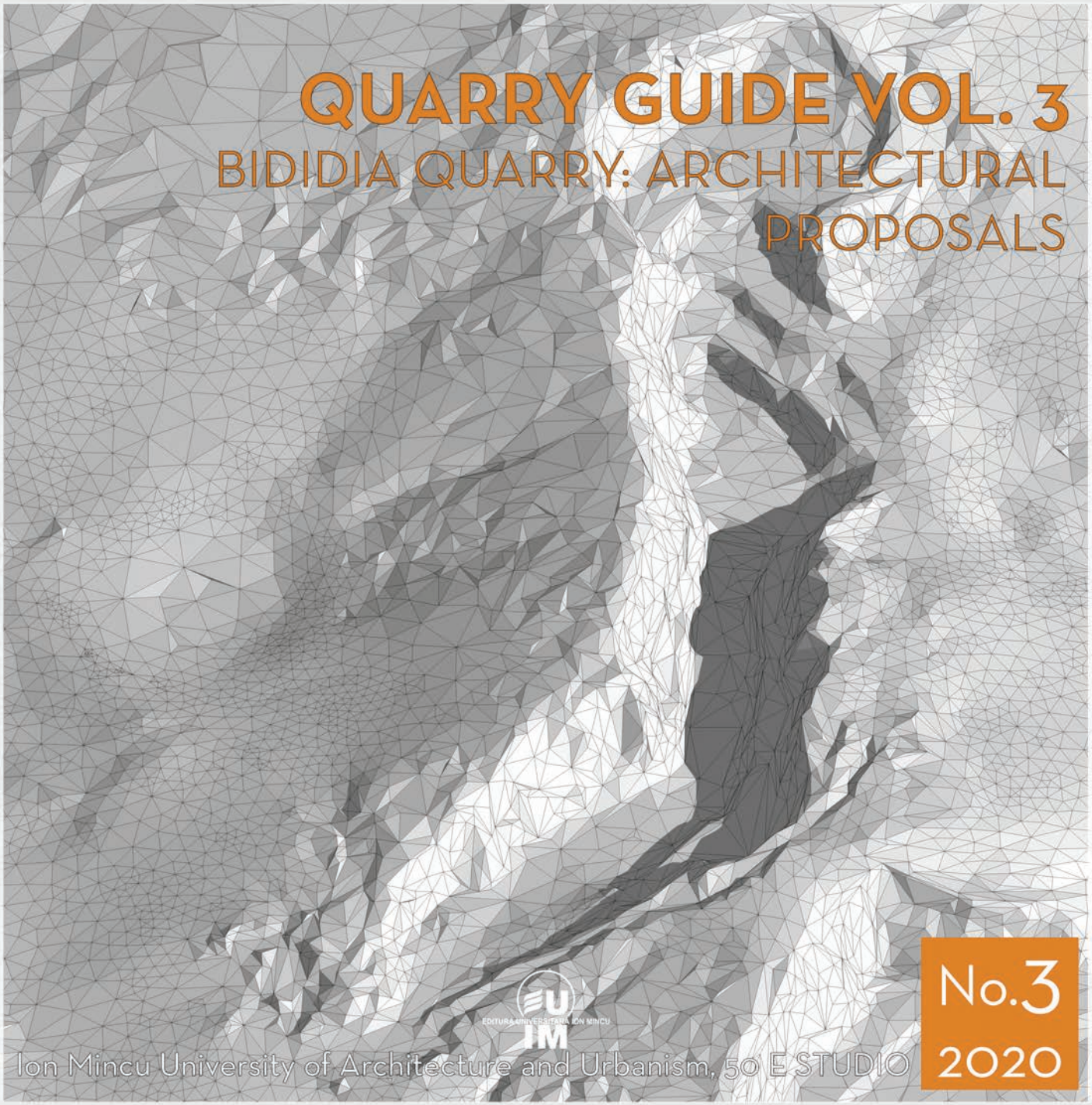
QUARRY GUIDE VOL. 3

BIDIDIA QUARRY: ARCHITECTURAL PROPOSALS



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QUARRY GUIDE VOL. 3: BIDIDIA QUARRY - ARCHITECTURAL PROJECTS

"ION MINCU" UNIVERSITY OF ARCHITECTURE AND URBANISM
COORDINATOR: Voica Marius

5TH YEAR - ENGLISH STUDIO
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BIDIDIA

ABSTRACT

DOBROGEA REPRESENTS FOR ROMANIA A UNIQUE CASE OF ASSOCIATION OF DIFFERENT GEOLOGICAL PERIODS WITH EXTREMELY VARIABLE ROCKS AND SEDIMENTS, REUNITED IN A SPECIFIC LANDSCAPE OF HILL-DOMINATED AND LOW MOUNTAINS AREA. THE MORE THAN 100 ABANDONED QUARRIES IN THIS REGION ARE CERTAINLY A TOPIC OF INTEREST FOR THE FUTURE REGARDING THE SOLUTIONS OF REINTEGRATION-REHABILITATION IN THE NATURAL ENVIRONMENT OR REFURBISHMENT-REUSE BY PROPOSING NEW MORPHOLOGICAL AND TYPOLOGICAL FUNCTIONS.

IN THE CASE OF THE BIDIDIA QUARRY IN TULCEA IS VERY SPECIAL, AS THE SPATIAL IMPACT OF THE PLACE (OF APPROXIMATELY 10 HA) IMPOSES ITS IMPRINT ON THE ENTIRE CITY AND REPRESENTS SOMEWHAT SYMBOLICALLY ONE OF THE SOURCES THROUGH WHICH THE SULINA CANAL HAD BEEN BUILT.

VOLUME 3 BRINGS TOGETHER THE ARCHITECTURAL PROPOSALS OF THE CONCEPTS PRESENTED IN THE 2ND VOLUME FOR BIDIDIA QUARRY IN TULCEA, MADE BY STUDENTS OF YEAR 5, THE INTERNATIONAL GROUP OF UAUIM WITHIN THE LONG PROJECT OF SEMESTER 2/2020 AND THE SUPPORT AND JUDGING PROJECTS CARRIED OUT BY AN INTERNATIONAL COMMISSION.

ARCHITECTURAL PROPOSALS

01.BALINT TAMÁS	Theater and Cultural Hub	Amphitheater + Cave theater + Acoustic Experiment chambers + Restaurant + Stage assembly workshop	aprox. build surface: 3 749 m² aprox. total surface: 4 000 m²	~1450 visitors + 60 staff member
02.BISCHOFF CHRISTIAN *(GERMANY)*	Greenhouse Future Farming	Vertical Farming + Offices + Laboratory + Space for Visitors	aprox. build surface: 3 600 m² aprox. total surface: 13 100 m²	~180 employers
03.CIONTU ȘTEFAN-VLAD	Tournament Center	Tournament Center + Housing Units + Running Track + Pool + Library + Canteen + Administration	aprox. build surface: 4 520 m² aprox. total surafce: 5 810 m²	100 athletes + 20 staff + 50 visitors
04.COMANELEA ANDREEA	Geology Museum	Geology Research Center + Accommodation+ Interior and Exterior Geology Museum + Summer school for students + School for citizens and tourists	aprox. build surface: 8 000 m² aprox. total surface: 30 000 m²	50-75 scientists (permanent) + 100 guests (scientists + students) + 100 tourists
05.DI TOMMASO VALENTINA *(ITALY)*	Theater Quarry	Outdoor Theater + Outdoor Art Museum + Relax Zone	aprox. build surface: 18 000 m² aprox. total surface: 40 000 m²	2000 visitors + 700 viewers
06.DUCAR VICTOR VLAD	Memory Garden	Public garden/Refugee camp + School + Library + Canteen + Healthcare + Mosque + Administration	aprox. build surface: 18 173 m² aprox. total surface: 24 716 m²	1100 refugees + 100/150 staff
07.GURAU TUDOR DANIEL	Olympic Swim Center	Olympic Swim Center + Accommodation + Restaurant + Exterior Public Spaces	aprox. build surface: 7 900 m² aprox. total surface: 35 000 m²	250 people + 30 staff members
08.HUDUDUI MONICA NICOLETA	The Quareed Workshops	Workshops + Reed processing + Reed storage + Education + Sustainability research center + Hotel + Restaurant	aprox. build surface: 6 000 m² aprox. total surface: 40 000 m²	150 staff members + 200 visitor + 60 hotel accomodation
09.JOIȚA CATINCA IOANA	Quarry Revival Ensemble	Vertical Farming+ Accomodation + Bicycle Tracks	aprox. total surface: 10 000 m²	40 staff members + 400 visitors (out of wich 100 accomodated)
10.PALAGHIA ȘTEFAN ALEXANDRU	The Hidden ECOmmunity	Housing + Community Center + Public Facilities + Accommodation + Vertical Farming	aprox. build surface: 2 000 m² aprox. total surface: 7 000 m²	~ 180 inhabitants + 20 accommodation places
11.PÂȘLARU MĂDĂLIN CRISTIAN	The R.O.C.K. - Rock Observation and Climbing for Kindred	Bicycle track + Bike Rentals + Accomodation + Observation Tower + Restaurant & Lounge + Offices + Adventure Park + Cliff Climbing	aprox. build surface: 12 000 m² aprox. total surface: 44 000 m²	680 visitors + 125 staff
12.RIVIELLO ROBERTA *(ITALY)*	The Stain of Stones Hotel	Hotel on the slope + Extreme Sports Centre	aprox. build surface: 1 800 m² aprox. total surface: 9 000 m²	20/30 staff + 60 permanent users+200/ 250 guests per day
13.TURCU SABINA	The Ark -Danubian Autonomous Research Campus	Research Center for Enviromental Studies + Accomodation + Restaurant + Conference center + Autonomy Management Facility	aprox. build surface: 8 500 m² aprox. total surface: 14 500 m²	305 persons 125 permanent users + 130 guests + 50 staff members


ONE DAY PROJECT
01.BÁLINT TAMÁS
02.CIONTU ȘTEFAN VLAD
03.COMANELEA ANDREEA
04.DUCAR VICTOR VLAD
05.GURAU TUDOR DANIEL
06.HUDUDUI MONICA NICOLETA
07.JOIȚA CATINCA IOANA
08.PALAGHIA ȘTEFAN ALEXANDRU
09.PÂSLARU MADALIN CRISTIAN
10.TURCU SABINA

Támás BALINT

Theater and Cultural Hub

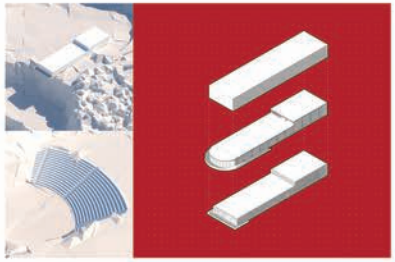
Theater and Cultural Hub. The main purpose of my project is the cultural revival, and enrichment of Tulcea and its territory. The Bibidia Quarry offers place for my proposal, a Theater and Cultural Hub. It means that inside the quarry, a set of interior and exterior amphitheaters, stages, theater and auditoriums are proposed and cultural events will be organized.

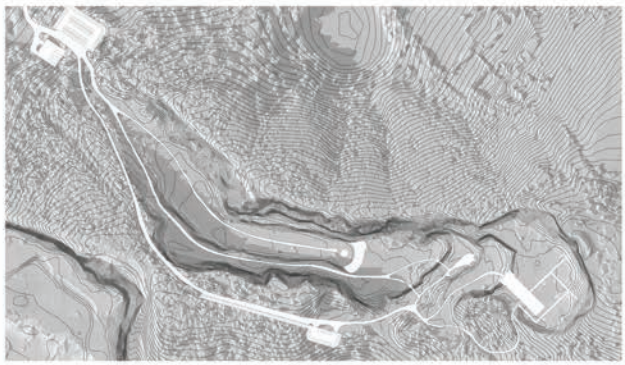
Each and every asset is different, and they provide different acoustics, visual preferences and capacity. As we enter the quarry, the first asset that we can see is the ancient greek-like amphitheater, gives place to cca. 1000 spectators. Furthermore, into the quarry, on the next level a set of inserts into the wall of the quarry platform are provided, for so called acoustic experiments. These chambers are different in size and shape, even the finishing of the walls is not the same. Here all kind of small concerts that require a rather specific space or acoustic attribute can be held.

On the next level platform, an entrance, which is actually the exit, of the Cave Theater can be found. Here can enter around 300 spectators for a peculiar show; the atmosphere of the cave, the reasonable shape of the cave, the finishing of its texture provides proper acoustics, even without any acoustic installation inside.

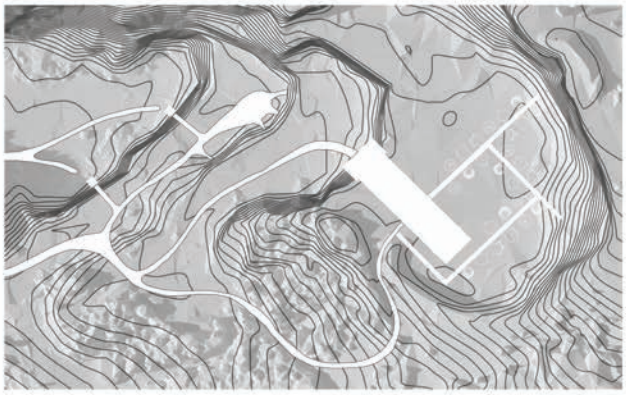
The actual entrance to the theater is made on the last platform, where a gabion wall combined with steel structure system can be found, and gives home to the foyer of the theater, where people enter, will buy the tickets, beverage or snack from the small restaurant, and descend to the theater below in an elevator. This foyer also provides a small restaurant where the spectators during break, or after the show may take a rest, and admire the astonishing panorama that the quarry provides. Next to the foyer, the scene assembly area can be found; meaning, that it has a 20 m, vertical connection with the scene of the theater below, and it is connected by a mechanism that can elevate the scene from the theater to the assembly area, where another scene can be assembled and descended by the same elevator mechanism, for the next act of the play.

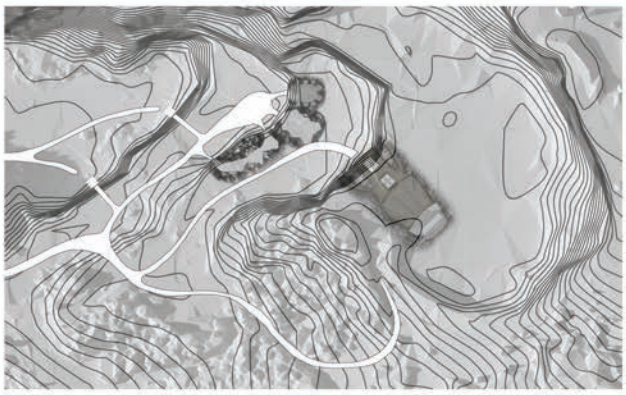
The site can be accessed by vehicles, for that parking spaces are provided at the entry of the quarry, and also close (cca. 300m) to the entry of the theater, for an easier and more immediate access.

