

ISTANBUL TECHNICAL UNIVERSITY
FACULTY OF ARCHITECTURE
DEPARTMENT OF
LANDSCAPE ARCHITECTURE
2020-2021 SPRING
GRADUATION PROJECT

URBAN CAMPUSES OF ITU:

Core Jury Members

Prof. Hayriye Eşbah Tunçay, PhD
Assoc. Prof. F. Ayçim Türer Başkaya, PhD
Assist. Prof. Ikhwan Kim, PhD

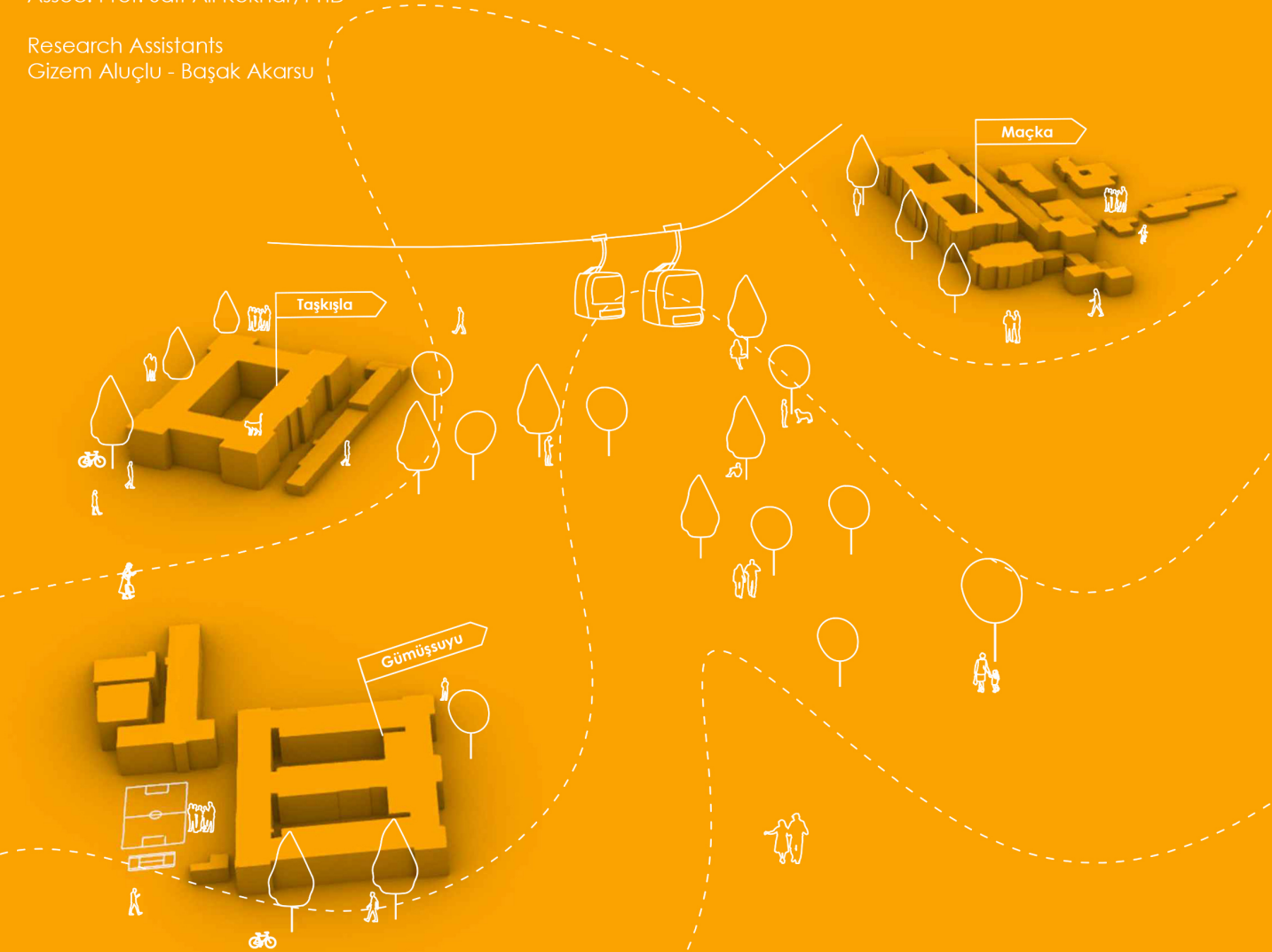
Guest Jury Members

Prof. Saye Nihan Çabuk, PhD
Assoc. Prof. Sait Ali Köknar, PhD

Research Assistants

Gizem Aluçlu - Başak Akarsu

Taşkışla, Gümüşsuyu, Maçka



• urban campus • creative hub • green network • multilayered landscape • cultural and natural dynamics • dynamic city
• history • culture • industry • sports • military • education • panoramic view • transportation • extreme topography

2020-2021 SPRING | STUDIO REPORTS

bitirme projesi

graduation project

PEM 492E/4902E

Core Jury Members/Çekirdek Jüri Üyeleri

Prof. Hayriye Eşbah Tunçay, PhD.

Assoc. Prof. Ayçim Türer Başkaya, PhD.

Assist. Prof. Ikhwan Kim, PhD.

Guest Jury Members/Konuk Jüri Üyeleri

Prof. Saye Nihan Çabuk, PhD.

Assoc. Prof. Saitali Köknar, PhD.

Research Assistants/Araştırma Görevlileri

Gizem Aluçlu

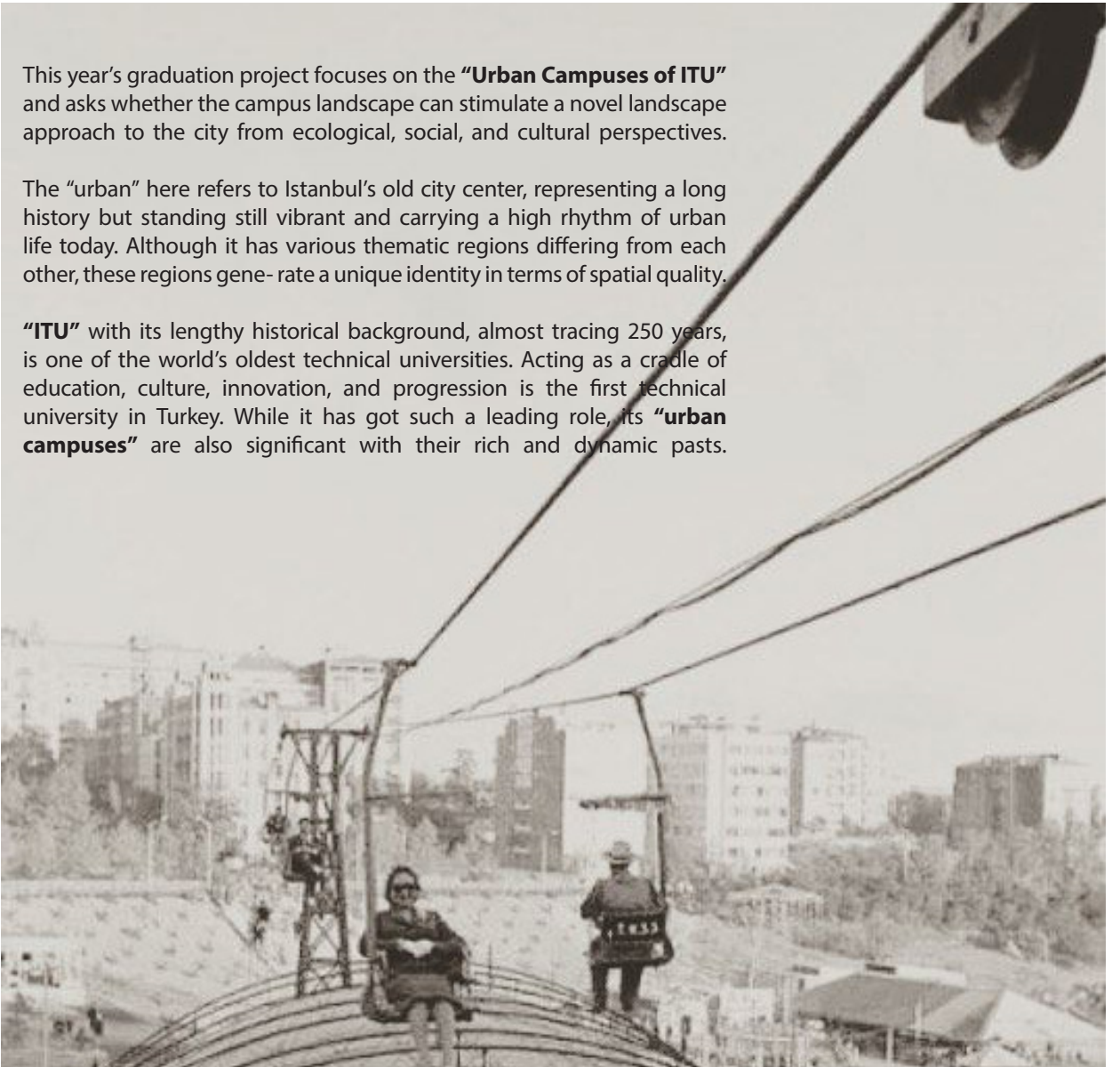
Başak Akarsu

URBAN CAMPUSES OF ITU: TASKISLA, GUMUSSUYU, MACKA.

This year's graduation project focuses on the **"Urban Campuses of ITU"** and asks whether the campus landscape can stimulate a novel landscape approach to the city from ecological, social, and cultural perspectives.

The "urban" here refers to Istanbul's old city center, representing a long history but standing still vibrant and carrying a high rhythm of urban life today. Although it has various thematic regions differing from each other, these regions generate a unique identity in terms of spatial quality.

"ITU" with its lengthy historical background, almost tracing 250 years, is one of the world's oldest technical universities. Acting as a cradle of education, culture, innovation, and progression is the first technical university in Turkey. While it has got such a leading role, its **"urban campuses"** are also significant with their rich and dynamic pasts.





"Urban campuses have unique planning and design challenges when it comes to creating a sense of place." (Bacevice & Bennet, 2018).

"With the growth of urban campuses in the twenty-first century, how can landscape architecture foster the innovation associated with cities and urban neighbourhoods? How might the urban university campus become the creative hub imagined by urban designers and thinkers?" (Way, 2016).

Besides their architectural and landscape settings, these campuses reflect the city's history with the tasks they have undertaken during various periods, together with the milestone events and people they have contacted. Surroundings of these campuses engorge themselves on and bring about a

multilayered landscape involving the regalain, political, multicultural, prestigious, educational, social, vernacular, natural, and recreational layers besides the manyo thers. In such a complex setting, it is expected from graduation candidates to discover the problems within site by elaborating the qualitative and quantitative aspects while putting the urban campuses at the heart of their design proposals. 2020-21 Spring Semester Landscape Architecture Graduation Project invites students to discuss and develop innovative design proposals to generate a creative interplay between the varying layers and the people of such an educational landscape.

From Beşiktaş to Harbiye, the project area encompassing all three campuses corresponds to a multilayered region in Istanbul. The campus buildings served primarily for military purposes

as hospitals or barracks hence first-degree conservation status. The surrounding area includes lots of constructions from the Ottoman to Early Republic Period, as they happened to be at risk of disappearance due to earthquakes happening dramatically in Istanbul. Because of physical and social factors, the area is open to risks caused by anthropogenic and natural factors. The site also consists of industrial history with the structures like 'gashouse.' The stadium, together with the different sports fields in the campuses, contributes a sport layer in the area. Since the site has an extreme topography, from the sea level to 80 meters, it is open to the Bosphorus and panoramic views. This topography has a dominant impact on transportation. Therefore, the mobilization between two campuses can be possible by cable car, which can be the one significant example in the world.



GRADUATION PROJECT SITE



Today, the Faculty of Architecture includes five undergraduate programs: Architecture, Landscape Architecture, Urban and Regional Planning, Interior Architecture, and Industrial Design. Taşkılla was registered on May 14 of 1983 as “Cultural Property to be Preserved at First Degree” (ITU Faculty of Architecture, 2014).



ITU Gümüşsuyu Campus consists of Faculty of Mechanical Engineering, Faculty of Textile Technologies and Design, Gümüşsuyu Sports Center, Gümüşsuyu Dormitories with a capacity of 286 people. Campus locates on the Gümüşsuyu Street in the axis of Taksim- Beşiktaş.



ITU Maçka Campus, located on the Beşiktaş Nişantaşı axes, includes the Faculty of Management, English Preparatory School, Language and Revolution History Department, Turkish Music Conservatory, ITU Foundation offices, and ITU Social Facilities (ITU Faculty of Management, 2021).



CORE JURY MEMBERS



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SELECTED PROJECTS

01 URBAN LABORATORY | Gizem Yağmur Gölbaşı

*Equivalent Prize of the 9th Landscape Architecture Students Graduation Project Awards/Chamber of Landscape Architects

02 RE_CONNECT | Ezgi Akpınar

*Equivalent Prize of the 9th Landscape Architecture Students Graduation Project Awards/Chamber of Landscape Architects

03 CARNIVALESQUE | İrem Güvenç

04 RESILIENT CITY | Ece Özetlerer

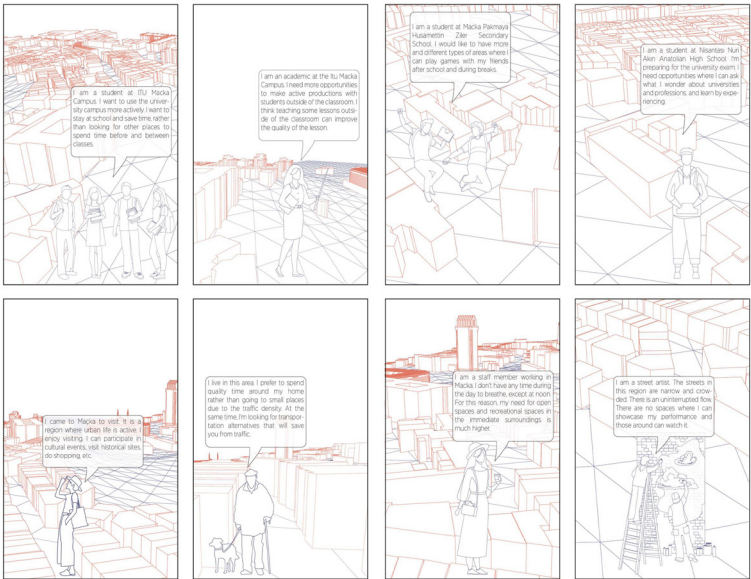
URBAN
LABORATORY

Gizem Yağmur Gölbaşı

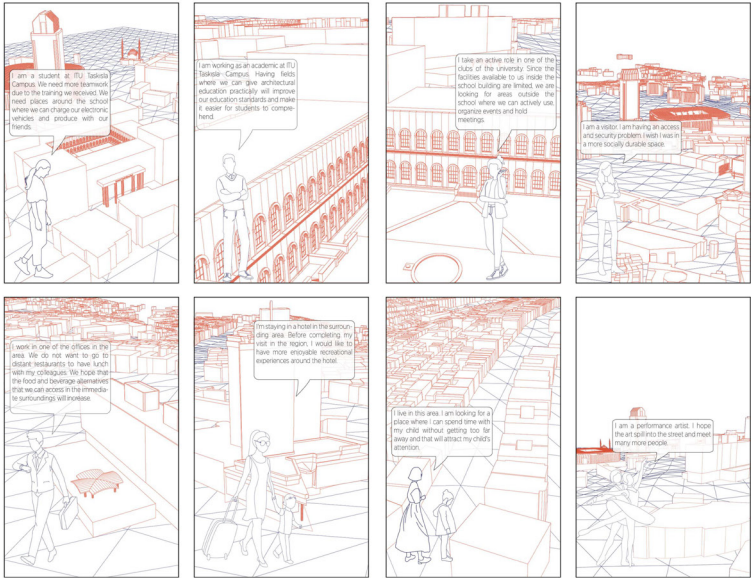
*Equivalent Prize of the 9th
Landscape Architecture Students
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Chamber of Landscape Architects

The Urban Laboratory Project, which has been implemented within the scope of university and city interaction, is supervised and managed by the University and Local Administrations. The Urban Laboratory Project is located in the area at the intersection of the three city campuses of Istanbul Technical University. With innovative, inclusive, participatory, resilient, ecological and flexible design approaches, the most appropriate environmental, social and economic strategies are developed for the multi-layered structure of the region and the project. This proposed project consists of 10 basic concept parts. These 10 regions, which consist of meeting, enterprise, incubation, production, experience, exhibition, education, activity, rest and green themes, make use of the university's opportunities and produce scientific solutions to the problems of the city. Every segment of the society is included in the project and participatory processes are followed in the solution of urban problems. Experts in their field, entrepreneurs, students, city residents, administrative segments, etc. groups come together to prepare studies that determine the future of the city and set our standards in the

ITU MACKA CAMPUS AND SURROUNDINGS USER PROFILES



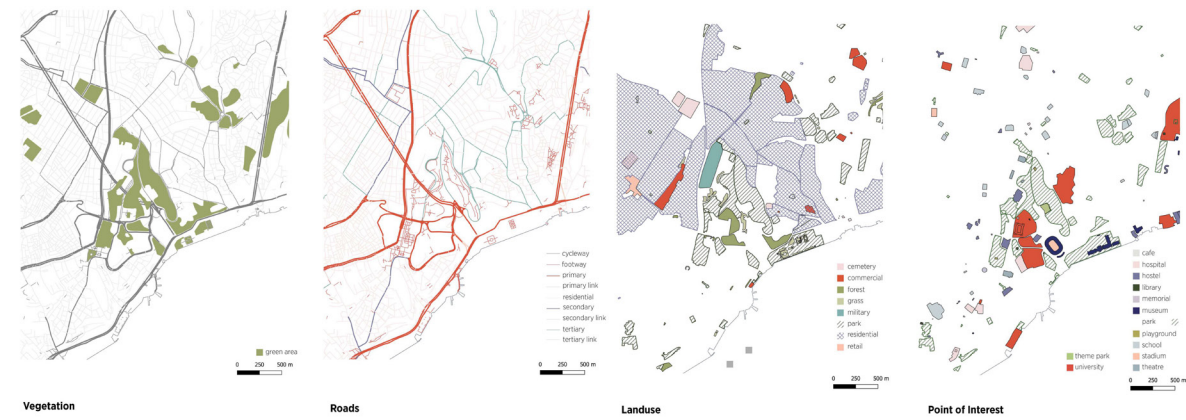
ITU TASKISLA CAMPUS AND SURROUNDINGS USER PROFILES



