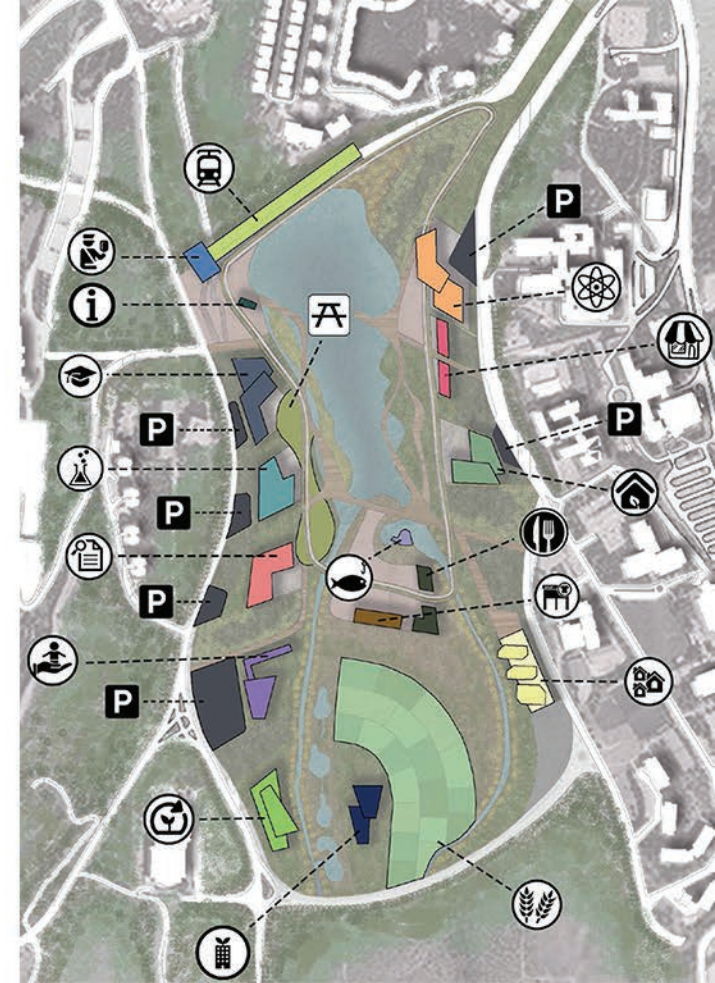


Different paths are for different purposes. The wooden path gives different views of the lake with level differences. Pavements create movement flexibility. Each building has parking areas attached to main vehicle road to minimize carbon footprint of the site.

- Tram Way
- Pedestrian Path
- Car Parking
- Building Pavement
- Plazas
- Recreational Area
- Platform

The Riparian areas are protected. The southern part of the site, terraced agriculture zone within the natural park is provided. In order to prevent erosion, urban woods which also create a buffer zone through the site are provided.

- 1- Riparian Area
- 2- Urban Woods
- 3- Walkable Greenery
- 4- Nature Park
- 5- Terraced Agriculture
- 6- Woods
- 7- Wetlands

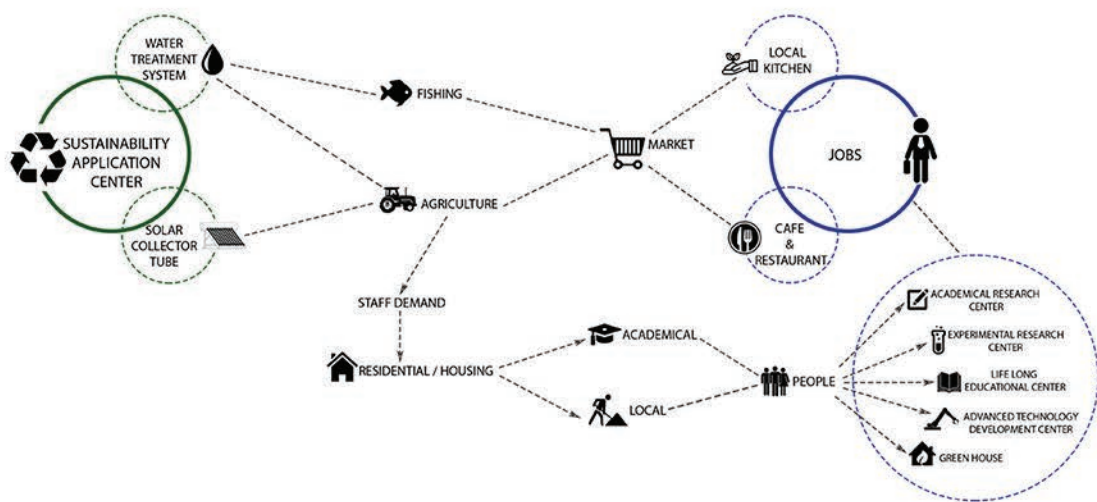
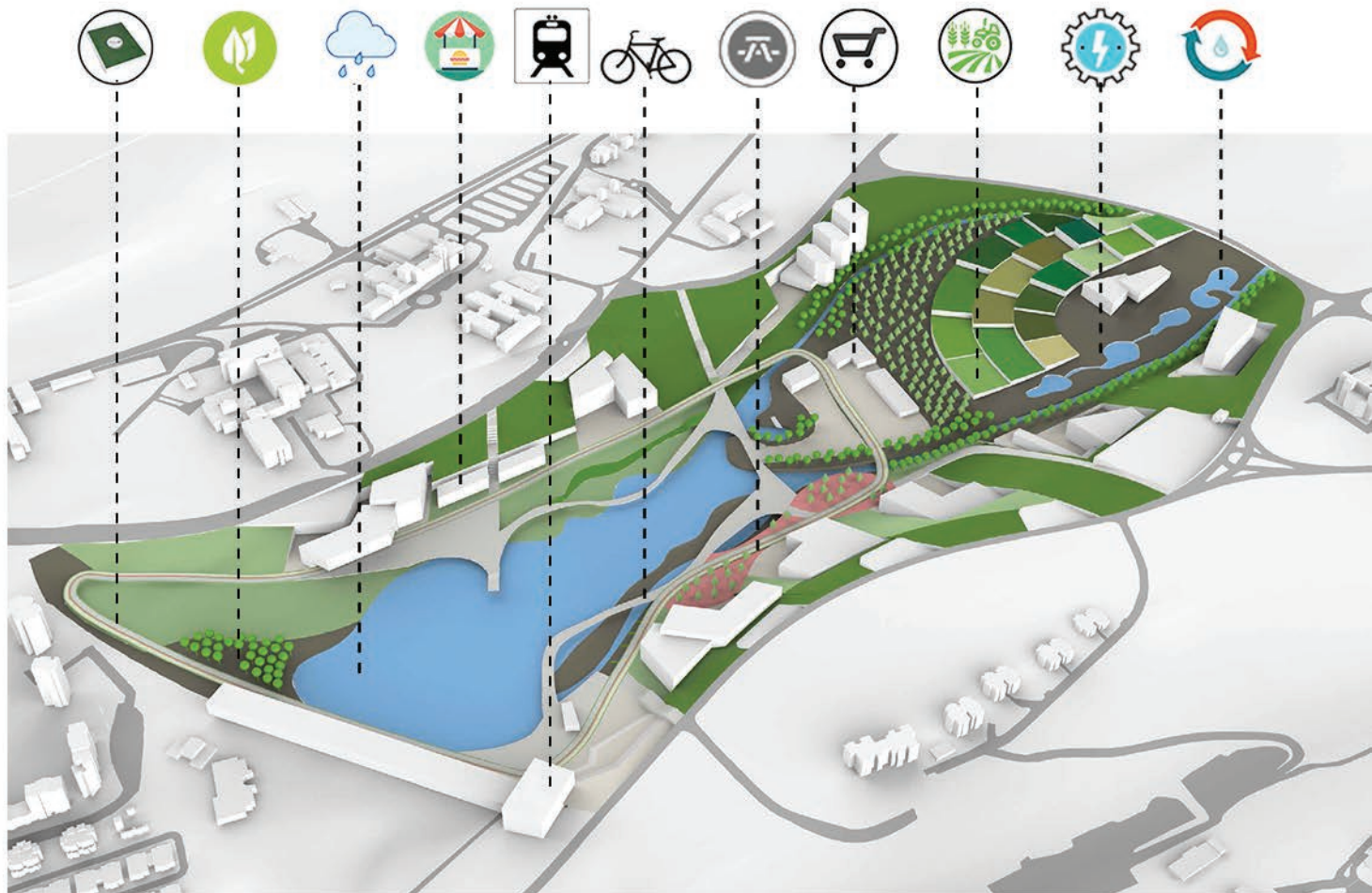


- Tram Station
- Transportation Hub
- Information Center
- Life-long Education Center
- Parking Area
- Experimental Research Center
- Academical Research Center
- Children Attraction Center
- Sustainability & Recycle Center
- Sustainability Application Center
- Agriculture Field
- Faculty Residence
- Local Shops
- Restaurant
- Fishing Area
- Greenhouse
- Advanced Technology & Research Center
- Recreational Area



The proposed master plan aims to be self-sufficient cycle via environmental and economic sustainability. Driven by sustainable energy strategies, this cycle provides opportunities for jobs, accommodation and education creating a gentle touch to all aspects of sustainability.

This closed loop allows sustainability through water treatment system and solar collector tubes which supports agriculture through the site. The water treatment system provides clean water through the site and support fishing facilities. Agriculture and fishing supply products to market places for local kitchen and cafe & restaurants. The functions through the site – academical research center, experimental research center, life long educational center, advanced technology development center and greenhouses which increases the job opportunities and educational activities in the site.



**Trams** work on electricity and it can be provided from the production of electricity from the solar panels and kinetic pavements considered in masterplan.

**Rainwater capturing** is considered by making the topography supportive to stream down rainwater and drainage to the lake.

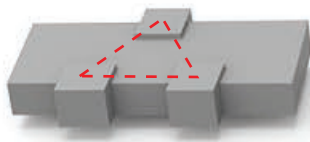
**The local shops and commercial sides** on the masterplan support the local economy and provide employment to the local people. the food activities provide better food in a hygienic environment.

**Agriculture** on the site promotes local eating culture, and provides earnings to the site, employment to the locals, provide wetlands, protection against erosion, promotes fishing and aquaculture etc.

**Electricity Production** is generated by the solar panels and kinetic pavements to supply the energy  
**Water treatment** separates grey water for the agriculture fields and irrigation. The water flowing from the streams go through wetlands. Wetlands filter the water and increase the quality of the lake. The water is reused, agriculture fields, toilets and the cleaning of water also promotes aquaculture and marine life. More fishing would also increase economic activities within the site.



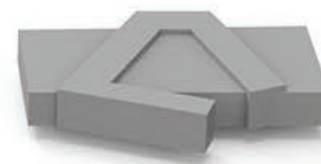
Building program is provided as a life-long education center.



Three subspaces are defined for children, youth and adults other than classrooms and workshop areas.




Subspaces are combined in a continuous approach. Site plan elements are taken into consideration while creating the form.




As public gathering spaces of site is considered, the form of continuous space had changed.





The common functions are divided into two masses, as workshop area and library; and classrooms and offices creating a courtyard in the middle.


 Green roof system is used to create delicate transformation from landscape to building.

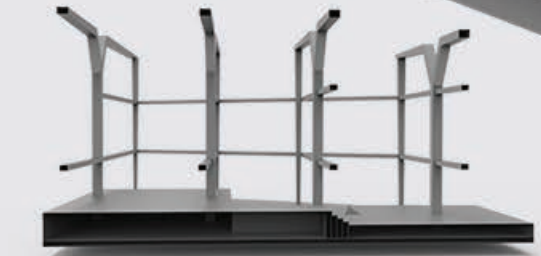
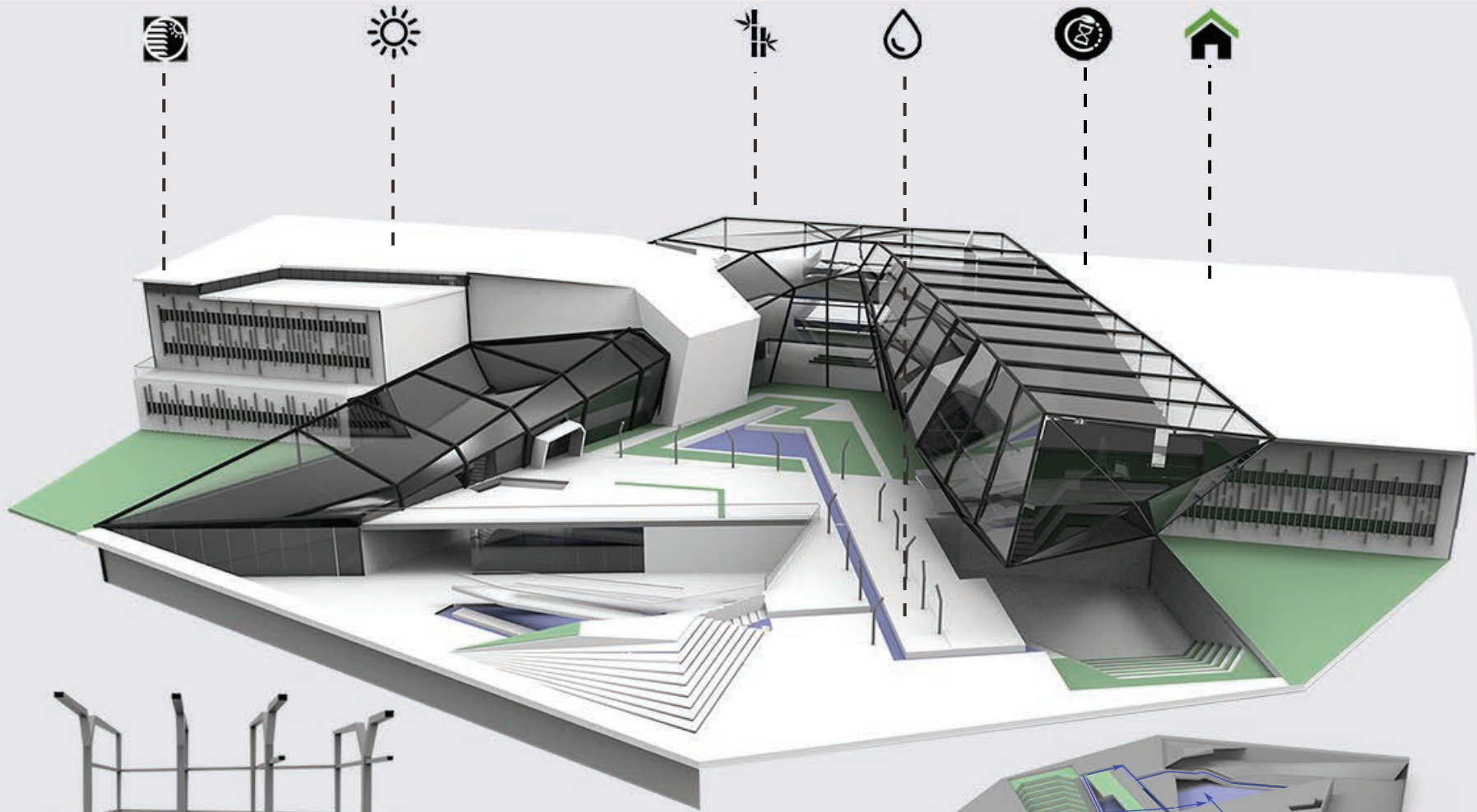
 ETFE is used as covering material instead of glass to decrease the greenhouse effect and enhance the sustainability and durability of materials.

 Rainwater harvesting system is applied with landscape in order to use the water efficiently within the site (irrigation etc.)

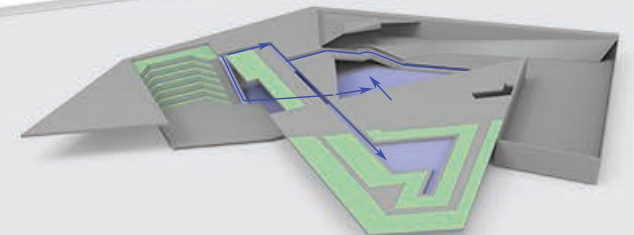
 Bamboo is used as an interior material for material durability and sustainability.

 North light is invited to library with an opening on roof, creating homogenous lighting inside, decreasing the use of artificial lighting.

 Louver system is applied on east facade to increase the comfort and decrease the excessive thermal heating.