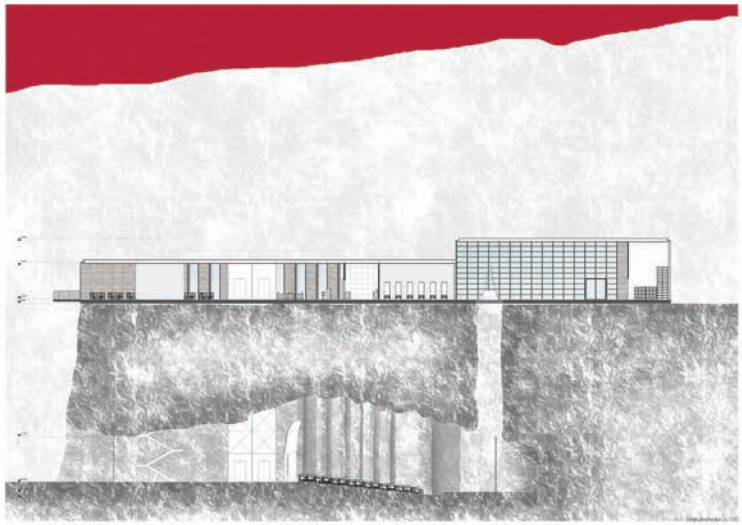


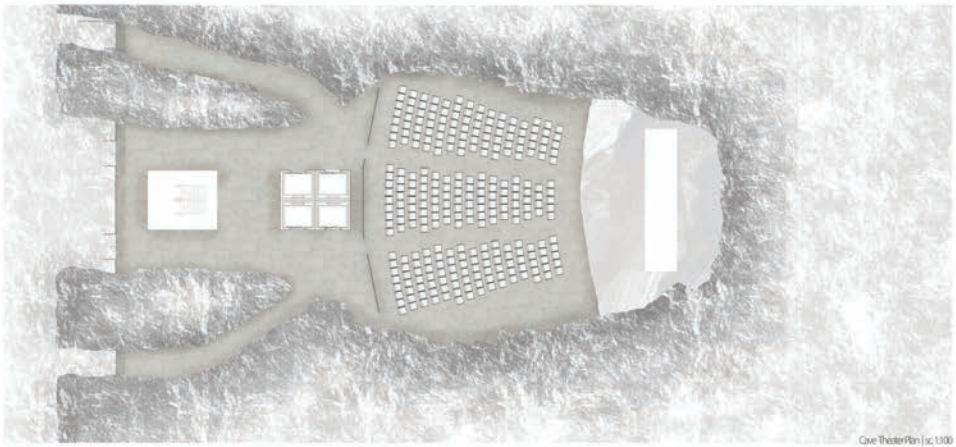


Entire Site Plan Organization | sc. 1/2000

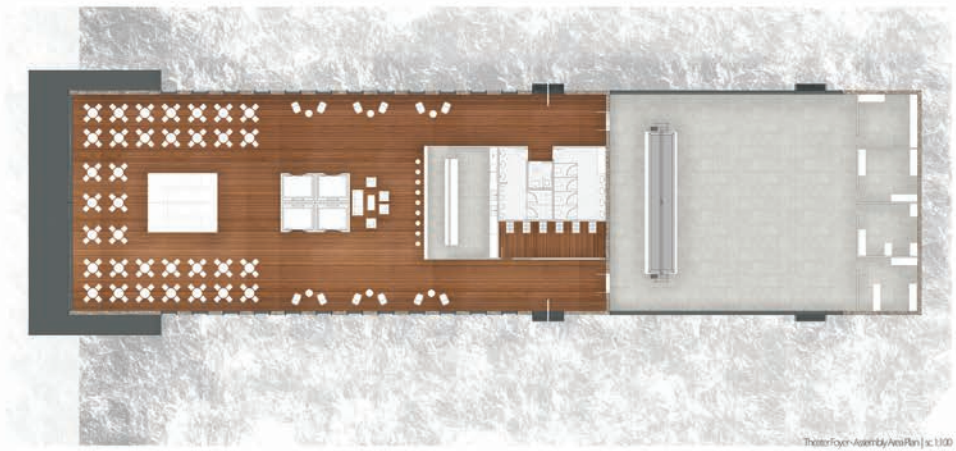






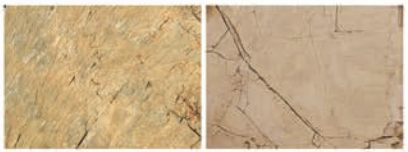


Cave Theater Plan | sc. 1:100

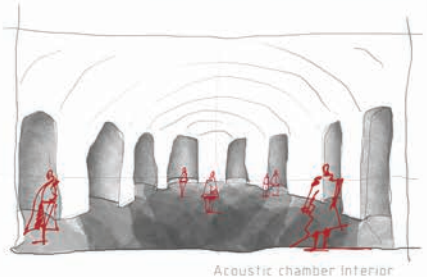


Theater Foyer-Assembly Area Plan | sc. 1:100

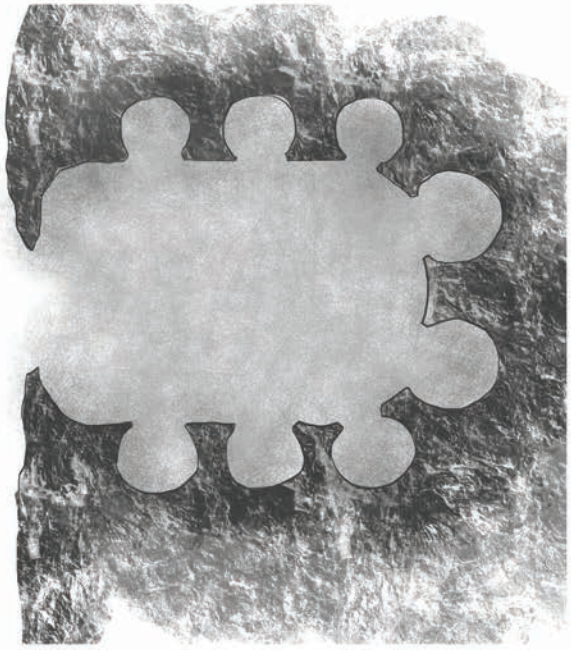
Acoustic chamber Section | sc. 1:200



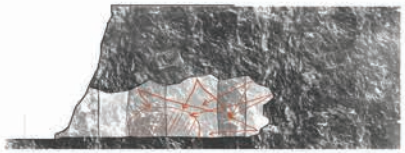
Acoustic chamber texture references



Acoustic chamber Interior



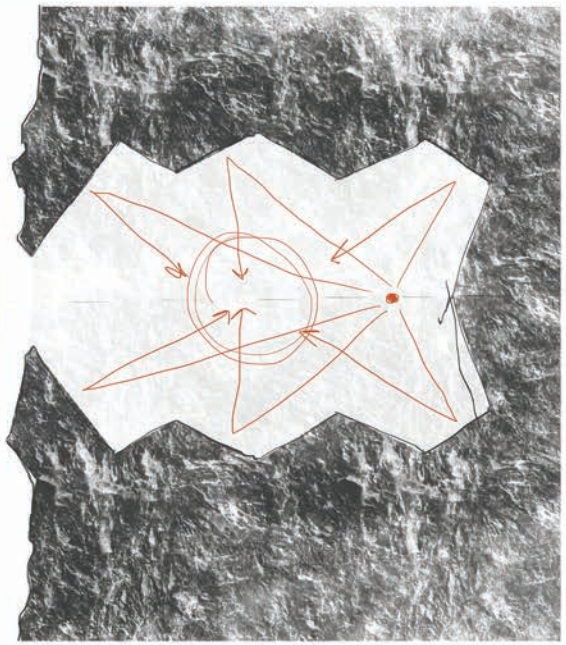
Acoustic chamber Plan | sc. 1:100



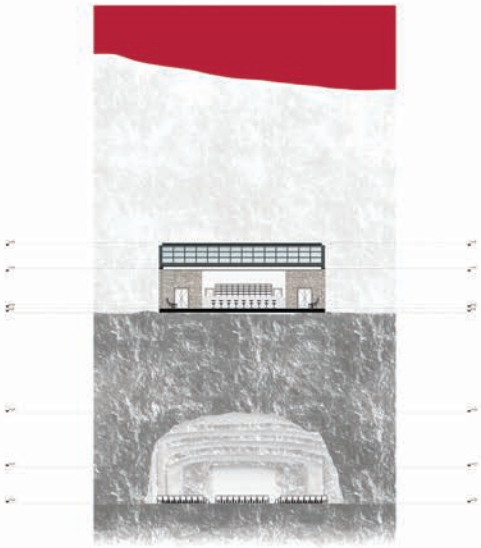
Acoustic chamber Section | sc. 1:200

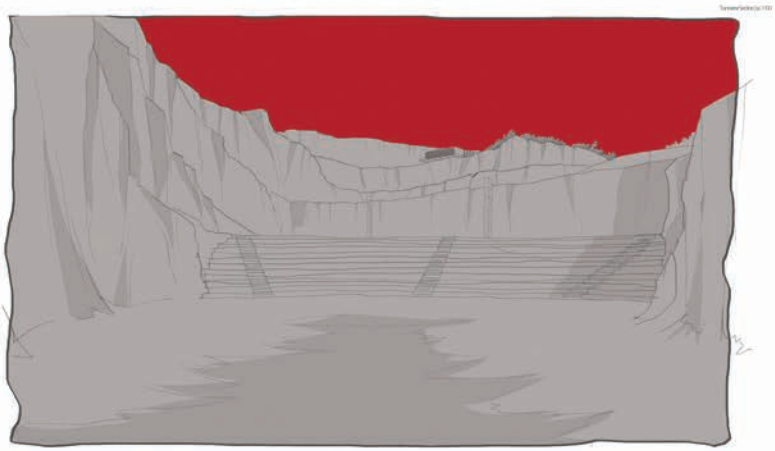
Acoustic chamber texture references

Acoustic chamber Platform



Acoustic chamber Plan | sc. 1:100





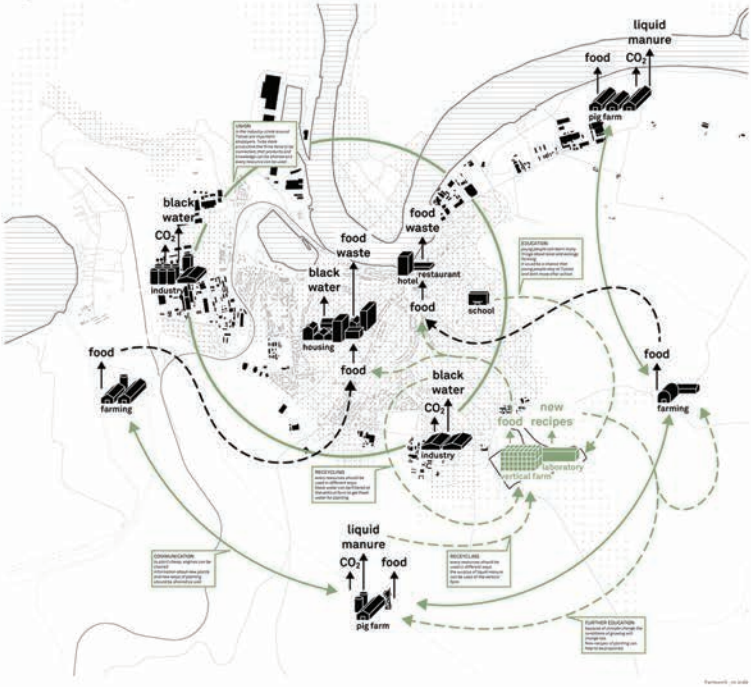
Christian BISCHOFF

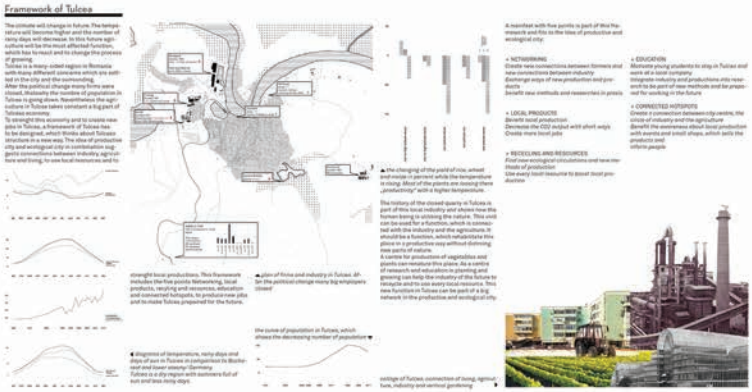
Greenhouse Future Farming

The climate will change in future. The temperature will become higher and the number of rainy days will decrease. In this future, agriculture will be the most affected function, which has to react and to change the process of growing. Tulcea is a many-sided region in Romania with many different concerns which are settled in the city and the surrounding. After the political change many firms were closed, that is why the number of population in Tulcea is going down. Nevertheless, the agriculture in Tulcea takes constant a big part of Tulcea's economy even nowadays, many years after. To strenghten this economy and to create new jobs in Tulcea, a framework of Tulcea has to be designed, which thinks about Tulceas structure in a new way. The idea of productive city and ecological city in combination suggests connections between industry, agriculture and living, to use local resources and to strenght local productions. This framework includes the five points Networking, local products, recyling and recources, education and connected hotspots, to produce new jobs and to make Tulcea prepaired for the future. The history of the closed quarry in Tulcea is part of this local industry and shows how the human being is utilising the nature. This void can be used for a function, which is connected with the industry and the agriculture. It should be a function, which rehabilitate this place in a productive way without destroing new parts of the nature. A centre for production of vegetables and plants can renature this place. As a centre of research and education in planting and growing can help the industry of the future to receycle and to use every local resource. This new function in Tulcea can be part of a big network in the productive and ecological city.

A vertical farm is like a small ecological system in a greenhouse. Rainwater of the roof can be collected and used to water the plants. Plantwaste, which is produced after the harvest, can be used in a biogas plant or can become to a new soil. Dr. Dickson Despommier made a research to vertical farms and create a list with eleven advantages of the vertical farm. This list of advantages indicates a big complexity of vertical farms. To create this small ecological system and to use every resources of farming, many rooms are needed and therefore have to stay in a right functional context. Also every plant needs another specific way of planting. Mushrooms and small greenplants can be planted in the vertical farm without natural light. To plant bigger plants like tomatos, it's more difficult and natural light is useful. This includes, the rooms have to be flexibel that the plant-racks can be changed in summer and winter time.

a green way for Tulcea





site plan 1:2000

what is it about?

A vertical farm is like a small ecological system in a greenhouse. Rainwater of the roof can be collected and used to water the plants. Plantwaste, which is produced after the harvest, can be used in a biogas plant or can become to a new soil. Dr. Dickson Despommier made a research to vertical farms and create a list with eleven advantages of the vertical farm.
This list of advantages indicates a big complexity of vertical farms. To create this small ecological system and to use every resources of farming, many rooms are needed and have to stay in a right functional context.
Also every plant needs another specific way of planting. Mushrooms and small green-plants can be planted in a vertical farm without natual light. To plant bigger plants like tomatos, it's more difficult and natural light is useful. This includes, the rooms have to be flexibel that the plant-racks can be changed in summer and winter time.

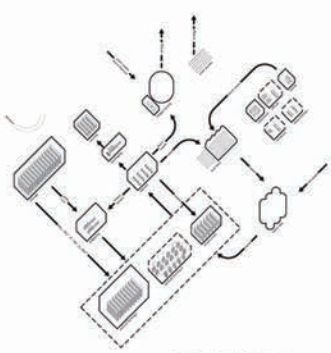


diagram of functions which are needed for vertical farming

how much space is needed to produce food for whole Tulcea - a fictiv number which helps to create a vision of the whole quarry

11 points by Dr. Dickson Despommier

+ YEAR-ROUND CROP PRODUCTION
Regular crop production has been linked to the seasons, even in tropical climates. The time of year and patterns of weather, together withthe soil types found there, determine the yield of a particular crop in any region.

+ NO WEATHER-RELATED CROP FAILURES
Indoor farmers get to control everything: the temperature and humidity, as well as the amount of light and the density of the plants.

+ NO AGRICULTURAL RUNOFF
Runoff in most advanced farming operations is laden with soil, fertilizer, pesticides, and herbicides, and usually ends up in some river on its way to the estuary.

+ ALLOWANCE FOR ECOSYSTEM RESTORATION
If a significant amount of farming were to take place inside the urban landscape, then the world's ecological footprint of agriculture would become smaller.

+ NO USE OF PESTICIDES, HERBICIDES, OR FERTILIZERS
The design of the building will take into account the need for keeping out unwanted diners, such as insects and microbial pathogens, that in an outdoor setting are able to more than satisfy their nutritional needs and raise hell throughout the world's agriculture landscape.

+ USE OF 70-95 PERCENT LESS WATER
In contrast to traditional agriculture, hydroponic, and more recently aeroponic agricultural technologies have revolutionized the way water is used to grow plants without the damaging side effects of agricultural runoff.

+ GREATLY REDUCED FOOD MILES
The vertical farm is a neighborhood concept couched in futuristic terms, but with a homespun intent. The things we trust most are the things we can see for ourselves. Locally grown corn, tomatoes, or free-range chickens seem to taste better, also

different plants need different systems of planting

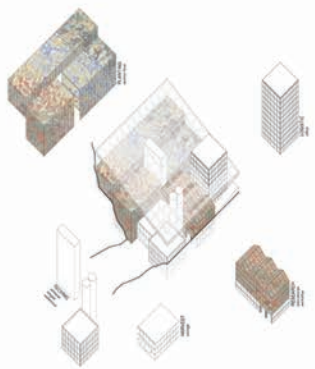
the idea of one roof, which includes many functions and creates a protected place for the needed programs of vertical farming

+ MORE CONTROL OF FOOD SAFETY AND SECURITY
Vertical farming would become impractical if it had to shut down every six weeks or so to adress an outbreak of something like whitefly, a common visitor to most open greenhouses. Thoroughy vertical farm is using the same principle that one applies to the design and construction of intensive care units for hospitals.

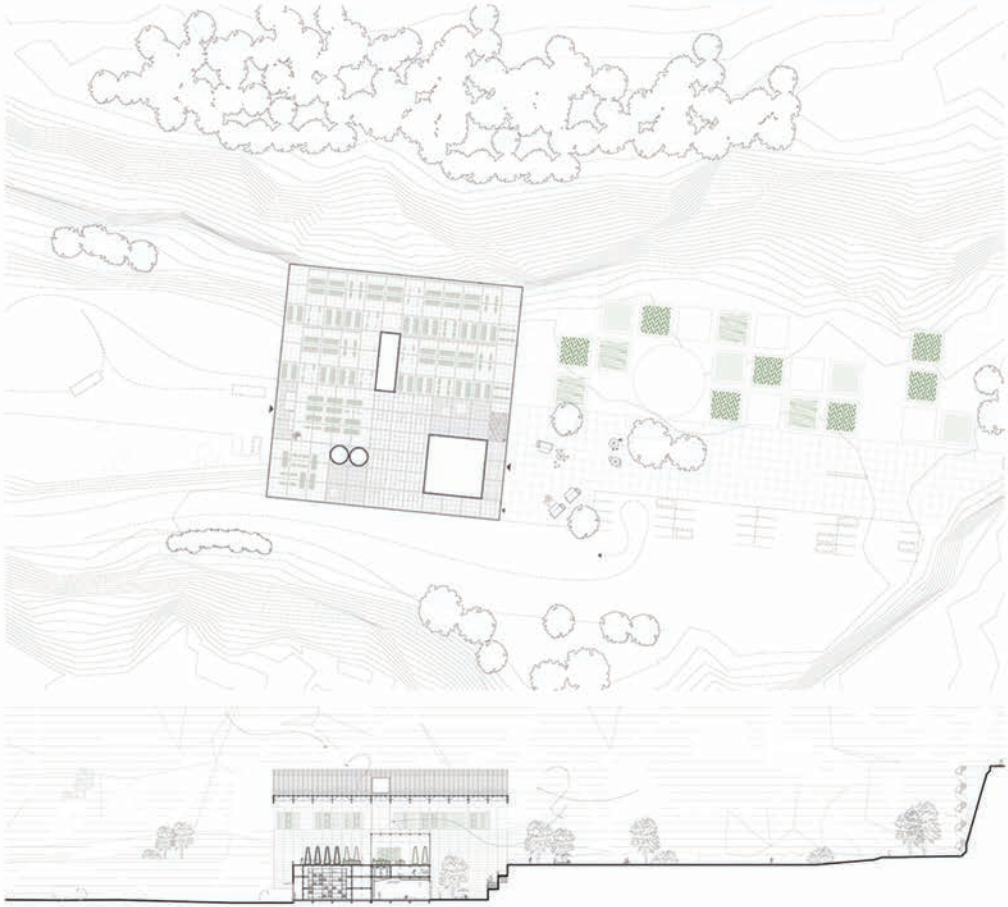
+ NEW EMPLOYMENT OPPORTUNITIES
Municipalities will use vertical farms to rehabilitate urban spaces once considered too degraded to serve as commercial properties. Areas in which vertical farms become situated will, in turn, attract new development, making the urban food desert a thing of the past.

+ PURIFICATION OF GREY WATER TO DRINKING WATER
It is time to realize that these products of our own metabolism have instrinsic value and must be turned into recyclables, and the energy in the solids extracted by some form of high-tech incineration scheme.

+ ANIMAL FEED FROM POSTHARVEST PLANT MATERIAL
Conserving energy will be a concern if the vertical farm uses a significant amount of electricity to grow crops. In this case, incinerating the posthavest portion of crops would be a viable strategy of energy recovery. In other situations leftover plant material could be converted to animal feed.



the growing under one roof



site plan | section 1:500

how the functions fit

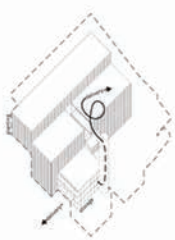
Under a roof with many own functions the different programs are free organized in a way, that every function is setted at its best position. For example the vertical farm is fixed in the north to get the most natural sun, while the tanks of water are at the lowest part of the roof.

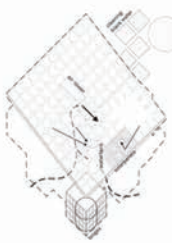
from the rocks to every household

The part of the „real" vertical farm is placed in the north of the building. The interior is devided in different parts of planting, which have there own planting circular flow. So there can be a harvest every day.
After the harvest by hand, because of the sensibility of plants, machines are packaging the plants. This packages of vegetables ar arranged at the storage automatically, to make the delivery faster and this digitalisation gives an overview about the products easily.
There are two options of delivery, the classic one with a truck at the ground-floor and one airstrip at the roof for drones.

the technical part

To use every Ressource and recycle material is one aim of the framework. So the vertical farm should be one small ecosystem, which could work autonomically.
There are the functions of the roof, with collecting rainwater, and produce energy with solar panels (at areas, which can produce shadow). The biogas facility is also one part of the technical function. One can produces energy with plantwaste and liquid manure by the local farms. At the testfields outside of the building, blackwater can be filtered and used to water the plants.
One part of the tower (in the north of the building) is empty and used for a natural circulation of the air.



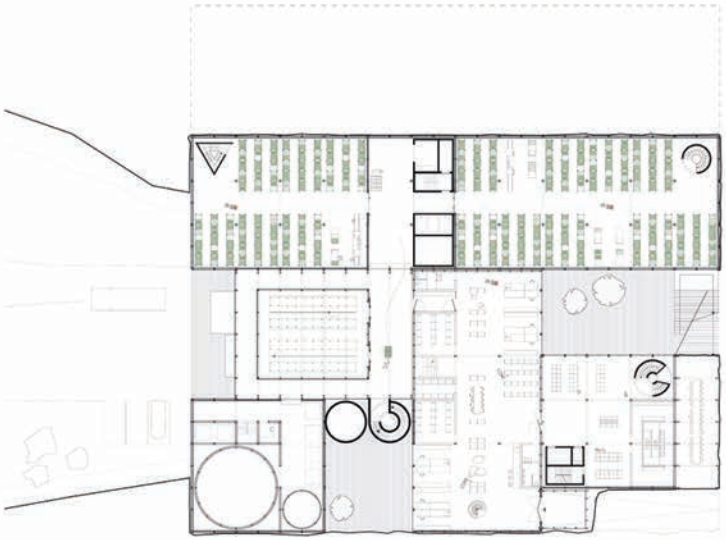


the research part and organisation

The research is one big part of all the functions. A vertical farm couldn't be productive without creating new plants and way of planting. So the research is divided into two parts. The laboratories are at the third level, which can be entered by a ramp next to the office tower. A smaller Greenhouse for testing is setted at the fourth level.
The organisation, offices and administration are placed at the office tower, which can be entered at the fourth level in the east.

open for visitors and education

Research shouldn't be hidden. It is important to share the new information with farmers in the surrounding, Romania and worldwide. This part of the building is placed at the groundfloor and can be entered by an open staircase in the east. There are areas for workshops, lectures and meetings. It is also the starting point of „touristic" tours throw the vertical farm, which can end at the cafeteria, where a showkitchen is placed and the fresh vegetables can be tested.



floor plan 3rd level 1:300

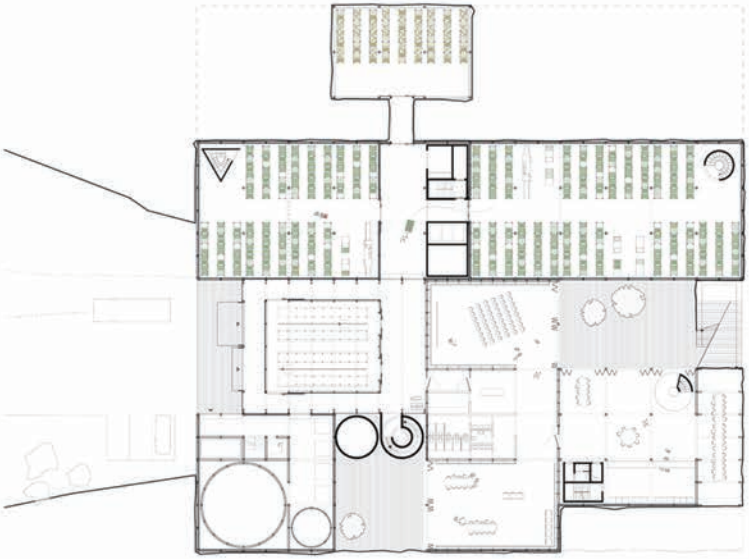
entries for many users

The axonometries of the building show the different functions and suggest the numbe of differnt entries. It is important to place these entries without crossed ways and be placed in a natural way, that every user can find it easily.

the delivery of products by trucks is placed at the groundfloor

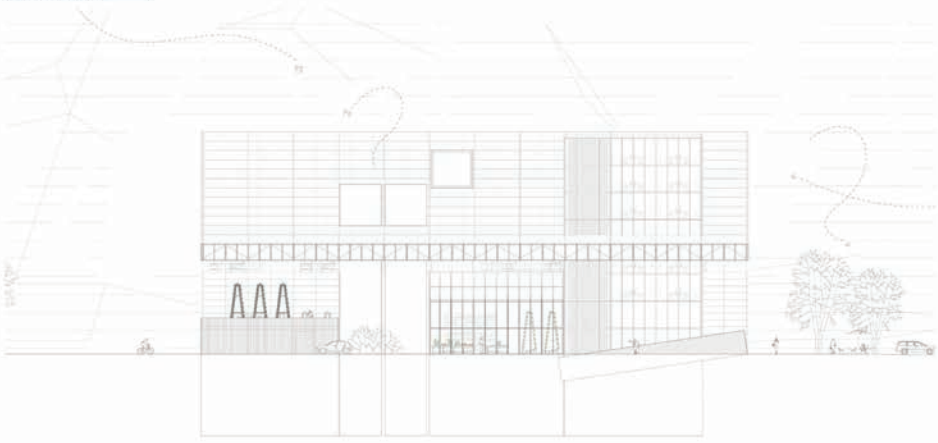
▲ visitors and employers have to pass the building on the upper level

at the back of the building are the three entries. The main entrance with administration is at the officetower. At the left side is the ramp to the laboratories and on the Right the staircase down to the cafeteria and the lectures and workshops.