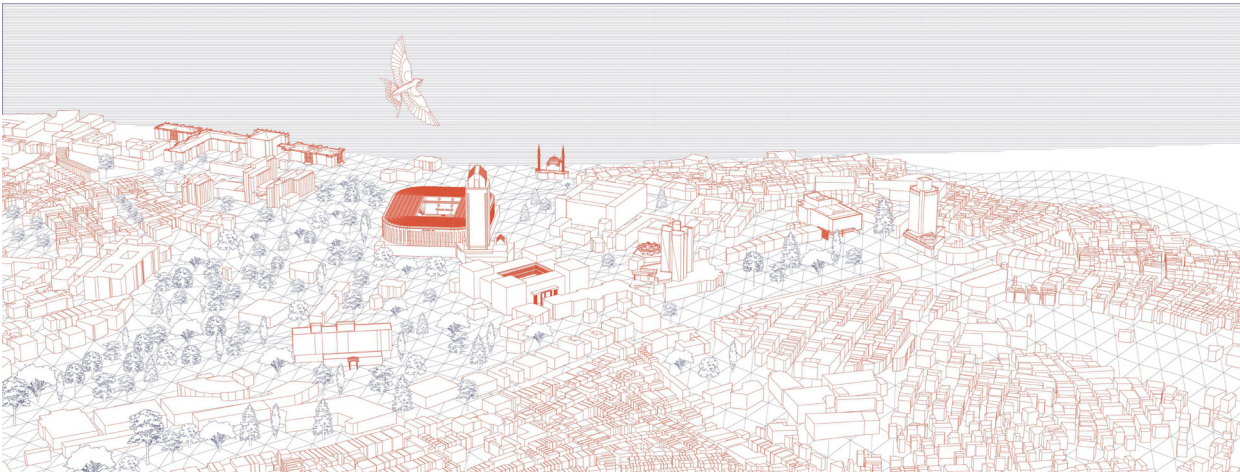
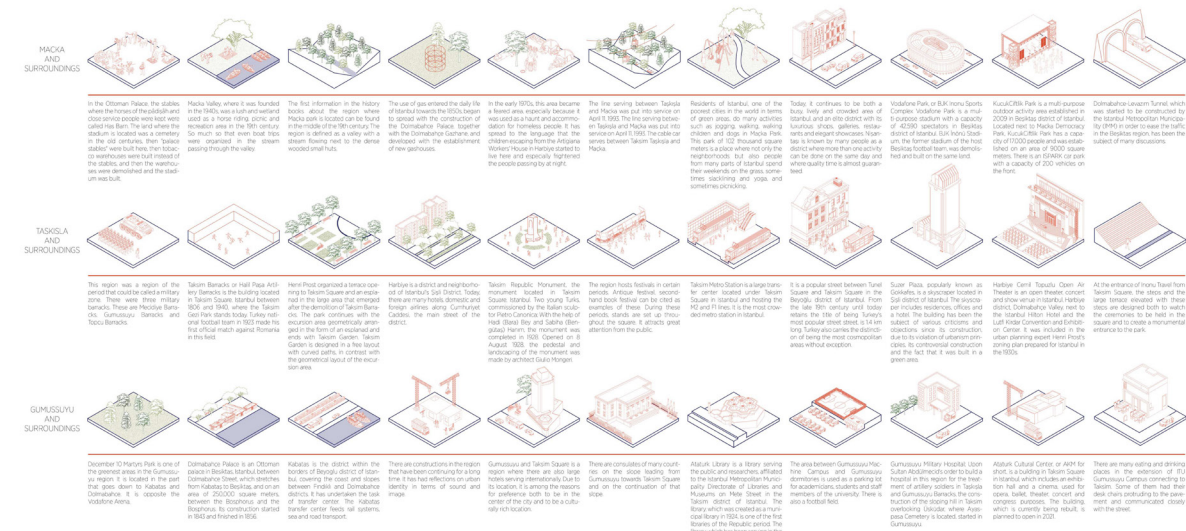
ITU GÜMÜSSUYU CAMPUS AND SURROUNDINGS USER PROFILES



URBAN ANALYSIS



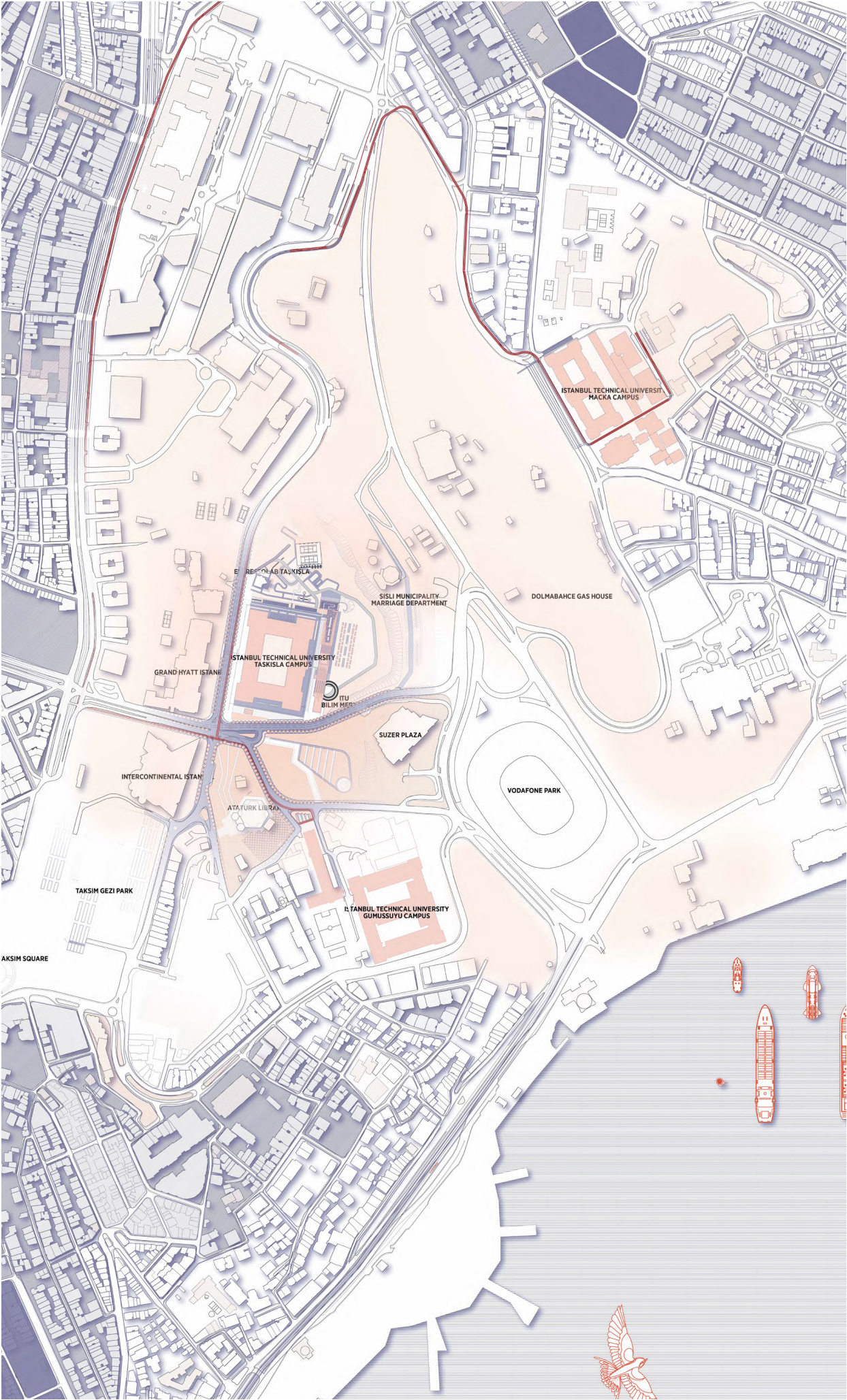
AREA USAGES



international scientific arena. In the process of dissemination of these studies, the city council, mobile application, social media accounts, ITU Radio and the developed website are used. The region studied within the scope of the project has historical and urban site status. Maçka Democracy Park, located at the center of three campuses, has an important ecological potential as the largest green area in the region. It is aimed that the spatial strategies

and solutions developed in this context are sensitive to the sensitive nature of the region. The Patch-Corridor-Matrix model was used with the problems determined at 1/2000 scale and suggested solutions through this concept study. The determined method and concept work was adhered to at 1/500 scale and 1/200 scale. In the 1/500 plan, the focus is on the Taskısla Campus, the

urban gap between the campuses, the Gumussuyu Campus and the Ataturk Library. In the 1/200 plan, Taskısla Campus was taken as the center and environment-friendly co-working areas were developed in and around Taskısla. The project was supported with spaces where people from all walks of life can socialize and become a part of the Urban Laboratory, as well as common working areas.



01 URBAN LABORATORY

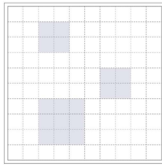
METHODOLOGY

"Landscapes are composed of elements-the spatial components that make up the landscape. A convenient and popular model for conceptualizing and representing the elements in a categorical map pattern is known as the patch-corridor-matrix model (Forman 1995). Under this model, three major landscape elements are typically recognized, and the extent and configuration of these elements defines the pattern of the landscape."

(1) Patch--Landscapes are composed of a mosaic of patches (Urban et al. 1987). Landscape ecologists have used a variety of terms to refer to the basic elements or units that make up a landscape, including ecotone, biotope, landscape component, landscape element, landscape unit, landscape cell, geotope, facies, habitat, and site (Forman and Godron 1986).

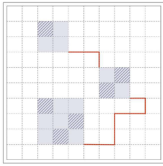
(2) Koridor - Koridorlar, yapı veya çevre temelinde tanımlanabilen doğrudan yapıyı unsurlardır. Forman ve Godron (1986) koridorları "iki farklılık gösteren bölgeyi birbirine bağlayan ve arazi parçalarını birleştirerek koridorlar oluşturur" olarak tanımlar. Koridorlar, arazi parçalarını birleştirerek, arazi parçalarını birleştirir ve arazi parçalarını birleştirir.

(3) Matris - Bir projeye ilişkin alanlar için projeye ilişkin diğer alanlar (genellikle yapılar). Bunlardan matris, en kapsamlı ve en büyük alanı (örneğin toprak) ve bu nedenle projeye ilişkin diğer alanları (örneğin yapılar) (Forman ve Godron 1986).



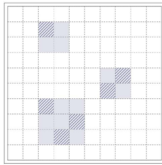
03 CORRIDORS/CONNECTORS

It forms parts of the network system that connects patches. It is framed by the buffer zones and the city matrix. It acts as a skeleton for the Urban Laboratory.



01 PATCHES

It covers the use of spatial potential and the creation of defined areas that work in the logic of stations within the scope of the objectives of the Urban Laboratory.

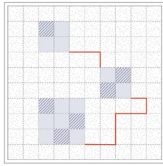


04 URBAN MATRIX

It covers the design, implementation and management of spaces outside the patch and corridor, where the ecological infrastructure of the city is strengthened.

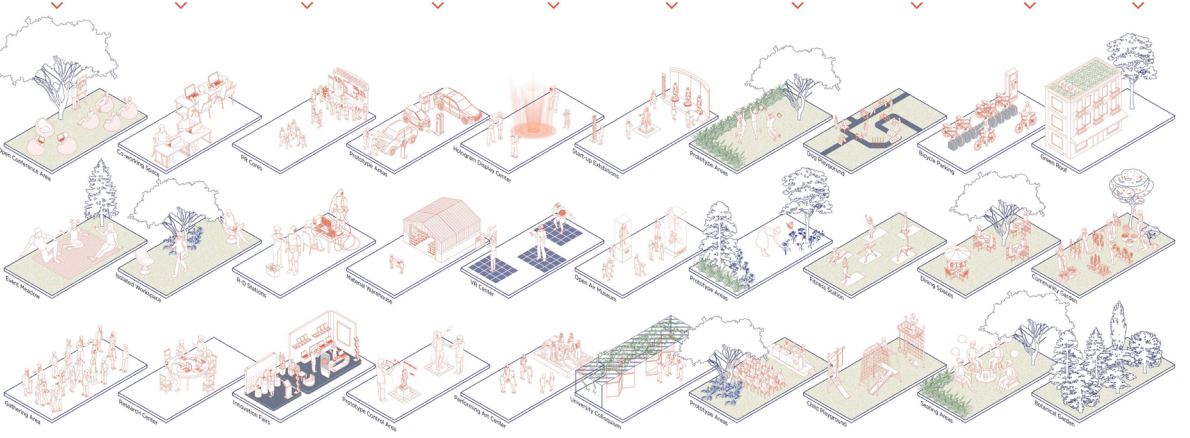
02 ROOMS/CELLS

They are specialized units included in patches. They become more defined in terms of content and function. As a concept, they are based on the patches they are on. Due to spatial differences, they are described as units.

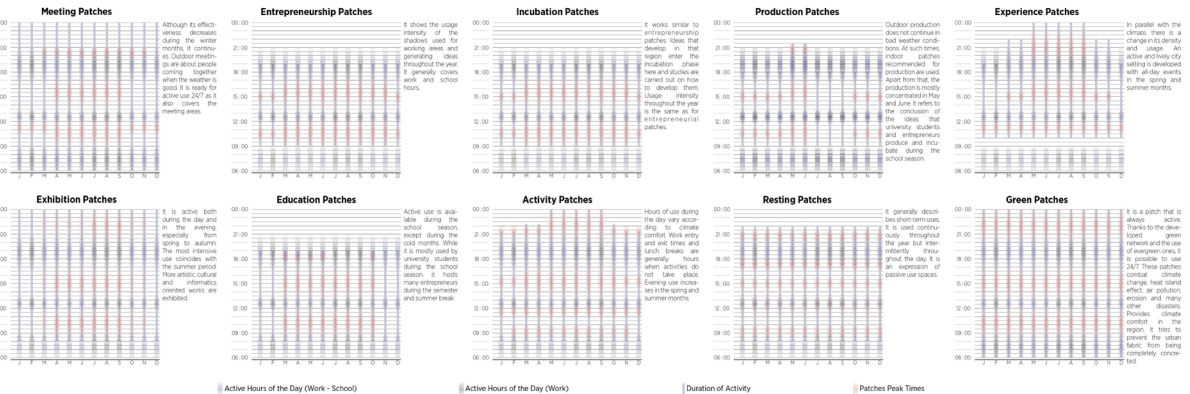


PATCH TYPES

01 Meeting Patches	02 Entrepreneurship Patches	03 Incubation Patches	04 Production Patches	05 Experience Patches	06 Exhibition Patches	07 Education Patches	08 Activity Patches	09 Resting Patches	10 Green Patches
Definition Gathering places	Definition Spaces that allow working individually and as a team	Definition Places where entrepreneurial ideas are developed and where they meet with the investor and the market.	Definition Places where industrial and supported ideas are put into production.	Definition Places where the experience-appropriate outputs of the city laboratory offer experience to many different segments of the society	Definition Places where the research and production of university students and other entrepreneurs are exhibited.	Definition Areas where learning, conferences and workshops are held	Definition Places designed for active recreation	Definition Places that allow passive use.	Definition Green infrastructure
Goal To bring people from all layers of society together for similar purposes and to ensure communication between them	Goal Establishing active passive production spaces for entrepreneurs and designers who want to work and produce	Goal To create the physical environments that will prepare the ground for the research and development phase	Goal To ensure that ideas are put into production with the cooperation of many people	Goal Providing people with new and instructive experiences	Goal Meeting the work done inside and outside the campus with the society and evaluating the productions and providing feedback	Goal To ensure that education spreads to the city to use the teaching of the place to make education more interactive, to spread the understanding of education not only for students but for the society	Goal To create spaces where people who experience the space can actively use	Goal To create spaces where people who experience the space can use passively	Goal Reducing the urban heat island effect, combating climate change, supporting the construction of ecological corridors, making the relation network in the city strong and continuous
Spatial Tools Historical Society Center Meeting Square Open Conference Area Gathering Area Event Meadow	Spatial Tools Co-working Spaces Isolated Workspaces Research Center	Spatial Tools R&D Spaces Innovation Fairs	Spatial Tools Material Warehouse Prototype Control Area	Spatial Tools Media Art Center Performing Art Center Hologram Display Center	Spatial Tools Student Spaces University Colloquium Climate Museum / Exhibition Energy Museum / Exhibition Open Air Museum	Spatial Tools Outdoor Classroom Nature Education University Course	Spatial Tools Fitness Station Sunset View Point Child Playground Dog Playground	Spatial Tools Grass Spaces Viewing Platform Bicycle Parking / Bicycle Houses Seating Areas	Spatial Tools Bio-retention Area Botanical Garden Community Garden



DENSITY ANALYSIS OF PATCHES



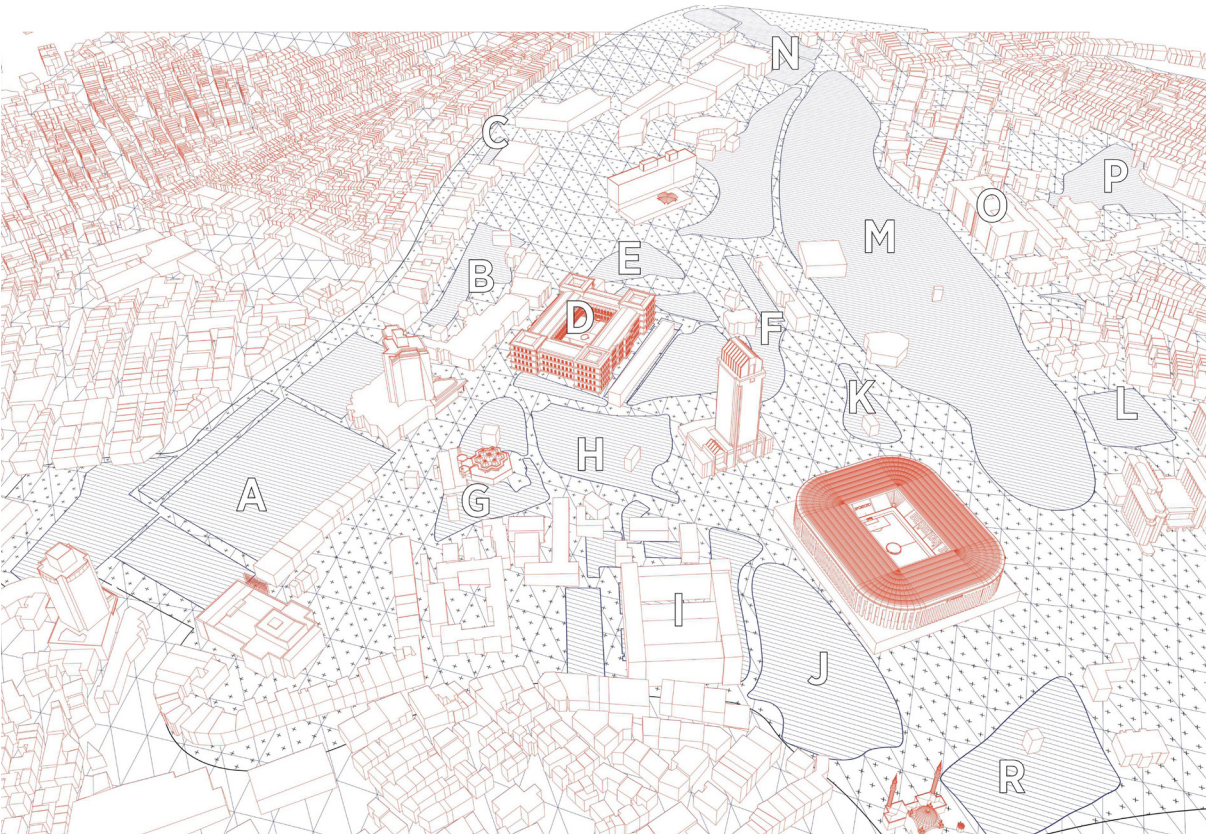
The ITU URBAN LABORATORY Project, which will be implemented within the framework of the cooperation of Istanbul Technical University and Istanbul Metropolitan Municipality, will provide solutions to the problems in the city while hosting the scientific information to be produced within the scope of

the university. The contribution of other universities to the studies and the publication of the productions realized in the city laboratory on a national and international scale will bring solutions to urban problems in a global sense. In this way, social relations will be strengthened, development and city-oriented