Environmental Structure System

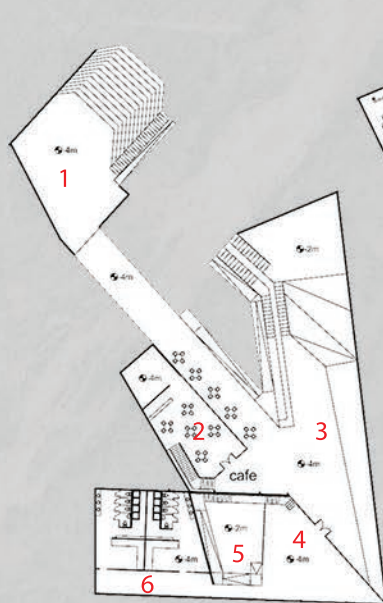


Rain-water Harvesting System

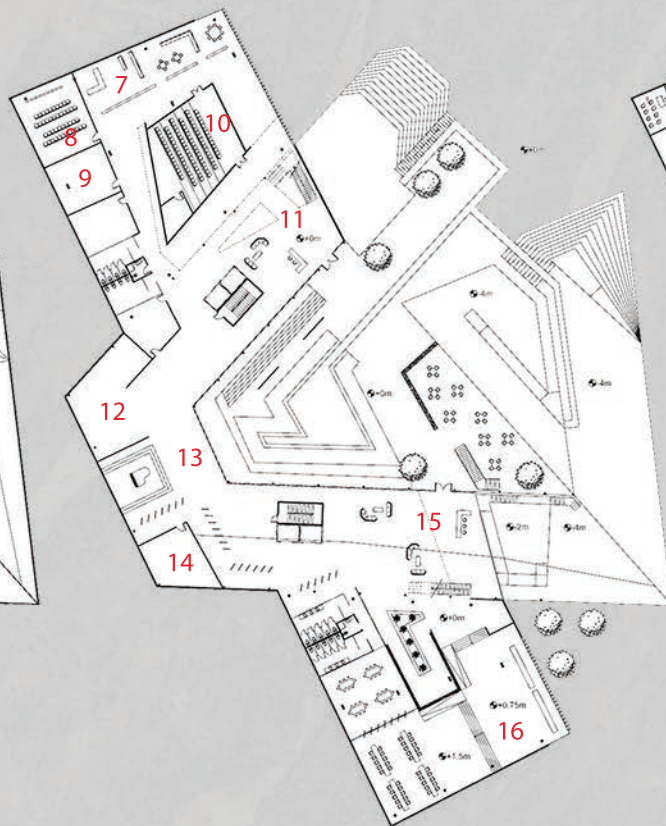
## Building Program

- 1- Open Air Amphi
- 2- Cafe
- 3- Open Playground
- 4- Entrance & Lobby
- 5-Motor Coordination Playground
- 6- Locker Rooms
- 7- Open Classes
- 8- Multimedia Room
- 9- Laboratories
- 10- Conference Hall
- 11- Entrance & Lobby
- 12- Art Shop
- 13- Music & Arts Atelier
- 14- Material Storage
- 15- Entrance & Lobby
- 16- Workshop Area
- 17- Classrooms
- 18- Open Study Area
- 19-Botanical Treatment Space
- 20-Free-time Activity Space
- 21- Cafe
- 22- Lounge
- 23- Workshop Area
- 24- Library
- 25-Office Area & Collaboration Space
- 26- Techno-Center
- 27- Consultancy & Entertainment
- 28- Entrance & Lobby 2
- 29- Library & Common

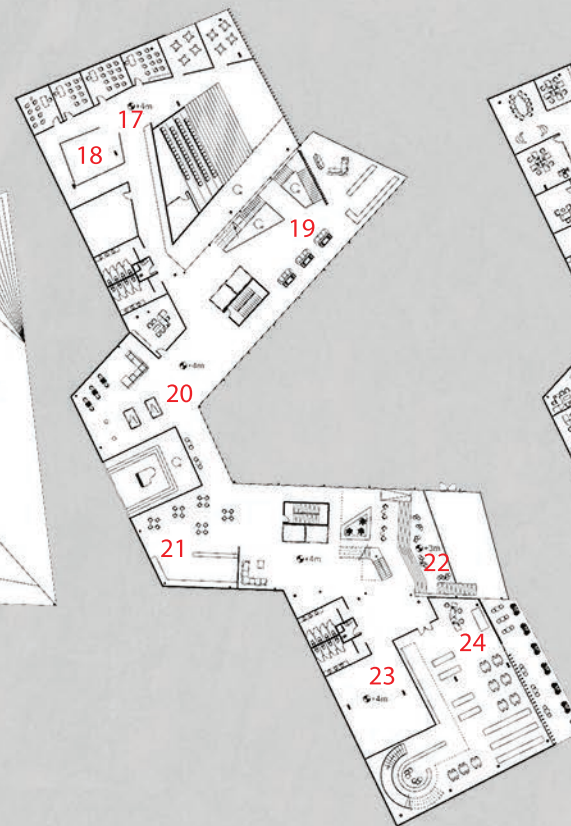
Basement Floor Plan



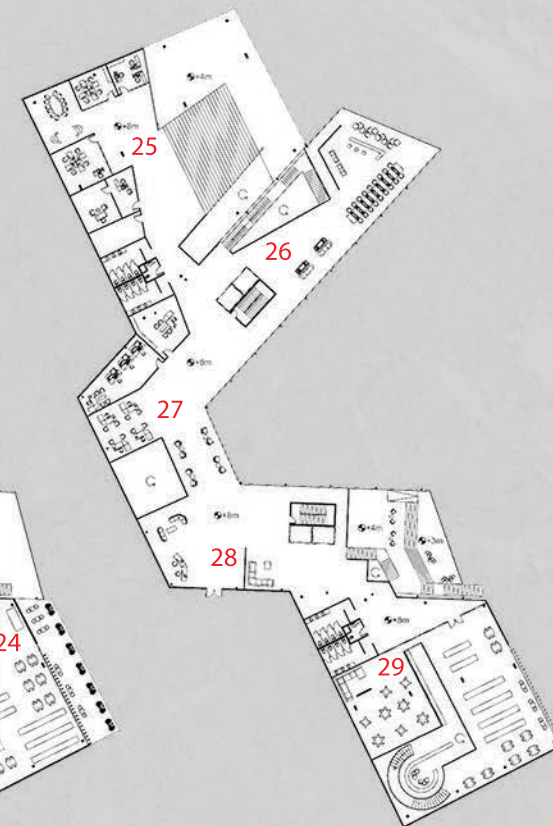
Ground Floor Plan



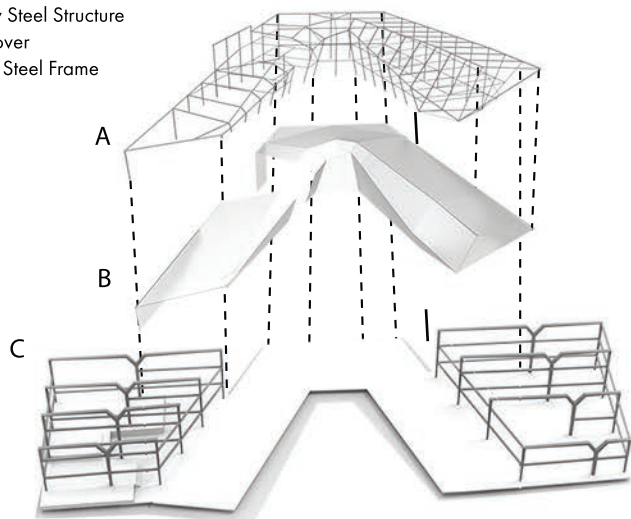
First Floor Plan



Second Floor Plan



- A- Hollow Steel Structure
- B- ETFE Cover
- C- Hollow Steel Frame Structure

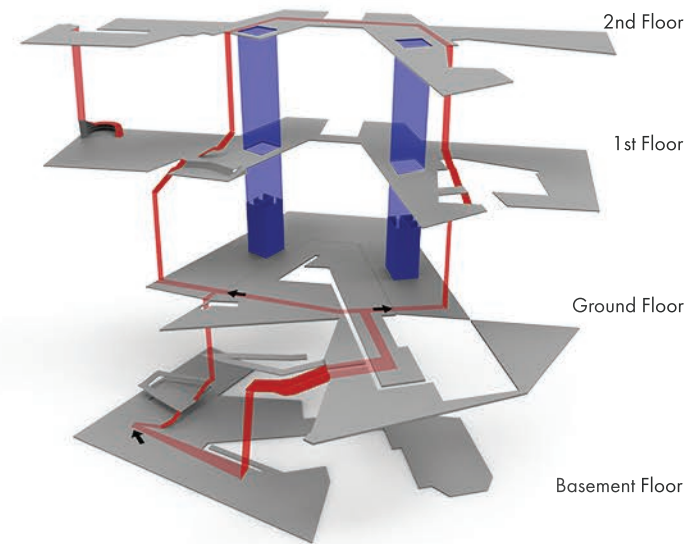


## Circulation Diagram

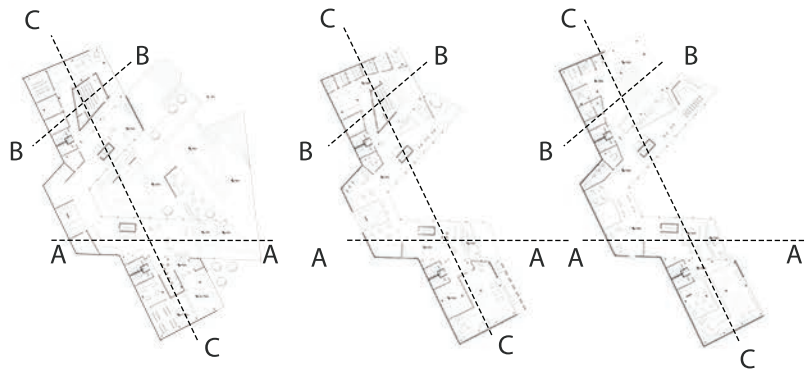
Since learning is a non-stop process, this idea is emphasized also in the circulation. The circulation forms a loop within every floor, allowing visitors to access the building from three different entrances.

## Structural Diagram

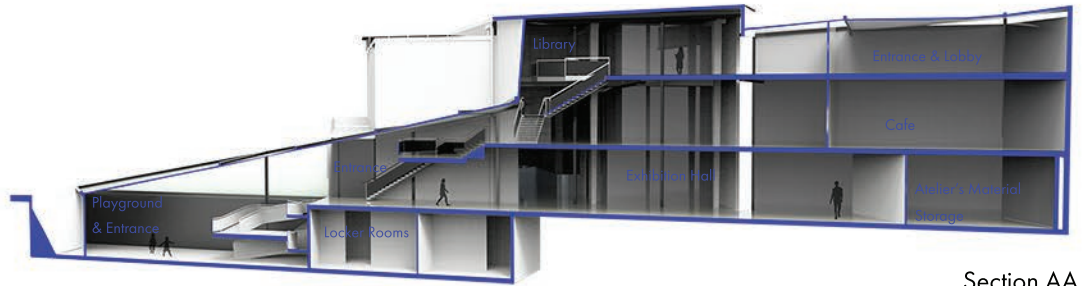
Structure is another part of design that emphasizes the differentiation of masses and solid void relationships. The main mass has a cage structure consisting of wide columns, that works as a chilled beam system. The continuous part has an ETFE cover that is supported with hollow steel structure. With this, the change during circulation along the life-long education center can be realized in experience.



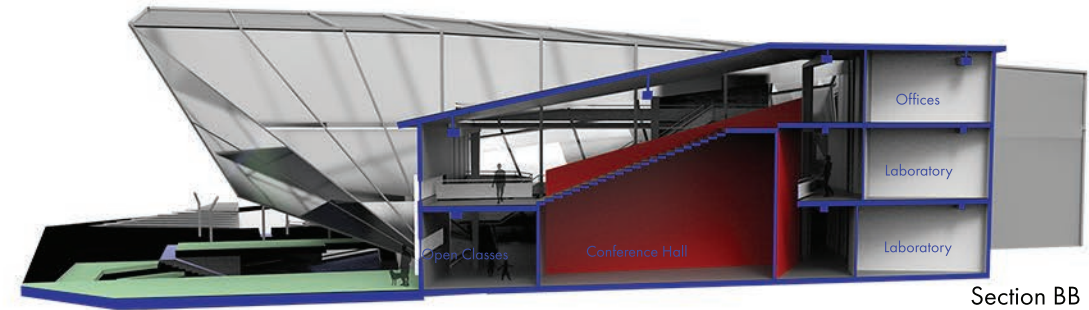




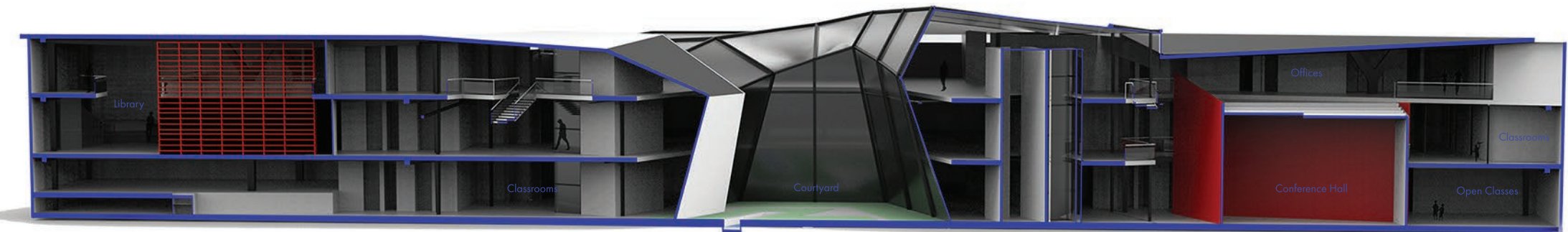
Volumetric spaces are organised by taking reference from user profiles. The volumes where children spend most their times are designed as playful spaces with level differences creating dynamism. The entertainment and constulancy area has minimum divisions for more free space and support gathering activities and a gallery space for visual connection with the studios and workshop areas on the ground floor.



Section AA



Section BB



Section CC

Diagram supports the infinite circulation from the spaces occupied from user profiles from children to grown-ups. The concept idea implies that the education is endless in every stage of the human consciousness. Every program's space offers different experiences and space definitions.