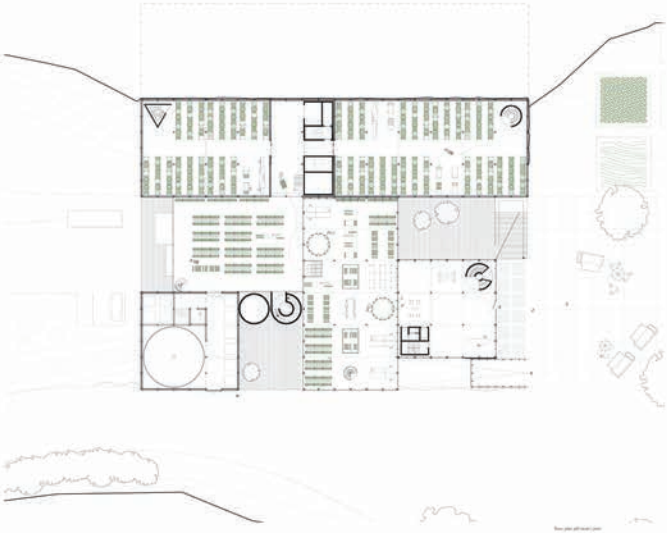
floor plan 1:200

a collage as housing

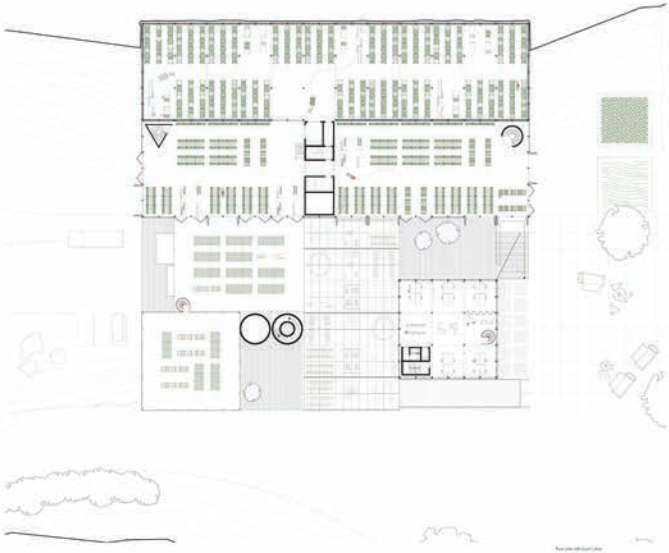


elevation 1:200

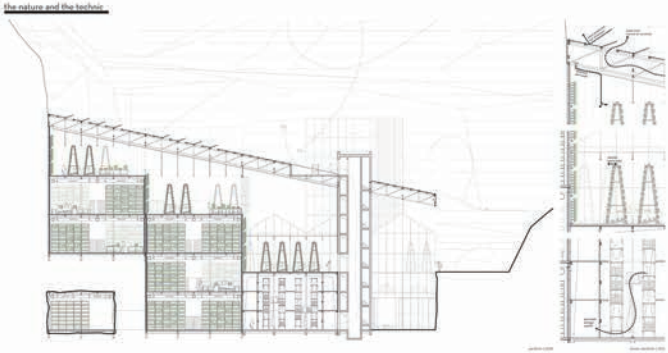
an open closed system



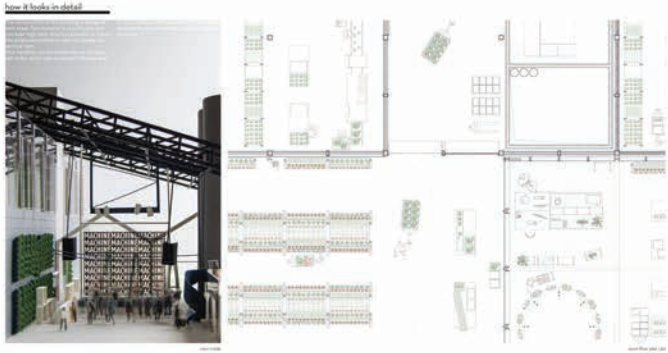
the flexibility of steel



the nature and the technic



how it looks in detail



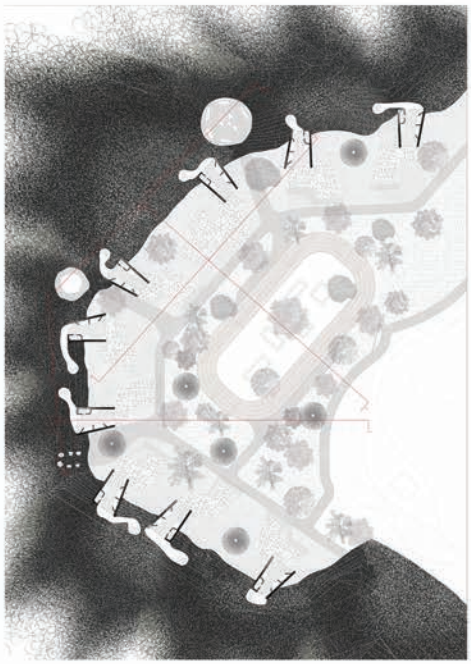
03 Stefan-Vlad CIONTU

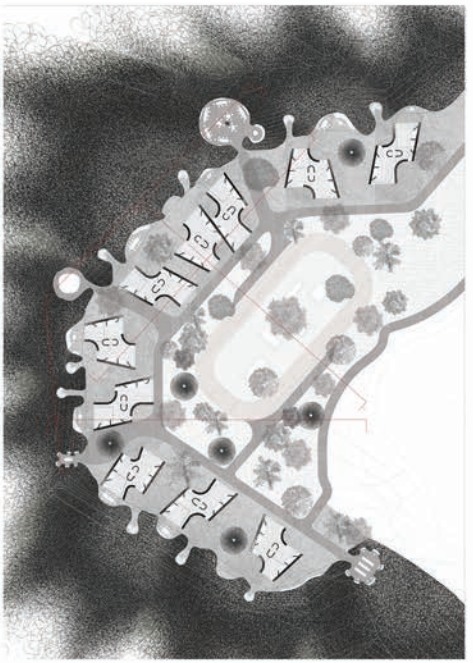
Tournament Center

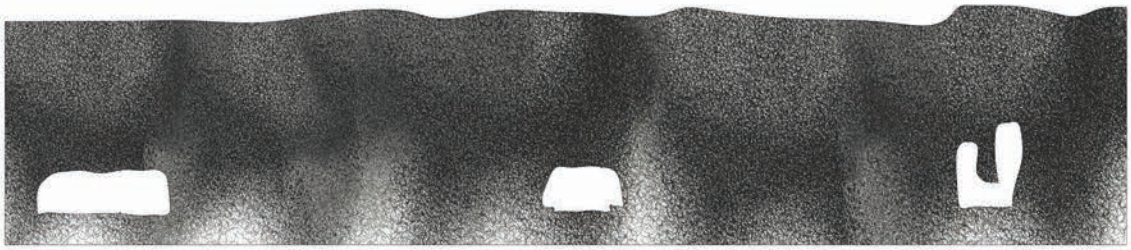
The project revolves around 3 systems: The caves, the stadium and the walkway. The latter connects all the elements in the project. The 5th platform is used for detailing the proposal, where the housing in phase 1 is located, along with conex functions. These secondary functions are a small library, sacred/ religious space, a small canteen, and a pool, carefully dug inside the slope of the quarry. The housing sits perched near the slope in a tension relationship. This tension is mitigated through the use of excavations that allows extra spaces for the ground floor, in form of outside-covered spaces, which can be summer kitchen, living rooms or courtyards, showers and gathering spaces.

In order to access the first floor, the user must access a small tunnel which grants access to the upper level through a spiral staircase. In addition, the upper levels have a small terrace roof garden, in order to create extra levels of filters. The ground floor volumes have pergolas as a sun protection measure which are connected with cables towards the trees in order to maximize the vegetation growth on the buildings. The ground floor area can be divided with movable partitioning, such as heavy phono-absorbant curtains or panels in order to taylor the experience towards each user(s). For instance, each bed can be converted into a small table in order to provide a day area, not only a bed. Thus, it can accommodate up to 4 different users with a shared sanitary group, and it can accommodate also a small family.

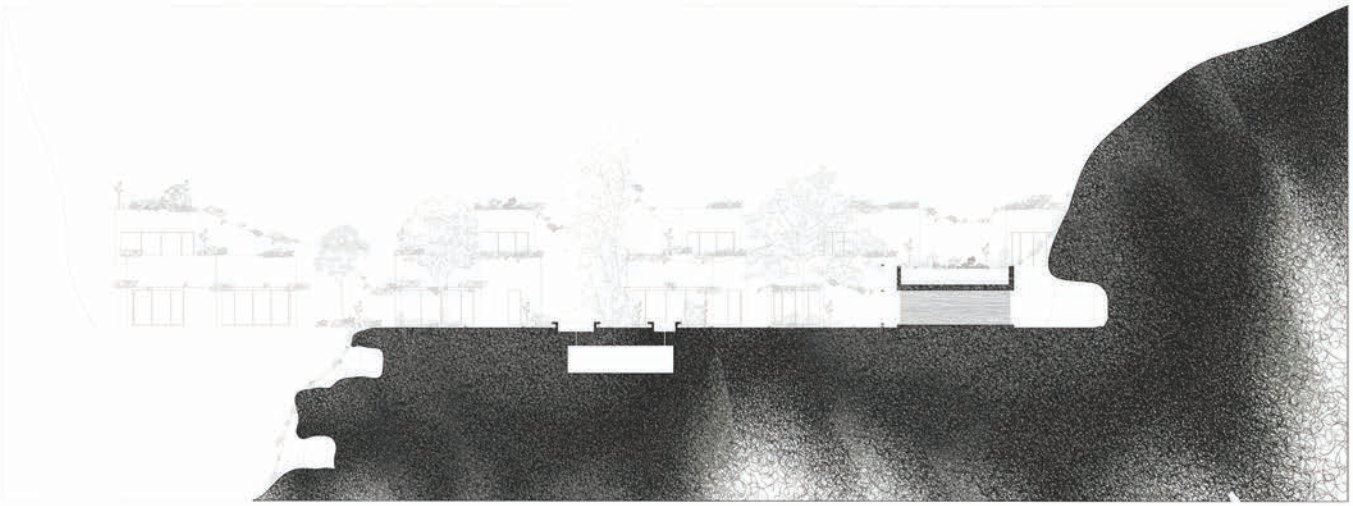
In this way, the mobile partitioning ensures a simultaneous double connection with the mineral harsh rock and the fluid vegetation. In the middle of the platform lies the running track, which connects the secondary functions through alleyways packed with vegetation. The center of the track features benches surrounding small water pools. These are left as they are, in order to work organically with the weather in order to have water mirrors in specific times of the year. In addition, these water mirrors are connected to a basin underneath the stadium that acts as a collector basin for the irrigation system which supplies the mineral field with water in order for vegetation to grow. The large walkway connects all the platforms in the project, generating alveolae according to specific secondary and conex functions.



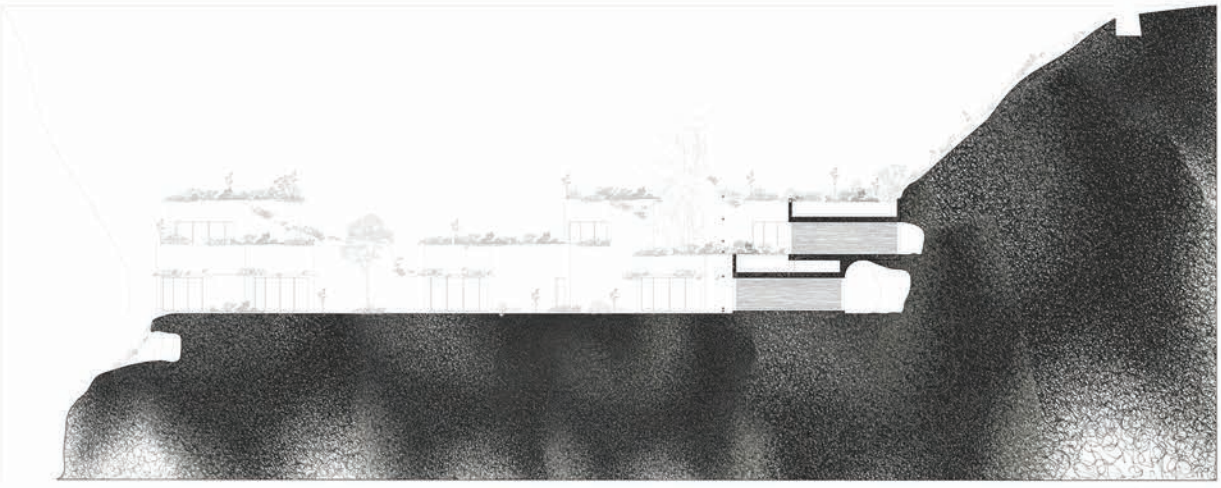




4-4 Section 1100



3-3 Section 1100



1-1 Section 1100

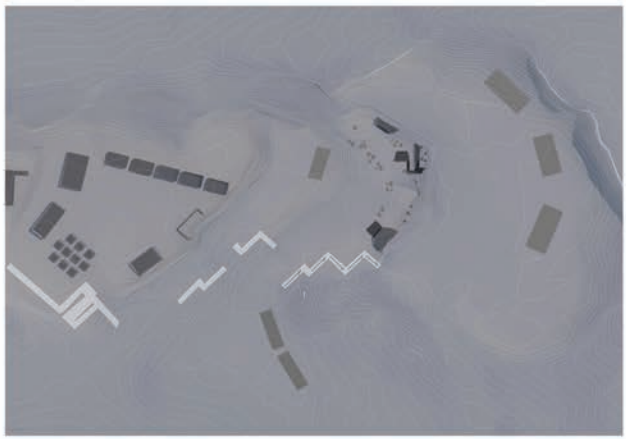
Andreea COMANELEA

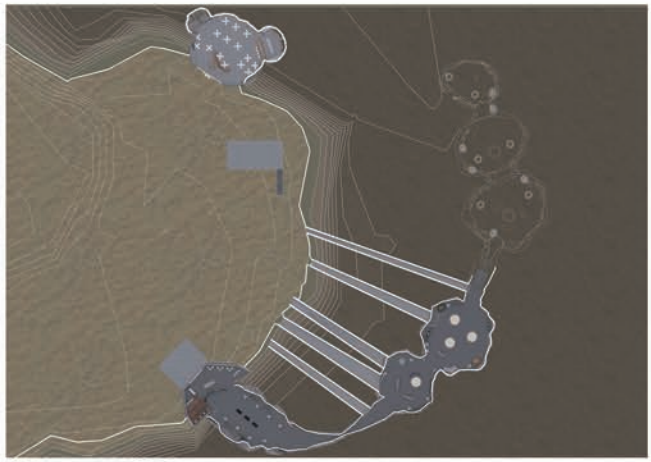
Geology Museum

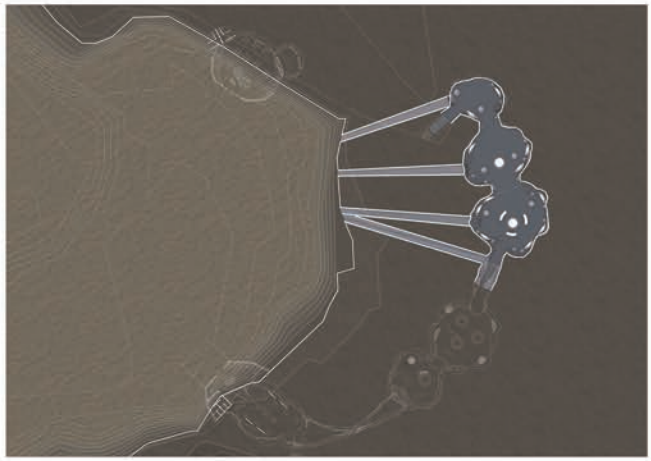
The most interesting aspect about Dobrogea is that it houses both the oldest and the newest part of Romania. Here we have the mountains that formed when the rest of the country was the bottom of a sea and the Danube Delta area that is still forming as we speak. From a geological point of view this site is a treasure and that's how the idea of the proposal caught life. The aim was to create a space for scientists and people looking for some leisure time. To make them meet in an environment that is enjoyable for both of these categories of people. In order to do that, at the lower extremity of the quarry, the atmosphere is a leisure one. It has gardens, sport fields and areas for the kids.

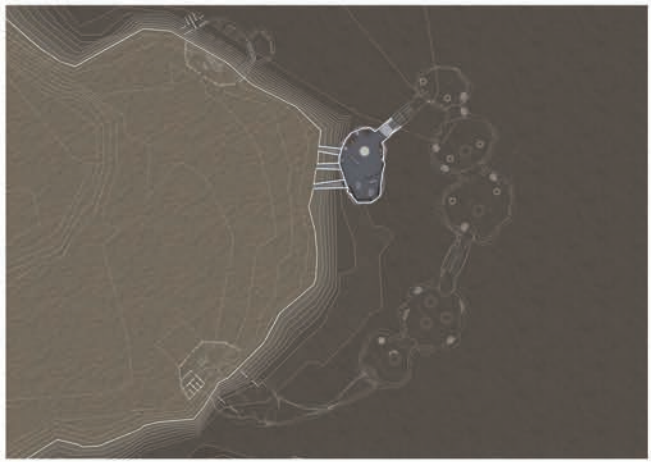
The upper extremity, the fifth platform, is the scientific one, consisting in the research facility for geology. The middle platforms, however, are a gray area. Accommodation spaces, a summer school and in addition, a museum. This museum is the main attraction point for these two categories of people. It is designed in such a way that everyone can enjoy it, even if they don't have any knowledge in this field. Instead of having a plain geology museum with an exhibit of a rock or mineral collection the aim was to bring geology closer to people. In order to do that, the proposal aims to create a walk through the history of time on Earth.

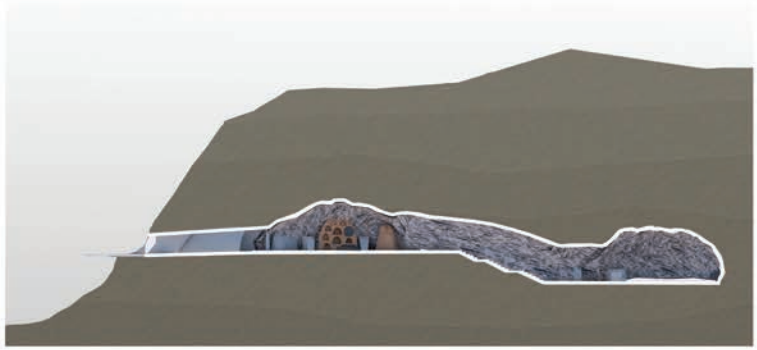
The whole exhibition is a walk, from the very beginning of the universe to the future of the earth. The main focus was to create connections between geology and different fields, like biology or paleontology so people will remember that a certain geological period ended when species appeared or disappeared from Earth. The route through the museum starts from the ground, by entering a cave, it takes the visitor through different experiences arranged in three different levels, each of them showing a different Eon, and it stops at a higher level, in the air.