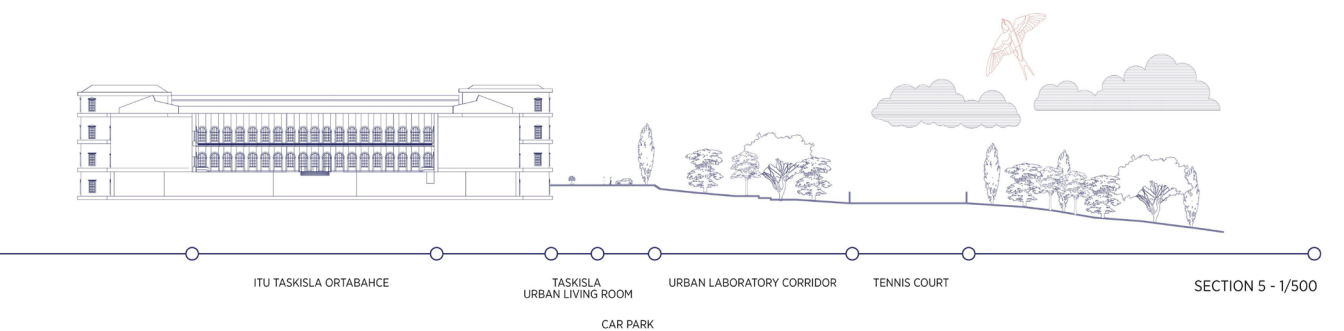
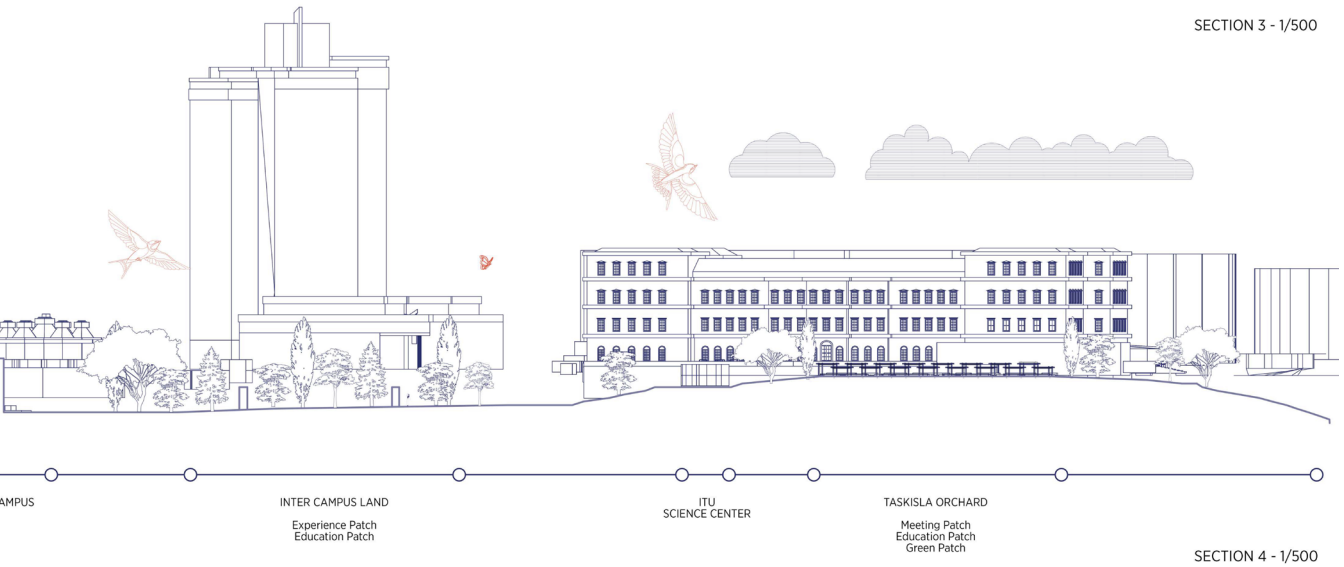
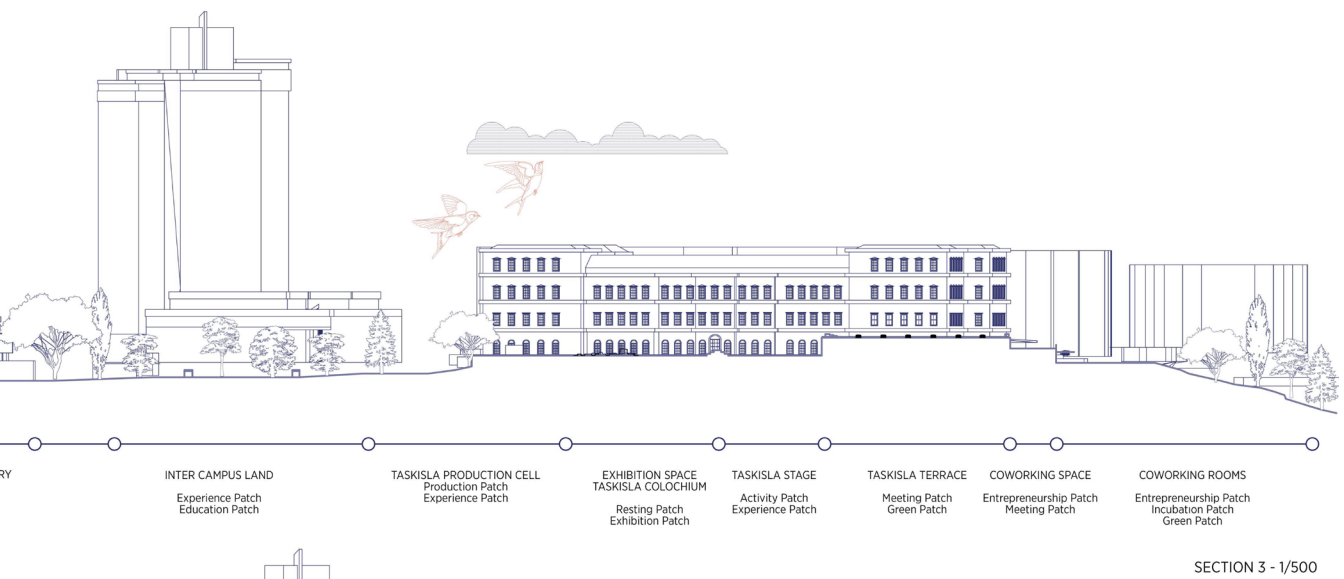
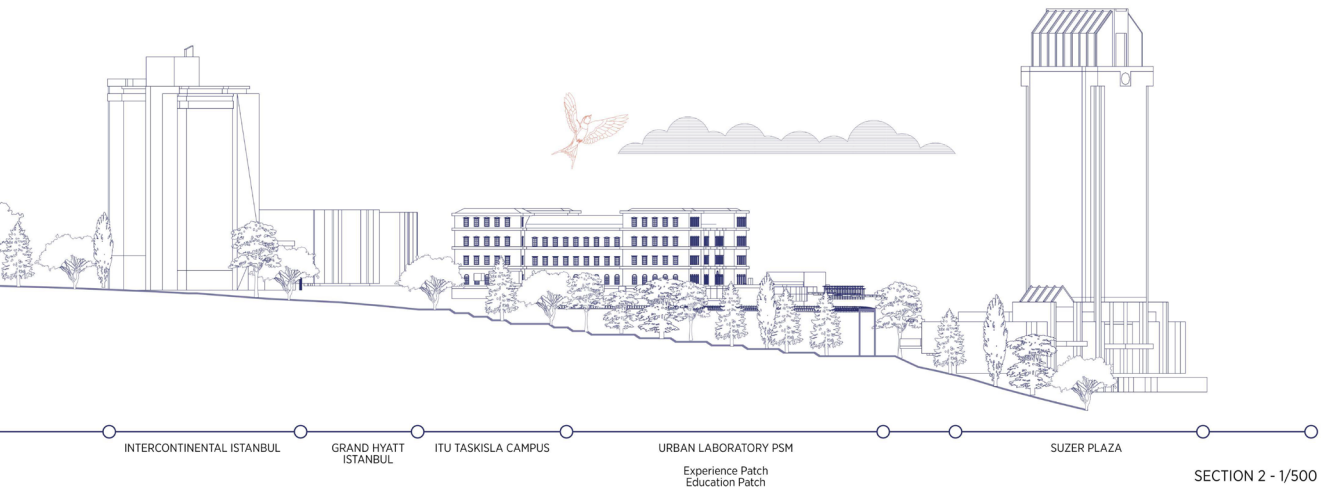
people will have the opportunity to come together, and the level of welfare and education in the city will increase. All segments of society will come together and produce rich content.



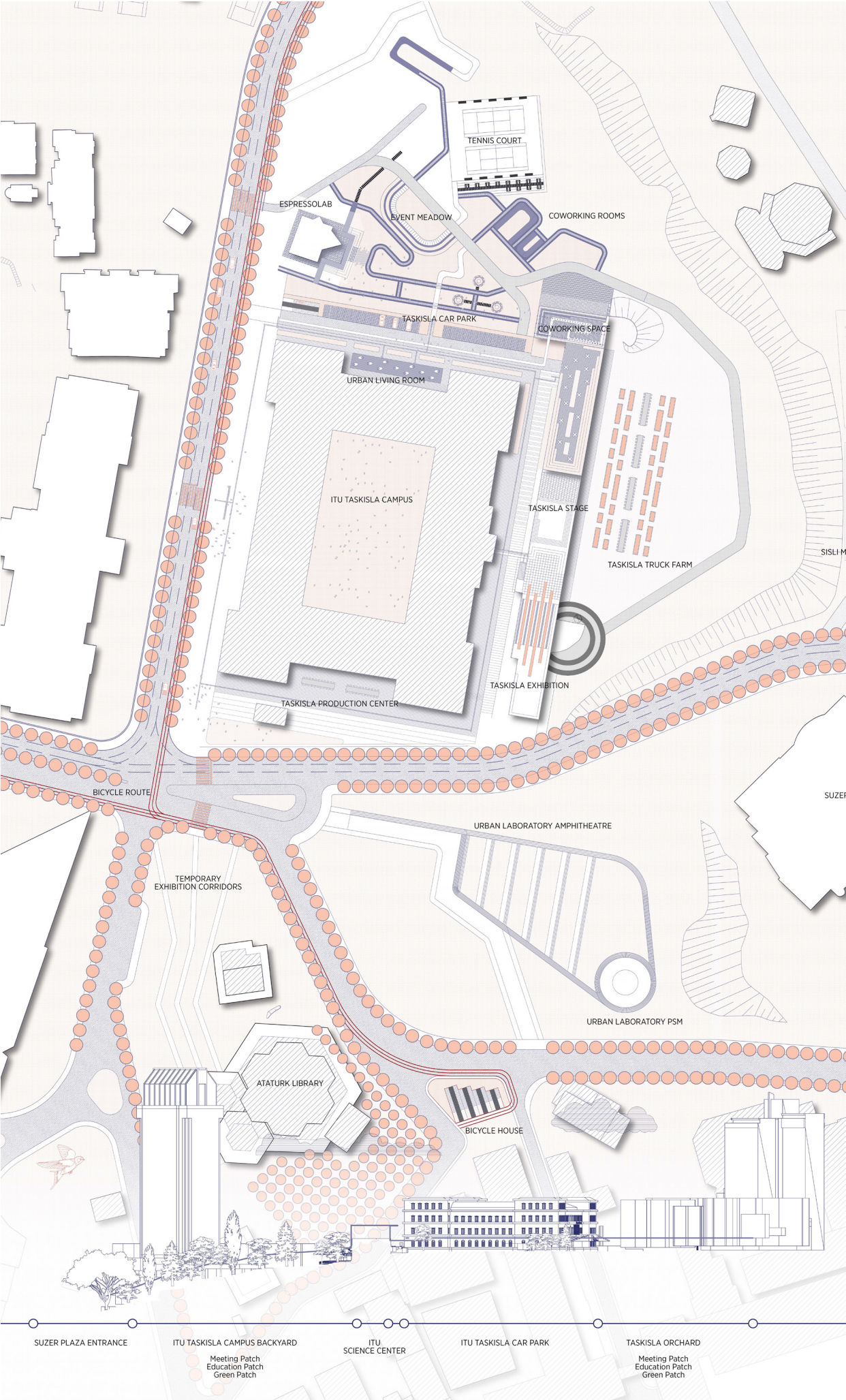
ATATURK LIBRARY

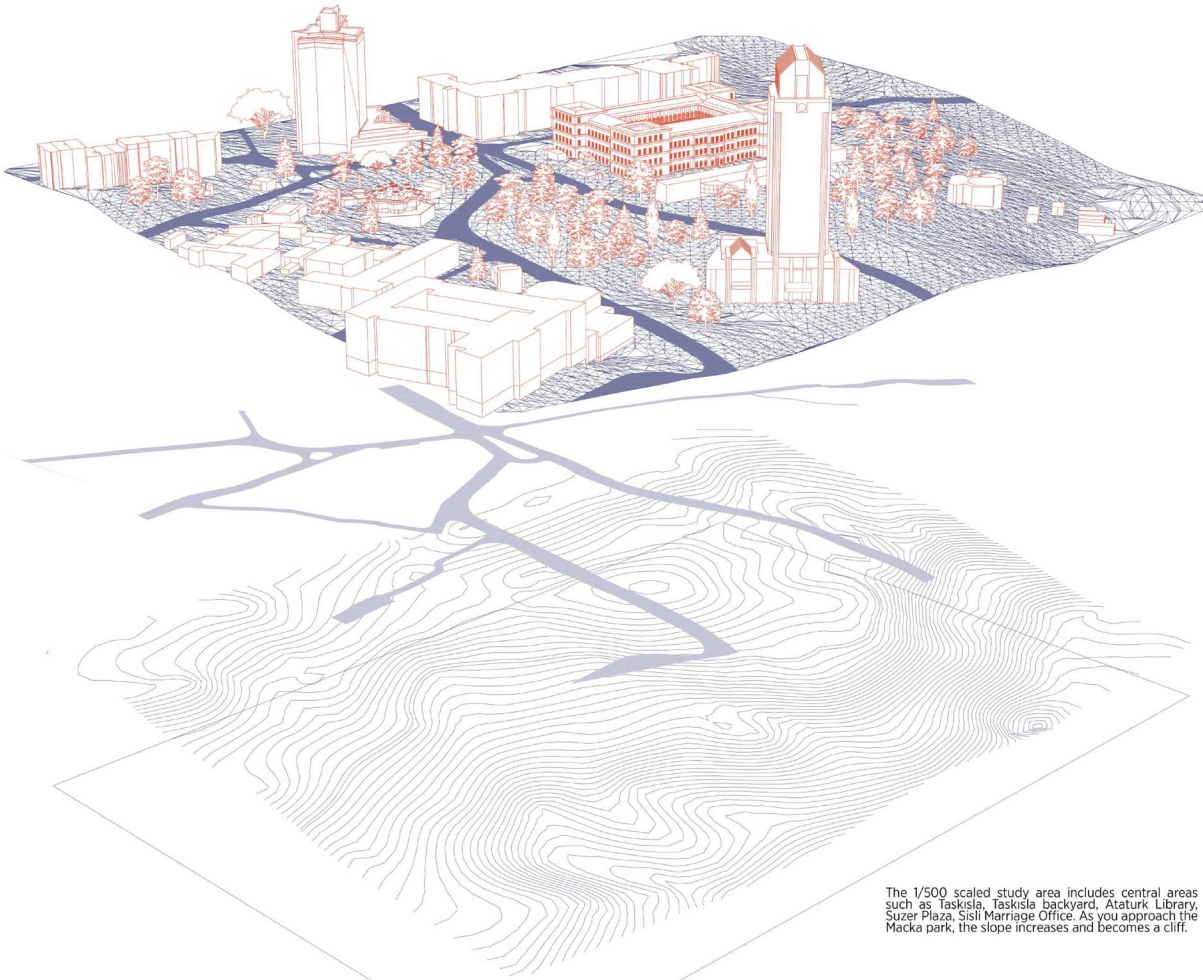


ITU GUMUSSUYU C



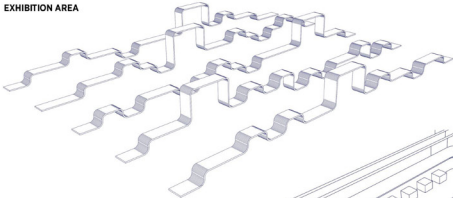
01 URBAN LABORATORY





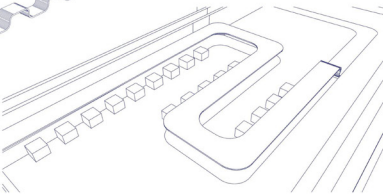
The 1/500 scaled study area includes central areas such as Taskisla, Taskisla backyard, Ataturk Library, Suzer Plaza, Sisi Marriage Office. As you approach the Macka park, the slope increases and becomes a cliff.

EXHIBITION AREA

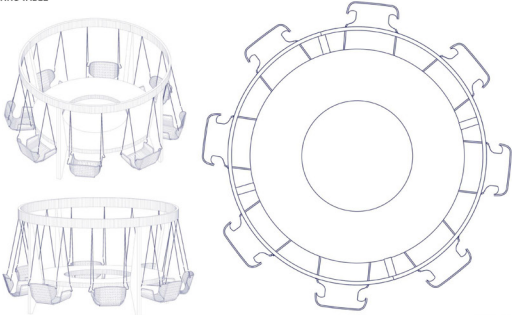


Design proposals have been developed to support the patch network that constitutes the organizational method of Urban Laboratory. It is aimed to integrate these areas with the site by designing them in accordance with the patch theory.