**1**

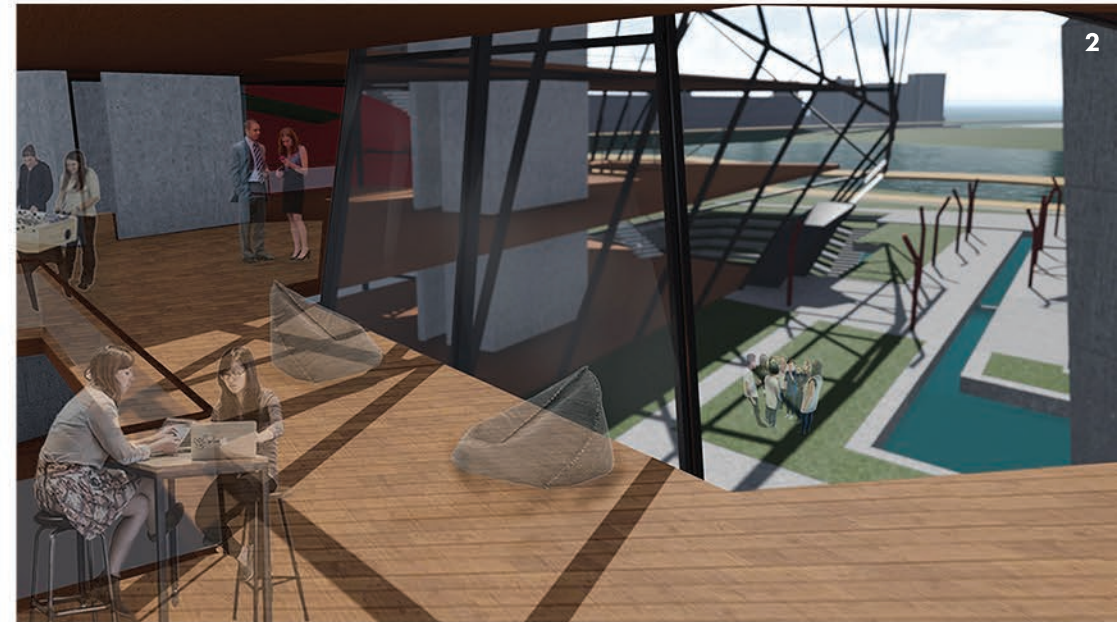
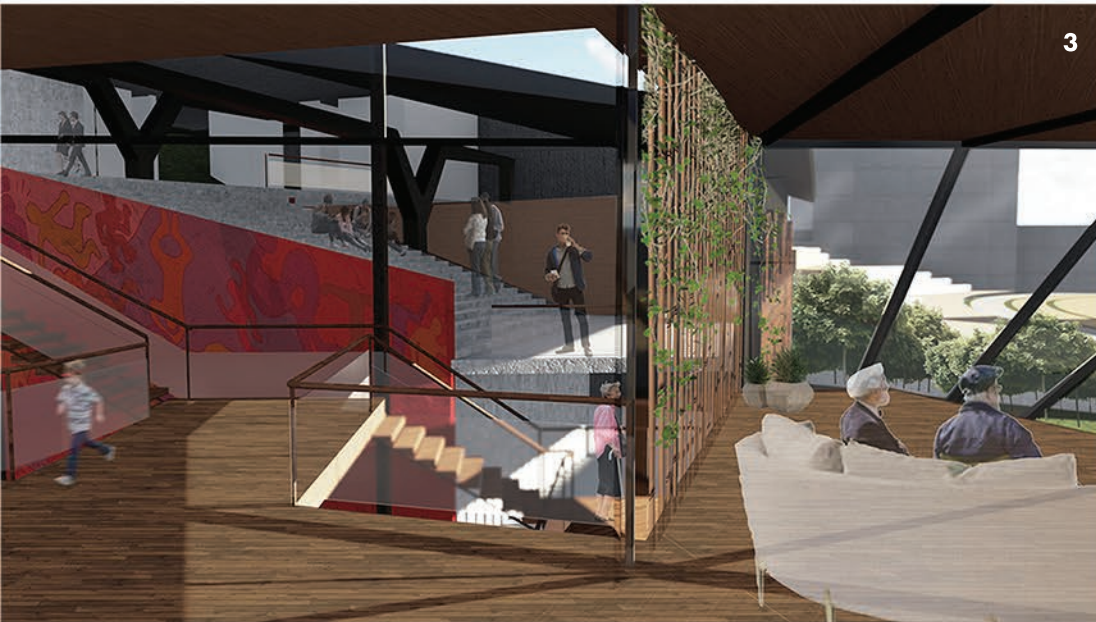
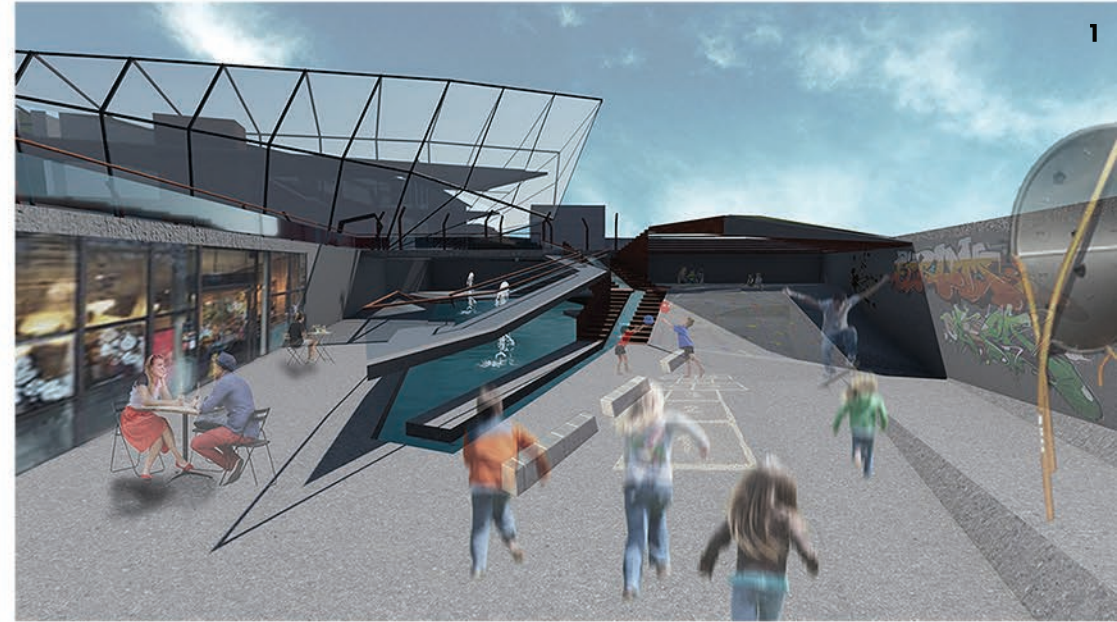
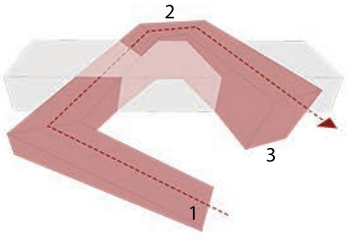
Open playground and cafe creates an opportunity for encounter. The playground offers different areas -with different slopes, allowing skaters to play- and equipment for children for wide range of activities that will develop the motor coordination and abilities to communicate.

**2**

The entertainment and consultancy area offers many free time activities, from business to alternative sports such as table soccer and billard.

**3**

Botanical treatment area offers good view of site by the water creating an efficient relaxation and observation spot.





## 02 Archaeological Research & Informatics Center

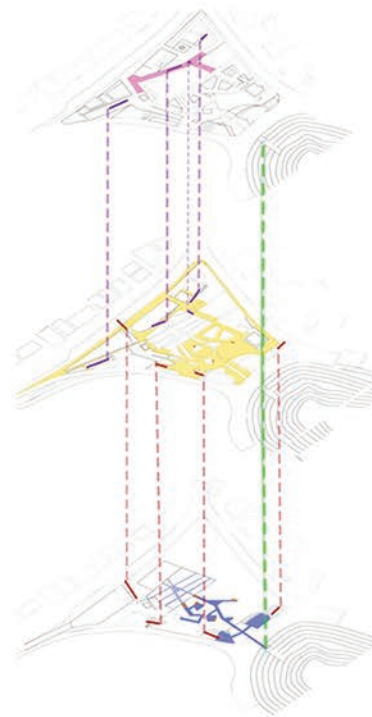
Type	Academic / Individual Work*
Time	2016-2017 Spring Term
Location	Konya / Turkey
Instructor	Prof. Dr. Giorgio Gasco / giorgio.gasco@bilkent.edu.tr
Role	Design Concept, Mass Study, Architectural Representation

\*Masterplan phase as a group work, further phases as individual

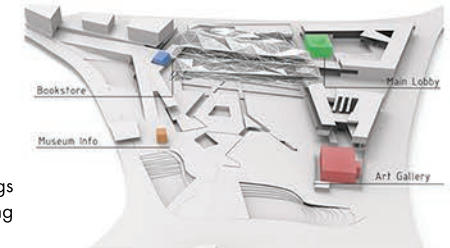
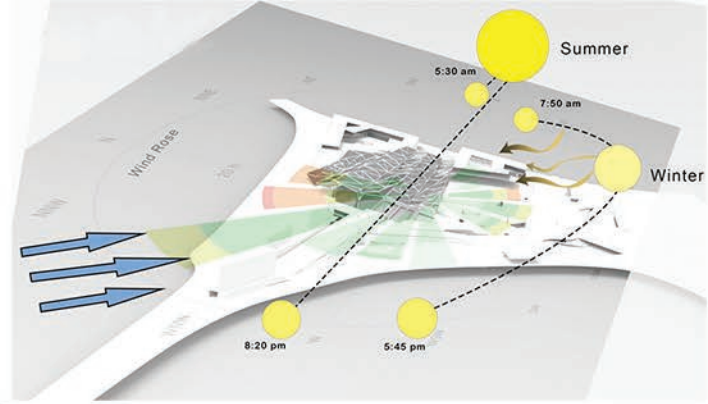
Konya, with many historical features coming out of the soil, is the site for the proposed archaeological research and informatics center. The site with the crack idea gives the general layout of the project in the central spine of Konya. The crack is used as a metaphor which shows the emergence of enlightenment and information coming to light with a maal touch that forms the crack. The aim of the project is to enrich the relevance to history and demolish the formality of institution by forming a bond between the public and researchers. This idea is applied to the project by using level differences that separate functions and common spaces that bring all user types together and encourage sharing the information in a continuous and efficient way. So that not only the researchers but the public will grow respect to soil and the past.



The site plan reflects the juxtaposition of being a dense urban center and consisting of a dense greenery. The urban characteristic of the site is conserved, from the outside perspective. Besides, the design offers a new way of exploring and respecting the the archaeological site with tunnels and various building that surrounds the site.



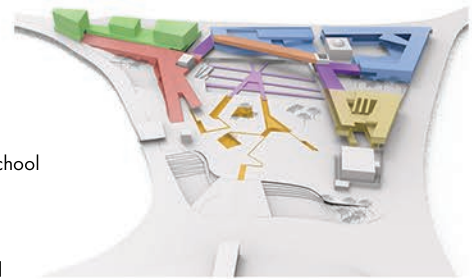
- Circulation**
- -4 Level Circulation
  - Ground Level Circulation
  - Circulation Between Buildings
  - From -4m to 0m
  - From 0 to Upper Level
  - From Top of the Alaaddin Hill to -4 Level



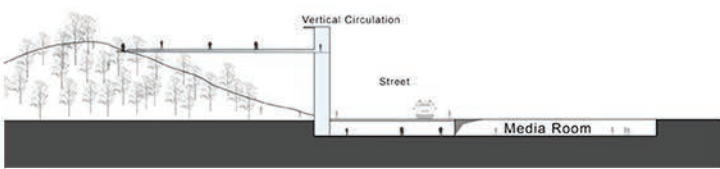
Existing historical buildings are conserved by giving new functions.

**Land Use**

- Residential Units
- Museum
- Research Center
- Professional High School
- Observatory
- Walking Platform
- Bridges
- Underground Tunnel



Site Elevation From Urban Facade



Section 1

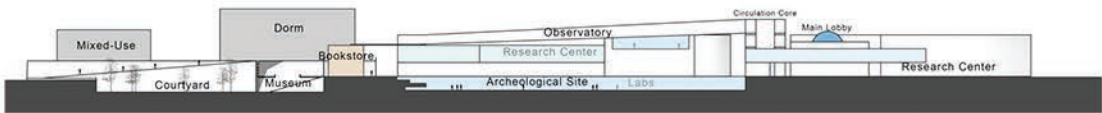
**Figure Ground & Footprint**

1. Mix-Use Residential - 3164 m2
2. Museum - 3100 m2
3. Bookstore - 127 m2
4. Research Center & Social Space - 2681 m2
5. Main Lobby & Reception - 460 m2
6. Archaeological Institution - 3802 m2
7. Archaeological Professional School - 1647 m2
8. Karatay Art Gallery - 612 m2
9. Information Point - 53 m2
10. Vertical Circulation Element - 150 m2



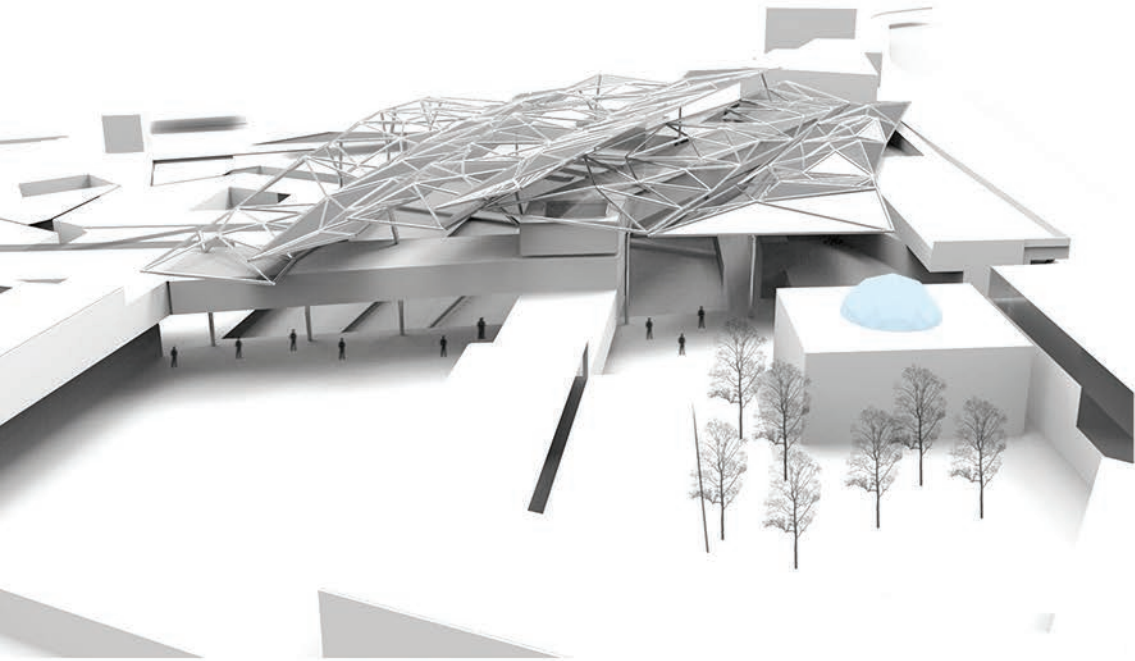
**Open Spaces**

- Courtyards
- Sunken Plazas
- Sunken Gardens
- Green roofs & terraces

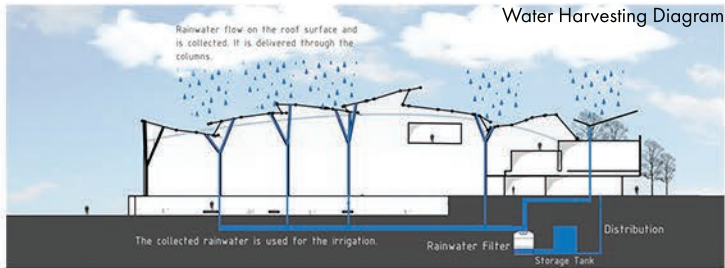


Section 2





The roof works as a protection, besides many sustainable features are loaded to structure such as water harvesting, electricity generating by PV, air cleaning by TiO<sub>2</sub> in order to support the idea of adaptive design.



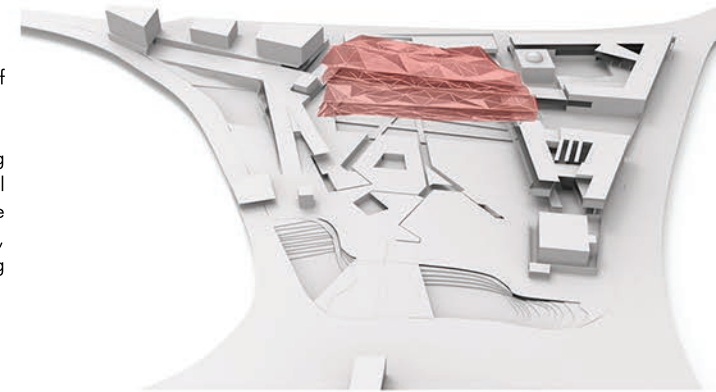
### Protective Roof

consist of;

- Titaniumdioxide & ETFE panels and
- Carbonfibre truss structure in terms of material.