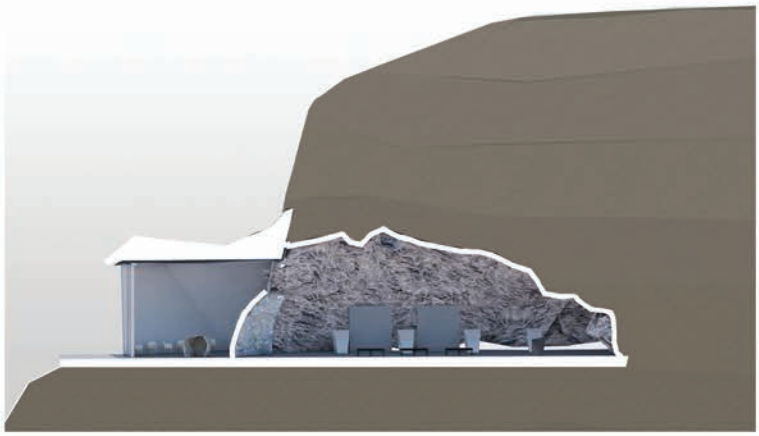


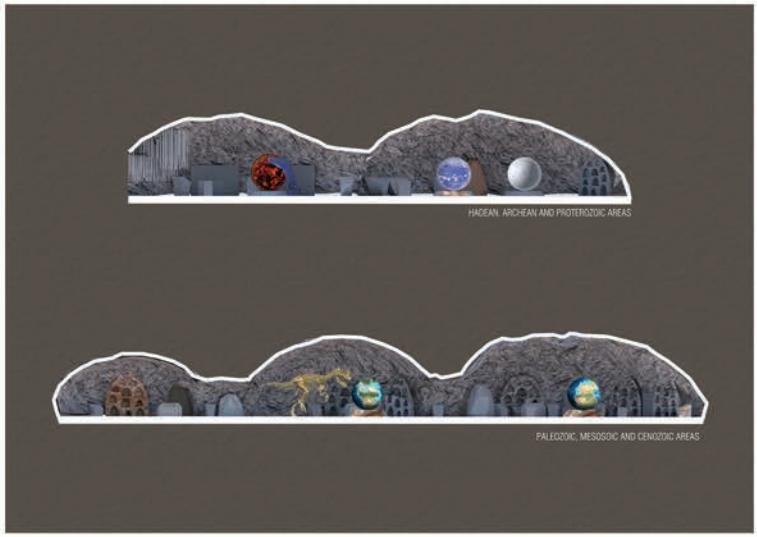











HADEAN, ARCHEAN AND PROTEROZOIC AREAS
PALEOZOIC, MESOSOIC AND CENOZOIC AREAS

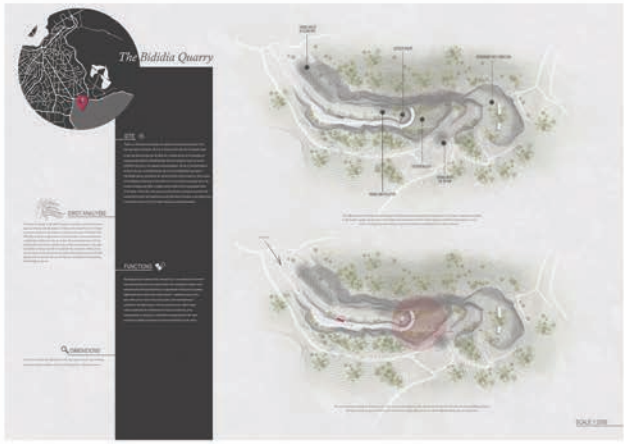
Valentina DI TOMMASO

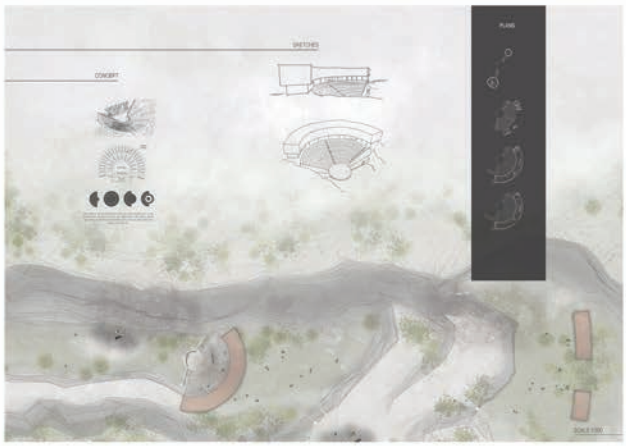
Theater Quarry

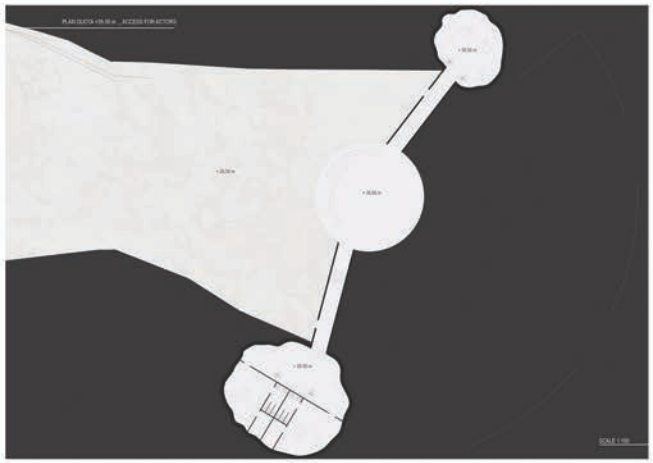
The project involves the construction of an attractive center which has the main function of the open-air theater. In the quarry there are other services, which improve the main function, aimed at promoting the stay of tourists and residents. The organization of the quarry is developed on several levels, based on the needs of each function and the conformation of the ceiling, made accessible by the new connections (elevators and stairs) and by the reuse of existing access routes.

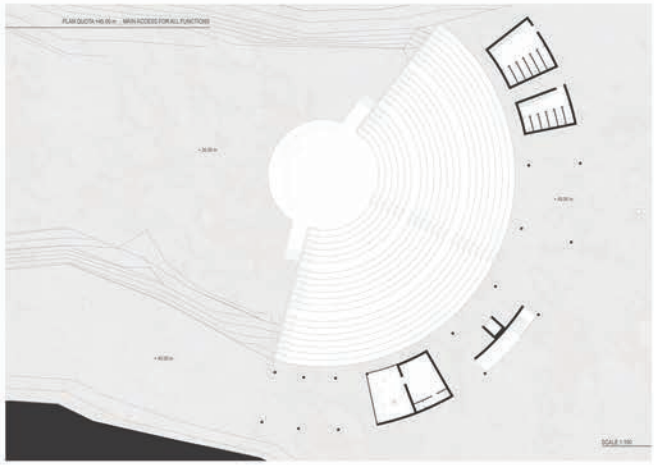
The main building is that of the theater, located in the lower part, which takes up the conformation of the Greek theater in a modern interpretation. The Greek theater was built using the conformation of the territory (usually at the foot of a hill) and this is what I wanted to do using the contour lines present in the quarry. So the Greek theater is closely related to the nature of the context in which it develops, just as it happens to me in the quarry. In fact, everything is designed to take advantage of the strengths established in my SWOT analysis, such as nature: the paths and green areas are designed to encourage new perspectives and admire the quarry.

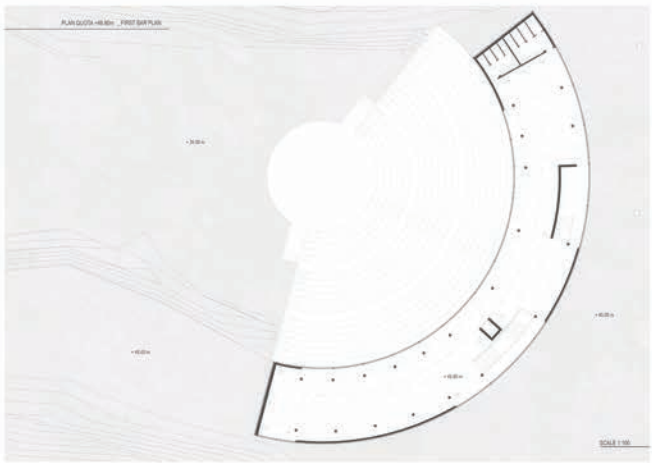
The theater is spread over several levels, starting from the lower part where we find the access for the actors with their respective dressing rooms and an administrative office carved out of the rock, the stage with a backstage designed not to be too invasive and not to hide the panorama , the audience carved into the rock, up to the upper floor. The most important plan is the intermediate level of the quarry where we can go to the different points of attraction. In addition, the semicircular building created by concentric circles starting from the stage, contains a bar designed for a stay where you can drink tourists, theater spectators or residents. The theater is designed to accommodate 700 spectators but the connections present throughout the quarry, including the car parks on the low and high levels, allow a single usability of each function.





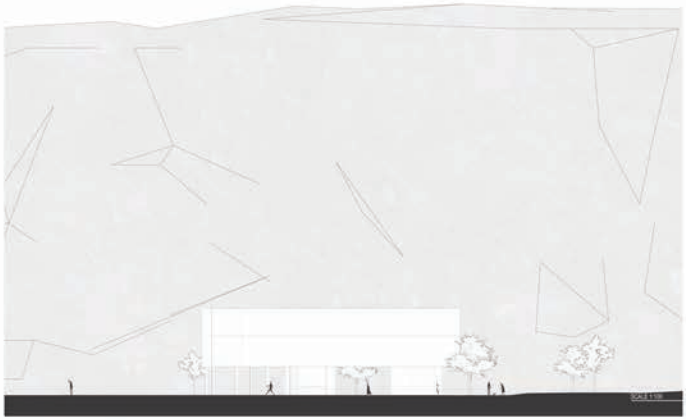

PLAN QUOTA +39.00 m _ ACCESS FOR ACTORS
SCALE 1:100


PLAN QUOTA +40.00 m _ MAIN ACCESS FOR ALL FUNCTIONS
SCALE 1:100

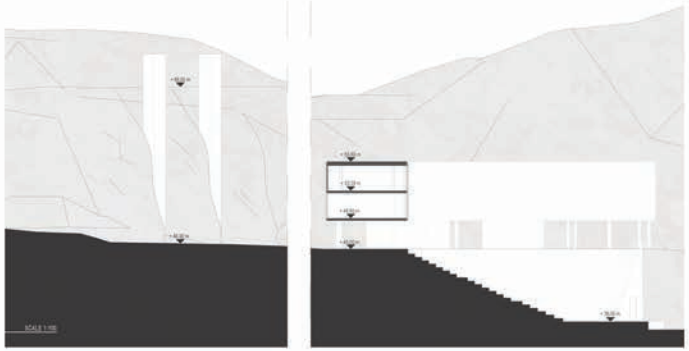

PLAN QUOTA +46.80m _ FIRST BAR PLAN
SCALE 1:100

EST ELEVATION

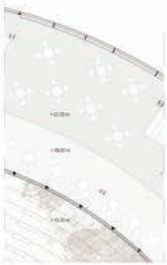
SOUTH - EST ELEVATION



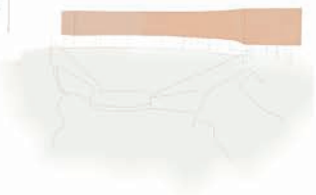
SECTION ON THE AUDIENCE



STRUCTURAL DETAIL



AXONOMETRIC VIEW



SCALE 1:50

RENDER

OUTDOOR MUSEUM

INSIDE THE BAR

TICKET OFFICE

OUTDOOR THEATER

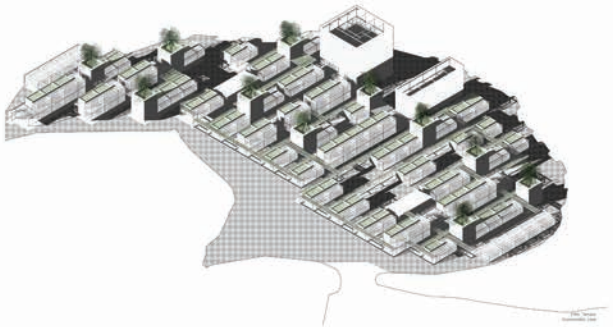
Victor-Vlad DUCAR

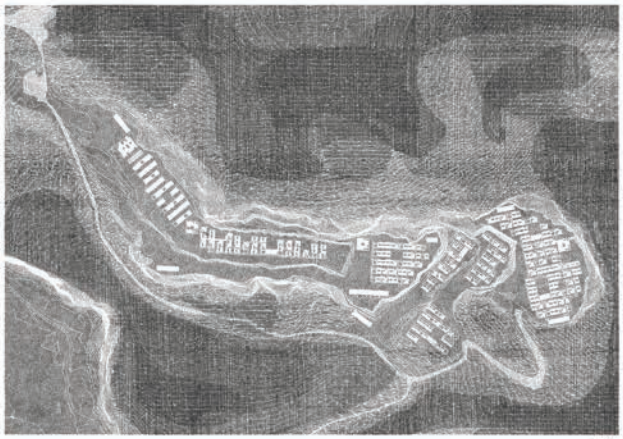
Memory Garden

Quarries represent a scar in the natural image. A place used only for exploitation, and after exploitation is ceased, it remains as a "no man's land" in the environment, especially if its located very close to a city, as it is the case of Bididia quarry. The proposal seeks both the returning of the area to the inhabitants of Tulcea and at some point, to give this "no man's land" to a population in urgent need, those being refugees. In an initial state, the quarry is transformed into a public garden, with structures used both for gardening and loisir, integrating the idea of urban farming with a place used by everybody, every day. Public functions/buildings will be created on some of the terraces, such as a market, for selling the vegetables produced there, an administration office with deposits, a private school, toghether with praying spaces and other conex functions.

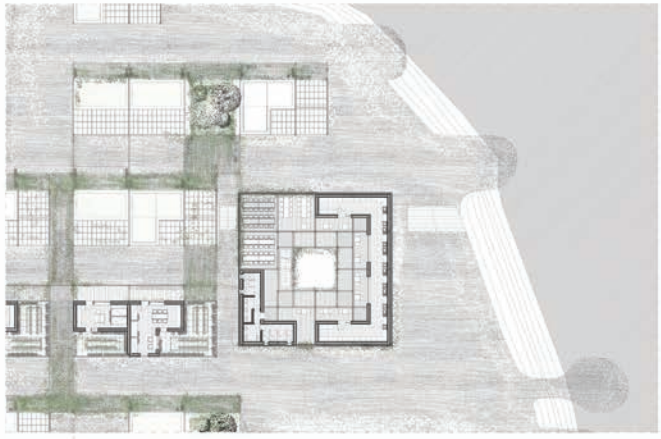
The whole site is organized using a 7m x 7m grid which follows the dominant axis of orientation of each platform. The structures are placed in a way in which they form a sort of smaller squares. For linking better this type of "semi-public" areas with the site, they will be extended towards the cliff, digging inside it, generating a stone covered space for each square.
In case of a refugee crisis, the whole site can be re-adapted for a refugee camp. Most of the structures can be converted into small houses, with semi-private areas such as porches. The greenhouses can be used by the refugees as their own garden, each house receiving a specific area/percent of each greenhouse.

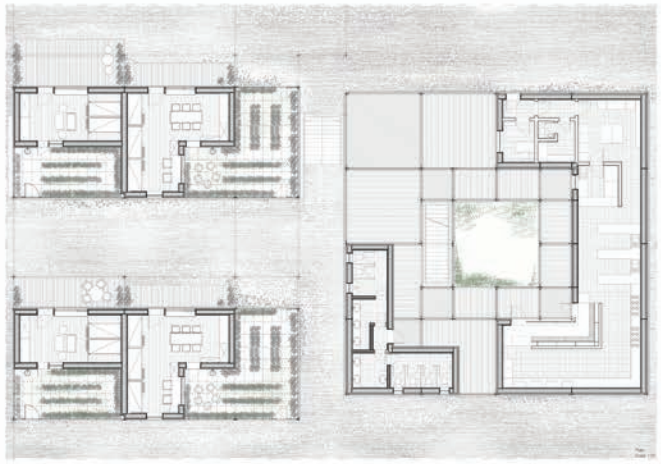
For a better social life, different public structures are built, such as an amphitheater, covered loisir spaces, big squares, while religious/praying spaces and a school are already built. The administration office can be transformed into a small health clinic used only for basic treatments.
The project seeks to give back to people a place which rightfully should be theirs through a public garden, while it tries to recover the original green image of the area.

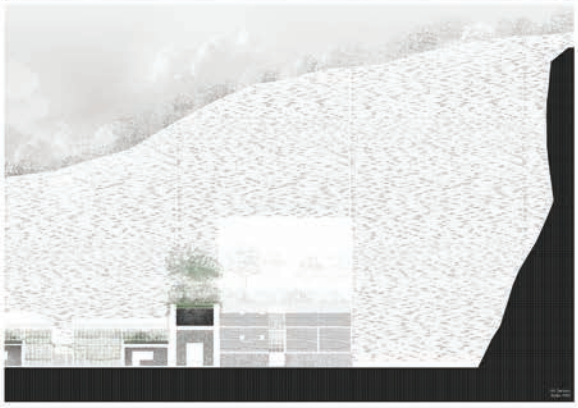


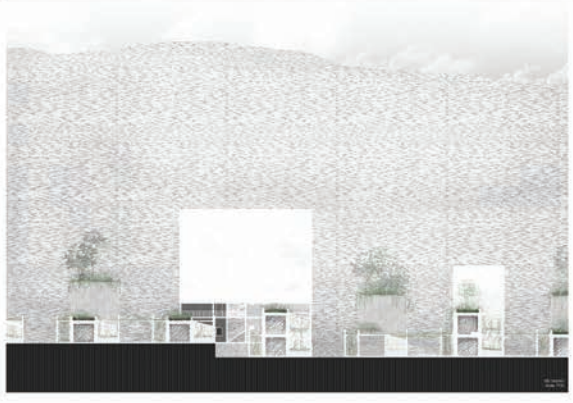


Zone Plan
Scale: 1/2000









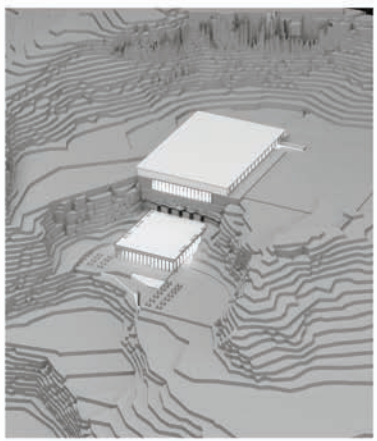
Tudor Daniel GURAU

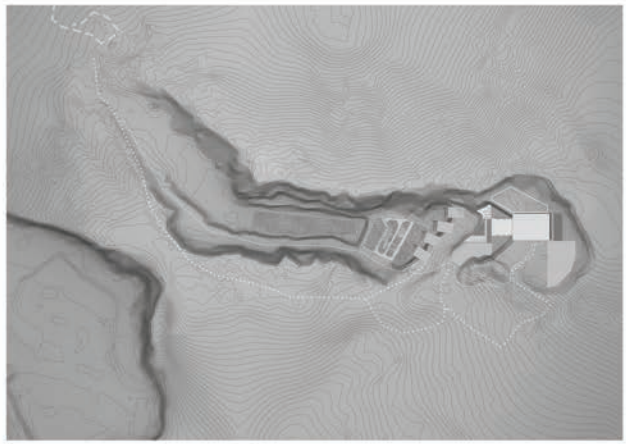
Olympic Swim Center

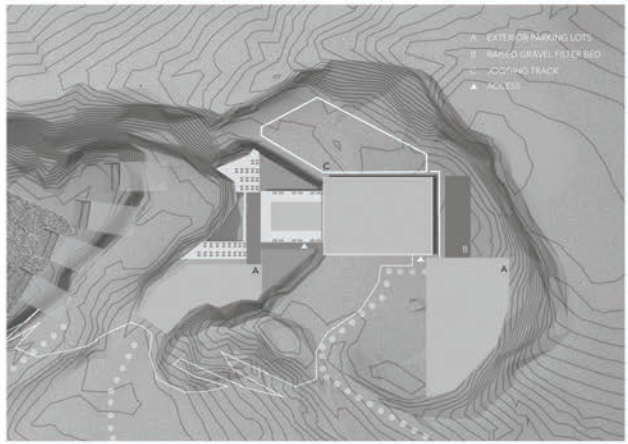
The need for something palpable to do, to see, to discover is real. Tulcea is a great city with great potential. Lack of activities is not necessarily a problem but can become one on long term. This way by making an analysis and seeing also the potential of the site: Bididia Quarry, I understood the thing that, a place like this can be used not only for tourists or making money out of it, like in the majority of cases lately, but also can be used as a focus point between two different communities: people of Tulcea and people outside of the city. The idea is not to steal Danube's attention but to offer an alternative to it's beautiful esplanade and openness, an alternative that can be seen as massive urban pocket, something new and unique.

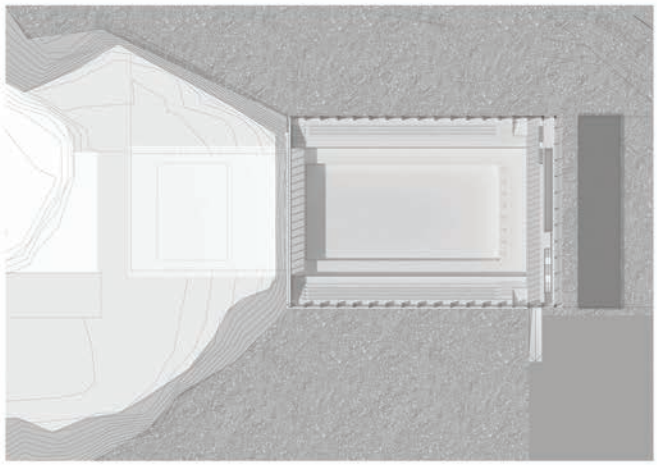
The scale of it is incredible and has many beautiful views to offer, from its different terrace levels. The main concept is having a sport center: an Olympic swimming pool both for locals and tourists linked to the secondary function: accommodation. In what way linked? The purpose of the secondary function is not only to offer a unique place to stay in for tourists but also is to gather money for training people that can't afford a proper subscription to a swimming pool and they want to. The whole process is aiming toward strengthening the relation between locals and citizens.

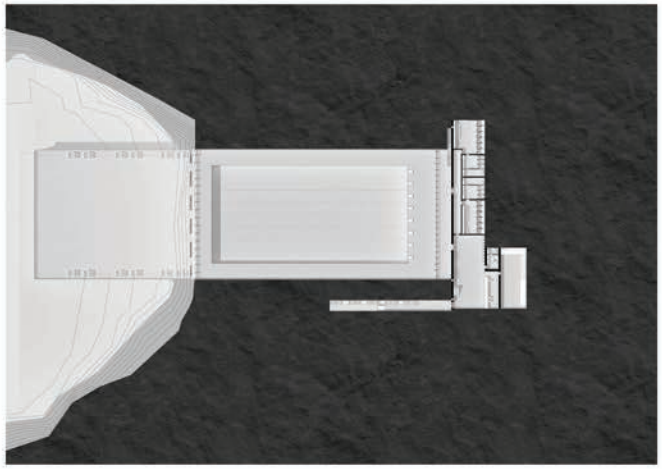
The site is public themed and has many unique spots to spend some time relaxing in a completely new and special environment, beautiful in its way. Regarding the construction and further usage of the constructions, the project is focused on sustainability: the majority of the walls are made using gabion walls from the rocks left on the site and those excavated. Also the way of gathering the water needed for the pool and filtering it is sustainable: water is collected at the upper level of the quarry and filtered using a local combination of materials: stone, sand and gravel.