COWORKING SPACE



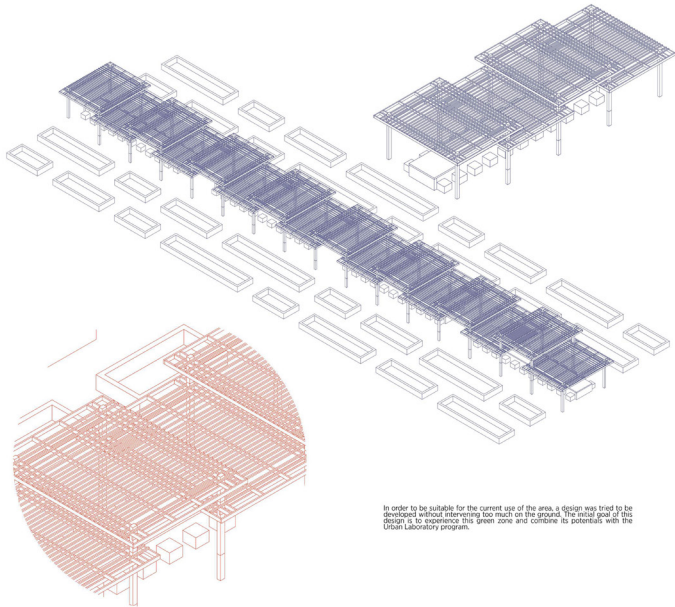
SWING TABLE



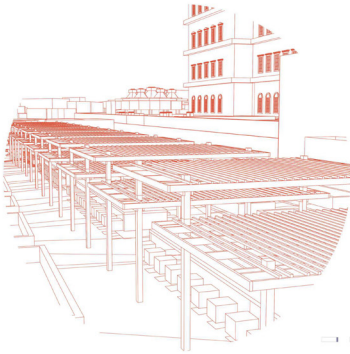
1/20 PLAN

The basic principle of the swing table is to create climate-friendly working areas by integrating the trees in the backyard of Taskisla into the design. For this reason, there are large gaps in the middle of the table where the tree trunk can easily fit.

TASKISLA ORCHARD

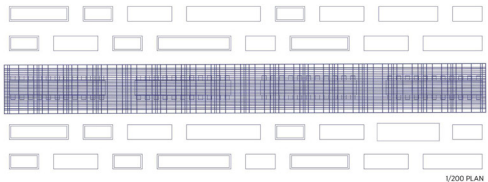


In order to be suitable for the current use of the area, a fiction was tried to be developed without intervening too much on the ground. The initial goal of this design is to experience this green zone and conform to potentials with the Urban Laboratory program.

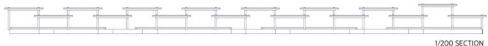


In this design consisting of wooden pergolas, it will serve the purposes such as activity, gathering, spending time, socializing and teaching. There are long wooden tables just below the pergolas. There are plant beds around it that are suggested to keep the concept of climate adaptation and develop it in terms of ergonomics, garden activities will be carried out in the related plant beds depending on the season.

1/200 SECTION

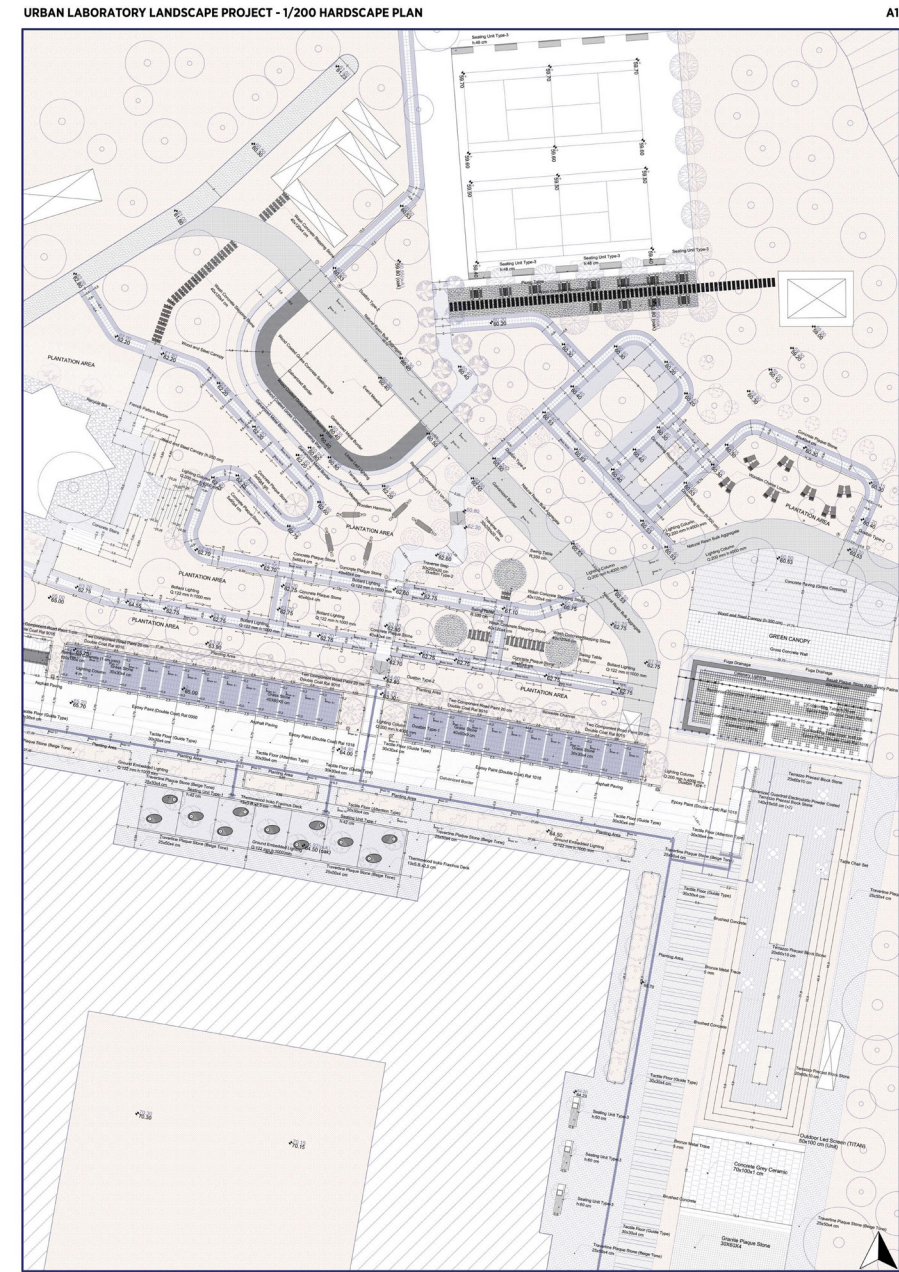


1/200 PLAN



1/200 SECTION





STRUCTURAL LEGEND

- Thermowood Iroko Fraxinus Deck (15x5.8 x2.5 cm)
- Travertine Plaque Stone (Beige Tone) (25x50x4 cm)
- French Pattern Marble (Hunk Silver Set)
- Grass Stone (40X80X9 cm)
- Terrazzo Precast Block Stone (40X80X9 cm)
- Basalt Plaque Stone With Sandy Patina (30X30X4 cm)
- Asphalt Paving
- Reinforced Concrete (1 cm joint)
- Natural Resin Bulk Aggregate
- Compressed Soil with Solution
- Traverse Step (30x20x20 cm)
- Concrete Plaque Stones
- Concrete Stairs
- Granite Plaque Stone (30x30x4 cm)
- Mulch
- Wash Concrete Stepping Stone (40x120x4 cm)
- Epoxy Paint (Double Coat) Ral 1018
- Terrazzo Precast Stairs
- Two Component Road Paint 20 cm
- Concrete Grey Ceramic (70x100x1 cm)
- Wood and Steel Canopy
- Brushed Concrete
- Concrete Paving (Grass Crossing)
- Tactile Floor (Guide Type) (30X30X4 cm)
- Tactile Floor (Attention Type) (30X30X4 cm)

PLANTING LEGEND

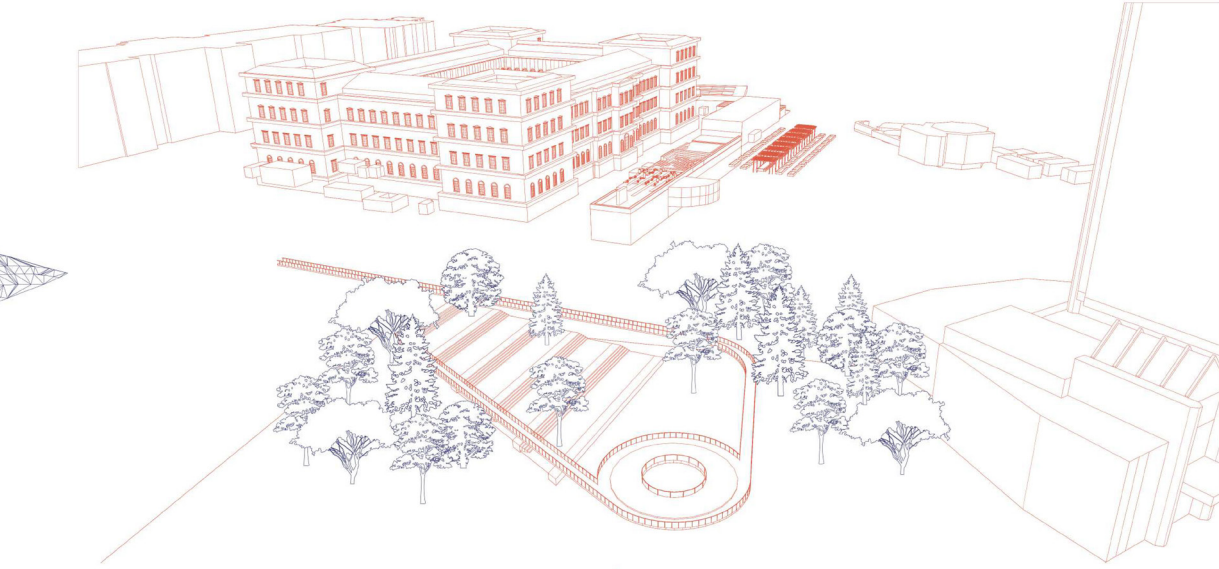
- Planting Area
- Existing Trees

URBAN FURNITURE LEGEND

- Swing Table
- Seating Unit Type 1
- Seating Unit Type 2
- Seating Unit Type 3
- Picnic Table
- Table Chair Set
- Wooden Hammock
- Wooden Chaise Longue
- Recycle Bin
- DustBin Type 1
- DustBin Type 2
- Catenary Lighting
- Lighting Column
- Boiland Lighting
- Ground Embedded Lighting

INFORMATION LEGEND

- Finished Floor Elevations
- Existing Elevations
- Drainage Slope
- Setting Top Elevations
- Setting Bottom Elevations



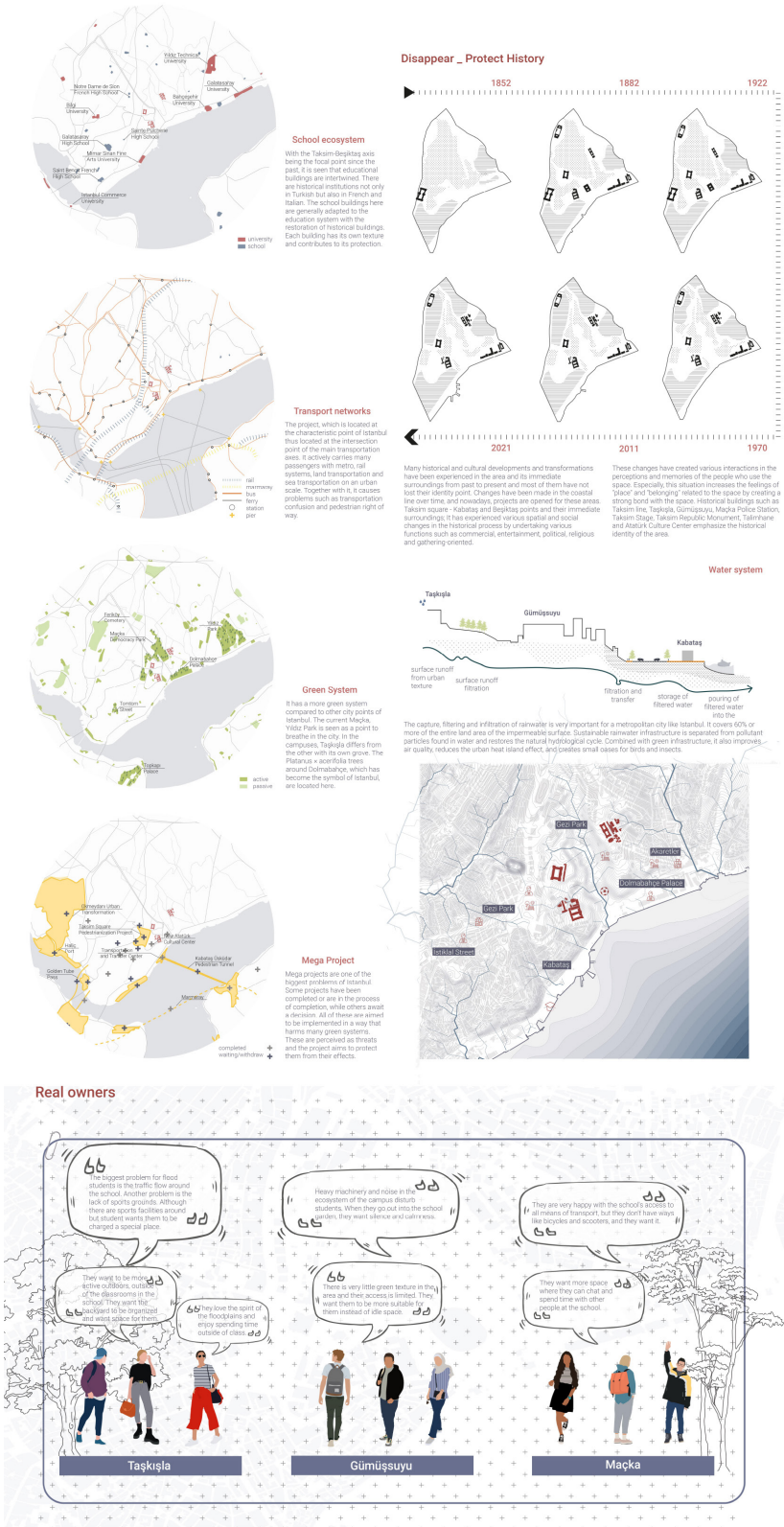
RE_CONNECT

Ezgi Akpınar

*Equivalent Prize of the 9th Landscape Architecture Students Graduation Project Awards/ Chamber of Landscape Architects

Re_Connect project, local urban area solutions are created, strengthening the locations of the campuses and at the same time hosting solutions and sources of inspiration to global climate problems. With the increasing student population over time, the sense of integrity and belonging to the environment among students has decreased. At the origin of the word re-connect, the cooperation and interdisciplinary process of the students continued in the education process, which was given under a single roof in the early days of education systems. Today, with the increasing student population and the introduction of the concept of campus, the interdisciplinary process is decreasing and it is getting way. The project is aimed to connect the sense of togetherness and cooperation again through cycles.

It is aimed to contribute to city life by creating a framework for the changing environment and people. The project uses co-creation, ownership as well as the social diversity of the community and region as a strength. It contributes to the special spirit of the region by contributing to the nature of the



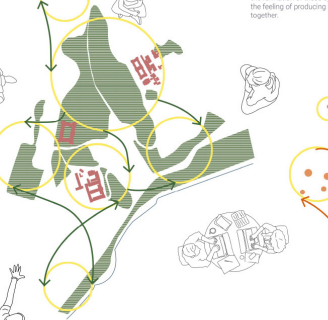
city, strengthening biodiversity. Taşkışla, Maçka and Gümüşsuyu, which are the city campuses of Istanbul Technical University (ITU), encourage reconnection with each other and with other systems.

The aim of the project is not only to make suggestions for ITU campuses, but also to make an impact on its environment. In this context, this process was supported by

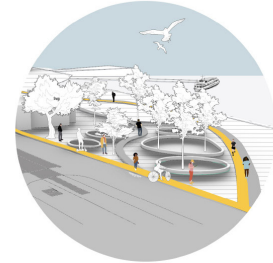
making arrangements to support my cycles. These are transport, flow, green system, blue system, activities and innovation system. By combining circulation and activities, connections were made between the three campuses. While choosing my activities, it has been selected according to the 6 main tools determined before and it has been ensured that the environment eaches the user at the highest level.

Students, tourists and students living here.

tho. Pavilions built at certain points inside and outside the campus meet different needs depending on the location. Especially in the busy city like the formation of these cycles increases the feeling of producing and sharing together.

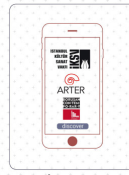


Main tools



Climate adaption with nature

All project areas and city campuses will basically be adapted to the nature of human habitation. Adapting the region to the climate also guarantees the city climate. The area will manage and retain rainwater, but at the same time improve the quality of the water while creating a better microclimate and ensure the use of water. The use of rainwater will be encouraged, and the use of solar power, CO₂ emissions, improvement of air quality and quality of life for residents. Especially, it is recommended to establish a water network in the city to collect rainwater and store it in the last year. These water networks are provided as rain gardens for the citizens and students, and especially important to collect runoffs in the sloping region. The water to be collected from the roofs will be directed to the nearby water collection areas and will be processed in the water treatment plant. The use of solar panels and solar panels for energy systems will be increased. The streets, which are important in the city campus, will be fully adapted to this process, allowing the city dweller and the student to breathe.



Links

Both physical and visual connections between the 3 campus contexts will be developed to make the space more accessible both physically and mentally. Campuses are connected with each other by a bicycle network. The campus landscape is also the most accessible place to put classroom values and lessons into action. With the creation of new spaces, the side streets will be connected to the area and the integrity of the existing green systems will be ensured. The idle area between Gümüşsuyu and Taşkışla will be reoccupied and students will be kept in touch with each other.



Corridor

As the integrity of the existing green systems is ensured, air will emerge in the corridors. It will provide clean air flow for the busiest and touristic place of Istanbul, where carbon emissions are highest. On the other hand, access to city campuses located on the Bosphorus is blocked at certain points. By integrating these areas with green systems, it has been defined as an area to escape from the noise of the city and to rest. With the increase of the human role in the green and blue corridors, it will turn into vibrant and dynamic spots and will enable students to use all the facilities of the city by transforming into areas where they exhibit their own work.