The roof is in charge of protecting archaeological site from physical deterioration on and off duty, since the site will be worked on and displayed, which will keep the site busy for a long time. Other integrated systems are;

- Solar panel
- Air circulation



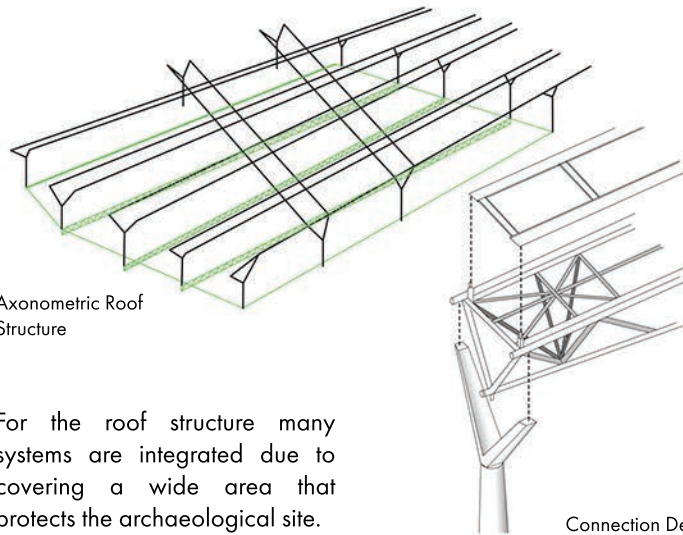
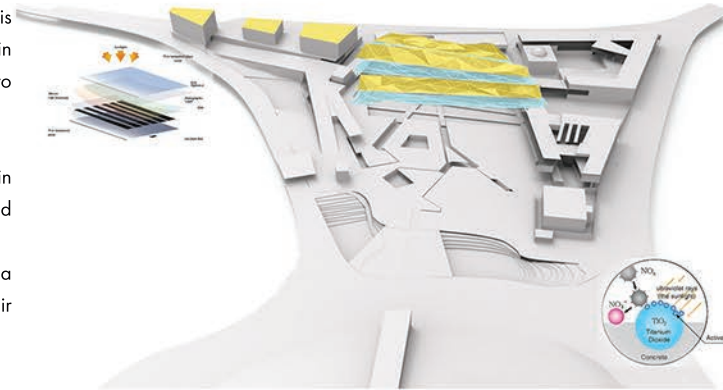
### Photovoltaic Panels & Smog Diffuser Material

In mix-use residential the energy is harvested from panels are used in general services of the building, trying to achieve the net-zero goal in long time.

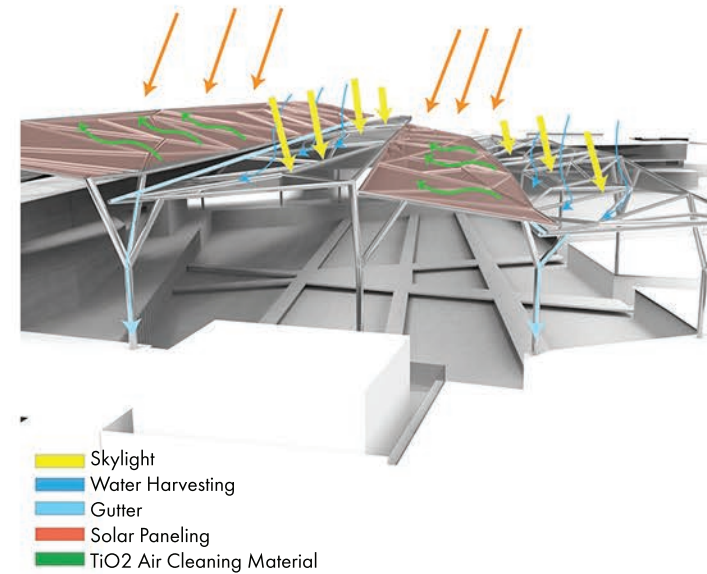
The energy harvested from roof is used in illumination of archaeological site and museum.

TiO<sub>2</sub> smog diffuser material is used as a cover on the roof in order to clean the air of urban center of Konya.

- Photovoltaic Panels
- TiO<sub>2</sub> coating



For the roof structure many systems are integrated due to covering a wide area that protects the archaeological site.



- Skylight
- Water Harvesting
- Gutter
- Solar Paneling
- TiO<sub>2</sub> Air Cleaning Material

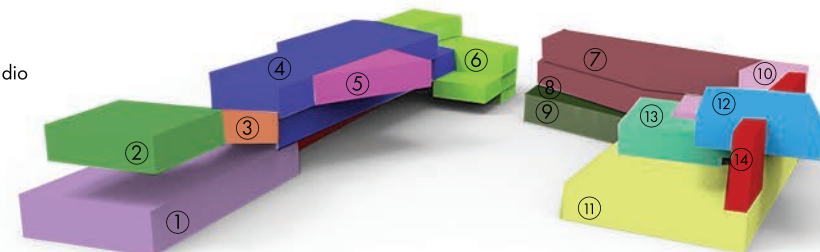


### Building Program

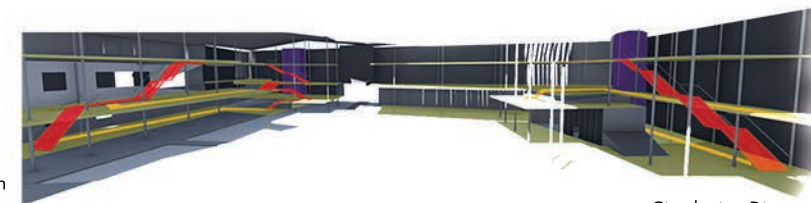
1. Storage
2. Locker Room for employees
3. Common Area for employees
4. Cafe
5. Workshop Area
6. Conference Hall
7. Foyer Area
8. Lecture Rooms
9. Atrium & Entrance
10. Exhibition Hall - Ali Gav Madrasa
11. Free Study Spaxe
12. Library
13. Terrace
14. Common Study Space
15. Offices
16. History Archive
17. Common Work Studio
18. Copy Center
19. Computer Lab
20. Offices
21. Collaborative Work Studio
22. Meeting Room
23. Administration

**Archaeological Research Center** offers a strong communication with the community while conducting the archaeological research on the excavation area, aiming to inform people about the importance and the sustainability of the site with the wide scale building program from archives and offices to collaboration studios and library. With the building entwining the green common space a microclimate is created in social and environmental aspect. Ali Gav Madrasa is kept in order to conserve the texture of the site which indicates from old times, the site has been used as an education space.

1. Workshop Area
2. Administration
3. Meeting Hall
4. Offices
5. Collaborative Work Studio
6. Core for Employees
7. Library
8. Terrace
9. Conference Hall
10. Library Lobby
11. Entrance & Foyer Area
12. Archive
13. Free Study Space
14. Circulation Core



Volume Study



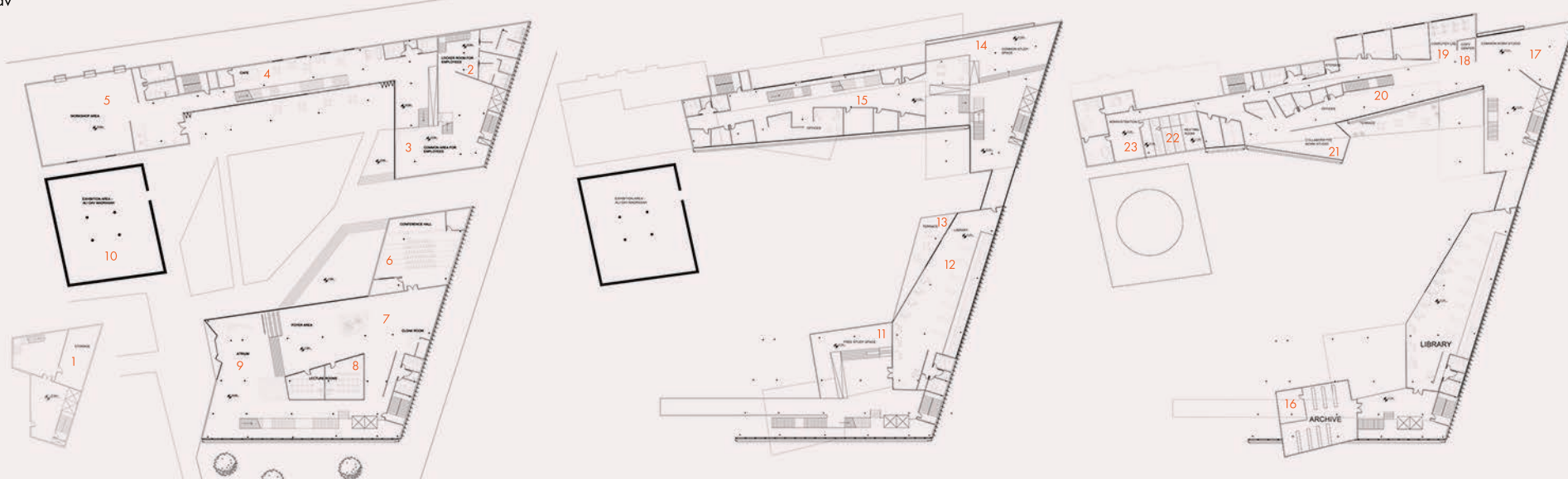
- Elevators
- Horizontal Circulation
- Stairs

Circulation Diagram

Ground Floor Plan

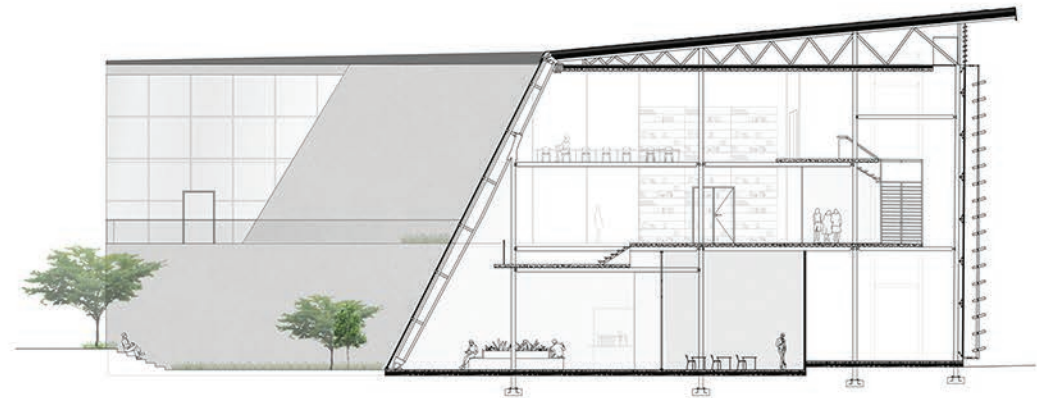
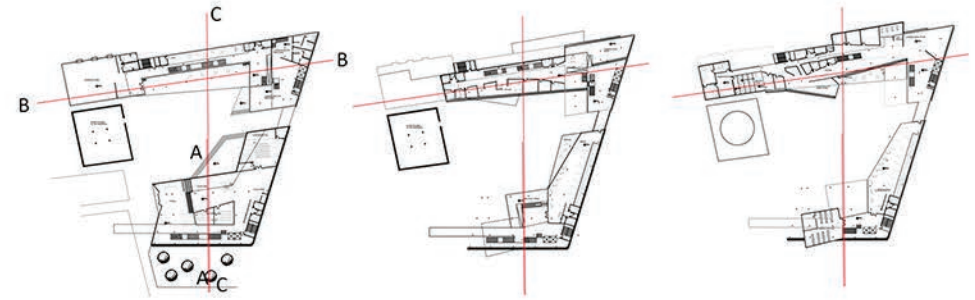
First Floor Plan

Second Floor Plan





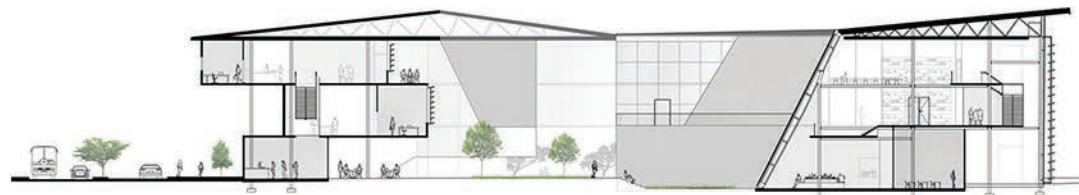
The façade of library creates a kinetic experience both outside and inside while moving towards the city. A sense of semi-transparency is formed. When the building is approached from the city center, it has a characteristic of inviting people. On the contrary, when it is approached from the other side it has an opaque characteristic supporting the privacy and creating curiosity.



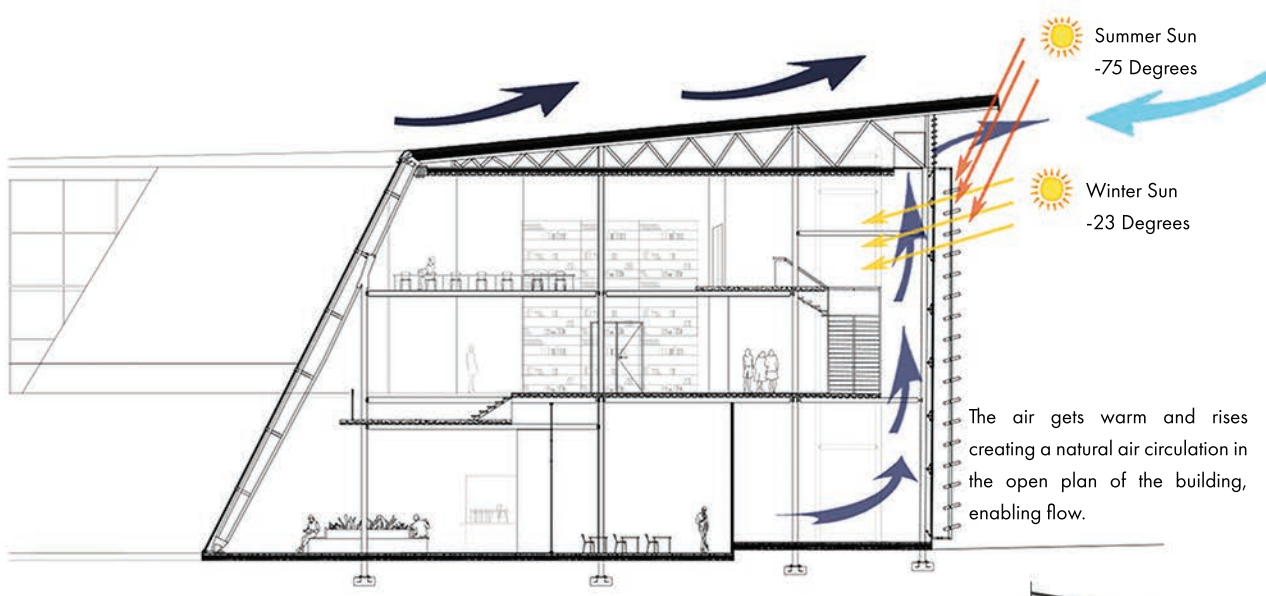
Section AA



Section BB

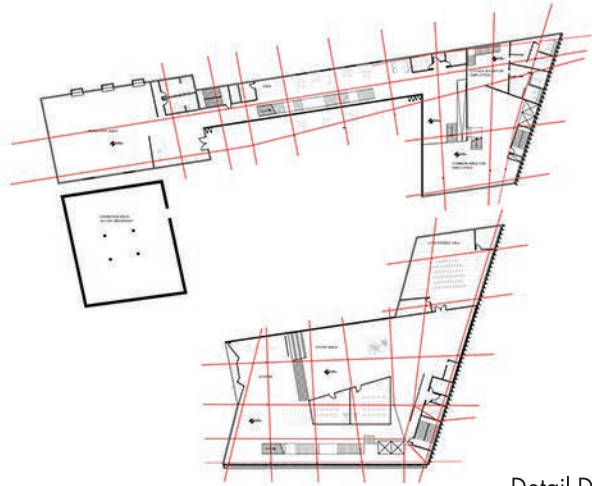
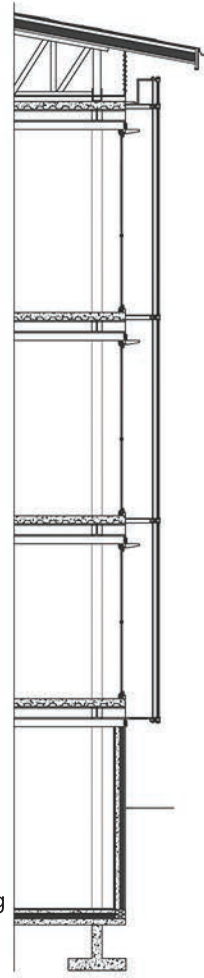