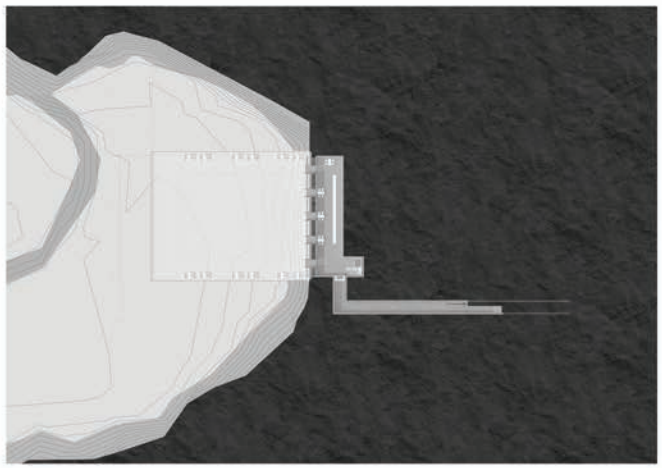


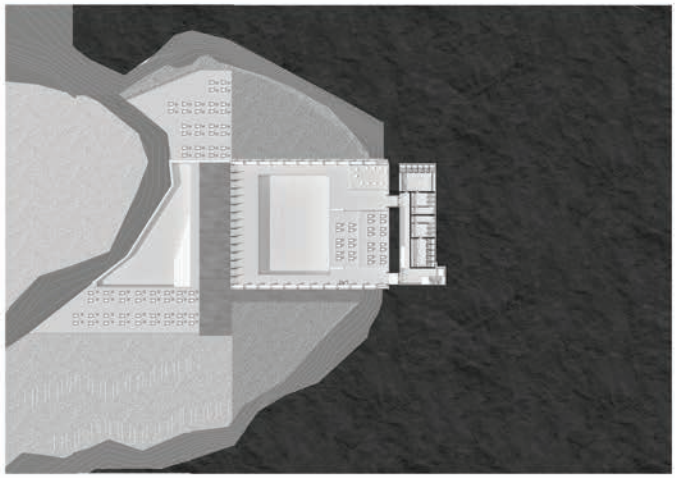


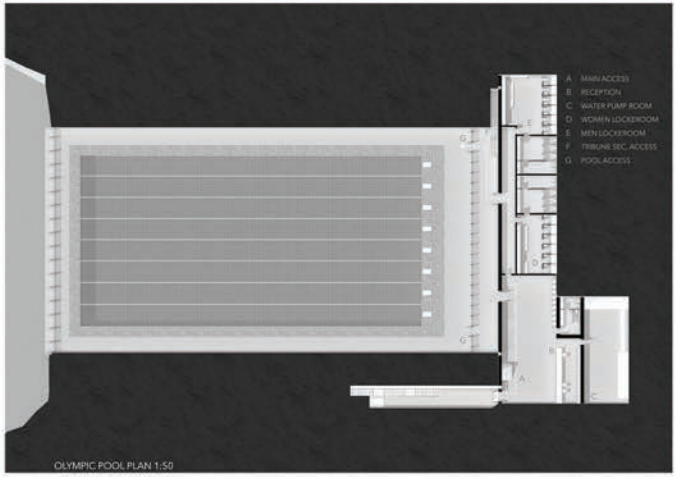




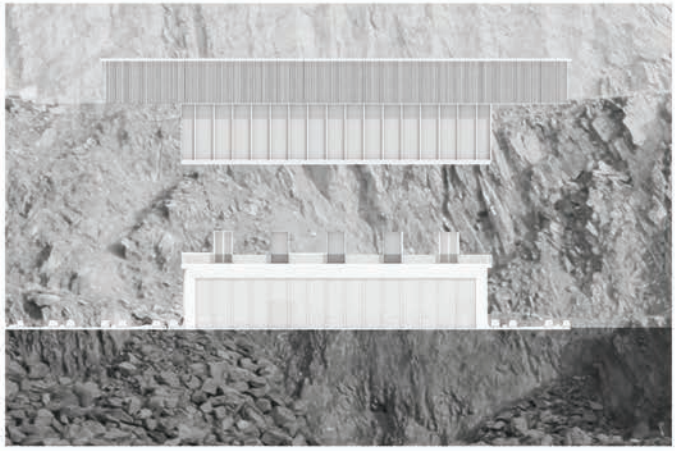


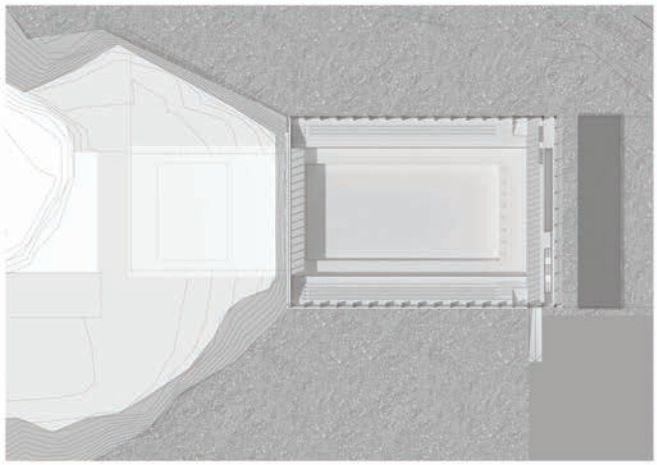


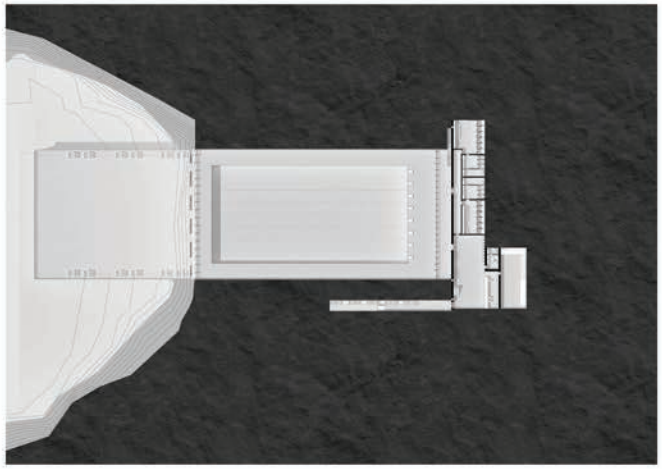


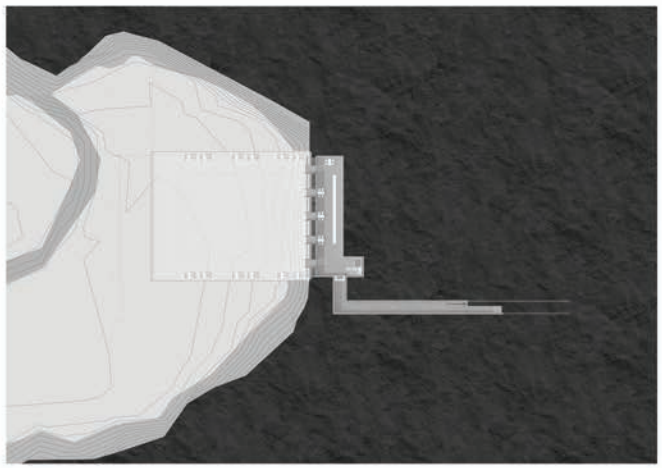


OLYMPIC POOL PLAN 1:50









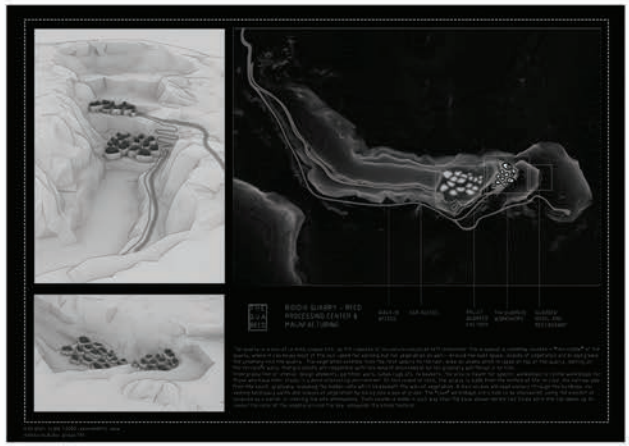
Monica Nicoleta HUDUDUI

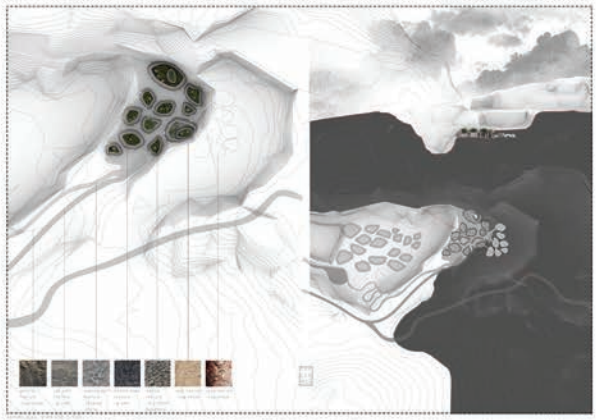
The Quareed Workshops

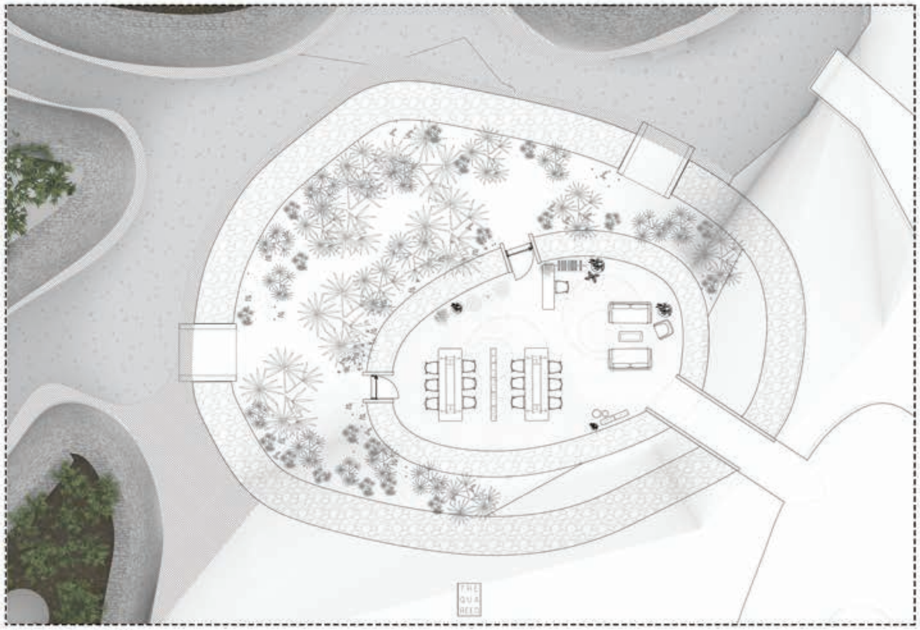
Where vernacular meets contemporary; The quarry offered a lot of opportunities from the point of view of functionality, placement and materiality. In a sentence, this project can be described as vessels which bring back the life into a forgotten quarry. The chosen function is focused on reed processing and exploring as many ways of working with it as there can be. The proposal includes pellets making, roof making, furniture, partitions etc. The developed part of the project is the hand manufacturing of reed products which takes place in a series of workshops, outside and inside. The main material used is stone, given by the quarry, processed in various ways. In combination with metal, the dry stone masonry volumes creates a vernacular image which is taking the user into another world. An inspiring environment, due to its uniqueness, which is bringing benefits to both men and nature.

The access is made through the bottom of the terrace, introducing the visitor to the first contact with the quareed workshops by meeting the reception. Throughout the terrace, the visitor will step on an organic alley scattered through the volumes. The final destination of this alley is the coffee shop and a panoramic viewpoint towards the quarry. Even the ones that are not participating in the workshops can enjoy the roughness of the stone at its contact with the vegetation by exploring this place just as much as they can have a taste of the work flow going on here by attending the outside working areas. The volumes are furnished simple and contain objects created in the workshops for inspiring the atmosphere of the place to the users. These vessels are sometimes hiding another volume inside, either empty or full, being left to the surprise of the visitor to discover it.

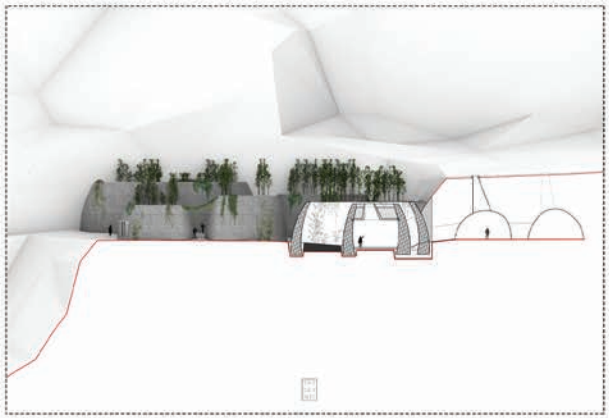
The vegetation that tops the volumes is various: from small flowers to trees, may plants can find the environment suitable for their survival. The dominant plant of this terrace is bamboo which can be harvested yearly for usage in the workshops. Even after the disappearance of activity in this place, the vegetation might cover a great part of the quarry, integrating it into the natural landscape without leaving major construction scars.







representative plan scale 1:50
monica hutudui, group 51e



perspective
monica hadulici, group 5/a

perspective
monica hadulici, group 5/a

Catinca Ioana JOITA

Quarry Revival Ensemble

The project revolves around 4 main ideas that respond to the needs of the site and of the city:
The natural water treatment system:
Given the fact that the quarry has, on its northern side, steep walls, I seized the occasion to use them as a means of collecting water. This water will be collected in a stream, at the base of the quarry walls, and carried down across the length of the site. On its way down, water would be purified using only natural means (filtration using rocks, sand and ultimately, plants).

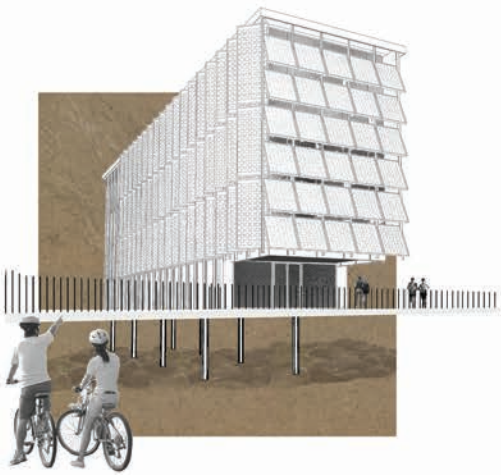
The greenhouses:
The urban farms are placed on the northern wall of the quarry, where they receive most of the daylight. However, they are not dependent on the exterior environment and can be closed whenever the weather is not favorable. Their irrigation system can be supplied from the collecting river found below them, while electricity will be provided by their integrated solar panel façade and roof.

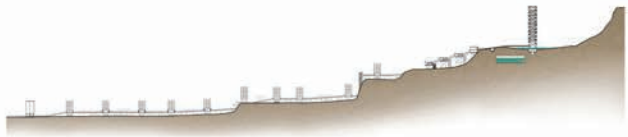
On the one hand, they will be used to grow tea, medicinal plants and flowers from different areas of the country which will be sold both on the site and in the city. On the other hand, they will be used for greening the "deserted" site, as leaves gathered from the plants grown there will be composted and used to make soil.

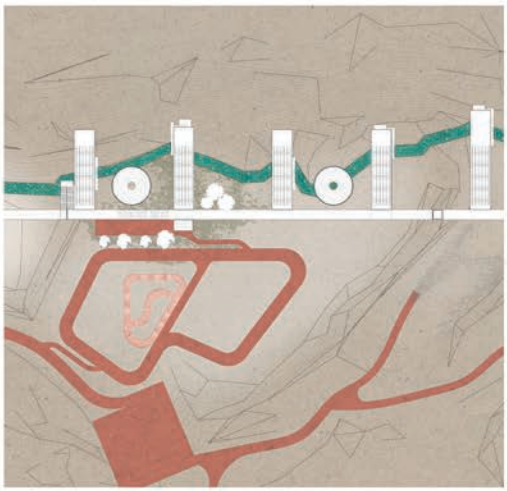
The accommodation:
Taking into consideration the concept of slow tourism, the accommodation can only house 100 visitors. However, the rest of the accommodation can be taken over by the city.

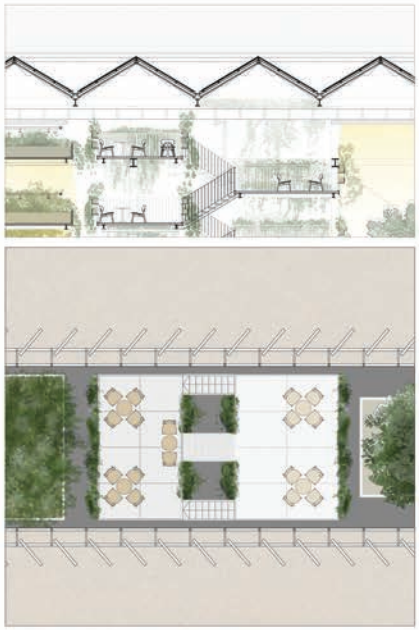
The bicycle tracks:

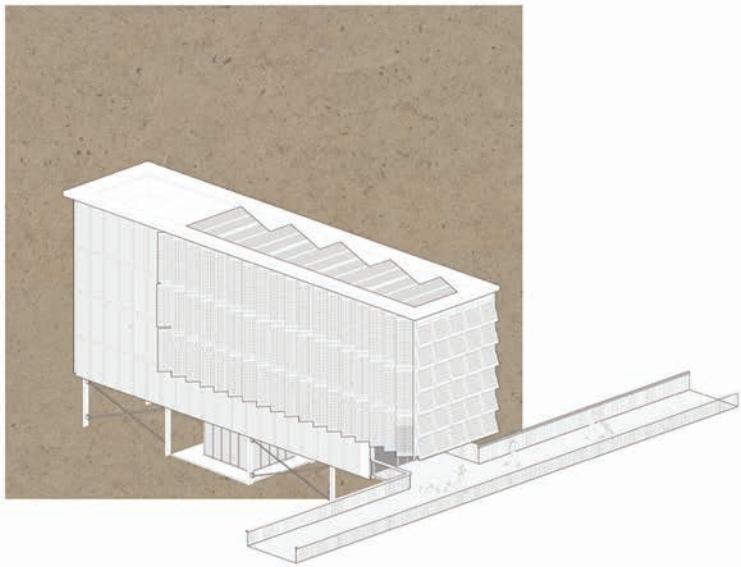
Most of the quarry, however, will be used for biking, in an attempt to activate the site. Each of the terraces will have a particular set-up (tracks for speed, for bicycle tricks, parks for children, etc.), while the access to each one of them will be made through ramps.











Stefan Alexandru PALAGHIA

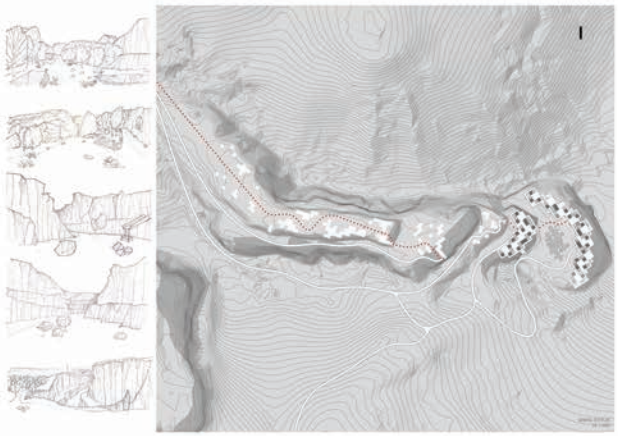
The Hidden ECOmmunity

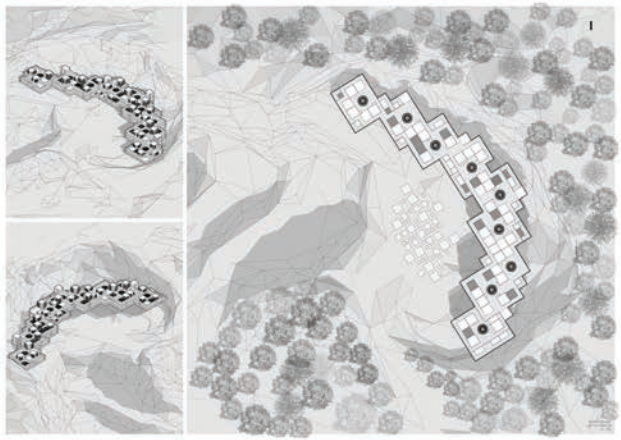
The project aims to explore new ways of living in such sites that would hardly accommodate all the service infrastructure that is so necessary for the nowadays living standards. In this respect, the project was envisioned as a small-scale energy self-sustainable community that would take in around 78 young couples in either one or two storey modules.