Campus as a driver to Istanbul ecosystem

As the campus develops it will preserve and lead the rich diversity of the landscape. It appears to different times with its architecture on 3 campuses. Besides being protected areas, they are important historical points of the city. On the other hand, campuses are the places where the first inventions and innovations are found. When we look at the ITU ecosystem, this context is strengthened with the existing Technopark. All entrepreneurial ecosystems need to be applied to local residents and city life, at which point the campuses are aimed to be a testing point. Productive experiences will be allowed by using all the potentials in its environment.



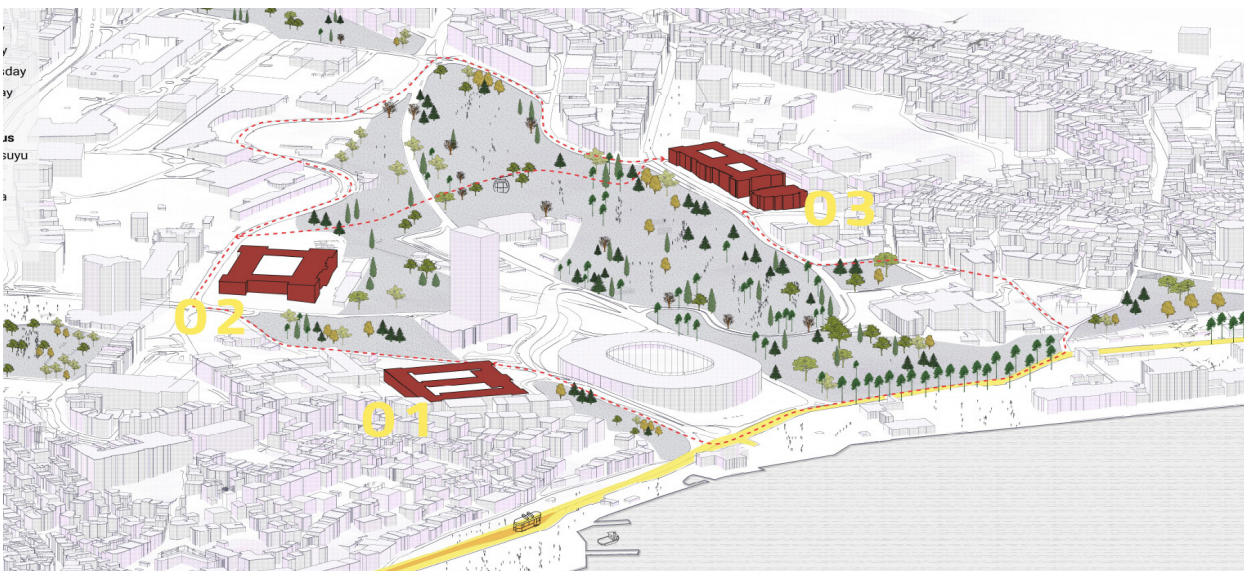
Unifying force

The city campuses, which are under a common roof, are at a walking distance from each other. But this proximity brings campus differentiation with it. This negativity in bringing together and in solidarity impede production from different disciplines. Taşköprü stands out in terms of architecture and landscape. Macro economy and social relations Güneşşuyu in the field of engineering. Pavilions made on campuses to increase social life will contribute to the production of different users together. Taking part in certain tasks with the event calendar will increase the interaction between campuses. Students who are disconnected from each other by taking part in the process in their current clubs will be reconnected.

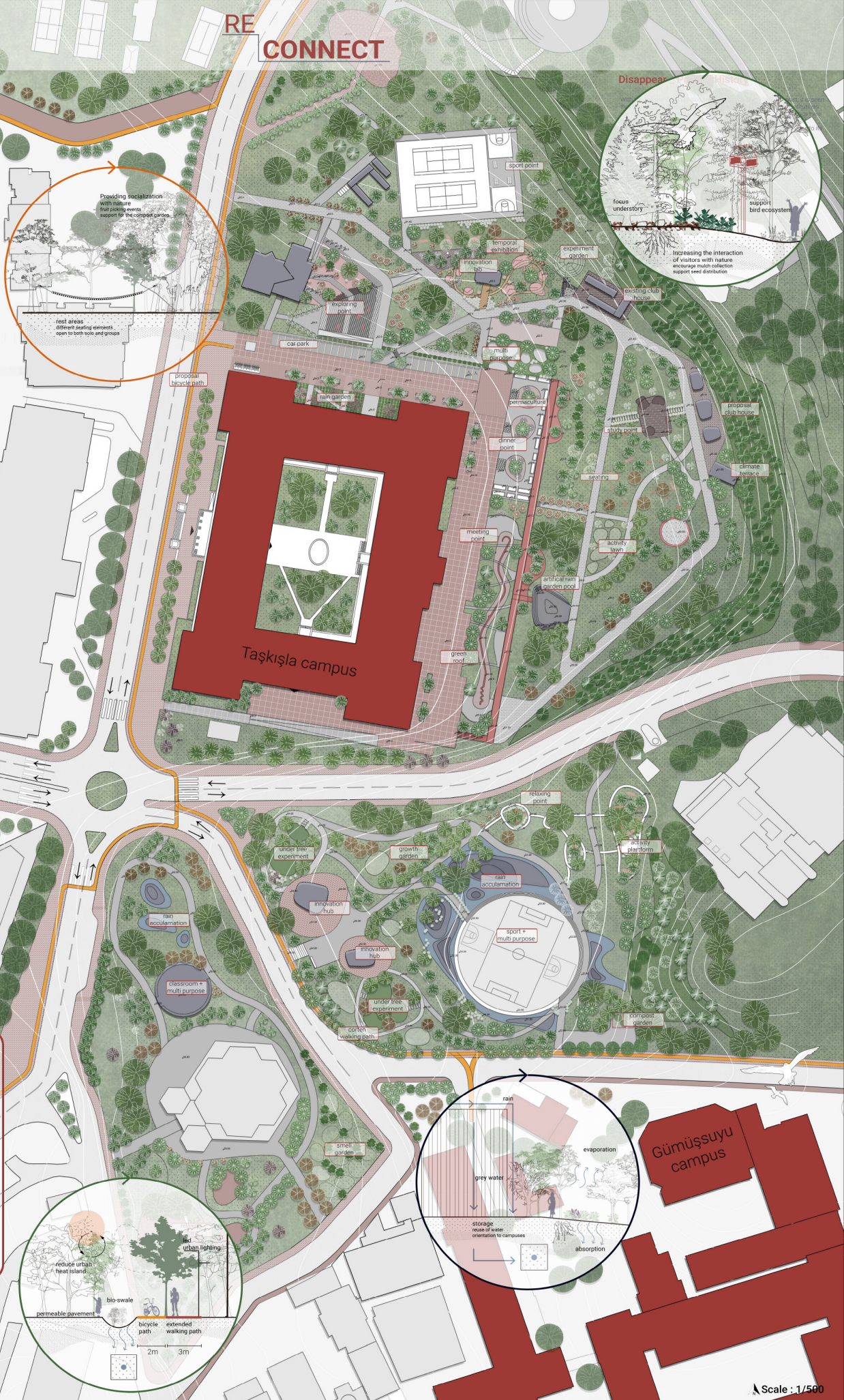


Synergy with ITU and other school ecosystem

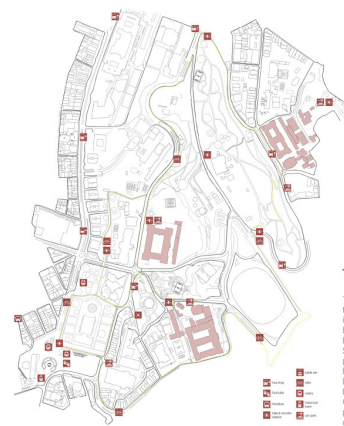
There is a great potential to use ITU urban campuses and surrounding schools as a driving force for all urban development. With spatial arrangements, both university students and young children will learn to be active co-creators of the school cycle and the nature of the city. The learning ecosystem will be recreated with the arrangements made in Taksimi Square, Mappa Park and in a few different parks. Experimentation and exploration of local ecosystems will be encouraged. ITU city campuses will lead by their own regulations at this point. With the organization of school trips and the creation of events, the relationship will be strengthened and there will be conscious students who are knowledgeable about and discovering local systems.





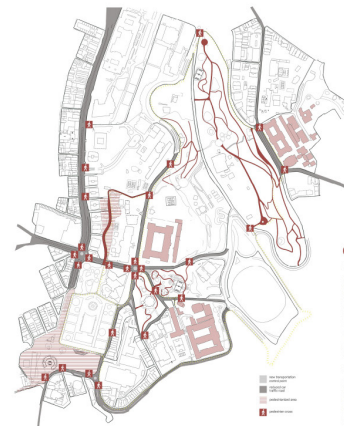


RE
CONNECT



Transportation

Takımcı-Beyktaş line, located in the middle of İstanbul, is home to intense transportation vehicles. A balance must be created between both pedestrian and vehicle traffic. Scooter rental points have been proposed for the field. In addition, by proposing a suitable route for bicycle traffic, a loop route between Taşlagla - Maçla - Gülmüşyay campuses was proposed and campuses were connected.



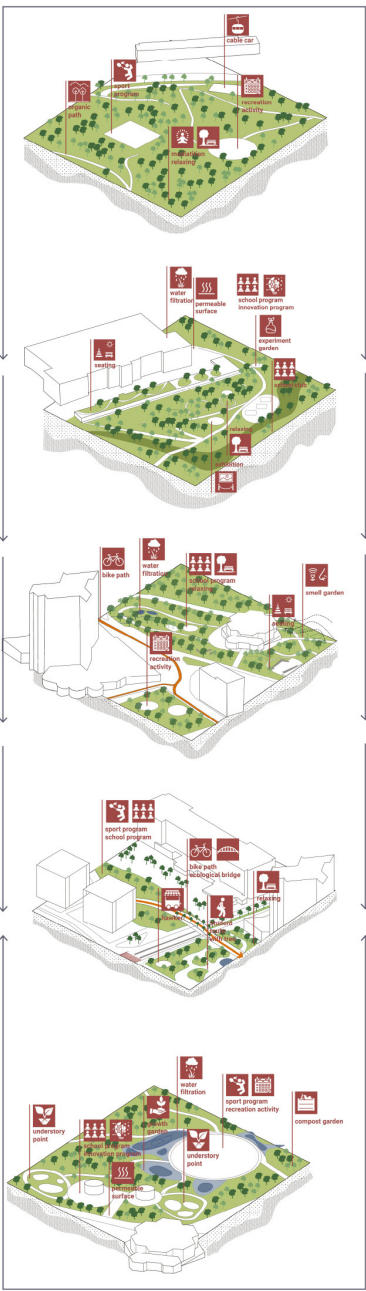
Circulation

It has been proposed with the necessary width of pavement for pedestrians in the necessary arrangements for circulation. At some points, pedestrian and vehicle traffic mix with each other. It is aimed to relieve vehicle traffic by bringing intersection suggestions especially for Taşlagla and its surroundings. Since Takımcı and the campuses are places with heavy pedestrian traffic, a speed limit has been imposed for vehicles. Uninterrupted pedestrian traffic is supported.

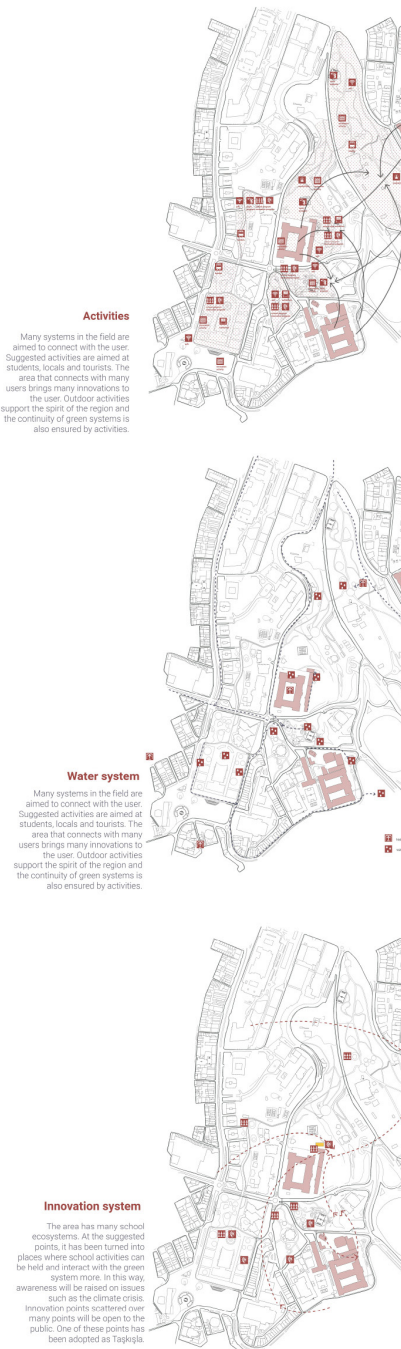
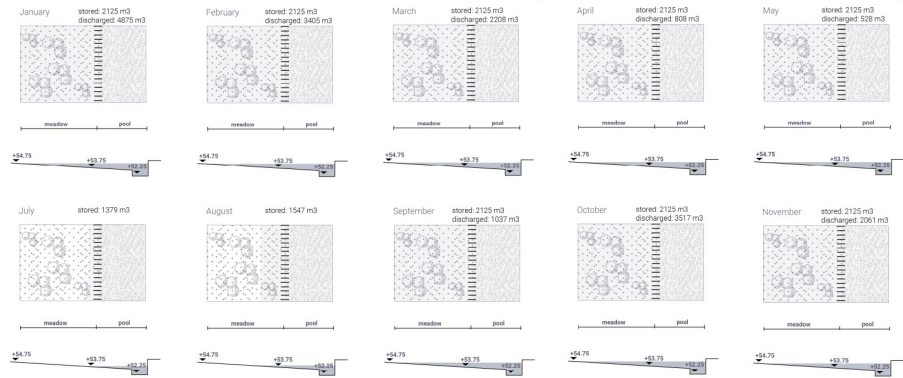


Green system

The field is home to many green systems. The necessary regulations not only propose new systems, but also maintain their current form. While maintaining the green system, it is aimed that the field be used by the users.



Istanbul is dependent on surface water resources. Changes in temperature and precipitation regime caused by climate change make it difficult to meet the increasing demand of the increasing population of the city. Pressures on water resources can threaten water security due to decreasing precipitation, evaporation with increasing temperatures, decrease in the amount of surface water, and prolongation of drought periods.



Activities

Many systems in the field are aimed to connect with the user. Suggested activities are aimed at students, locals and tourists. The area that connects with many users brings many innovations to the user. Outdoor activities support the spirit of the region and the continuity of green systems is also ensured by activities.

Water system

Many systems in the field are aimed to connect with the user. Suggested activities are aimed at students, locals and tourists. The area that connects with many users brings many innovations to the user. Outdoor activities support the spirit of the region and the continuity of green systems is also ensured by activities.

Innovation system

The area has many school ecosystems. At the suggested points, it has been turned into places where school activities can be held and interact with the green system more. In this way, awareness will be raised on issues such as the climate crisis. Innovation points scattered over many points will be open to the public. One of these points has been adopted as Taşlagla

With the proposed water collection area, it raises awareness about collected in the center of İstanbul. With the calculated area and water can be collected in every season in the area, and it is arranged the underground water tanks at the points where the area is insufficient accumulated water will be home to the creatures there, and at the to be used between campuses. By using one of the main tools, nature, ITU campuses are aimed to be a place

expected climatic changes

Change in Heat

Annual mean temperature increase

1 - 4.5°C

The hottest day temperature

40+°C

The coldest day temperature

0+°C

Summer temperature increase

1.5x

Number of hot days to increase

to increase

to increase

to increase

to increase

to increase

to increase

to increase

to increase

to increase

to increase

to increase

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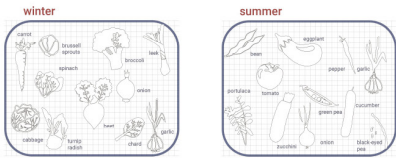
to increase

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RE CONNECT

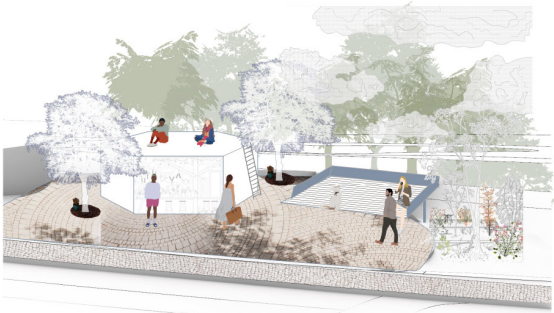
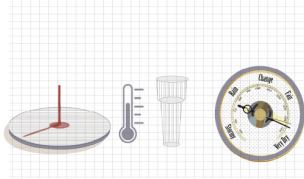
Connect food

The school's hard-floored roof has been replaced with a green roof. Activities in the roof garden are out of the ordinary. First of all, it is aimed to experience permaculture activity thanks to wooden pots. On the other side of the terrace, it is aimed to transform the roof garden into a meeting place with the sitting element at different levels, where the plants can be experienced. Arrangements have been made to come to the common meeting point of 3 campuses in the future. When it rains, it is aimed to collect it in the drainage gap and the activity platform located at the lower level.



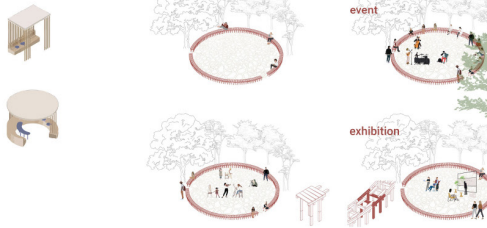
Connect climate

ITU students must learn to be active co-creators of the Istanbul cycle and the nature of the city. Tagkula invites other campus students to reveal the current potentials of the floodplain. For this, it was aimed that school clubs take an active role. A wooden terrace was proposed along with the proposed club rooms. It is aimed to be used as a climate garden where students can observe their nature experiences. Units that measure and share natural data, sundial, barometer, anemometer, wind vane, precipitation meter, humidity meter, thermometer were placed.



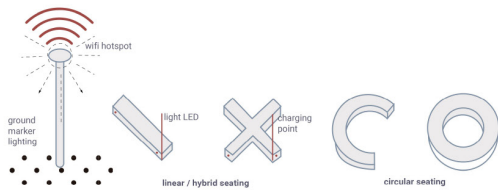
Connect people

Tagkula, Maçka and Gümrüsu have the potential to invite students to the area. With the opening of the backyard students, it is aimed to strengthen their relationship with nature. Students will be able to study in the open air with the wooden system that will not disturb the nature texture placed in the The exhibition point, which is open to different uses, it is aimed that more people interact with the backyard by providing outdoor activities.



Lighting / seating

Urban furniture was changed according to the needs of the students on campus. By adding wifi to the furniture, it was aimed for the students to spend time and work actively in nature. It is aimed to take on a different atmosphere in the evenings with the additional LED lights.