Section CC

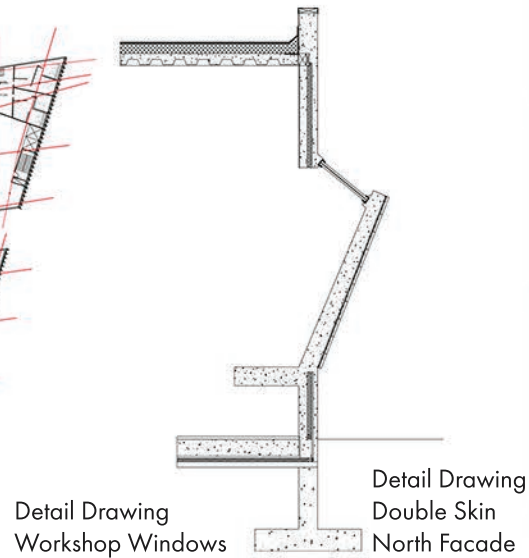


Environmental systems are used in overall building. All the systems are integrated in order to have minimum impact on the site which is a fragile one consisting of archaeological ruins. Whole building system works as one with the open plans and double skin facades. The roof works as a truss system which supports the stack effect, disabling the strong north wind and enabling the summer breeze inside the building. Double skin facades are applied on north side of the system in order to create a balanced climate inside, preventing harsh weather conditions. Stack effect and louvers are used as a system on south facade to overcome overheating due to frequent use of glass. Other systems that supports the environmental sustainability are;

- Chilled-beam system
- Rainwater harvesting

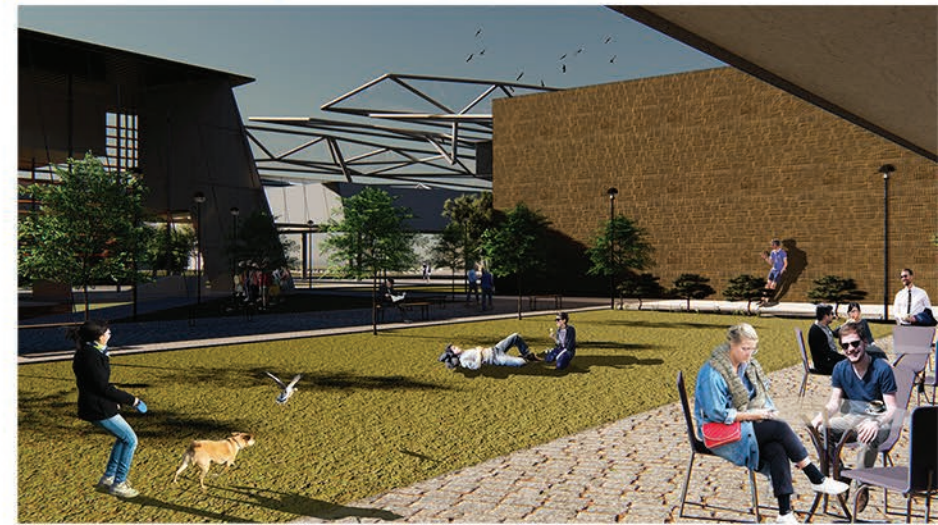


Structural Grid System



Detail Drawing Workshop Windows

Detail Drawing Double Skin North Facade







1

**1** Library's façade creates a kinetic experience to the user in different times of the day, and the excessive amount of light is filtered by the calculated angle of louvers creating a comfortable space to study. The library is the common space used by archaeological researchers and the community creating an everyday life encounter and increases the communication.



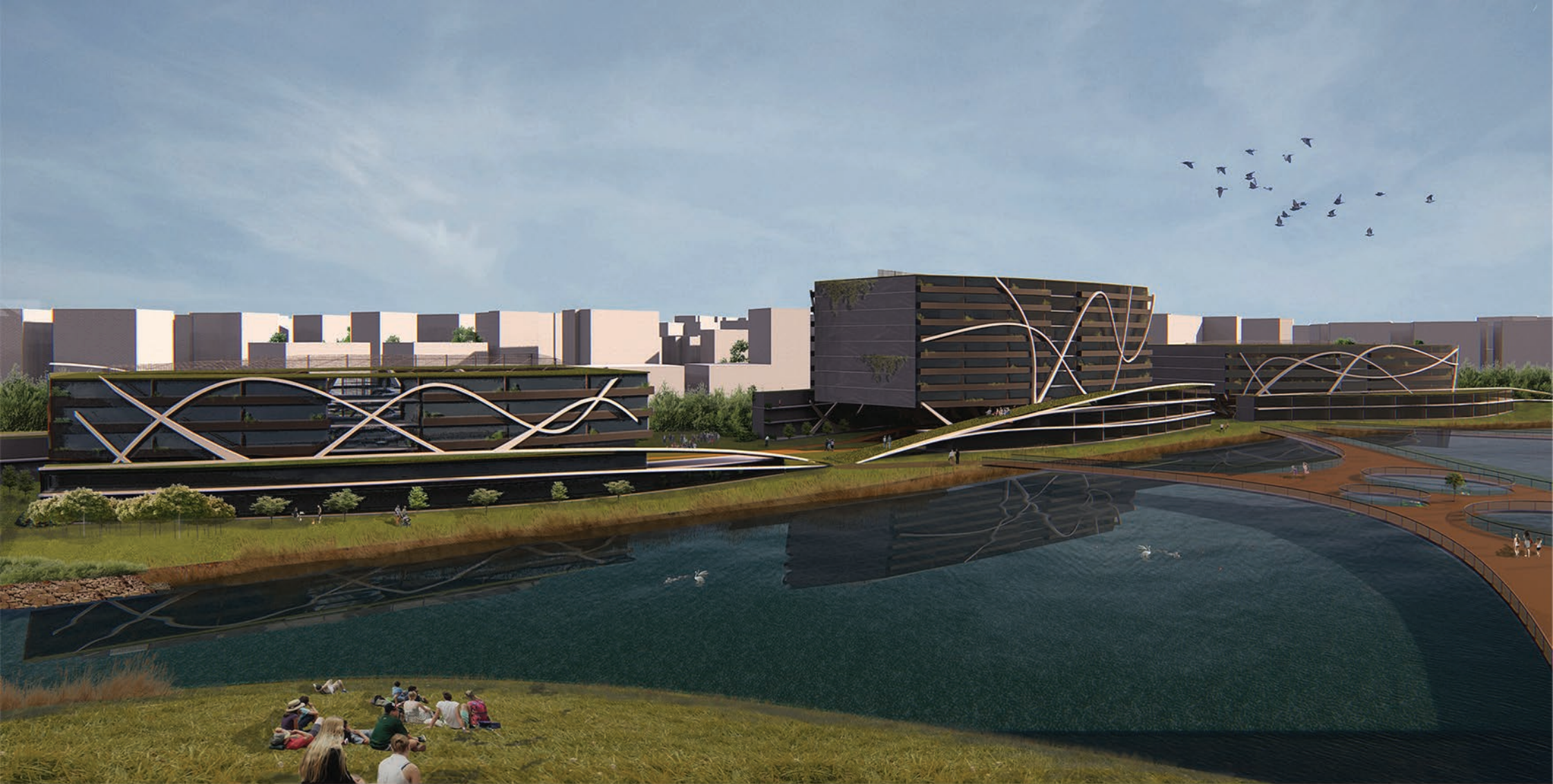
2

**2** Workshop and exhibition area defines how flexible spaces work. North façade of the space faces the urban side of the city, while south façade faces the old existing building that works as an exhibition hall. The openings let the north light in from above, creating an opportunity to control the homogenous light for the exhibition.



3

**3** Free time activity space is for archaeological researchers' spare time in order to increase communication and the information sharing. Maximum visual connection idea is supported along the main circulation system of the information core by the wide gallery space. By being in the middle of the offices and common non-institutional spaces, the free time activity spaces works as an interaction core.



## 03 **inside-out** mix-use co-housing proposal in Akköprü

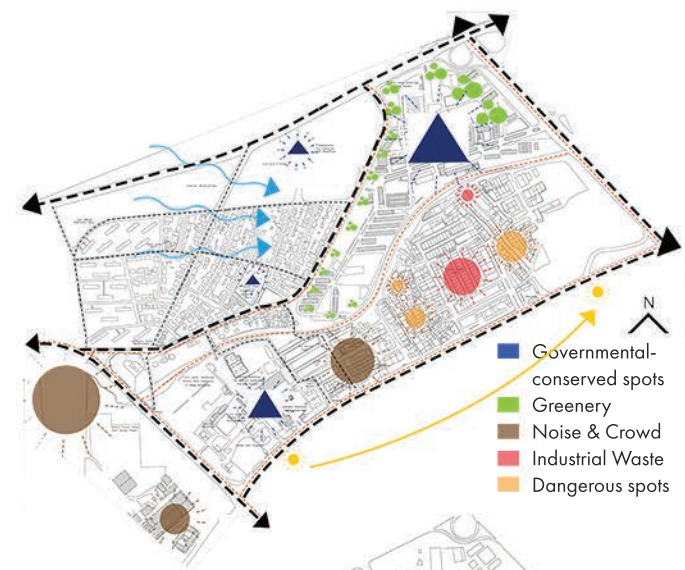
Type	Academic / Individual Work*
Time	2016-2017 Fall Term
Location	Ankara / Turkey
Instructor	Jesus Espinoza Alvarez / <a href="mailto:jesus.espinoza@bilkent.edu.tr">jesus.espinoza@bilkent.edu.tr</a>
Role	Concept Design, Structural Solutions, Architectural Analysis, Representation

\*Masterplan phase as a group work, further phases as individual

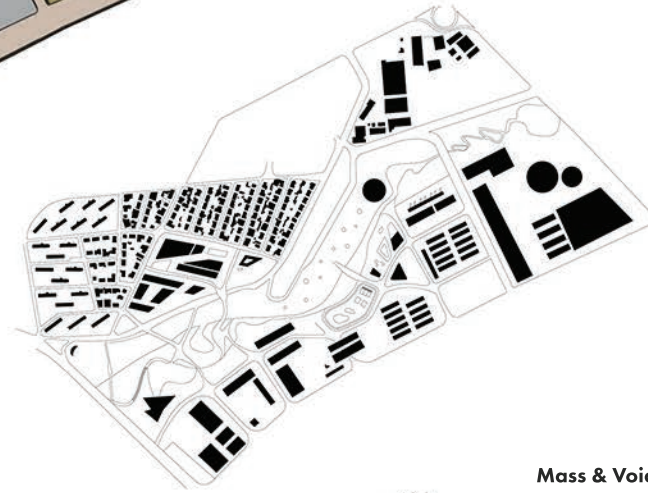
The co-housing project located in Akköprü, has been imagined as a self-sustaining program that contains residential units, offices, shops, restaurants and cafes, besides the power generating units, governmental programs and cultural facilities. Akköprü has been known as an industrial zone with the poor water facilities. The aim is to revitalize the site by regaining the value of historical heritage of Akköprü Bridge and one of the oldest settlements of Ankara, Varlık District. The concept of co-housing is expanded as a mix-use program that the residents exploit all the features of the site. Sustainability is applied considering all the aspects such as environmental, economical, socio-cultural and aesthetical. The design concept is valueing the historical roots and the harmony of nature, while giving the water's richness back.



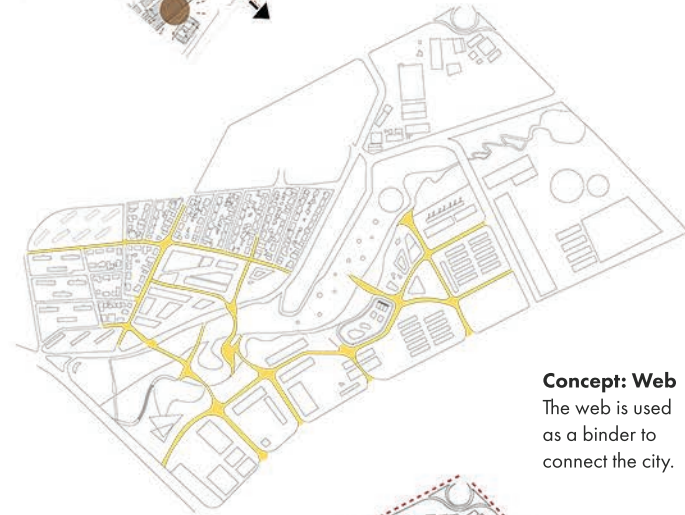
The site is located in Akköprü, Ankara, which is one of the most famous industrial zones. Revitalization of the zones and regaining the richness of water in site is aimed. The treatment of water is prior to the site. A combined heat and power center is offered in site in order to control energy and supply the energy demand of site. Web is the concept that works as a binder of the site, which will get the site together, environmentally and socially.



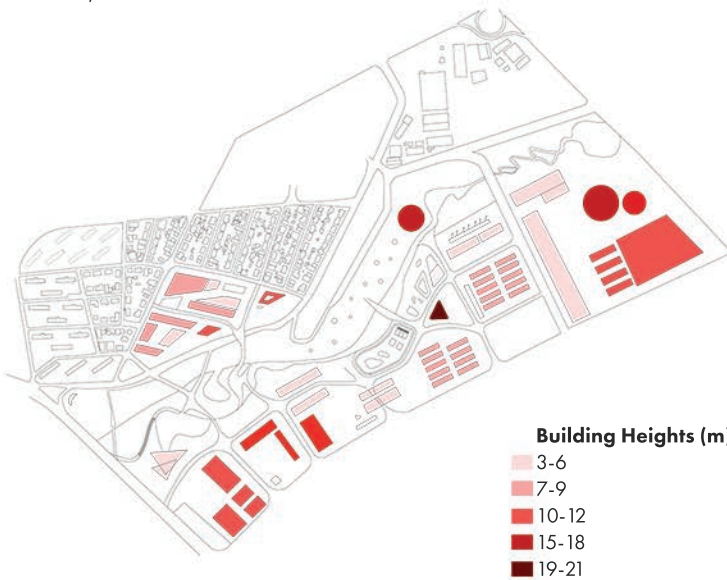
Proposed master plan creates a smooth transition from urban crowd to a tranquil green space that offers various programs in educational, cultural, commercial branch.



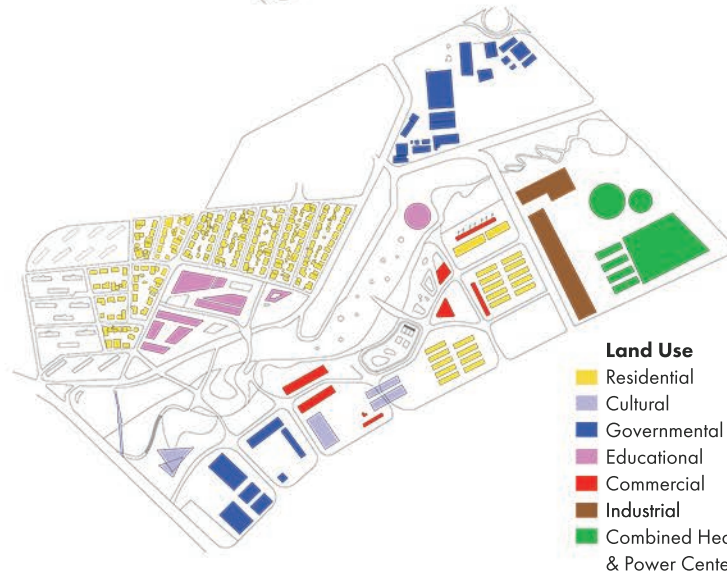
**Mass & Void**



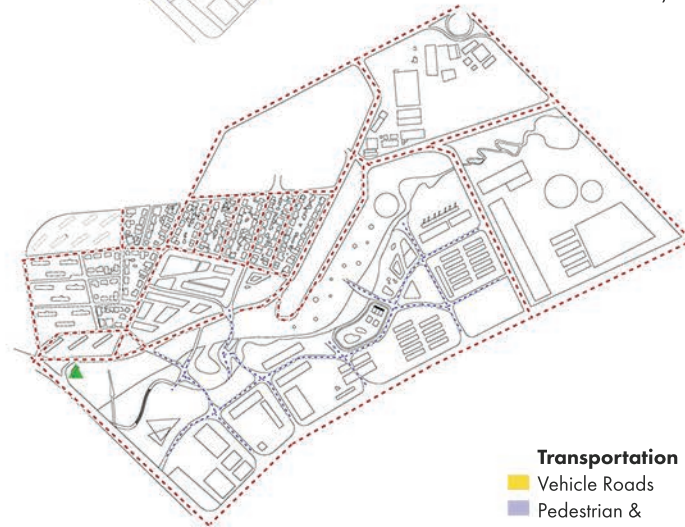
**Concept: Web**  
The web is used as a binder to connect the city.