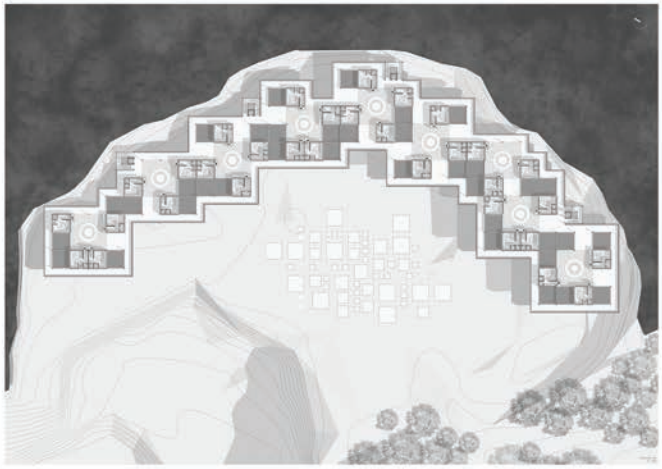
The arrangement of the modules in plan started from a cluster like organization around a central common space (a 'piazza'-like void). Their rules are simple to grasp at the first glimpse: all accesses to the modules are facing the piazza-like spaces, no module is north oriented, each housing unit opens one big courtyard that aims to block intruders from being able to see inside.

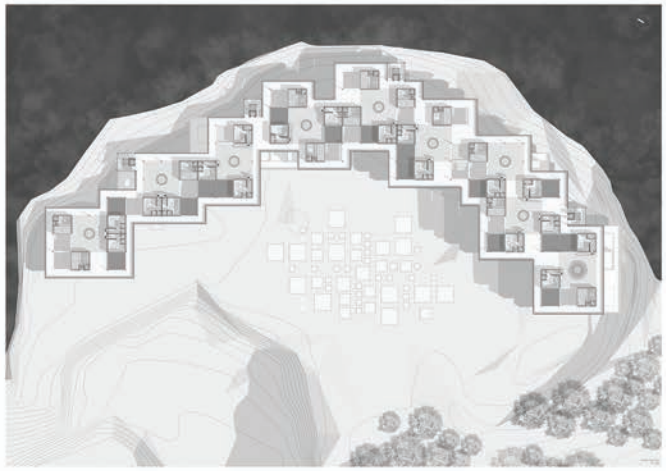
The entire "complex" fills in the void in front of the last wall of the quarry. Each housing module/ unit is covered in a dynamic mesh that responds to the surrounding environmental conditions. This mesh is conceived so that it maximizes the interior natural lighting conditions while reducing to the minimum possible the solar radiation gain. It is comprised of small solar cells that act as stimuli for the actual response of this "smart" layer. From the inside, the view towards the exterior is unobstructed but as the mesh reacts to sun, it will allow different visibility phases from the exterior to the interior. For instance, when the sun shines too bright, the mesh will become almost opaque to the viewers outside and while the lighting conditions outside are weaker, the mesh becomes transparent. This dynamics of the outer skin of each module ensures a unique experience of the couples living here and more than this, it enhances the "surprise" character that is so specific to the site itself. Besides this, the outer skin also helps harvesting enough energy to partially supply each household.

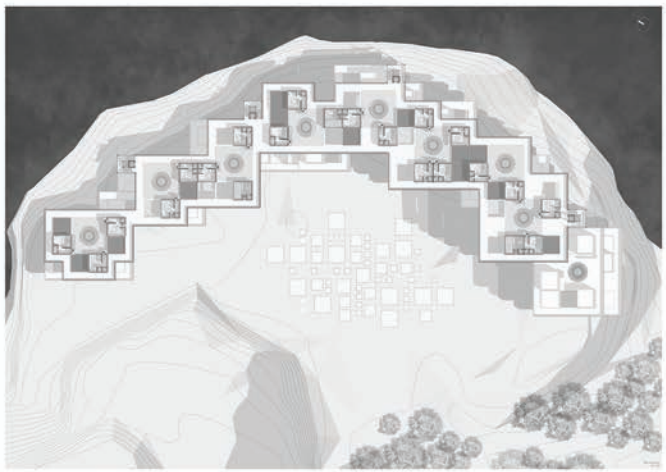
The project not only features housing, but the spaces in-between also play an important role as they are the areas where the community happens and all the coming together and working side by side, taking care of the surrounding becomes reality. The project does not aim to develop a utopian solution for the site, rather a very possible scenario that would encourage the more developed settlements in the region to embrace an eco-friendly lifestyle.

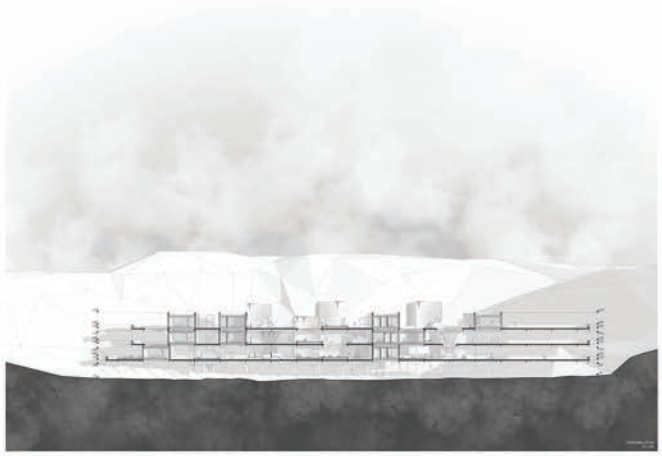


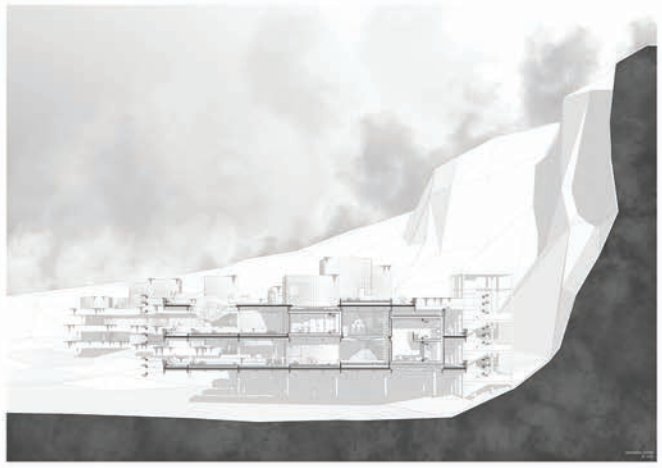


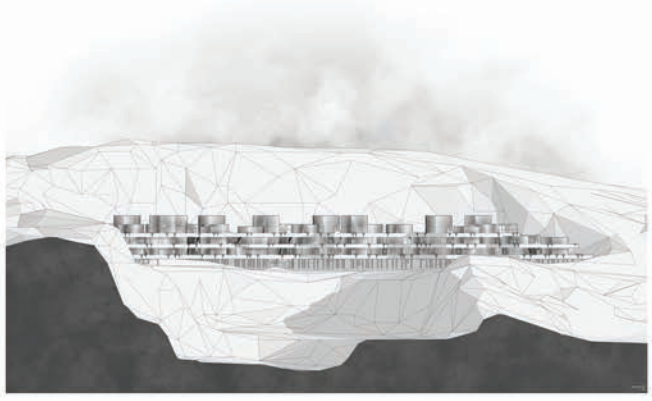


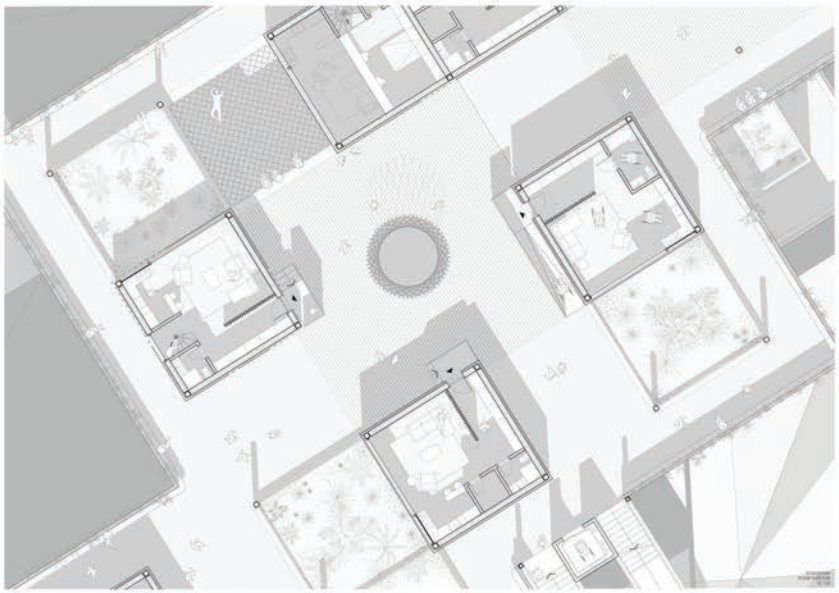


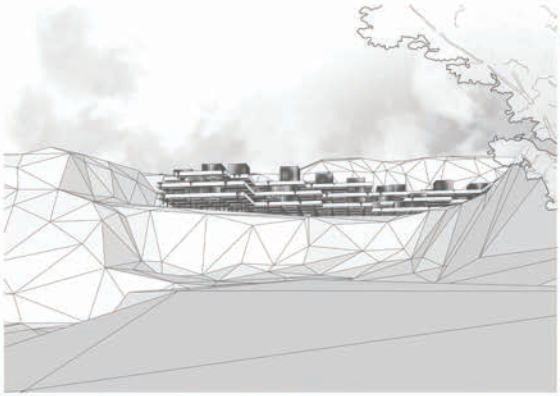


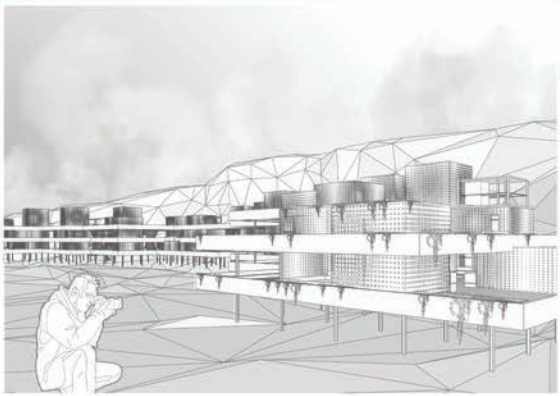












Madalin Cristian PASLARU

The R.O.C.K - Rock Observation and Climbing for Kindred

The project aims to explore new ways of living in such sites that would hardly accommodate all the service infrastructure that is so necessary for the nowadays living standards. In this respect, the project was envisioned as a small-scale energy self-sustainable community that would take in around 78 young couples in either one or two storey modules.

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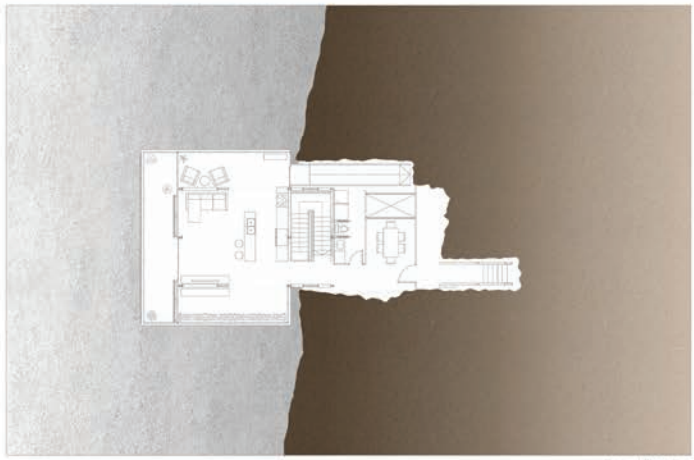
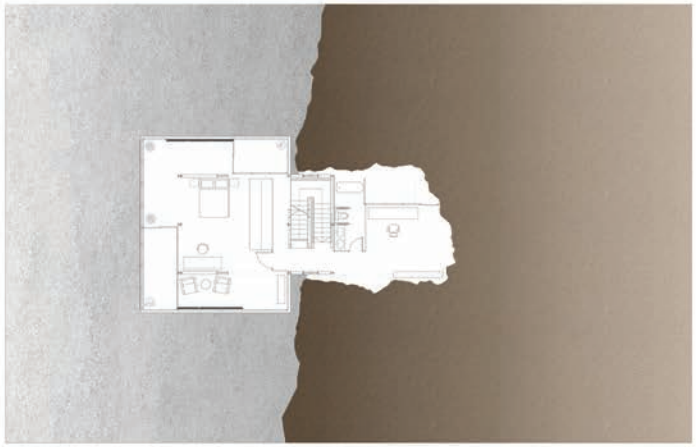
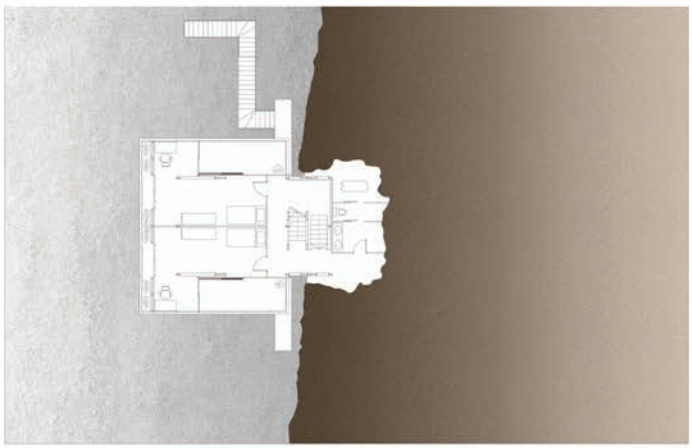


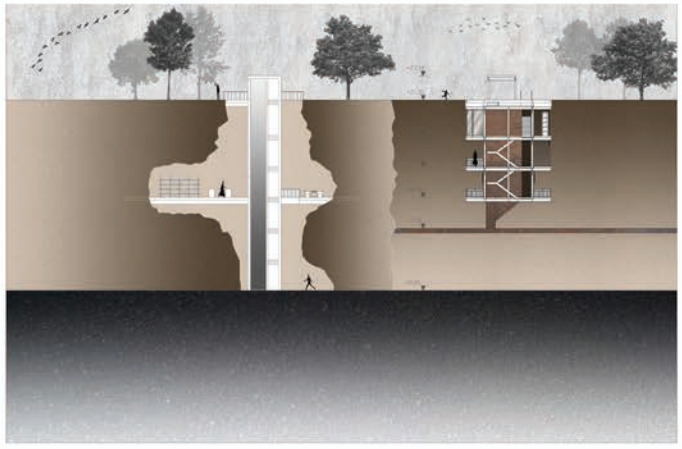
Ground Floor Plan

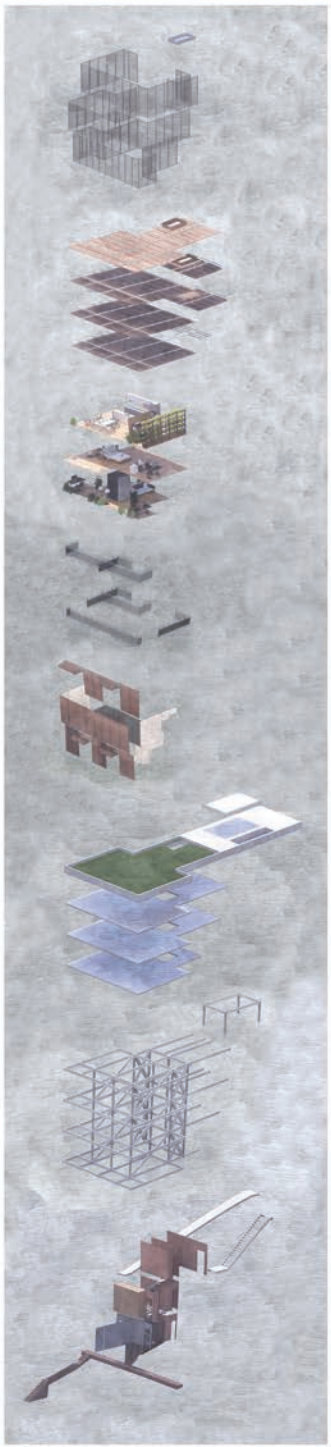


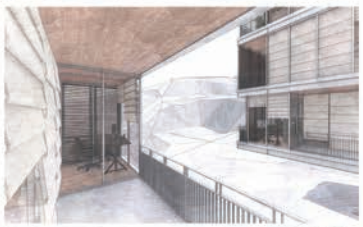
1 Floor Plan

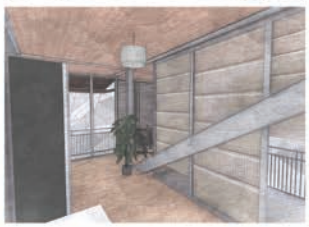


2 Floor Plan









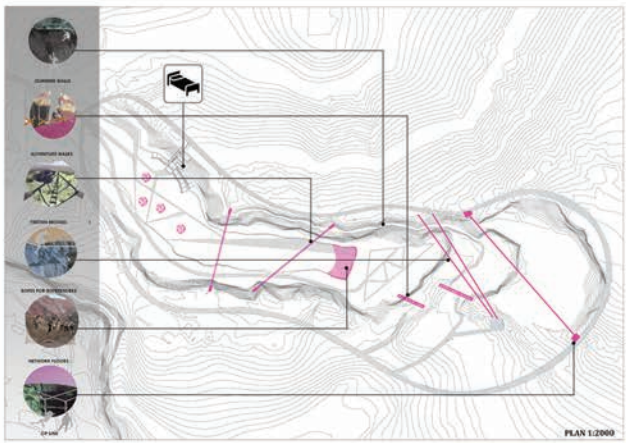
Roberta RIVIELLO

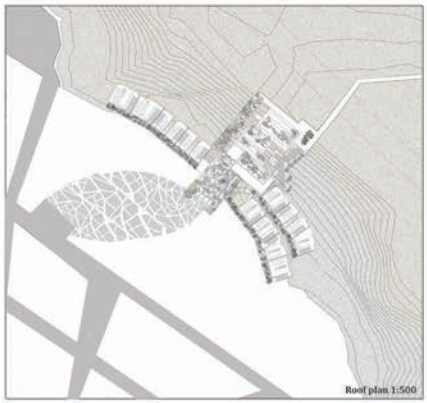
The Stain of Stones Hotel

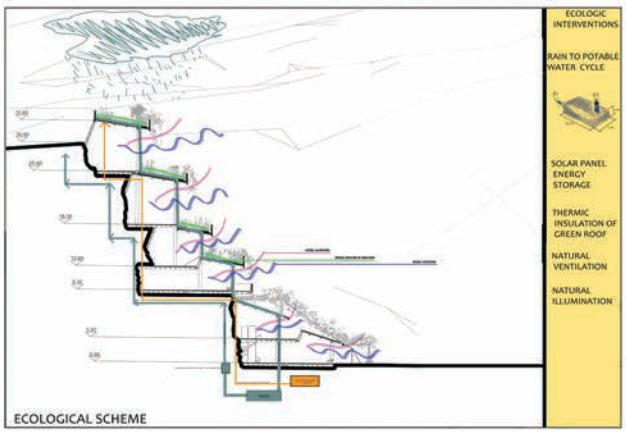
The Tulcea quarry dominates the city. It is an important presence, it constantly looks towards the city but nowadays it lies without a function, empty and wild.

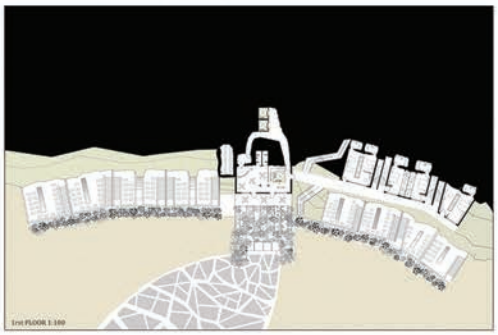
The Stains of Stones Hotel is ment to be accepted by his contest a sort of lava flow that comes out of the rock itself, something slightly invasive, which respects the traditions but at the same time that covers high performances.
The hotel is attached to the slope of the quarry section, it develops in that location as it is close to the road to reach the city, but at the same time immersed in the quarry itself, with the facade facing the majestic rocks of the quarry. The hotel develops most the rooms and the reception on the ground floor and others on first floor, the choice is dictated by the convenience and comfort request of visitors but also by the desire to create a close relationship between the rock and the architecture. To respect the soil of the quarry, the rest of the hotel services develop in height, embraced by the slope of the cliff on one side and with glass openigs that look to the horizon on the other. These services are designed not only for the convenience of hotel users, but also for external visitors that may arrive for the extreme sports park and may want to eat in this particular scenario or to relax in the SPA after a day in the rocks.

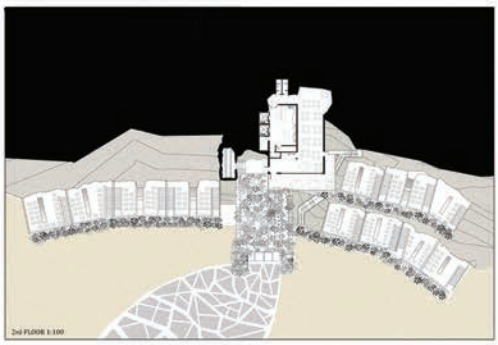
The services are: bar, restaurant, gym, children's entertainment room, conference room and finally spa and wellness centre, the latter is the pearl of the hotel, positioned at the top and equipped with a terrace to enjoy the spring, summer, autumn and even sun winter. The ascent along the rock is guaranteed by an inclined lift half excavated in the rock and half covered with pergolas with pretty native plants, but on the other side is located also a block of stears to climb the cliff. All framed by the peaceful panorama of the peaceful city of Tulcea.