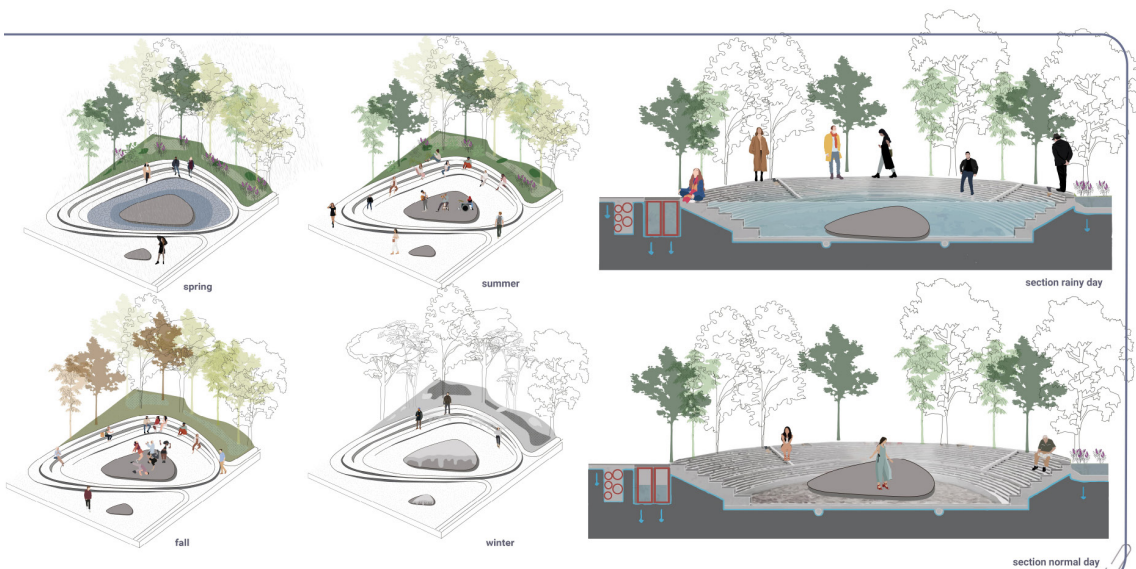
out how water can be precipitation capacity, and to be transferred to the ocean. In this way, the same time it is aimed climate adaption with water for other schools.

h Precipitation

decrease 12%
days 20%
during heavy increase 59%
precipitation 9%

l Rise

ization along East-west winds along axis to be affected, air quality which climatic threats



02 RE_CONNECT



Biological cycle



Social cycle



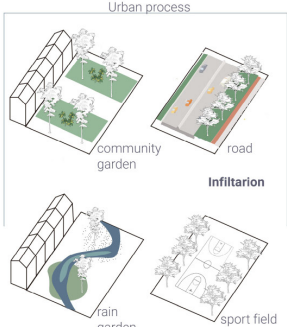
Hydrological Cycle

Cycle with biological_understory



Cycle with social and hydrological_experiment garden

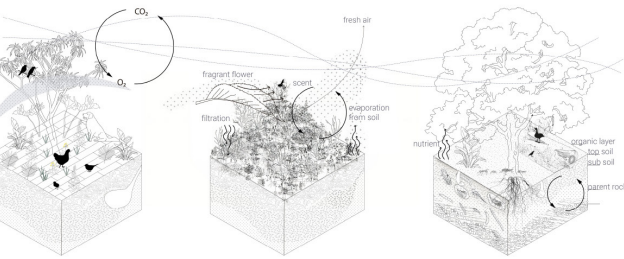
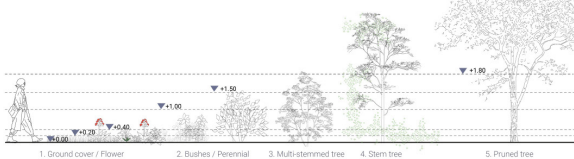
The climate is changing, rains are falling heavier, on the other hand, drought lasts longer. While these two points form the innovation part of the project, they unite the hydrological, social and biological cycles. The experimental garden located in Taşkışla campus is designed to learn what parameters it brings to the city in planting design. Different lands and different practices in the city have been used as a reference for the design of the experimental garden. For this, experiments are carried out with soil compositions, planting types and runoffs. These experiments are aimed to be used in different application areas of the city in the future. On the other hand, they will be able to support the experimental process by owning the tasks in the proposed application so that their students can interact.



Urban process

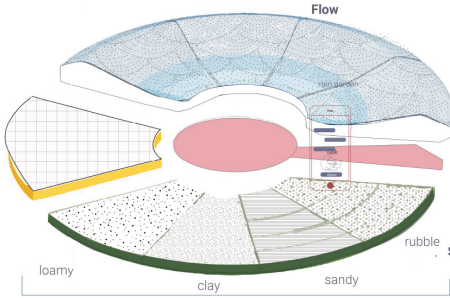
Diversity in vegetation

Vegetation is arranged in multiple layers re-connect and explain understory throughout the environment.

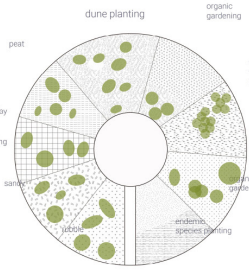


The understory is the underlying layer of vegetation in a forest or wooded area, especially the trees and shrubs growing between the forest canopy and the forest floor. With the decreasing green tissue day by day, many plant and animal species are also decreasing. It is designed to consider not only the top of the earth but also the soil. Different vegetation types have been introduced as a suggestion and it is aimed to keep biodiversity at a high level.

Top cover and bottom cover work together. Students, local residents and tourists have been informed more about the subject with the planting design that will lead the campus and its surroundings. A special sense of belonging to the place has been created with the selection of the vegetation species belonging to Istanbul. Different vegetation has been used to create the necessary nutrients for underground plants. All these bring together the integrated landscape system.

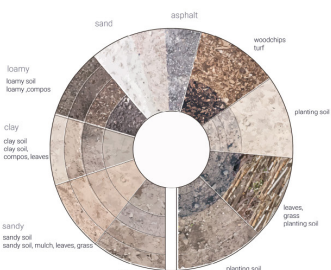


Flow



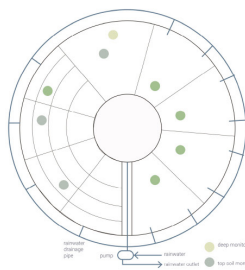
Planting

Plants are aimed to be made from the most used plants in the city. It varies according to the soil type for different sections. Controlled experiments have been created for different garden types. With the selection of the easy-growing species of the plants, the observation was made to be seen by everyone.



Soil

Various soil compositions based on four different surfaces have been used. Different soil types found in Turkey were used. By dividing the soil types, materials such as leaf and compost, which can be mixed with the existing ones, were added. Different controls of different soils are provided. It is aimed to increase the applications by keeping the depths of the soil short.



Water

Rain water collected from the roof of Taşkışla to support the recycling of the water will meet the plants here. On the other hand, water measuring monitors were used to find out how permeable it is according to different parameters. Thanks to these monitors, it will be predicted what results can be obtained in city applications.

There are cycles at the starting point of the project. These cycles are connected by the effect of adhesion and cohesion. Cohesion binds the same substances and adhesion binds different substances together. 3 cycles have been created for a sustainable campus; they are hydrological, social and biological.

These cycles are connected according to the concept of adhesion and cohesion. Looking at the main tools, it has been designed in accordance with the field as a result of sustainable campus principles. 6 of these main tools are determined; nature

harmony with climatic solutions, links, corridors, campuses being drivers for Istanbul ecosystems, unifying power, synergy with ITU and other school ecosystems. As it descends to the lower layers in biological, hydrological and social cycles, different points in landscape planning are explored.



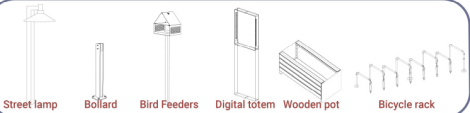
erial Legend

Symbol	Name	Width	Unit	Number
[Symbol]	Andesite Plaque Stone	25×50×5	m ²	336
[Symbol]	Basalt Plaque Stone - 1	25×50×5	m ²	135
[Symbol]	Basalt Plaque Stone - 2	40×40×5	m ²	189.6
[Symbol]	Basalt Plaque Stone - 3	30×10×7	m ²	60.2
[Symbol]	Concrete Plaque Stone Dark Grey	25×50×5	m ²	467
[Symbol]	Concrete Plaque Stone Light Grey	25×50×5	m ²	83.75
[Symbol]	Concrete Sleeping Stone	100×40×17	m ²	117
[Symbol]	Galvanized Metal Separator		m ²	35
[Symbol]	Granite Plaque Stone	40×80×5	m ²	195
[Symbol]	Granite Cube Stone	10×10×5	m ²	362
[Symbol]	Grass Stone	40×40×9	m ²	316
[Symbol]	Pebble		m ²	397
[Symbol]	Permeable Concrete Block	200×200×7	m ²	834
[Symbol]	Permeable Concrete Block - 2	250×200×7	m ²	121.1
[Symbol]	Permeable Concrete Block - 3	340×200×7	m ²	22.1
[Symbol]	Permeable Concrete Block - 4	350×200×7	m ²	112
[Symbol]	Red Brick Stone	20×10×5	m ²	262.4
[Symbol]	Stabilized Soil		m ²	74
[Symbol]	Steel Grating	10×10×5	m ²	92.65
[Symbol]	Thermonwood	200×200×9	m ²	170
[Symbol]	Travertine Plaque Stone	25×50×5	m ²	196
[Symbol]	Vegetable Soil		m ²	362.6

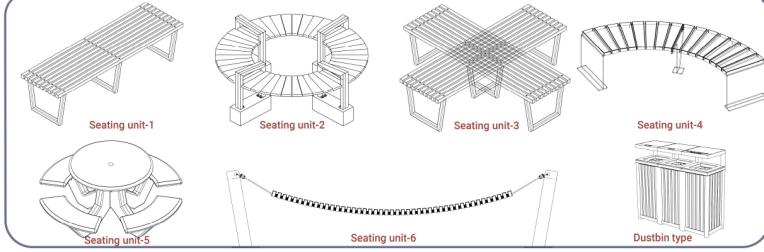
Lighting legend

Symbol	Name	Unit	Number
[Symbol]	Appliques	number	6
[Symbol]	Bollard	number	60
[Symbol]	Led Sleeping Light	m	256
[Symbol]	Street Lamp	number	40
[Symbol]	Tree-up Lighting	number	27

Street furniture



Street furniture



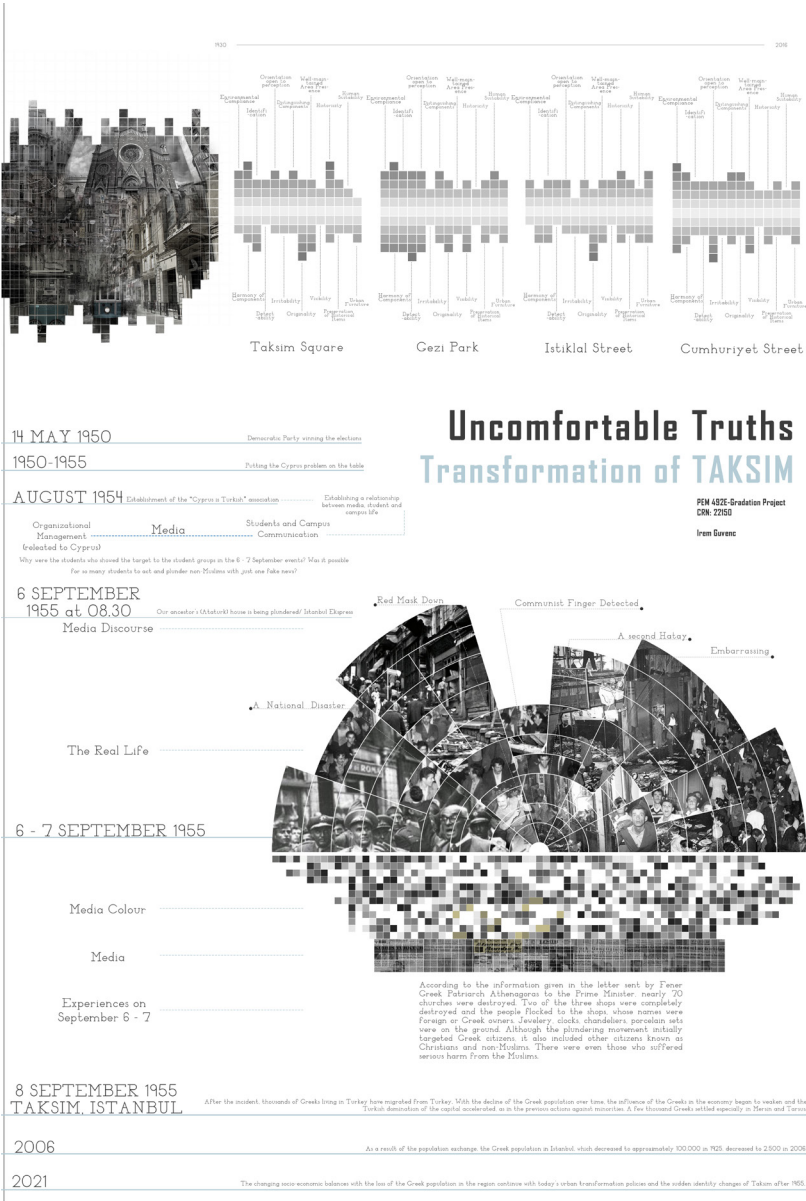
Hardscape Conc

It is aimed to use different colors in the Taşkıqla, which is the inspiration source: combined with the use of the materials of their floors to create existing asphalt structure and permeable pavement introduced. It has grassstone in order to transform into a diff field and its surface transformed into a diff to observe nature and urban landscape, sitting used both solo and suggested. In other lighting is used in principles of sustainable not only with street bollard and staircase in different

CARNIVALESQUE

İrem Güvenç

Within the scope of the project, Bahtin’s concept of Carnavalesque was taken into consideration. With Micheal Bahtin’s concepts of carnivalesque and carnivalization, a new mirror was tried to be shed on the city and the city’s association with universities. As it is known, carnival is formed by the gathering of a large number of people from different segments in certain periods. It is removed from the ordinary course of daily life. When we look back in the perspective of the definition of carnival, we can have the chance to examine the events of September 6, 7, 1995 in a different context. To summarize, September 6-7 is the looting of the houses and workplaces of people of Greek origin living in Taksim. Although this problem is related to the Cyprus issue, it is known that the people who participated in this destructive action are mostly young university students. At this point, the important question should be where this influence comes from on young people. Of



course, the media. This is where carnivalization comes into play. Looking from today, a number of painful events are told quite heroically to the student groups of that period. Being an observer is also important at this point.

Observers can notice the absurdities more easily. In this context, design strategies have been constructed from monologue spaces to dialogue spaces. But it should be noted that the relationship between monologue

Carnival -esque

First Cycle

Carnival is the scene where many communities come together, at certain times of the year and individuals communicate in a different way, toppling the entire hierarchical order of life in a semi-real, half-play manner.

Second Cycle

Third Cycle

Fourth Cycle

Carnival requires participation and cannot be viewed from outside. There is no difference between viewers and participants.

The first rule that is implemented in carnival squares is to free the environment is the elimination of inequality. All prohibitions, restrictions, petty, hierarchical order are suspended. This process, in which all authorities are ignored, brings along strangeness.

Laughing is the hallmark of carnival. The carnival-specific variety of laughing allows behaviors that would never be allowed in normal life. Smiling has the power to soften even the harshest environments. With the wind of this power, dogmatic church rules can be overturned by the individual. The laughter in which Bakhtin appears peculiar. The most striking tangible object in the carnival environment, where communities from many different cultures and different times come together is the mask. The individual prefers to use a mask even in such a comfortable environment where he can express himself freely and without restriction. The mask is the message. The individual behaves freely in the carnival environment with the psychological relief created by the mask. With this feature, the carnival environment is revealed. Behaviors that would never be dared in the normal order come out. There is no definition of silence in the carnival square. It contains speech patterns such as loud laughter, song and swearing. Creativity is one of the leading roles in carnivals such as defining and embracing the role of the callist is great. Screamers to spread a news or to draw attention to the determined point act as a permanent staff during the carnival. Societies in search of alternative forms of communication create a language unique to that world in the carnival environment. A spontaneous language such as abbreviations and nicknames is produced. It is unusual to be indifferent to the carnival or simply to be a spectator. Therefore, every individual has to adapt to this new form of communication. In this structure which produces a unique language in which there is free expression and dogmatic rules are destroyed, slang words derive and grow like a snowball and become unstoppable.

In the end, carnival life ceases to be a new phenomenon. The fun is lost. The absurdity becomes palpable, and the carnival years remain empty. This is the harbinger of a new carnivalization process.