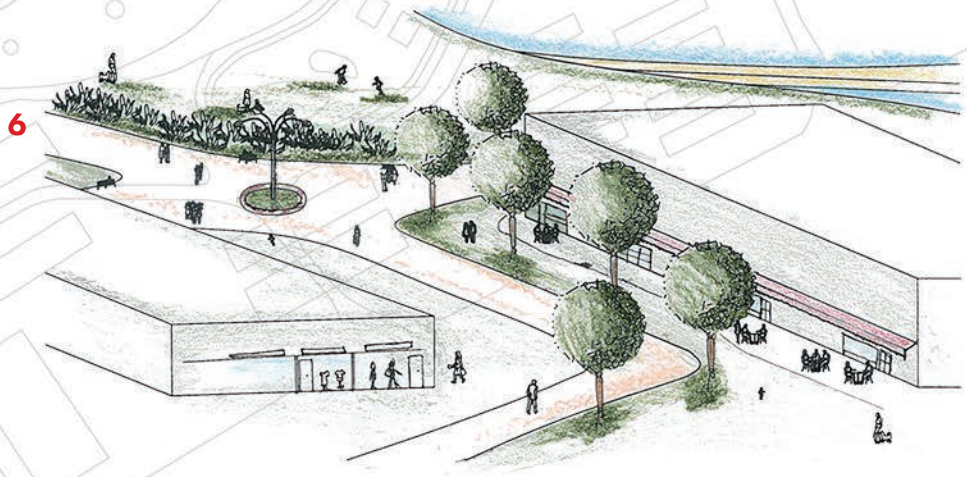
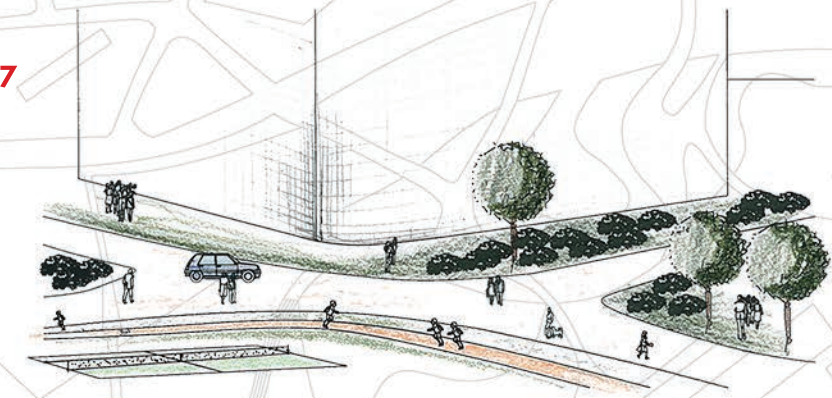
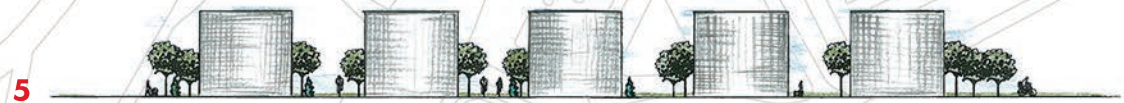
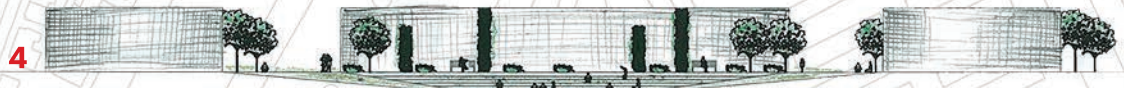
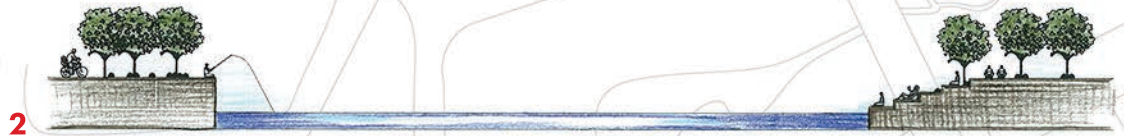
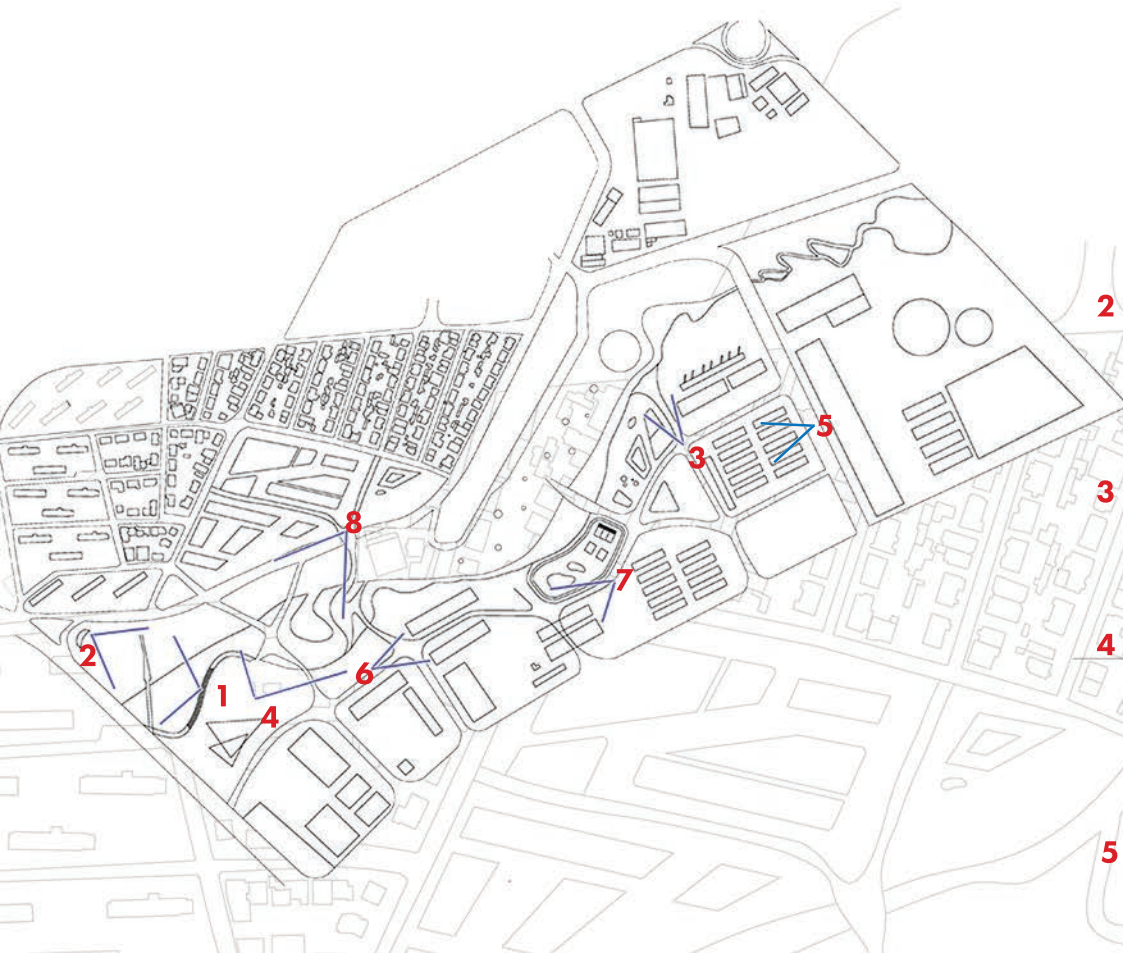
**Building Heights (m)**  
 3-6  
 7-9  
 10-12  
 15-18  
 19-21



**Land Use**  
 Residential  
 Cultural  
 Governmental  
 Educational  
 Commercial  
 Industrial  
 Combined Heat & Power Center

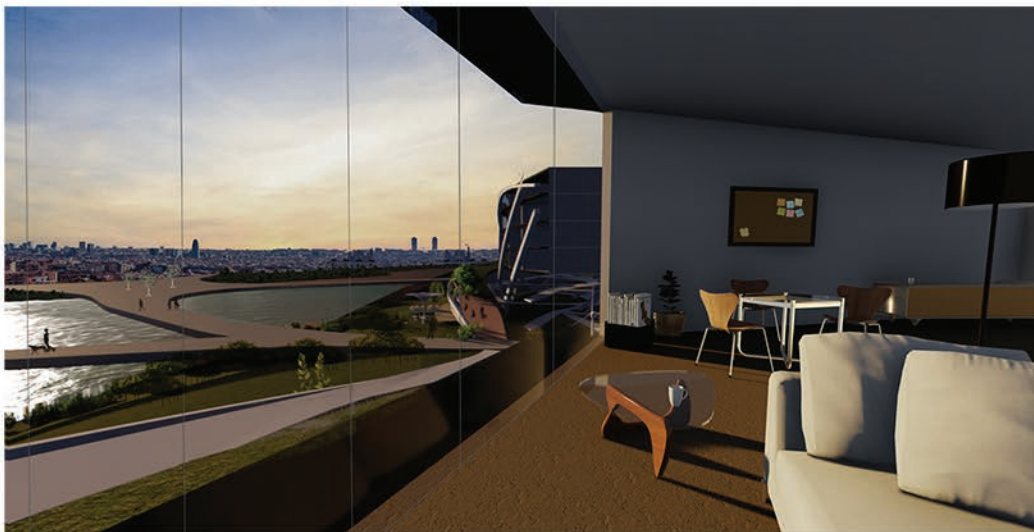
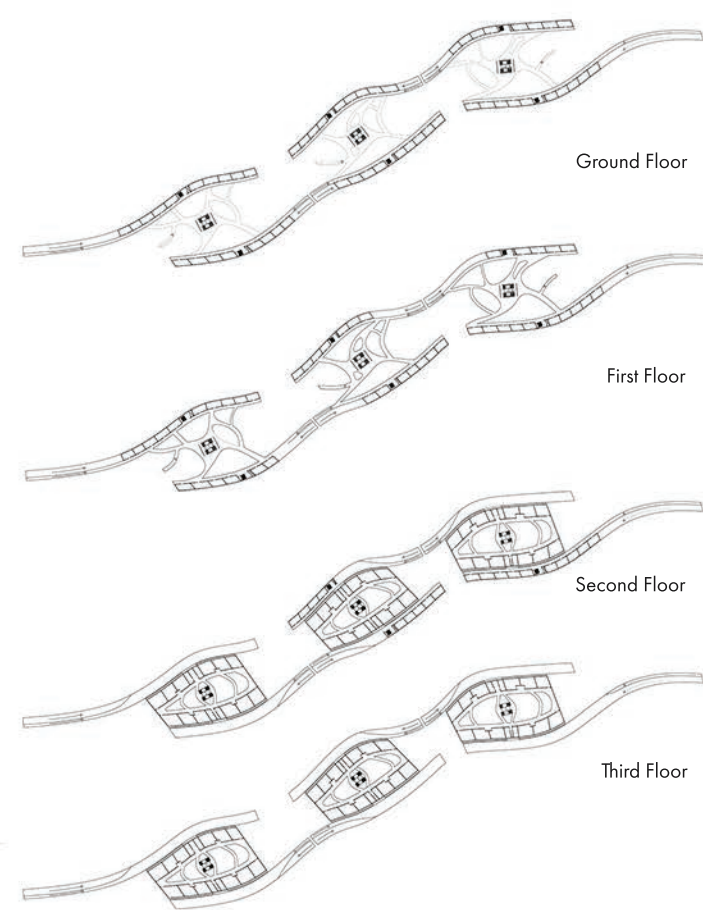
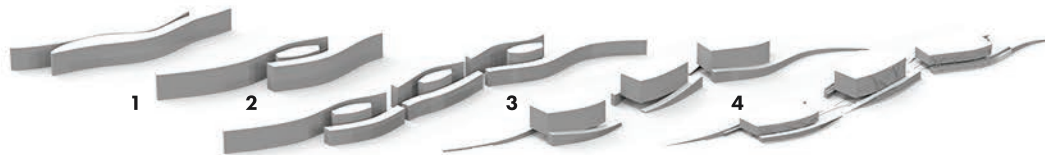


**Transportation**  
 Vehicle Roads  
 Pedestrian & Bicycle Paths

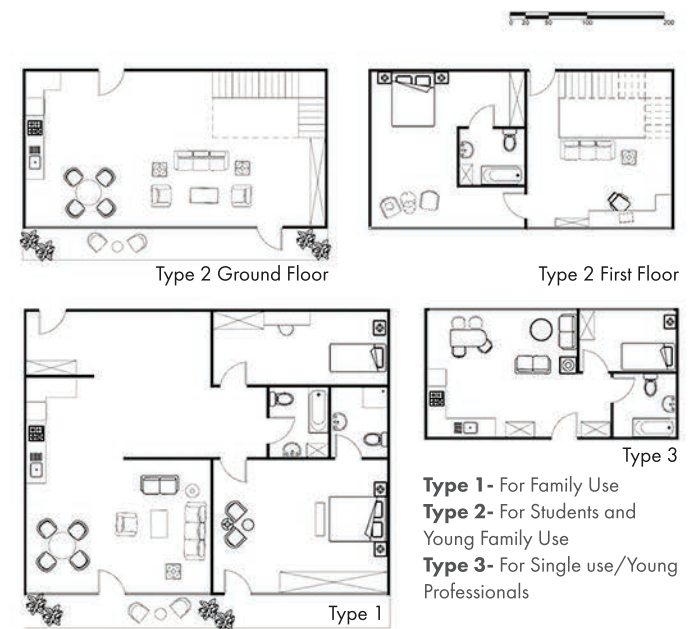




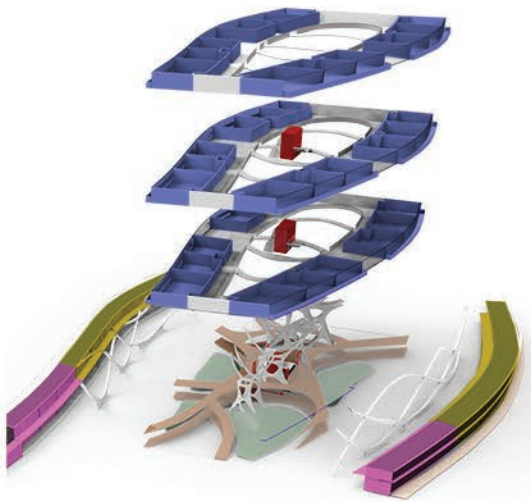
- 1. Fluidity and the web nature reflected on co-housing units
- 2. More subunits with more utilization. A core is set for circulation.
- 3. More units to accommodate more people
- 4. Common floors providing inner-outer spaces in cohousing



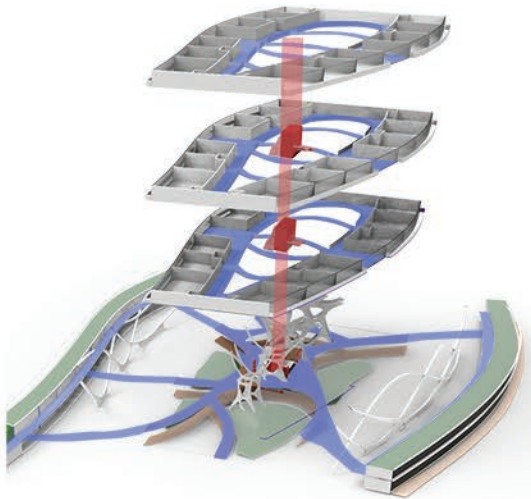
Sustainable mix-use architecture  
 Emphasizing the connection between soil and human that forms the culture  
 Platforms of the site is connected to the cohousing plan creating nodal points for social interaction  
 Culture emerging from soil:  
 Inner boulevards between the housing units providing shops, cafes, childpark and small art galleries  
 Ramps that connect the green roofs and inner boulevards are emerging from the ground creating a harmony with the Ankara Stream.