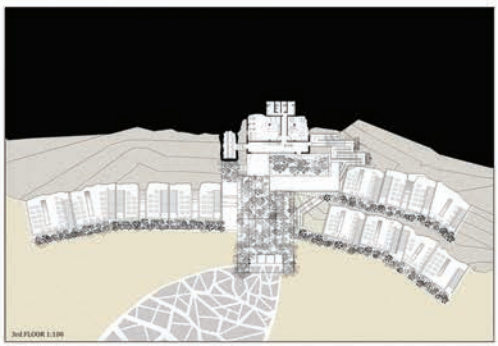


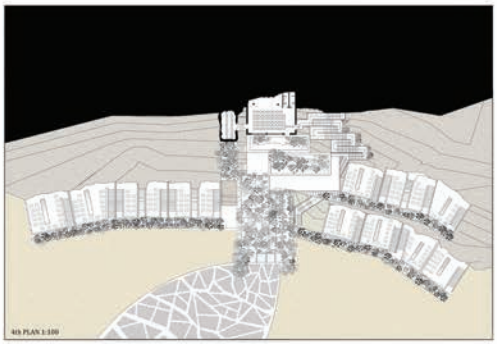


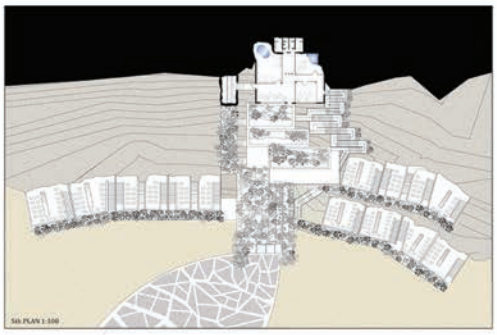




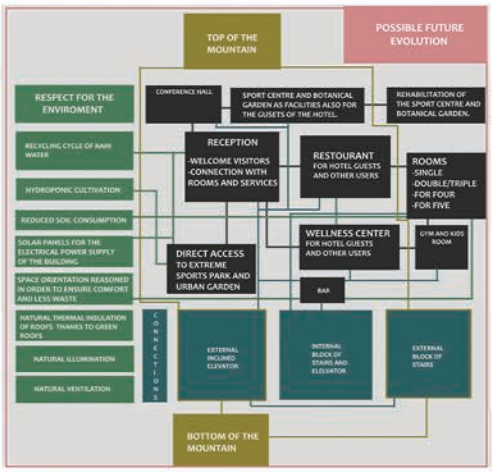


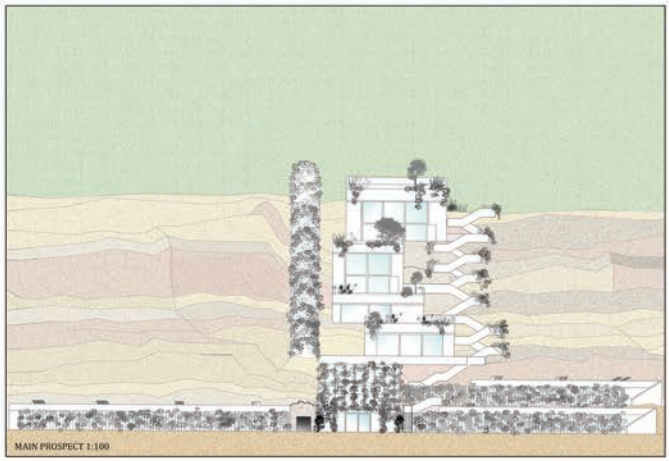




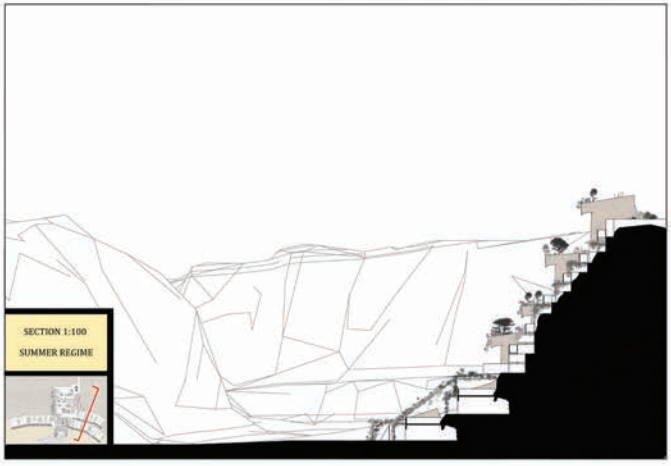


FUNCTIONAL SCHEME



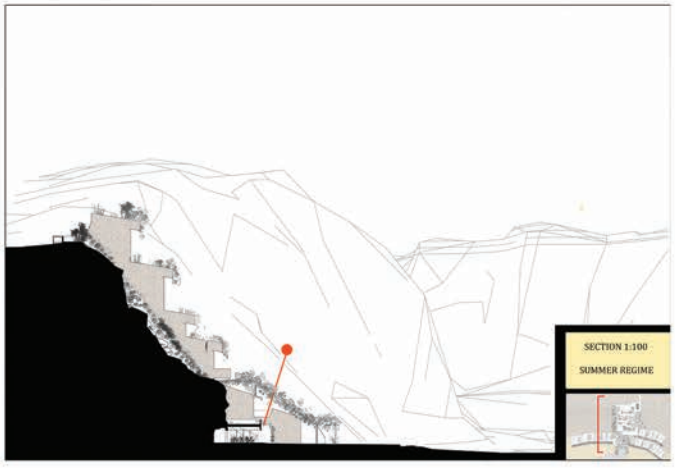


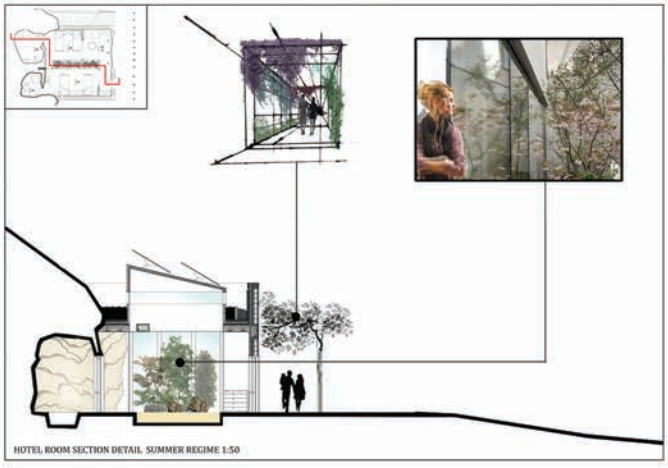
MAIN PROSPECT 1:100



HOTEL ROOM DETAIL 1:50

HOTEL ROOM EXPLAINED 1:50



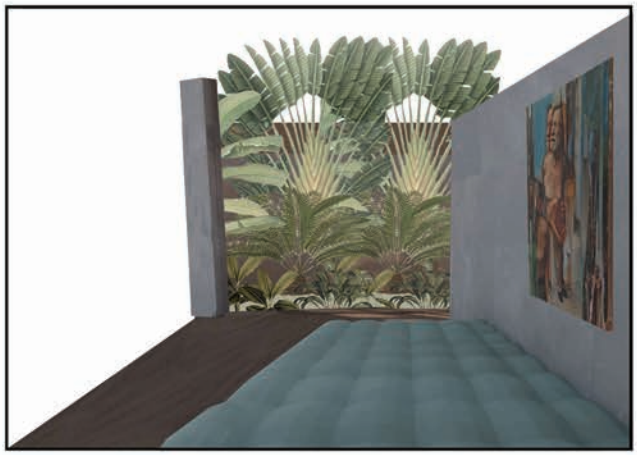


HOTEL ROOM SECTION DETAIL SUMMER REGIME 1:50









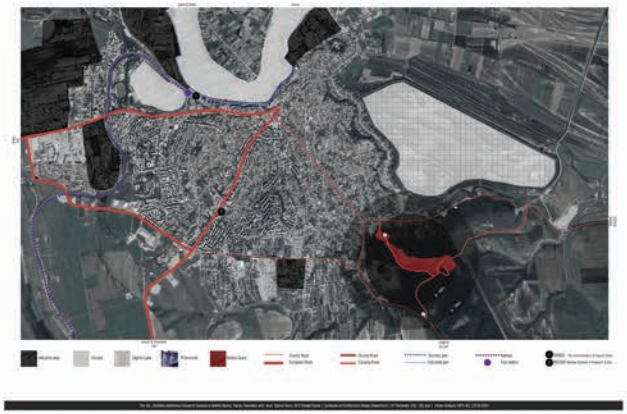
18 Sabina TURCU

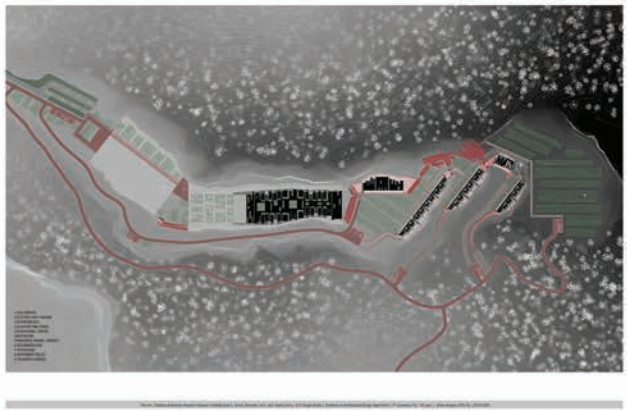
The Ark - Danubian Research Autonomous Campus

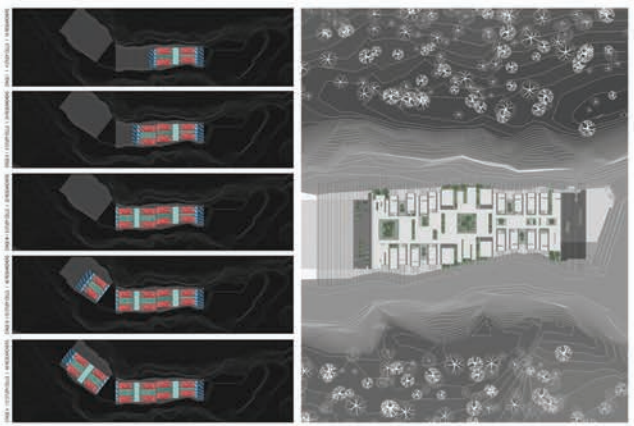
The quarry of Bididia offered a unique possibility of designing within a man-made natural environment. The premise of the project was to have a sustainable approach with a minimum of impact onto the site. In this manner, my intention was to use only elements that can pe removed, without leaving a visible wound into a site which is already a scar into the natural context. The entire proposal is relating to the walls of the quarry, and in order to have the same type of relation and approach all over the site, in some cases additional excavation needed to be done. Also, ascending pathways were also carved into the stone walls to allow an easier communication between the platforms. Otherwise, the only other mean of reaching different places within the quarry is by using electric vehicles, as cars are left in parking at the entrance of the campus. This was my response to the intention of not introducing other foreign elements onto the site, while allowing an expansion and subtraction as needed.
At the lowest level where the Campus is placed, two parallel walls offered the possibility to stretch tensile cables between them. This approach allowed a flexible partition of the interior space, as panels are anchored onto these cables and can be easily removed or changed. The interior space is ordered by the fractal concept and considering the importance of the synergy within the elements of the system generated.
The main idea was to create a combination of living-working environment for scientists that are staying there for a longer period of time to study the Danube Delta Ecosystem (from a biological and geological point of view). In addition, the Campus is accessible at some degree to outside users that are coming for a short period there, staying at the hotel proposed in the masterplan.

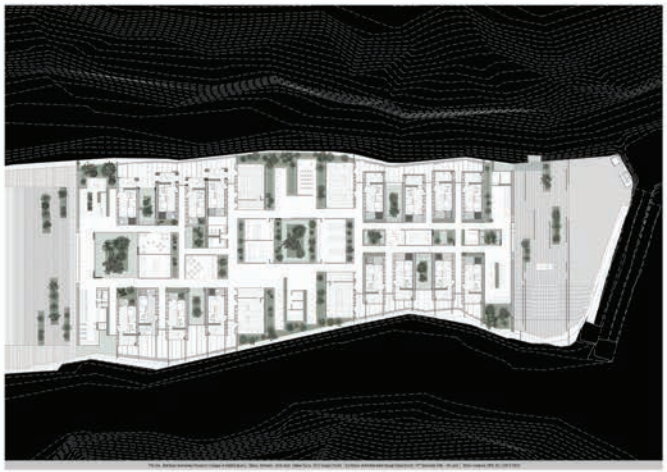
In order to achieve this goal, I have presented the first stage of development, where 4 groups of 4 scientists each are coming together to learn, experiment and share their knowledge and necessary tools with the others. Thus, a group of 4 scientists is represented by their private units, which have various degrees of permeability and transparence, opening towards a common terrace and using a common laboratory which is not accessible by the outsiders. Four of there groups are placed around a common space, flexible and responding to their needs and the afflux of incomers. The tangency between the groups is represented by common laboratories, which host equipment useful to multiple types of researches and the interstitial space filled with greenery.

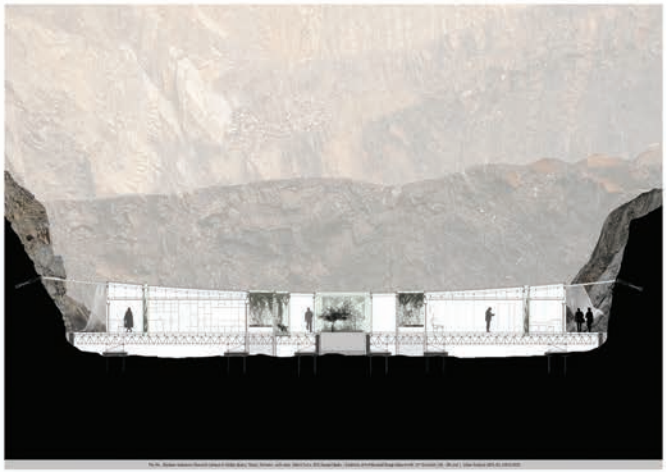
The constructive system is represented by tensile cables that are supporting panels that divide the space in order to respond to the needs. The more private parts are protected by gabion walls and different manners of using translucent glass panels (both solutions allow the light to pass tough them in order to illuminate the interior space), while the more common spaces are outlines by movable panels of polycarbonate or curtains. The floor is raised above the natural layout of the quarry on a scaffolding structure, with lightweight triangular beams and gabions fixed with anchors as footings, allowing the technical equipment to be fitted inside. The space is heated by thermal pumps. The ceiling is again adapted to the function of the interior space: The private areas are having an opaque ceiling suspended from the cables that allows the outer space to be used for different equipment, while the common areas are covered with a more translucent material, to create an ominous light inside. perceived.

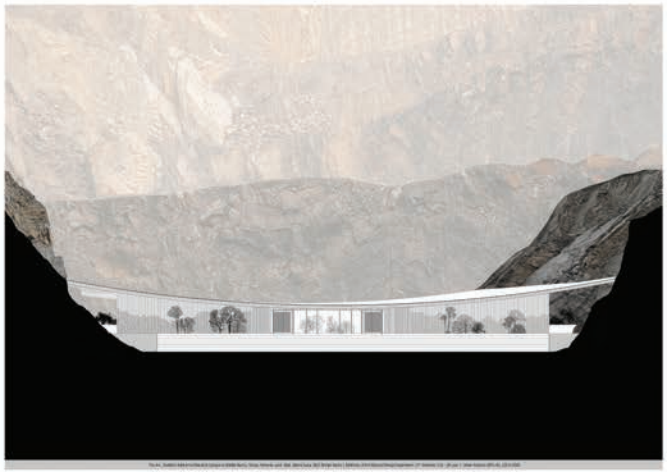


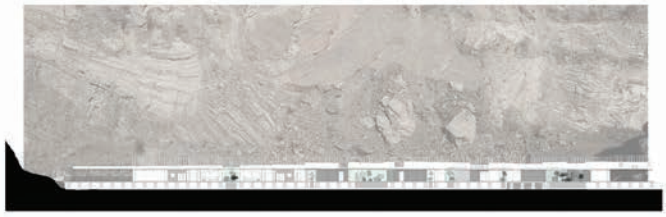


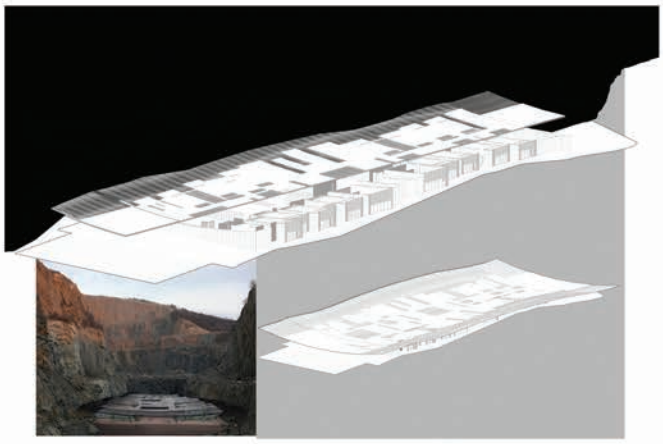


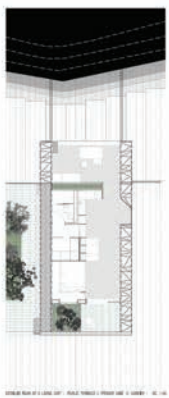


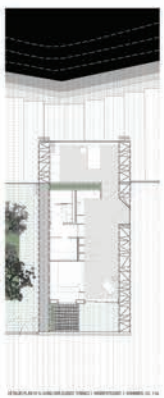


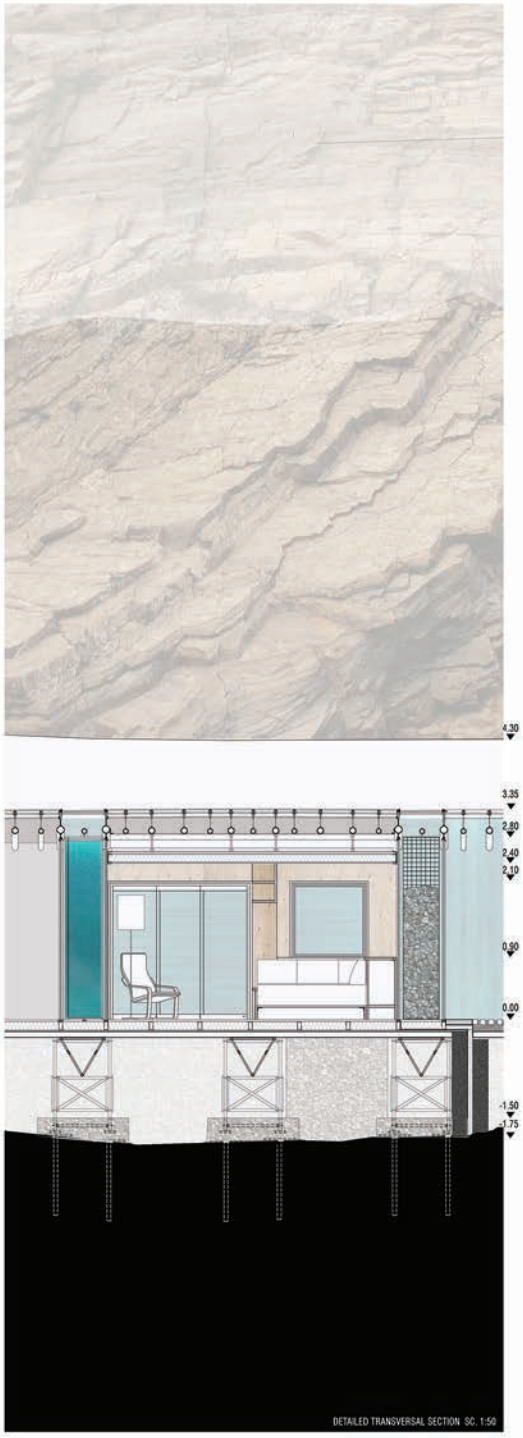






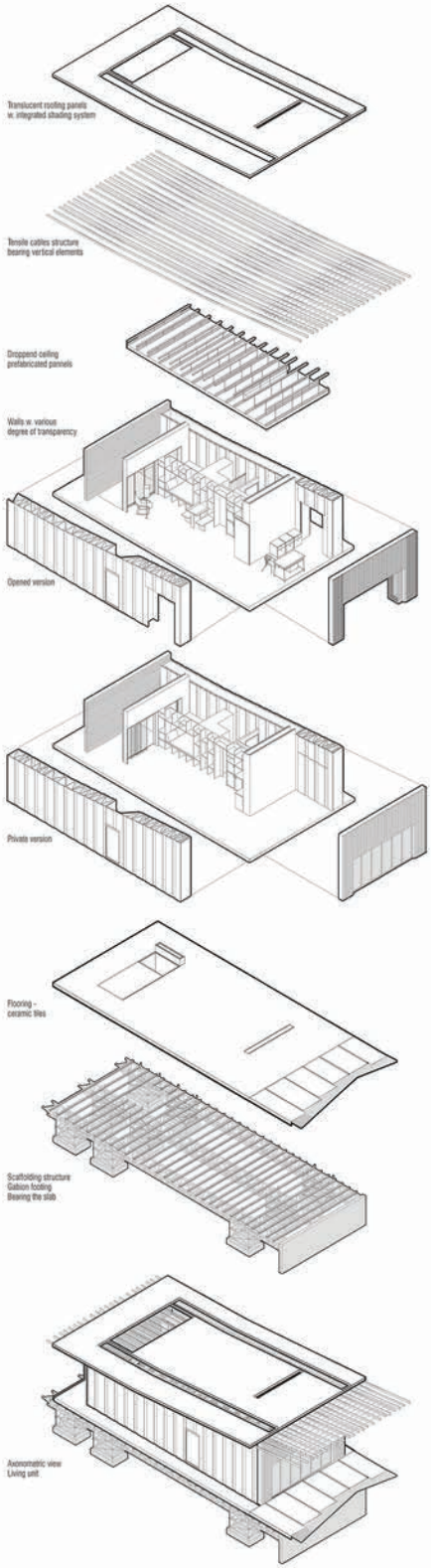


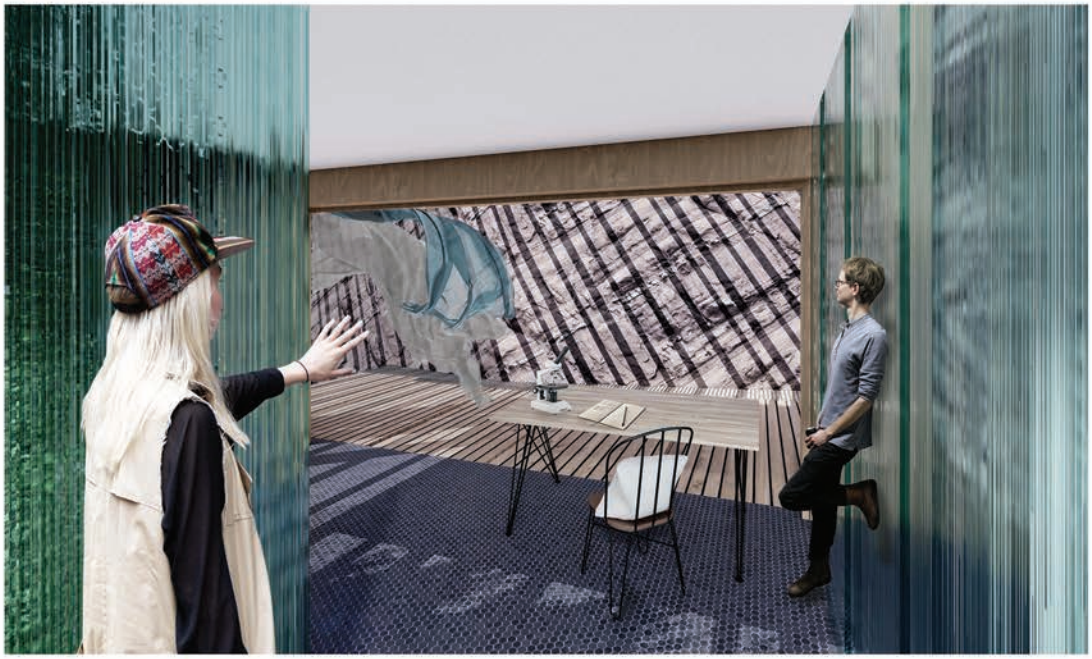




DETAILED TRANSVERSAL SECTION SC. 1:50

DETAILED LONGITUDINAL SECTION SC. 1:50


Translucent roofing panels
w. integrated shading system
Tensile cables structure
bearing vertical elements
Droppend ceiling
prefabricated panels
Walls w. various
degree of transparency
Opened version
Private version
Flooring -
ceramic tiles
Scaffolding structure
Gabion footing
Bearing the slab
Axonometric view
Living unit