Fifth Cycle

1910-1930

1930-1950

1950-1980

1980-2010

Mekteb-i Harbiye

Taskila

App Cemetery

Cumussuyu Military Hospital

Radio House

Divan

Hilton

Taksim Casino

AKM

Lutfi Kirdar Congress Center

Taksim Residence

Merdivan Hotel

Intercontinental Hotel

PEM 492E-Graduation Project
CRN: 22150

Irem Guvenc

and dialogue is not linear but circular. EA is a cellular design model in which different spaces create a dialogue with various border elements. EA plants were created with spaces on them. These spaces are places where

participants can plant vertically. This is a futuristic reflection of an ancient Far Eastern belief. In this belief, a person makes a hole in the tree and whispers his secrets. Then it fills this gap with soil. Over time, a new cosmos balance

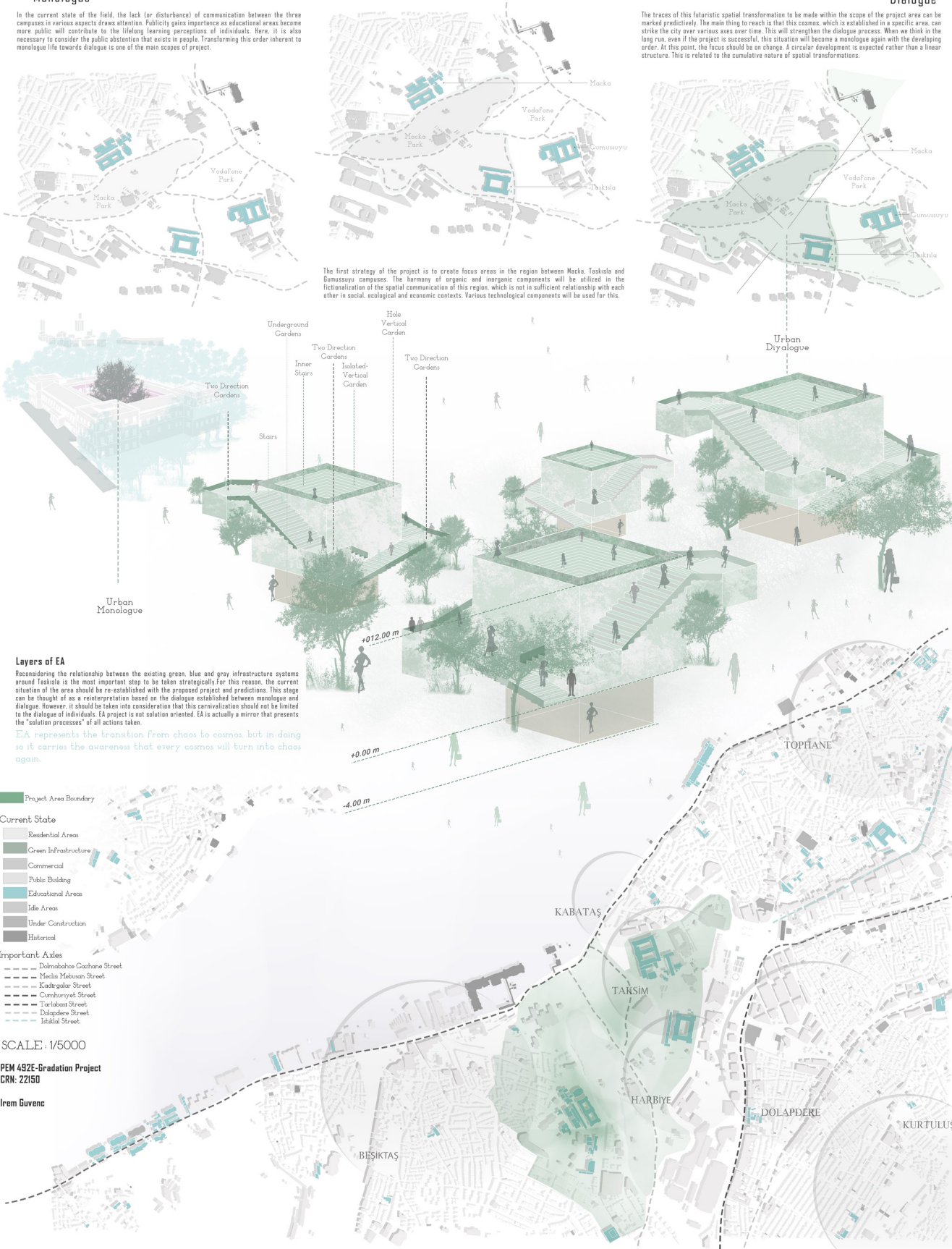
is formed here for many living things. And it starts to sprout. However, it should be known that all the cosmos that are formed go towards chaos.

Monologue

In the current state of the field, the lack (or disturbance) of communication between the three campuses in various aspects draws attention. Publicity gains importance as educational areas become more public will contribute to the lifelong learning perceptions of individuals. Here, it is also necessary to consider the public attention that exists in people. Transforming this order inherent to monologue life towards dialogue is one of the main scopes of project.

Dialogue

The traces of this futuristic spatial transformation to be made within the scope of the project area can be marked predictively. The main thing to reach is that this cosmos, which is established in a specific area, can strike the city over various axes over time. This will strengthen the dialogue process. When we think in the long run, even if the project is successful, this situation will become a monologue again with the developing order. At this point, the focus should be on change. A circular development is expected rather than a linear structure. This is related to the cumulative nature of spatial transformations.

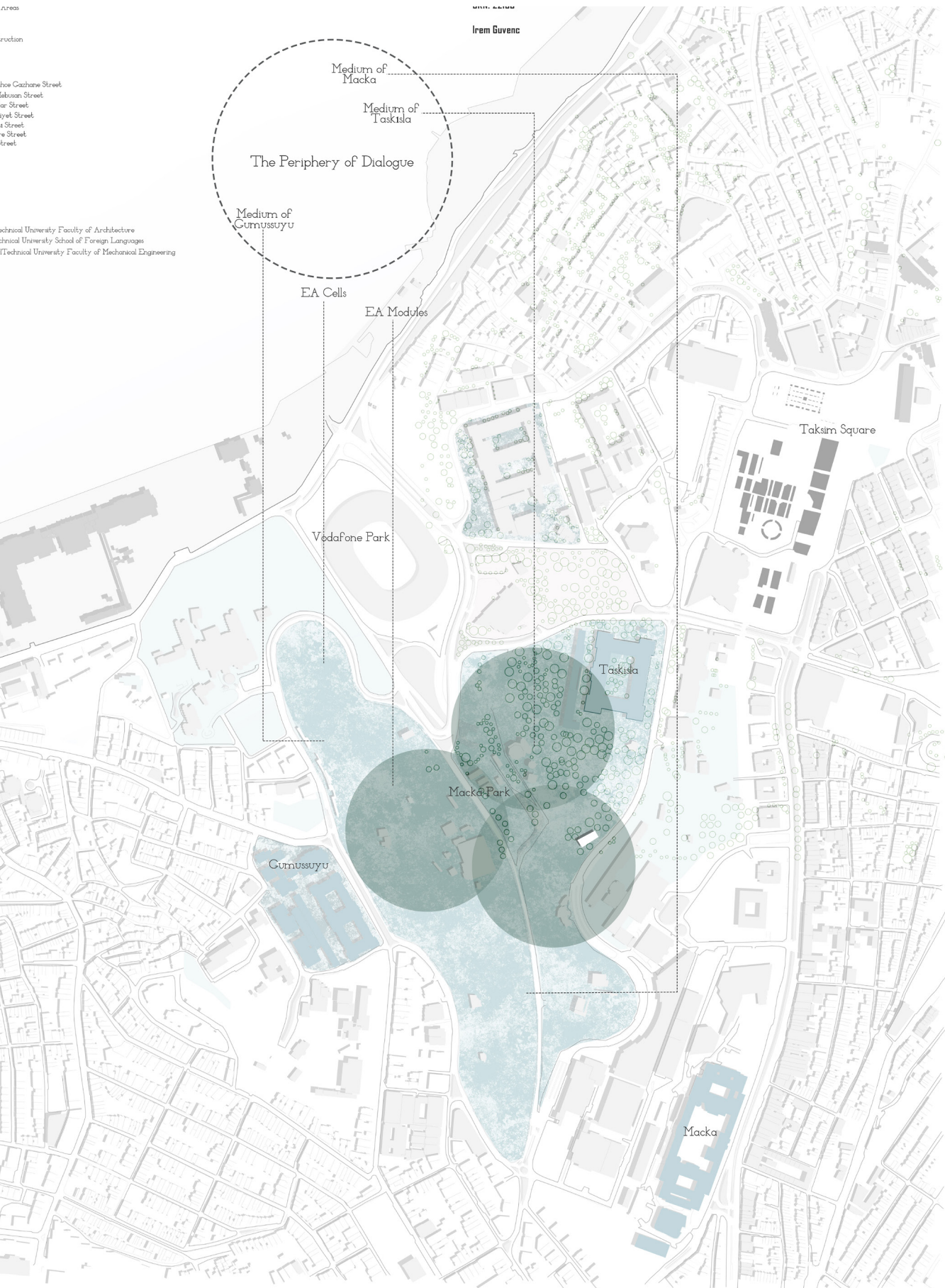


According to the Turkish Language Association; faculties, institutes, colleges, etc., which have scientific autonomy and public legal personality, and which conduct high-level education, training, scientific research and publication. Universities, which are defined

as educational institutions and darülfünun, are in contact with the city from the largest units to the smallest units of the city. Even if the form, characteristics or qualities of this communication change, its existence remains. The mentioned communication is available to

be explained and explained with Bahtin's carnivalesque definition. Universities are places where issues, topics, and interpretations carnival. However, it is necessary not to characterize this carnivalization as only positive or only negative. There is a very appropriate and concise

Areas
struction
hese Gazane Street
elabunan Street
ar Street
yket Street
a Street
e Street
Street
Technical University Faculty of Architecture
Technical University School of Foreign Languages
Technical University Faculty of Mechanical Engineering

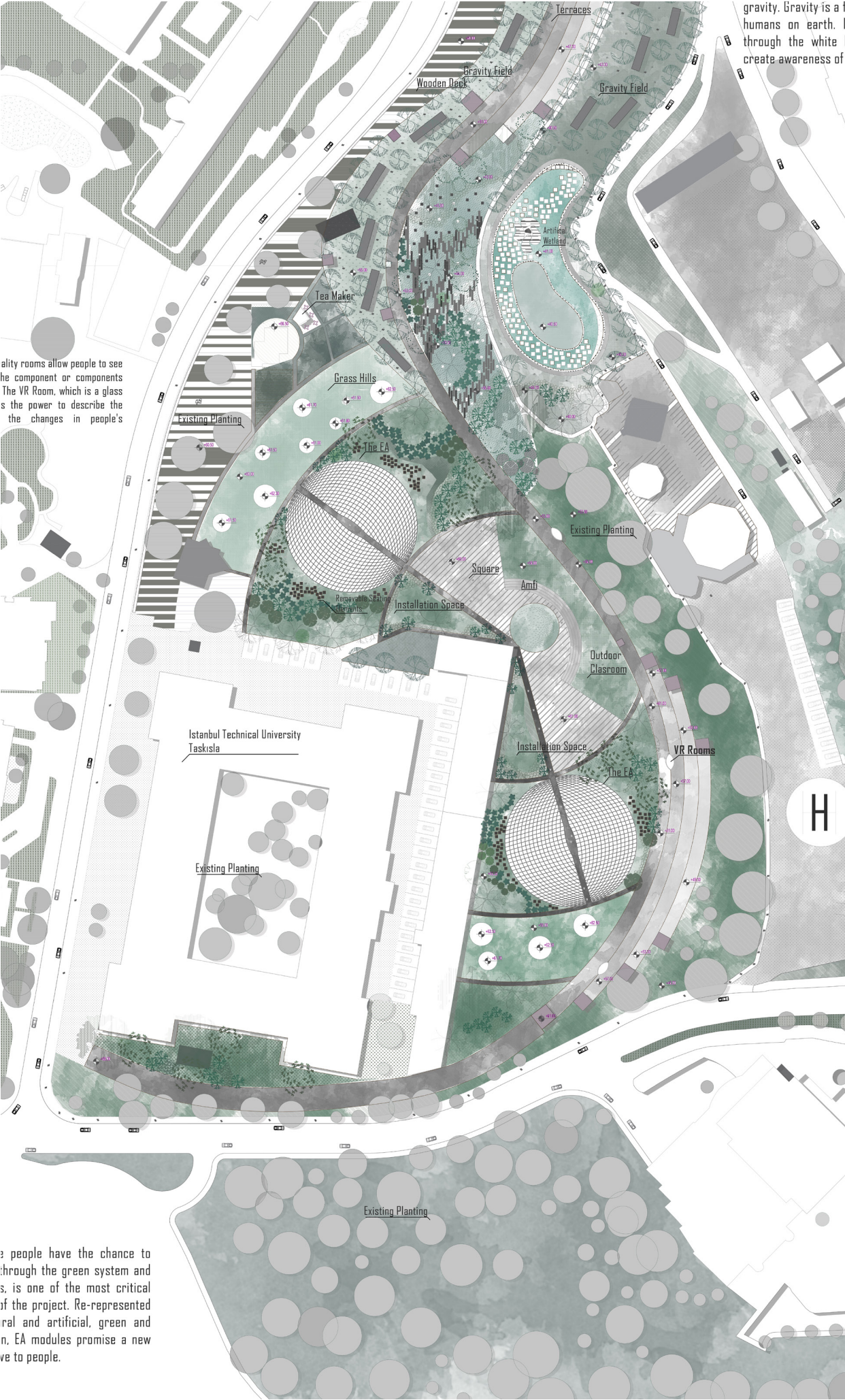


definition of carnivalization in the article named "Carnavalesque theory and its reflections on the Instagram environment". Carnival is the stage where people from many walks of life come together at certain times of the year, and individuals communicate in a different way,

in a half-real, half-play, against the entire hierarchical order of life. The carnival environment indicates an unusual, upside down world order realized by moving away from the course of ordinary life. Carnival requires attendance and cannot be viewed from the outside. There is

no difference between audience and participant. Due to the laws developed by the carnival, everyone leads a carnivalesque life during the carnival.

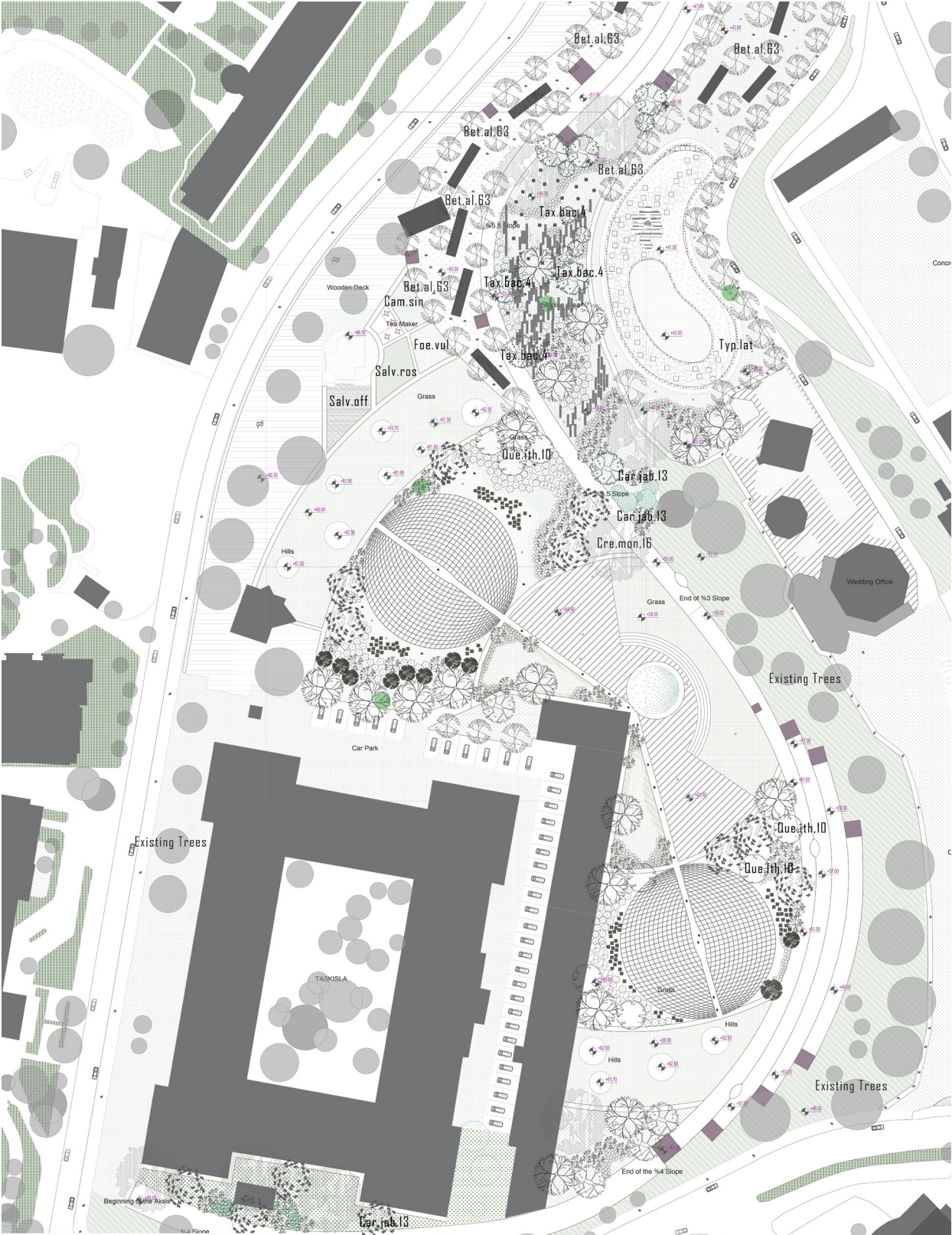
03 CARNIVALESQUE



ality rooms allow people to see
he component or components
The VR Room, which is a glass
s the power to describe the
the changes in people's

gravity. Gravity is a
humans on earth. I
through the white
create awareness of

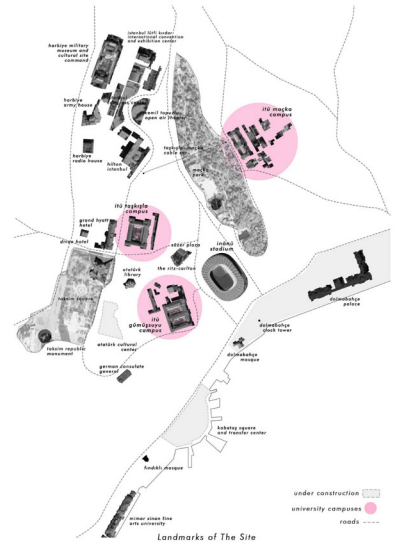
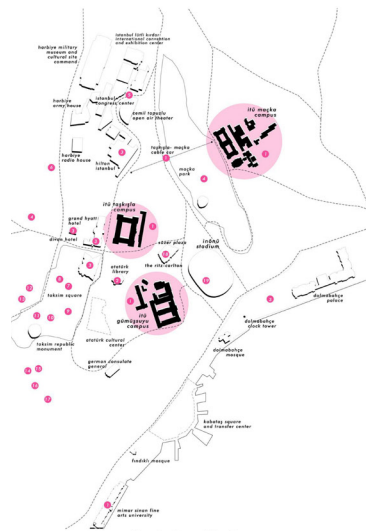
people have the chance to
through the green system and
s, is one of the most critical
of the project. Re-represented
ral and artificial, green and
n, EA modules promise a new
ve to people.