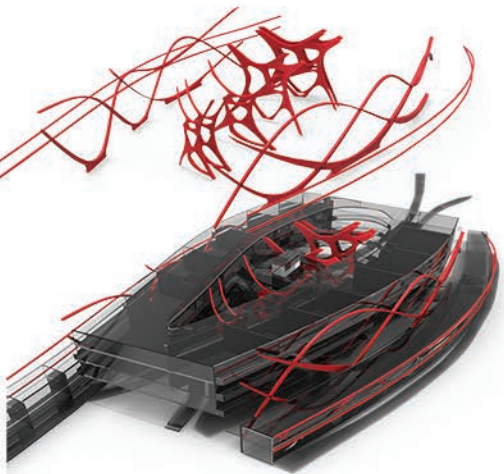
- Type 1-** For Family Use
- Type 2-** For Students and Young Family Use
- Type 3-** For Single use/Young Professionals



- Functions**
- Residential Type 1 & 3
  - Residential Type 2
  - Shops & Cafes



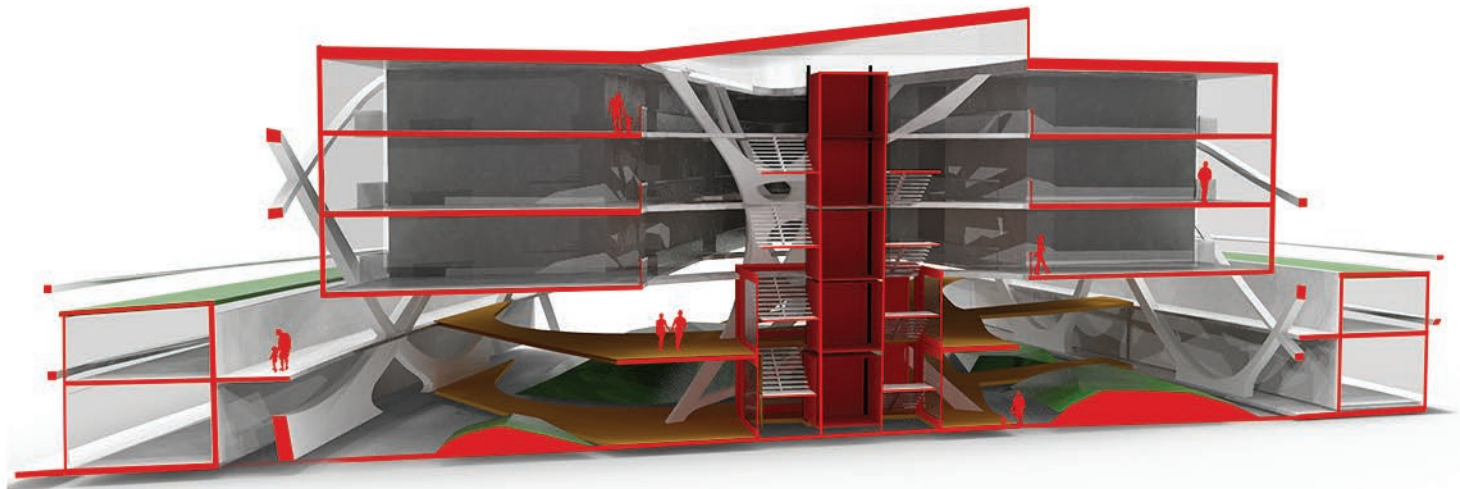
- Circulation**
- Horizontal
  - Vertical



**Structure**  
 Structure is supplied with the web like structure, enveloping the masses from outside. Inner structure is also in harmony, creating visual permeability and lightness.



A huge gallery space is designed in order to create an inside-out experience for the local users. In that manner, a microclimate is created destroying the general typology of a classical apartment. The nature is brought to inside which offers perception interactive spaces. On the basement level an artificial landscape is built for playfulness. Two platforms have wide areas to maximum interaction and function. The climate is also considered and the green-roof with transparent PV is placed.



Nature is brought inside, creating the consciousness and the significance of sustainability to residents. The platforms of three residence units are continuous, at the same time changes the levels, reflecting the characteristic of water and nature. The gallery space is lightened with the transparent photovoltaic system on the roof, supported with the green roof systems on surrounding roofs.

Social spaces are formed with artificial topography, which emphasized the level of platforms and covers the entrances of 3 typologies of building. Red entrances are to create a contrast with the green landscape in the buildings ground floor. The site is both visible from the corridors and inside of the units creating the consciousness of the soil and roots.





## 04 Dwelling Space & Character of Places

**Type** International Workshop of Architectural Construction / Group Work\*

**Time** 2016 Summer

**Location** Polignano a Mare, Bari / Italy

**Instructors** Prof. Dr. Giorgio Gasco / Assoc. Prof. Burcu Şenyapılı Özcan  
giorgio.gasco@bilkent.edu.tr / burcu@bilkent.edu.tr

**Role** Representation, Architectural Solutions, Background info. research

\*Group members. Başak Günalp, Canan Durak, Kübra Ata, Koral Korkmaz, Ece Begüm Kokudal

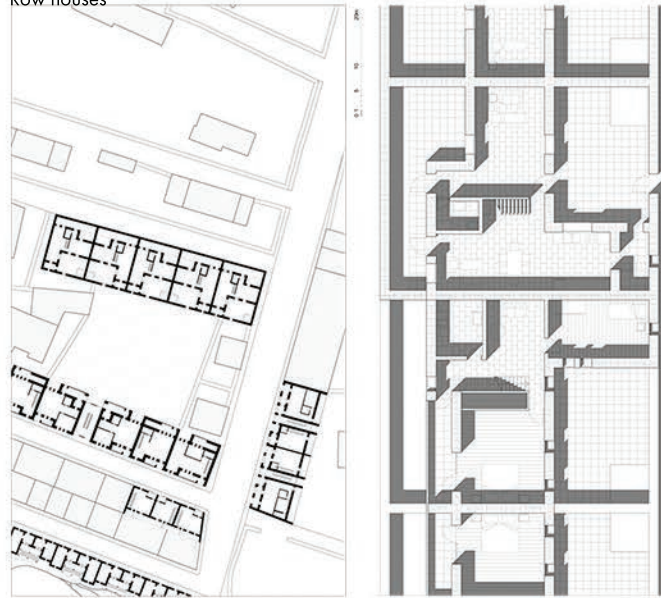
The idea of the project was to turn this irregular mass of houses into a small urban system able to confront a series of natural and architectural outstanding elements: the cove of the shore together with the imposing Abbey and the Saracen tower, and the beautiful surrounding countryside still mercifully intact. In order to assign it the features of a small town – of a “kleinstadt”, as some architects from the last century might have said – it is necessary to densify the buildings to produce a clear edge and a center: in particular two compact blocks are needed to mark this boundary towards the disorder of the scattered houses, and to define the public space. Specific points to intervene in has been identified: to fill some voids, to complete the area facing the sea, to replace the decrepit fisherman’s warehouse and continue the same area up to the sea, to complete the residential block beside the nice inn of the Abbey.



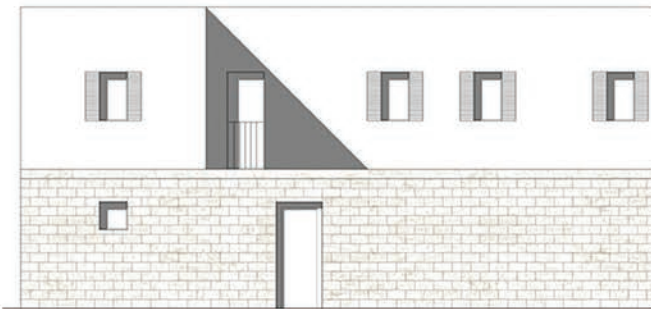


Masterplan

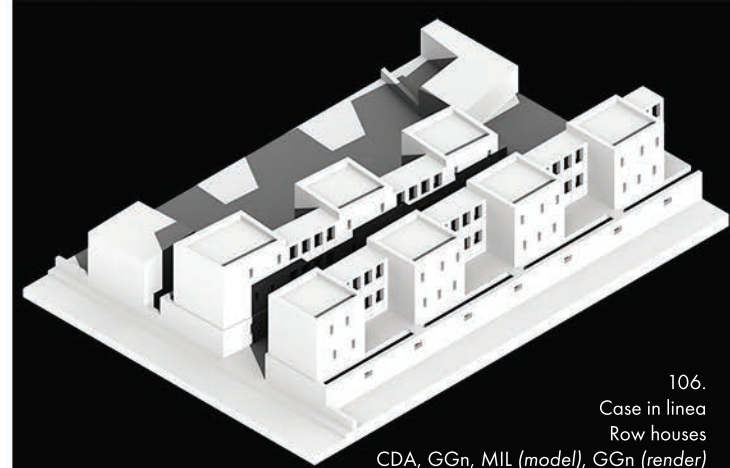
Case in linea  
Row houses



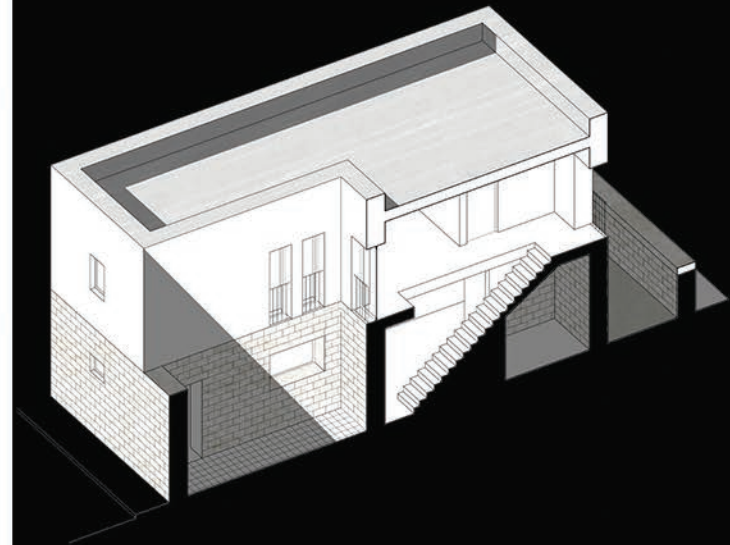
The public space is closed by the project proposal, placing a block larger than the other near the urban header building. It introduces a small courtyard to the square side using a filter between the public space and the house. The most private areas of the house are on the street side. For this reason, there is an additional filter space at the ground floor; there is also a small loggia on the upper floor. The block of row houses is made by the aggregation of courtyard houses on two floors. The main rooms of the house have openings to each façades. A single staircase connects each floors. A Central Anatolian housing typology is the model for this design proposal, through a new version for belonging to this Apulia suburb.

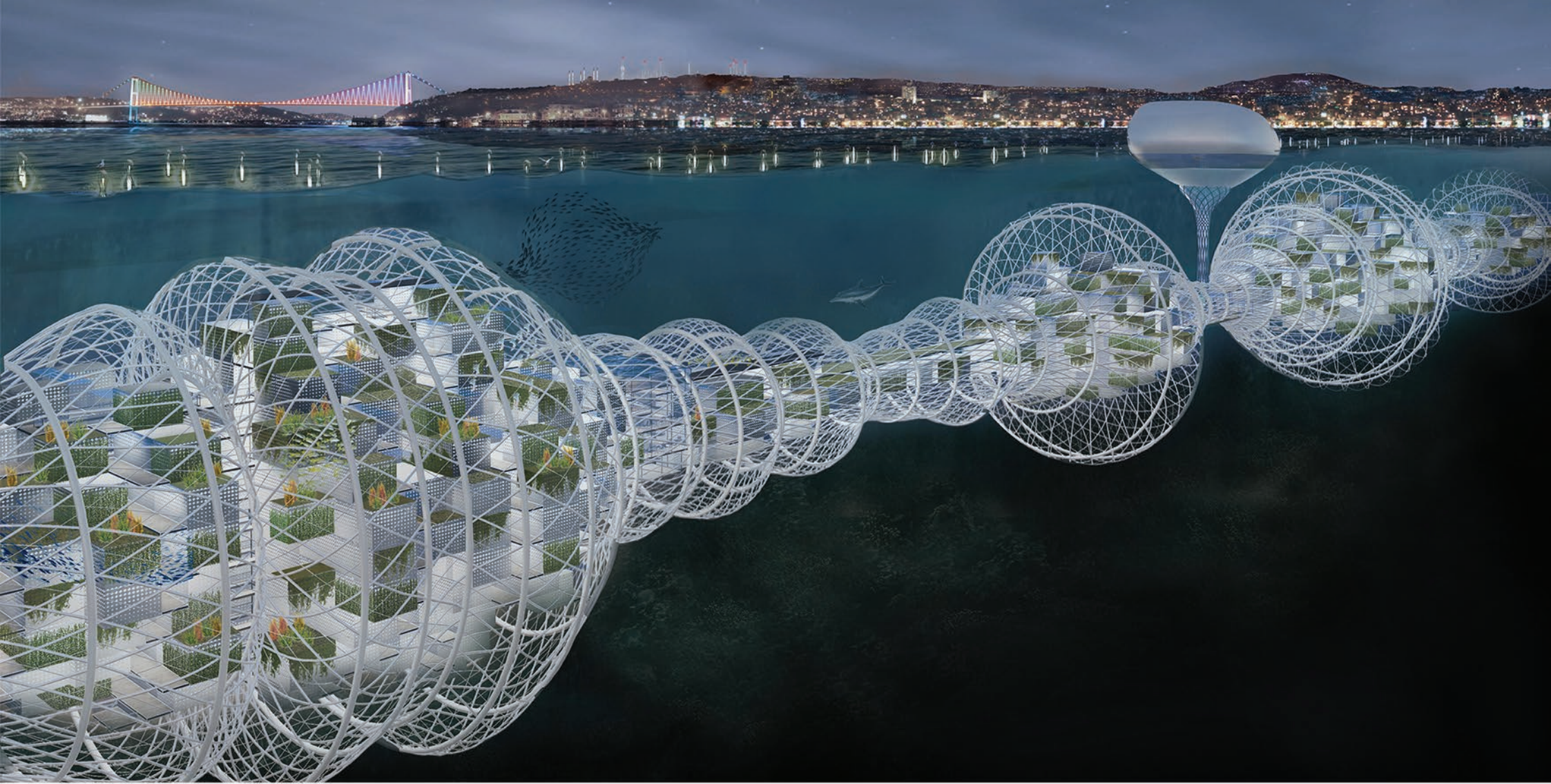


0 1 5 10 20m



106.  
Case in linea  
Row houses  
CDA, GGn, MIL (modell), GGn (render)  
2016





## 05 **seis-marine** emergency sanctuary for earthquake victims

Type eVolo Skyscraper Competition / Group Work\*

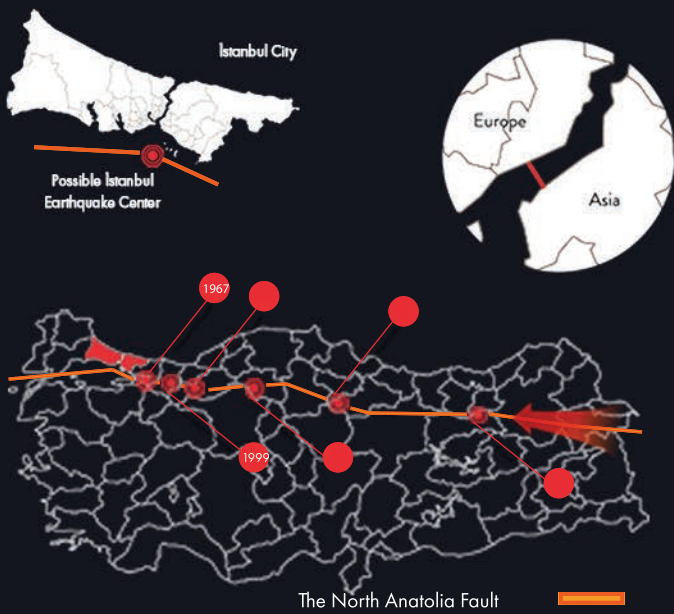
Time 2018 Winter

Location İstanbul / Turkey

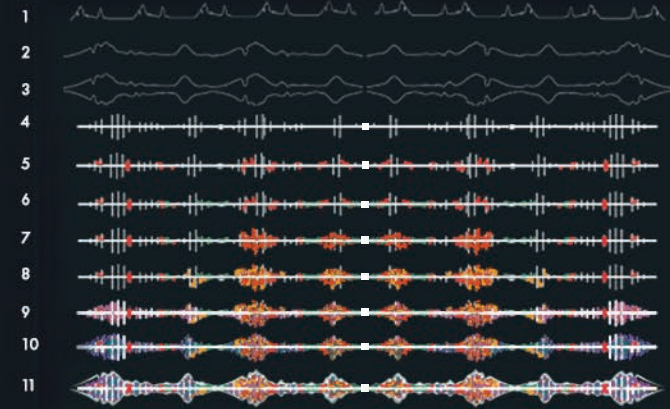
Role Conceptual development, Massing, Architectural Design Phase, Representation of Boards and Diagrams, Background Information Research

\*Group members. Başak Günalp, Tunahan Mert Topuz, Zeynep Ege Odabaşı, Didem Üyetürk

The objective of this proposal is to create an emergency escape shelter and temporary housing for the expected İstanbul earthquake which will leave thousands of local people homeless, located in between two focal points –and also considered as rescue points by authorities- of İstanbul, Üsküdar Port and Beşiktaş Port, where there is no risk of tsunami. Earthquakes are on the front burner for a long time in Turkey's agenda. Since Byzantine Period, many earthquakes had occurred and the most recent earthquake that affected many people's lives drastically had happened in 1999 in Gölçük, with the magnitude of 7.4 that caused the loss of 17.480 people's lives. The researchers indicate that the next İstanbul earthquake will occur in 30 years with the expected magnitude of 7-7.5. With the urban sprawl, not only cities expand but the accommodation density increases by time corrupting the organization of emergency access points, which increases the number of people and structures that will be affected. The design proposes a safe evacuation of masses from land to sea, giving an opportunity of accommodation for a long time in a catastrophic situation such as the destruction of city and roads during the renewal by creating an innovative horizontal organization under the sea.