Tree Legend					
Symbol	Plant Name	Common Name	Height	Diameter	Piece
	Betula alba	Silver birch Adi hug	15-20 m	7-10 m	11
	Pyrus elaeagnifolia	Oleaster-Leaf Pear Ahlal	8-10 m	1-2 m	6
	Crataegus monogyna	Common hawthorn Adi aliç	3-7 m	4-5 m	8
	Quercus ilaburensis	Valonia oak Palamut meşesi	10-12 m	1-15 m	7
	Pinus nigra	Black pine Karçam	15-30 m	2-3 m	10
	Taxus baccata	English yew Porzak	14-25 m	3-4 m	4
	Cupressus sempervirens	Mediterranean cypress Akdeniz servisi	20-30 m	2-2.5 m	24
	Acer palmatum	Japanese maple Japon akçağacı	8-15 m	3-4 m	5
	Carpinus japonica	Japanese hornbeam Gürçen	12-20 m	5-6 m	3
	Acer campestre	Field maple Ova akçağacı	15-25 m	2-2.5 m	19
	Aesculus hippocastanum	Chestnut Beşiz çiçekli at kestanesi	15-20 m	2-3 m	5

Ground Cover Legend					
Abbreviation	Symbol	Plant Name	Common Name	Height	Area
Hedra		Hedera helix	Common ivy Duvar Sarmagı	400 ft.	
Lyr. hum.		Lysimachia nummularia	Creeching jenny Sarıgül Sarmagı	300 ft.	
Wallo.		Wisteria floribunda	Summer wisteria Çiçekli karanfil	400 ft.	
Shrub Legend					
Abbreviation	Symbol	Plant Name	Common Name	Height	Area
Dicrep.		Dichondra repens	Dichondra Fam. Kaktüs	5-10 cm	1,000 ft.
Car. hum.		Carum humifundum	Snow-on-the-hill Yıldırım	10-20 cm	10 ft.
Rusc.		Ruscus hypnoides	Carpet of stars Yıldırım	10-30 cm	80 ft.
Thy. vul.		Thymus vulgaris	Common thyme Adi kekik	2-4 cm	10 ft.
Shrub Legend					
Abbreviation	Symbol	Plant Name	Common Name	Height	Area
Bud. dav.		Buddlejia davidii	Summer blue Kestane Çiçeği	80-100 cm	21.2 ft.
Os. hel.		Osmanthus heterophyllus	Holly viburnum Yıldırım	25-30 cm	10 ft.
La. nob.		Laureola nobilis	Bay laurel Sak	80-100 cm	80 ft.

Reed Plant Legend					
Abbreviation	Symbol	Plant Name	Common Name	Height	Area
Car. inf.		Carex lasiocarpa	Pampas grass Pampas otu	40-45 cm	14.7 ft.
Ph. auc.		Phragmites australis	Common reed Kamış	20-40 cm	111 ft.
Ar. dor.		Arundo donax	Reed Kamış	100-150 cm	32.8 ft.
Typh. lat.		Typha latifolia	Reed Kamış	100-150 cm	32.8 ft.
Tea Ceremony Garden Legend					
Abbreviation	Symbol	Plant Name	Common Name	Height	Area
Sal. off.		Salvia officinalis	Common sage Adi taze	30-40 cm	21.4 ft.
Sal. ros.		Salvia rosmarinifolia	Rosemary Biberiye	40-60 cm	84.3 ft.
Ph. vul.		Phacelia vulgaris	Parrot Kuş	30-40 cm	11.6 ft.
Car. vul.		Carex vulgaris	Tea plant Yıldırım	35-40 cm	11.6 ft.



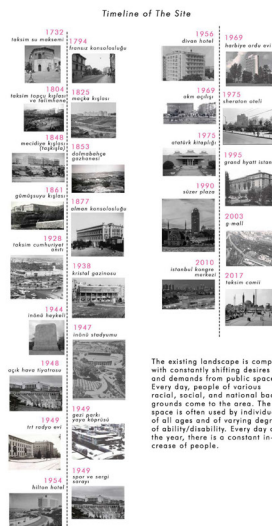
RESILIENT CITY

HISTORY

525 m2

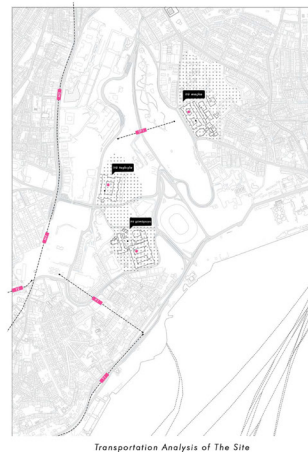
1.721 m2

5.691 m2

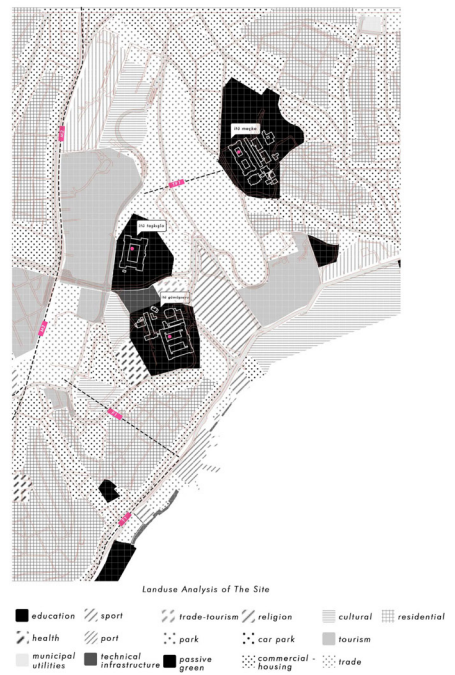


Satellites Of The Change

TRANSPORTATION



LAND USE



RESILIENT CITY

In addition to other analyzes, topography readings of the area are specified in order to be able to intervene against natural disasters. By examining the form of the topography and looking at other water-related data, the subjects such as how water can move and where it should go are focused on.

TOPOGRAPHY



Water and Topography Analysis of The Site

POST EARTHQUAKE CONCEPT

Two Scenarios of the Usage of Maçka Park



Daily Usage of Maçka Park

The aim of the project concept is to use the Maçka Park by its visitors normally during the day and to ensure sustainability in the context of the ITU campuses.

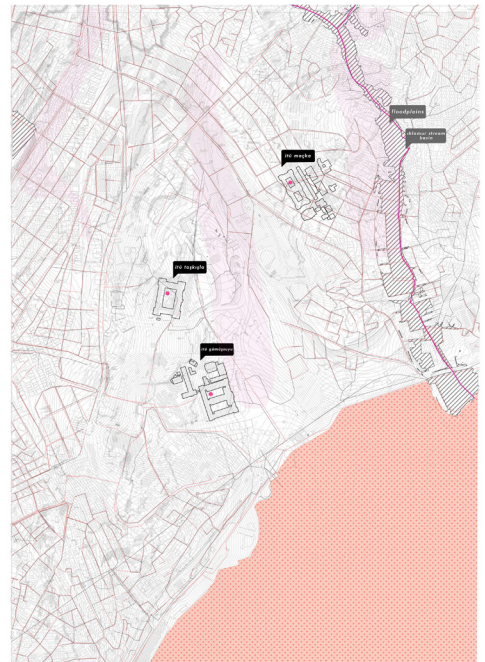


Post - Earthquake Usage of Maçka Park

After a possible earthquake, it is aimed to prepare the Mağsa Park, which is among the temporary gathering areas determined by the İBB, for the earthquake scenario in order to allow the victims during and after the earthquake.

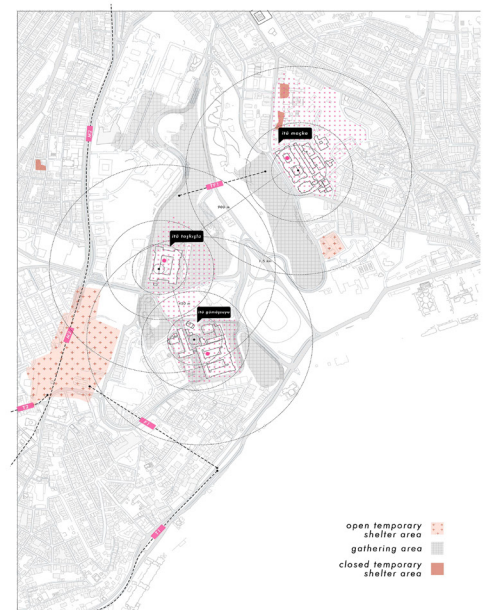
WATER ANALYSIS

Based on the certification systems researches carried out, the actions taken by all three campuses within the scope of İÜ regarding water for the sake of sustainability are insufficient. Water analyses were continued in order to ensure water management in the rest of the city, not only with the İTU campuses. The wastewater, drinking water and storm water lines provided by İSKİ are shown below.



Water Analysis of The Site

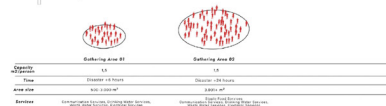
 floodplain
 ihlamur stream basin
 wastewater
 rain water
 drinking water



Gathering and Shelter Areas After an Earthquake

Gathering and Sheltering Area Types

1 Gathering Areas

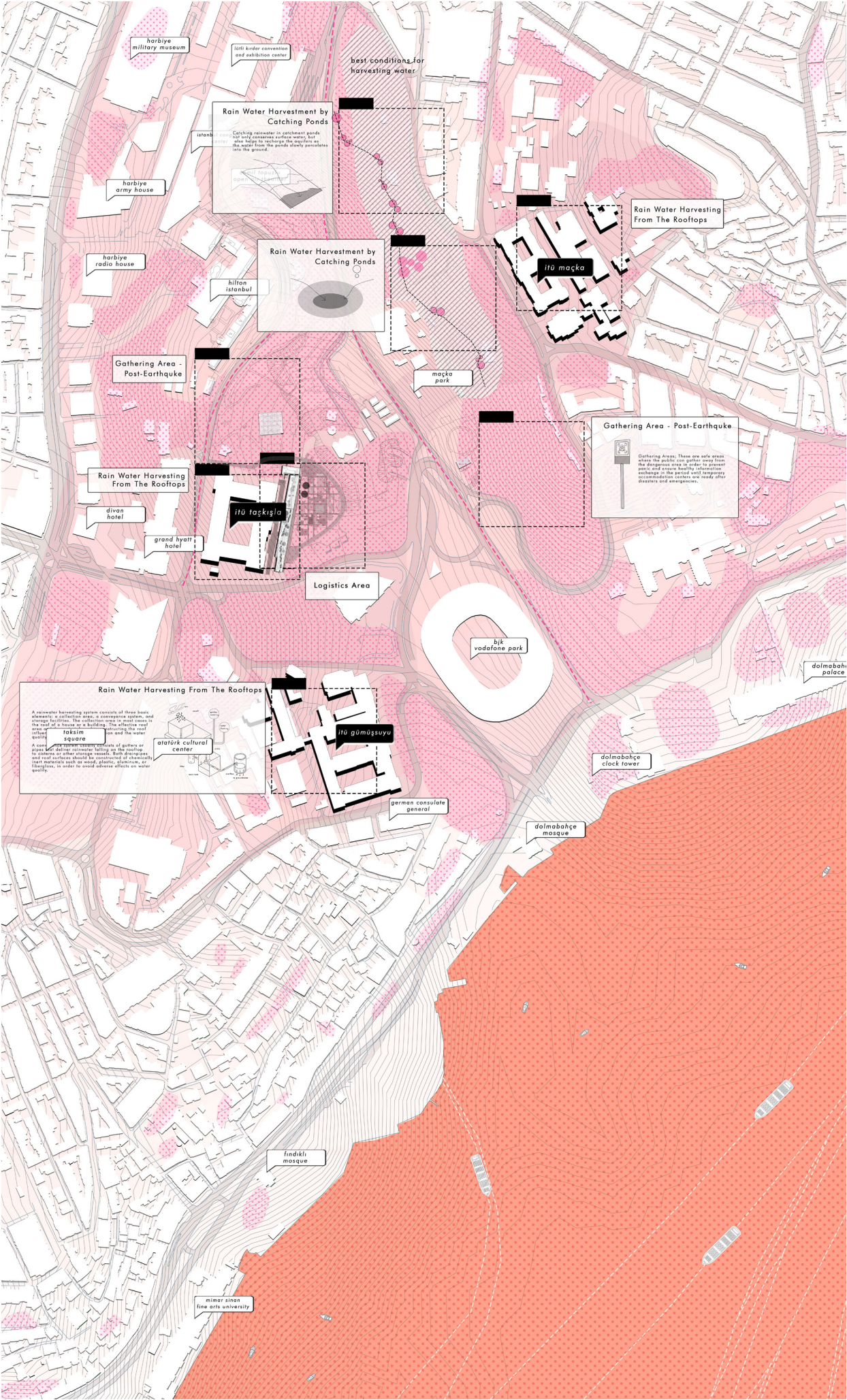


2 Living Areas



The meeting areas may differ depending on the facilities they provide and their needs.

Disaster tents, also known as the Red Crescent tent, are among the types of tents that are needed in times of disasters such as natural disasters, earthquakes, landslides and floods. These tents have a lot of usage area and they are not uniform, each type has different functionality.

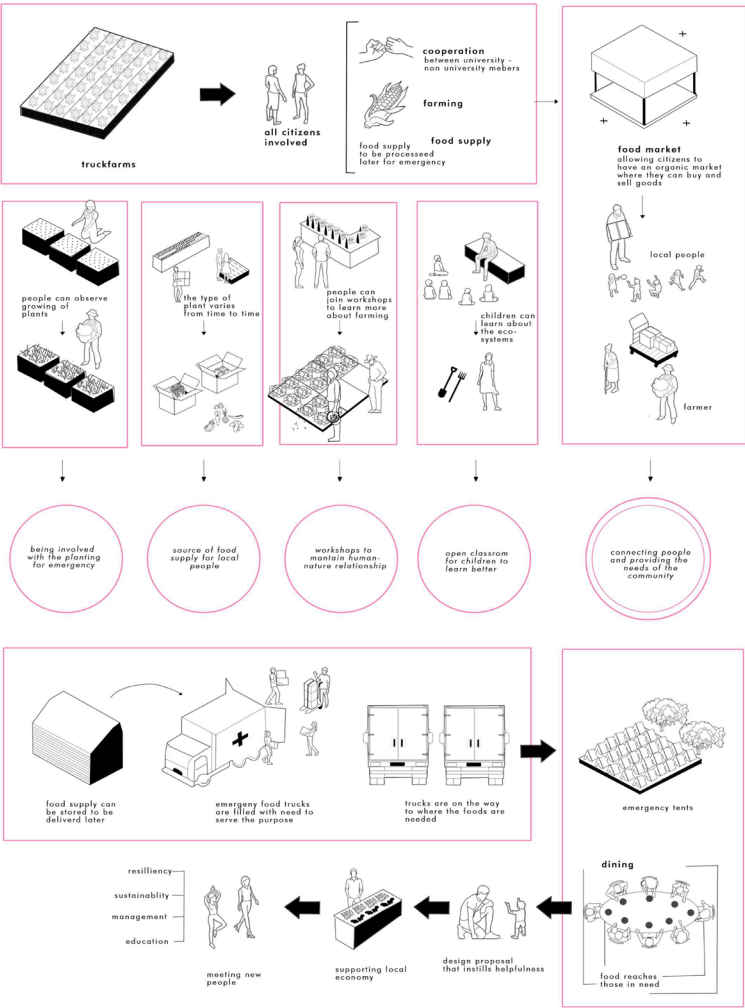


With the growth of urban campuses in the twenty-first century, landscape architecture can provide planning, learning and infrastructure associated with cities and urban neighbourhoods. ITU urban campus model can become the creative hub while taking a substantial part of the management of disasters. Natural disasters, especially earthquakes, which are an important problem in Istanbul today, should be brought to the fore. The university-city relationship is shifting in line with universities' involvement in public

service beyond teaching and research, as well as cities' reliance on networks rather than enclosure to enhance urban competitiveness. At the municipal level, urban university campuses are frequently de-urbanized in order to fulfill the larger urban need. Based on this idea, the foundations were laid to reveal the potential of ITU campuses to contribute to urban development. However, there is a shortage of focus on the dynamics of university-city interaction, despite the fact that university-city interactions in the

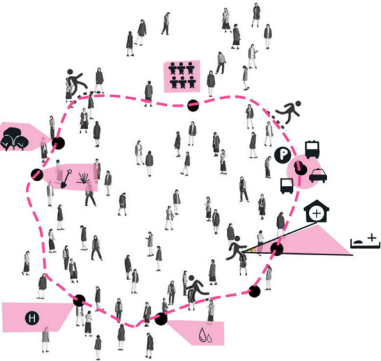
information society are totally different from those of the past. Universities have evolved from being primarily educational and research organizations to include public service as a third goal. Based on this situation, it can be said that ITU campuses can be a service source. The purpose of using service here is that in case of an emergency, design decisions will be taken accordingly, since ITU campuses and especially Taşkışla campus have a lot of potential in terms of logistics.

FOOD

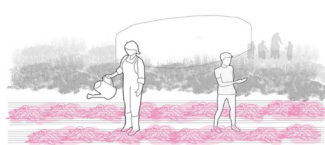


LOGISTICS PROGRAM

With the growth of urban campuses in the twenty-first century, landscape architecture can provide planning, learning and infrastructure associated with cities and urban neighbourhoods. ITU urban campus model can become the creative hub while taking a substantial part of the management of disasters. Natural disasters, especially earthquakes, which are an important problem in Istanbul today, should be brought to the fore.

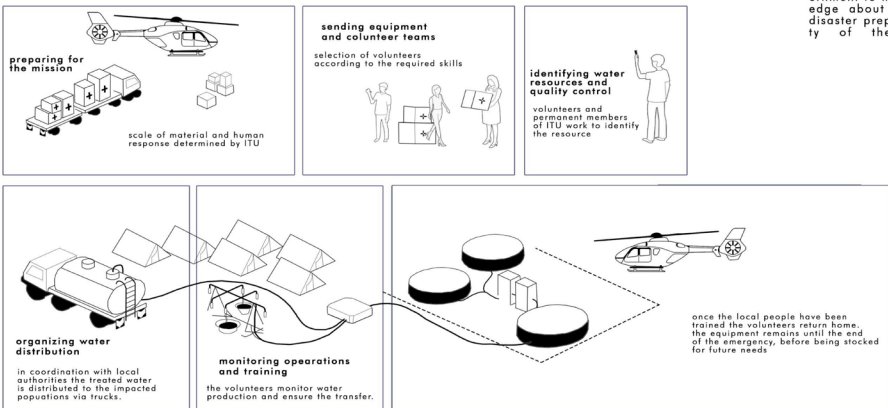


Earthquakes and other big disasters provide a serious threat to communities and their authorities. While much may be done to prepare a city's reaction to a disaster, few communities are fully prepared for first damage, loss, and the apparently unrealistic expectation of recovery. ITU campuses can have an effective response to these unfortunate situations. The university-city relationship is shifting in line with universities' involvement in public service beyond teaching and research, as well as cities' reliance on networks rather than enclosure to enhance urban competitiveness. At the municipal level, urban university campuses are frequently de-urbanized in order to fulfill the larger urban need. Based on this idea, the foundations were laid to reveal the potential of ITU campuses to contribute to urban development.



Based on this situation, it can be said that ITU campuses can be a service source. The purpose of using service here is that in case of an emergency, design decisions will be taken accordingly, since ITU campuses and especially Taşkışla campus have a lot of potential in terms of logistics. Given the magnitude and scope of the problem and its consequences in the twenty-first century, it is past time for all educational institutions to reflect on the measures they have implemented to create a risk-free campus and instill a culture of disaster preparation. It is crucial to highlight that regardless of the institutional mechanism or technology put in place by the government to mitigate catastrophes, disseminating knowledge about the same and developing a culture of disaster preparation becomes the primary responsibility of the urban campuses such as ITU.

WATER



green roof