\*The graph shows the juxtaposition of population density and the high risk area of earthquake damage

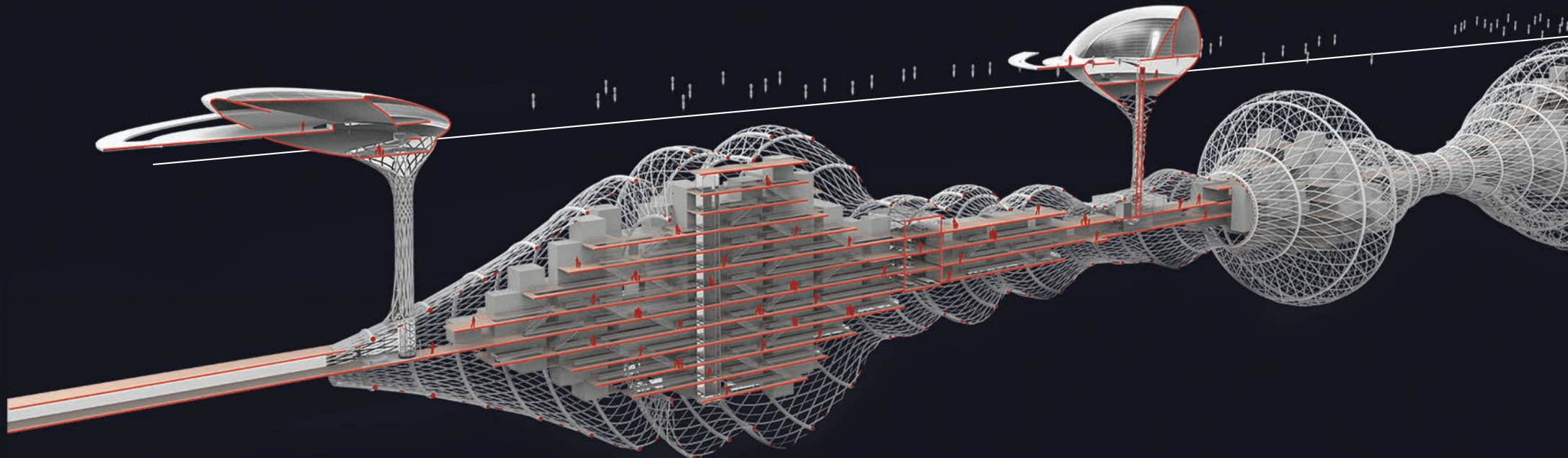


**Process & Concept**

1. Seismic wave of the Izmit-Gölcük Earthquake, which is the greatest and the most recent Earthquake in Turkey.
2. Seismic wave is elongated to create meaningful spaces inbetween.
3. The wave is revolved around y-axis to have a 3D development.
4. The main circulation skeleton and entrances are placed, other settlements that had been done are as following steps,
5. Common spaces are located according to access and unit/pedestrian density along corridors.
6. Green corridors are used as links between unit clusters.
7. The most dense units in terms of population are located near the center of the structure and main corridor. First 80 sqm collective units are placed.
8. Then 60 sqm collective units are placed.
9. 16 sqm family units are placed.
10. 12 sqm family units are placed.
11. Seismic wave formed carbon fibre skin envelopes the structure.

**The Outer Permeable Skeleton**

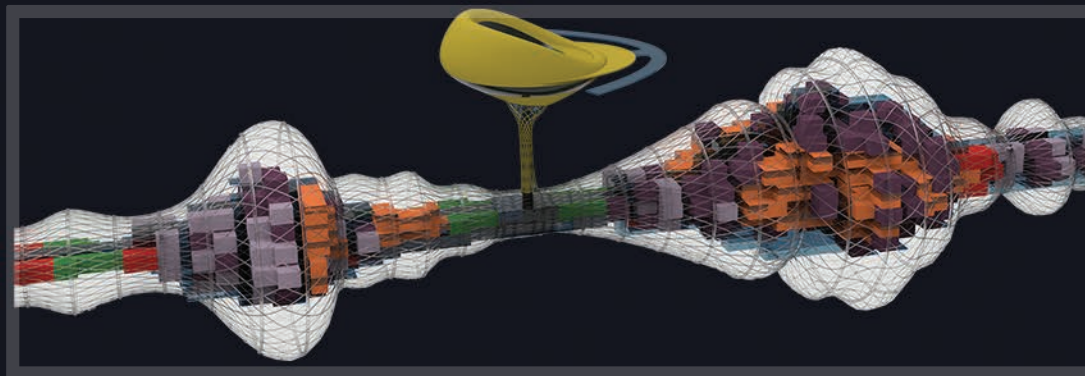
The outer permeable skeleton that surrounds the whole living system is creating a protection for units under the circumstance of maritime traffic, in the manner of protecting the natural habitat of sea and the natural stream with the prevention of creating an artificial dam by its permeable characteristic. The structure is made out of carbon-fiber, when the durability and the strength are taken in to account. The flexible characteristic of carbon-fiber supports the oscillation of shelter. The oscillation generates energy and the energy generated is used in the structure. Also, the inter-nodes where the height of the structure is minimum are the routes of maritime traffic, one of the parameters that taken into account while shaping the form.





### Easy Access & Mass Sheltering

The deployment units are visible from the sea which eases the maritime circulation and access to shelter by boats and helicopters by victims, rescue teams and military during/right after the earthquake. The shelter can be seen as a prototype that satisfies the need of 20.000 people's accommodation approximately. The prototype can be set anywhere along Marmara Sea, when it is needed in order to increase the number of accommodation.

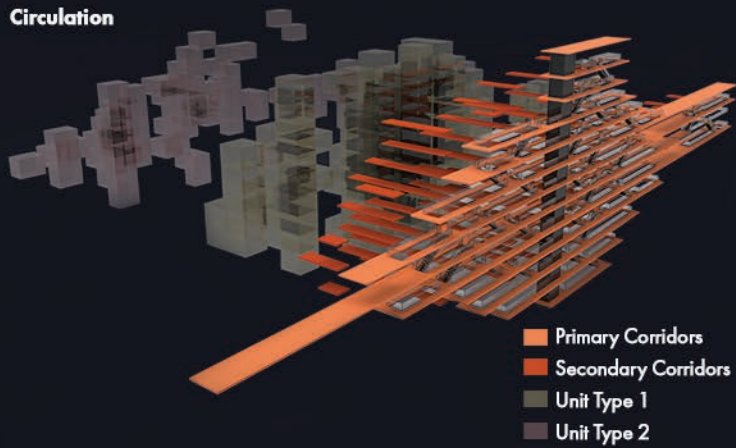


<b>DURING EARTHQUAKE</b>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #f0e68c; border: 1px solid black; margin-right: 5px;"></span> Emergency Access Zones</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #8b4513; border: 1px solid black; margin-right: 5px;"></span> Access Tunnels from Gathering Point</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #228b22; border: 1px solid black; margin-right: 5px;"></span> Green Corridors between Life-Nodes</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #9370db; border: 1px solid black; margin-right: 5px;"></span> Unit Type 1 (3x3)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #800080; border: 1px solid black; margin-right: 5px;"></span> Unit Type 2 (4x3)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #ffa500; border: 1px solid black; margin-right: 5px;"></span> Unit Type 3 (Collective)</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: #ff0000; border: 1px solid black; margin-right: 5px;"></span> Common Spaces               <ul style="list-style-type: none"> <li>Food Facilities</li> <li>Healthcare/Rehabilitation Center</li> <li>Seismographic Research Center</li> <li>City Simulation VR Rooms</li> <li>Leisure Activity Spaces</li> </ul> </li> </ul>	<b>AFTER EARTHQUAKE</b>	<ul style="list-style-type: none"> <li><b>Earthquake Shelter/Temporary Housing</b></li> <li><b>Eco-Tourism Hotel</b></li> </ul>
	<ul style="list-style-type: none"> <li>Maritime Ecology Museum</li> <li>Emergency Exit Tunnels</li> <li>Green Corridors</li> <li>Hotel Room Type 1 (3x3)</li> <li>Hotel Room Type 2 (4x3)</li> <li>Hostel Room (Collective)</li> <li>Common Spaces               <ul style="list-style-type: none"> <li>Food Facilities</li> <li>Undersea Observation Rooms</li> <li>Sea Agriculture Ateliers</li> <li>Exhibition/Conference Spaces</li> <li>Marine Life Simulation VR Rooms</li> </ul> </li> </ul>		

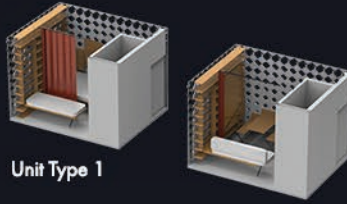
### Functions

Based on particular needs of cases various functions can be offered inside by considering phases such as before, during and after the expecting earthquake. Before earthquake the structure includes restaurants and fish farms but the overall functions are generated right after the earthquake consisting various spaces of activities such as deployment zones to reach the units, units derived from the needs of people and common spaces in order to prevent people being deeply affected by mass destruction. Unique spaces offer strong visual connectivity with water which can be interpreted as crafting a personal experience to retreat for the victims. After the earthquake, the structure will be used as an ecotourism hotel in order to maintain continuity and provide the overall sustainability of the structure, offering an outstanding experience by diversifying user experience.

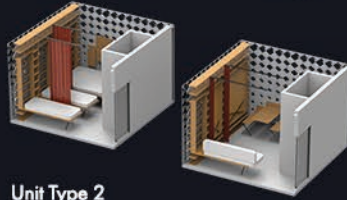
## Circulation



## Unit Types



Unit Type 1



Unit Type 2



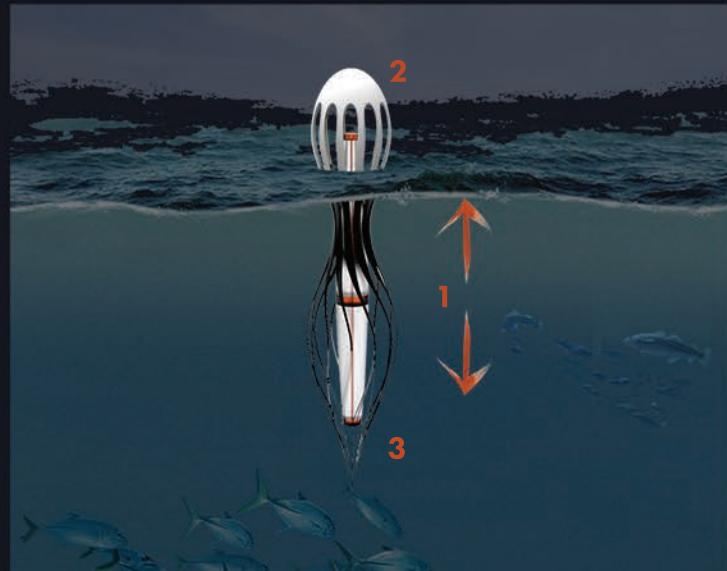
Unit Type 3

Various unit types are offered to reach various user profiles that are affected by the earthquake. The furnitures are designed as mobile to create more space in a defined squaremeter, creating small yet flexible spaces.



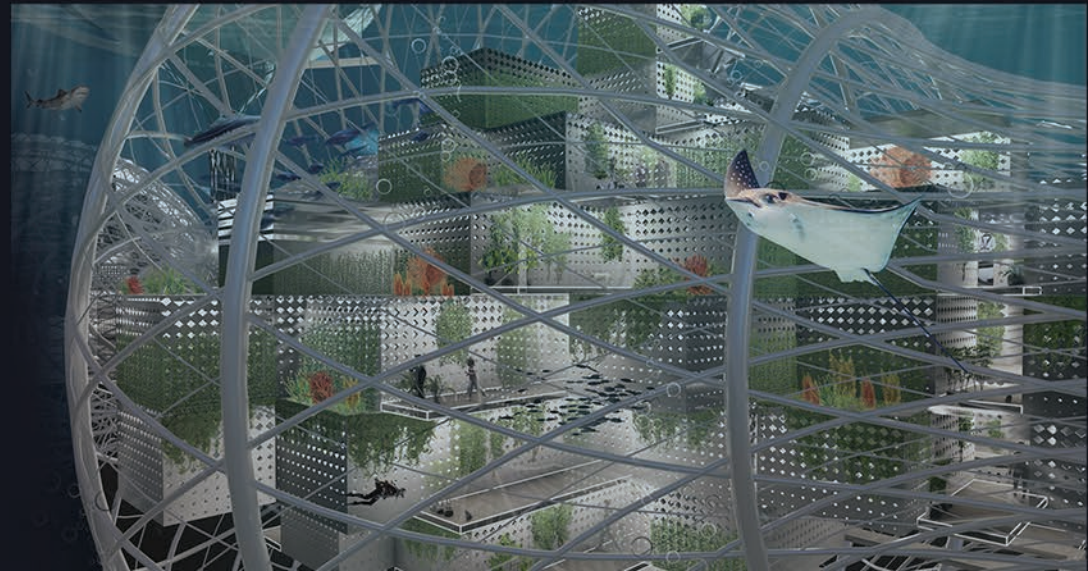
## Deployment & Form

The location of design is selected by juxtaposing the dense sea and land traffic, risk-population density, the existing fault line and the rescue points during emergency in order to ease the access from land to the emergency shelter right after the earthquake. The form is derived from the seismograph recordings of 1999 Gölcük Earthquake creating a massive memorial for the city aiming to merge history with emergency. The membrane then gave shape to the units and the main corridor, placing the less dense units (Type1 units) in terms of population at the outer boundary to ease the pedestrian traffic of corridors. The more dense units are placed near the main corridor, and secondary corridors are set for vertical circulation.



Aquabuys are used as sustainable, guidance and decorative features, by generating energy that will be used in units, guiding the maritime traffic and giving light to grab people's attention.

1. Each buoy has a hose pump that moves up and down in sync with the waves
2. The pump compresses the sea water, driving a turbine to produce electrical current
3. The current is transmitted to shore via cables





Thank you.

As a recent graduate 23 years old architect, I wish to expand my technical and theoretical knowledge of architecture and turn my focus on the sustainability of architecture. I am Başak Günalp and I think that architecture has not only become my field of education but also changed how I perceive the world, the definition of spaces and human communication, in short, became my lifestyle. To me, architecture and design is a key point for human beings. We have a dual-way of interaction which humans are affected by architecture and architecture is affected by humans. We see societies and incidents that changed the typologies, languages and styles of architecture. The world becomes global/international/accessible day by day, with the disappearance of textures and cultures, yet it creates a chance to access and adapt the changes and cultures in a fast way. In a world of change, architecture is taking its form rapidly with new technologies, systems, and opportunities, and I think that in order to benefit from the change and make it live, the change must be sustainable not only in environmental but also in socio-cultural and economic aspects. As an architect who seeks to be trained as confident, fully rounded architect aiming to achieve the highest standards of quality in overcoming the issues of today and challenges of tomorrow, now I began to feel the responsibility to texture the world with my touch by broadening my vision and knowledge on design, architecture, history of built environment, societies and human behaviors. As one of my professors said, "architects belong ugly places", the saying became my motto which makes me eager to create innovative solutions with offered technologies and collaborative design skills for a livable -actually, not only livable but also appealing, human-centered and fulfilled in terms of form and function- world.