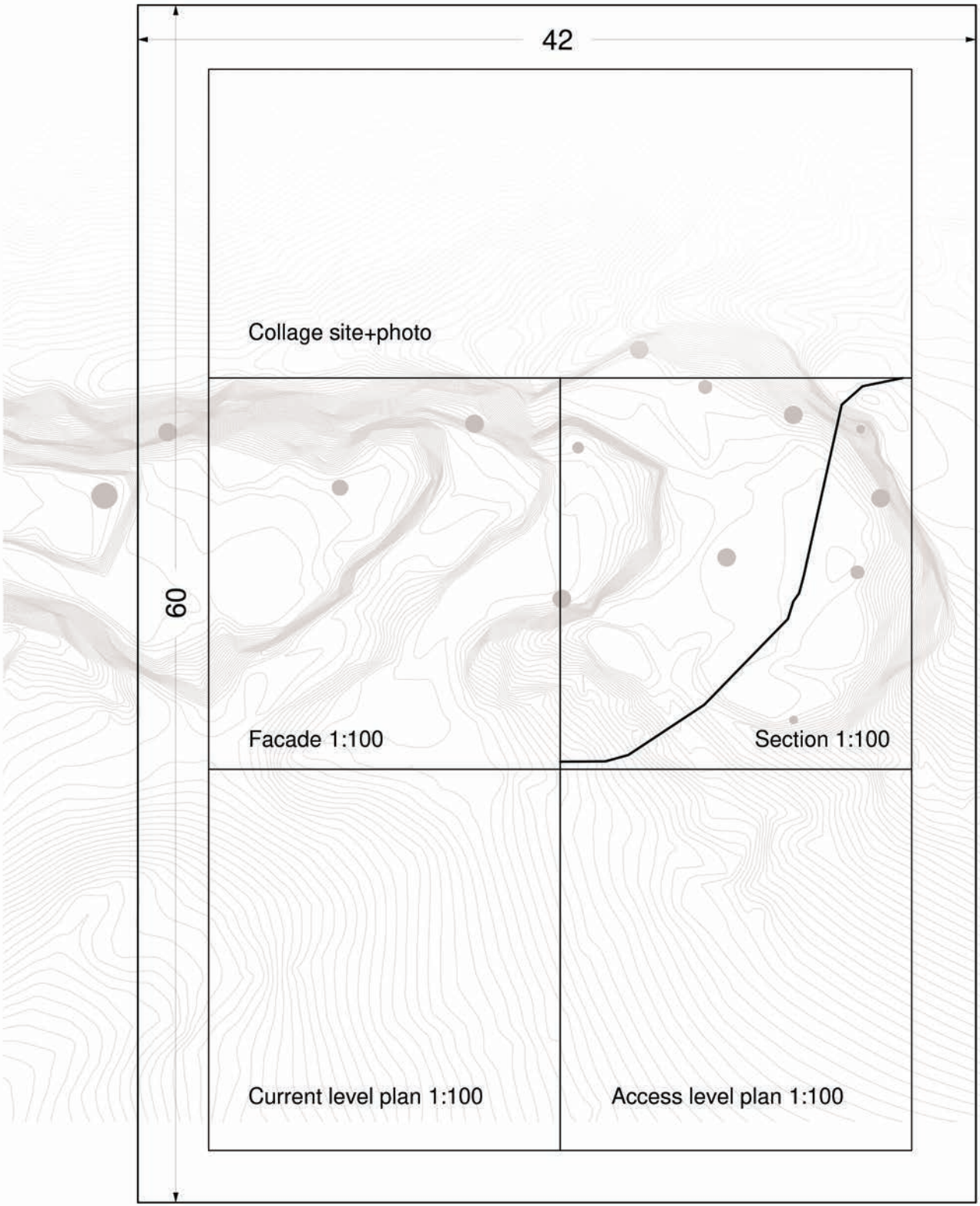


ONE DAY ARCHITECTURAL PROJECT (10 HOURS)

WE INVITE YOU TO DESIGN A SMALL HOTEL ON THE MAIN PROJECT SITE. THE HOTEL WILL BE DIMENSIONED TO HOST 50 TO 60 PERSONS, AND IT WILL BE PLACED BETWEEN THE 4TH AND THE 5TH PLATFORM OF THE QUARRY. THE ACCESS WILL BE MADE FROM EITHER ONE OF THE PLATFORMS, OR FROM BOTH.

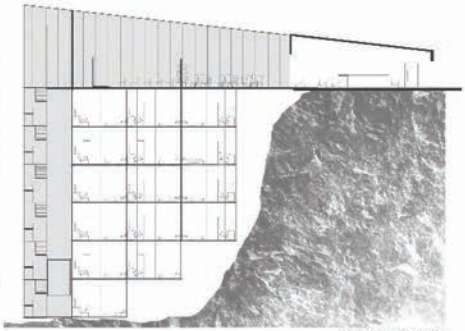
THE HOTEL WILL HAVE DOUBLE ROOMS (22 TO 25 SQM/UNIT, INCLUDING BATHROOM AND ENTRANCE AREA), A RESTAURANT WITH AN ACCORDINGLY DIMENSIONED KITCHEN AND A CONFERENCE HALL FOR UP TO 60 PERSONS. YOU CAN CHOOSE ANY POSSIBLE STRUCTURE (WOODEN, METAL, POURED OR PREFAB CONCRETE, EXCAVATING OR ANY MIXT ALTERNATIVE) ACCORDING TO THE PARTICULAR NEEDS DESCRIBED IN YOUR FUNCTION SCENARIO (A SHORT PARAGRAPH DESCRIBING THE PROGRAM: WHAT KIND OF HOTEL YOU PROPOSE: FOR A RESEARCH CENTRE, A AMUSEMENT PARK, FACILITIES FOR SENIORS OR FOR YOUNG PEOPLE, ETC.)

REQUIRED PIECES (A2 PORTRAIT, PLEASE SEE ATTACHED LAYOUTS):
SITE PLAN 1/2000
CURRENT LEVEL PLAN 1/100
ACCESS LEVEL PLAN 1/100
SECTION 1/100
MAIN FAÇADE 1/100
PERSPECTIVE (COLLAGE ON EITHER ONE OF THE TWO SITE PHOTOS WE SENT) 1/100
DELIVERY UNTIL 20.00PM
FORMAT: A2, JPEG, 150 PXL/INCH


42
60
Collage site+photo
Facade 1:100
Section 1:100
Current level plan 1:100
Access level plan 1:100

ONE DAY PROJECTS
Tamas BALINT

SITE PLAN PLAN / SC. 1:2000

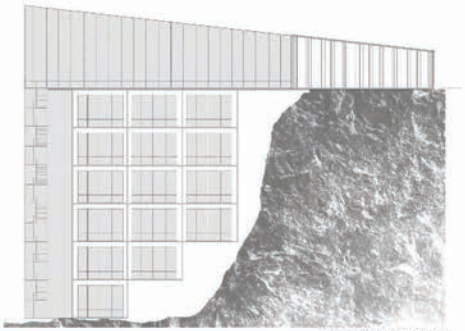


SECTION A-A' / SC. 1:200

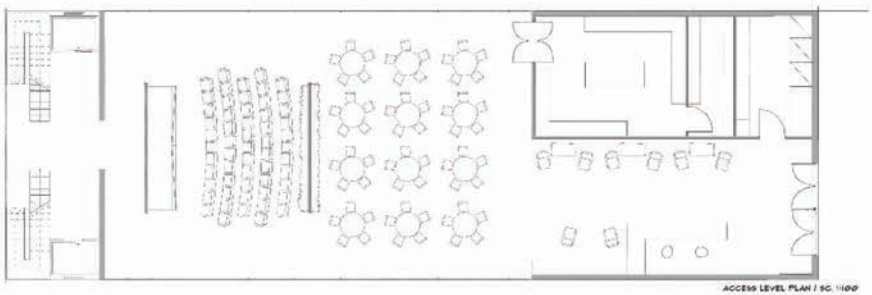
FUNCTION SCENARIO

MY PROPOSED HOTEL IS FOR ADVENTURARES, TRAVELERS AND HIKERS WHO WOULD LIKE TO TAKE A TRIP AROUND TULCEA AND ITS SURROUNDING LANDSCAPE, OR WOULD LIKE TO VISIT BIBIDIA QUARRY ITSELF. PEOPLE CAN ALSO TAKE A REST HERE BEFORE OR AFTER VISITING THE DANUBE DELTA WHICH IS QUITE CLOSE TO TULCEA AND IT'S A MAIN ACCESS POINT.
REGARDING THE STRUCTURE, I PROPOSED A VERTICAL TYPE OF ACCOMODATION FOR 60 PEOPLE IN 30 ROOMS. ON THE "0P" FLOOR WHICH IS ALSO THE ACCESS LEVEL, A RESTAURANT AND CONFERENCE HALL CAN BE FOUND. STEEL STRUCTURE AND WOODEN FINISHING WOULD BE USED. PARKING SPACES CAN BE FOUND AT THE ENTRANCE OF THE QUARRY, VISITORS CAN ACCES THE HOTEL BY FOLLOWING A CONSTRUCTED PATHWAY.

CURRENT LEVEL PLAN / SC. 1:100



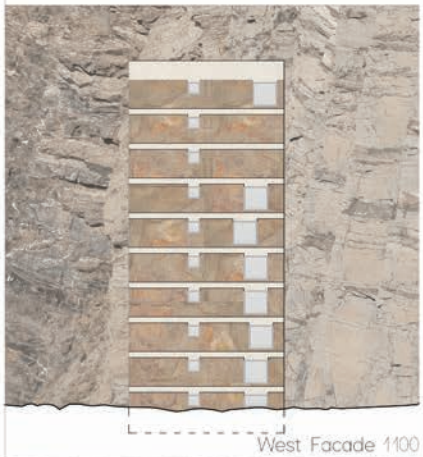
SOUTH ELEVATION / SC. 1:200



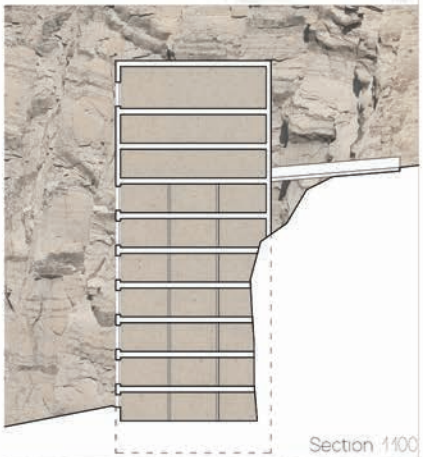
ACCESS LEVEL PLAN / SC. 1:100

Stefan Vlad CIONTU

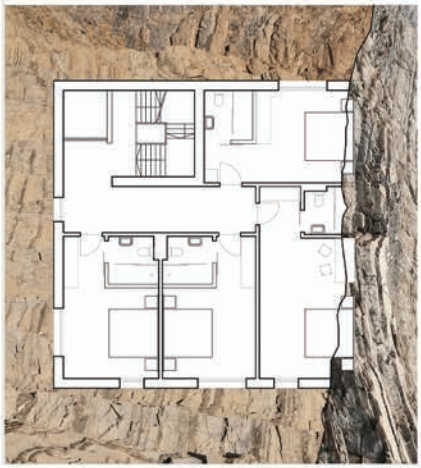
The hotel develops vertically in order to have a small imprint on the site, having access from the upper platform. Restaurant is located at the upmost level with kitchen in the level underneath it. Access in the building is done on the 7th floor, where the conference hall is also located. The goal of the project is to create different experiences for each customer, having rooms that have the solid quarry limestone wall as the interior wall.



West Facade 1100



Section 1100

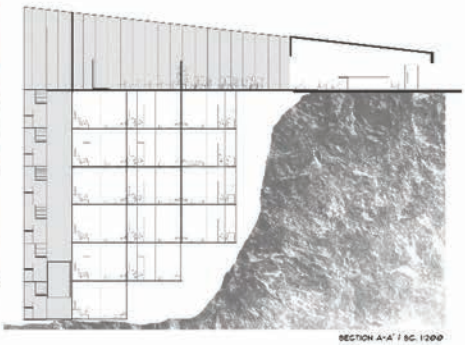


Plan 4th Floor 1100

Plan 7th Floor 1100

Andreea COMANELEA

SITE PLAN PLAN / SC. 1:2000



SECTION A-A' / SC. 1:200

FUNCTION SCENARIO

MY PROPOSED HOTEL IS FOR ADVENTURARES, TRAVELERS AND HIKERS WHO WOULD LIKE TO TAKE A TRIP AROUND TULCEA AND ITS SURROUNDING LANDSCAPE, OR WOULD LIKE TO VISIT BIDNIA QUARRY ITSELF. PEOPLE CAN ALSO TAKE A REST HERE BEFORE OR AFTER VISITING THE DANUBE DELTA WHICH IS QUITE CLOSE TO TULCEA AND IT'S A MAIN ACCESS POINT.
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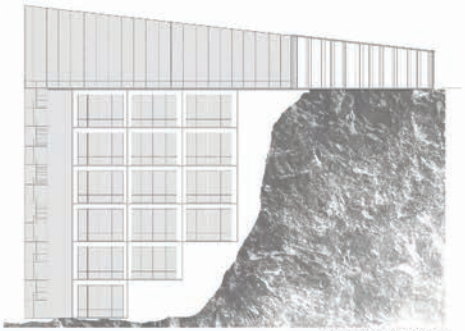
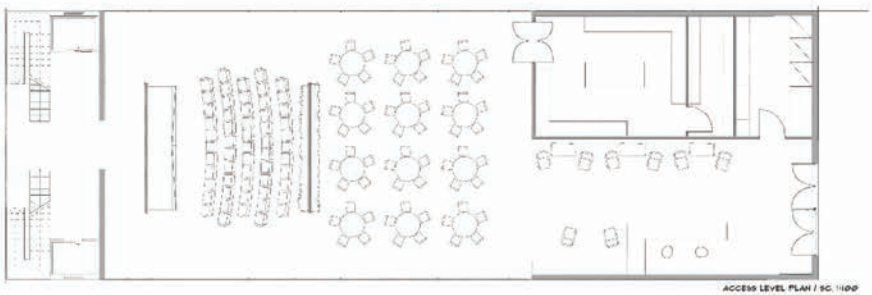
CURRENT LEVEL PLAN / SC. 1:100



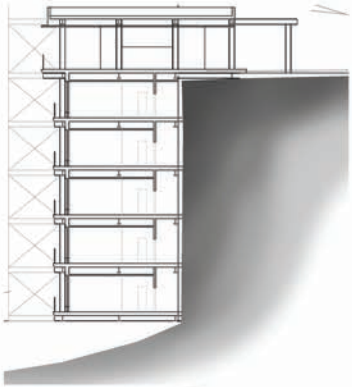
SOUTH ELEVATION / SC. 1:200

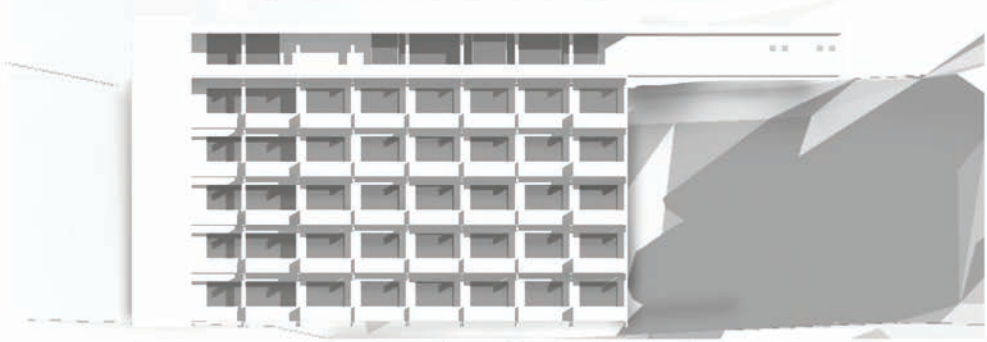


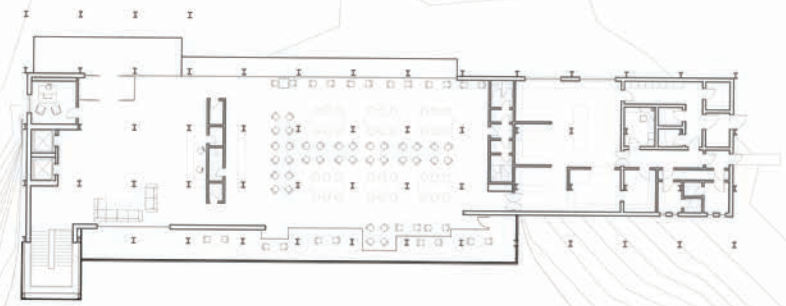
ACCESS LEVEL PLAN / SC. 1:100

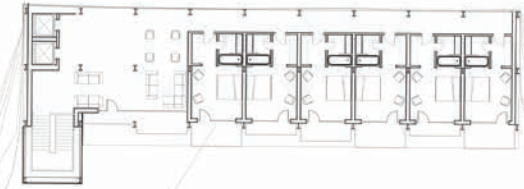
Victor Vlad DUCAR

The projects is corporate oriented, especially for people who want to create team-building like activities in the quarry.
The hotel is anchored on the wall with steel beams.
The access is done from the fifth platform, where the restaurant sits as well. The hotel houses 30 rooms with individual bathrooms.









Tudor Daniel GURAU

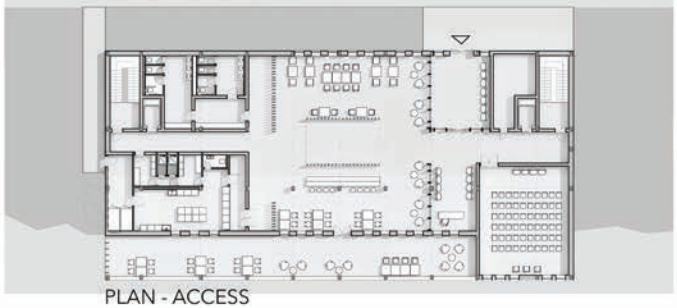
Using the site at maximum and what it has to offer is the foundation of the project. The building develops in an excavated space with the openings oriented towards the entrance of the quarry. The effect created is special -in a manner that every room has an unique view over the outdoors giving you the felling of a floating space. The hotel function, aswell as the secondary functions: restaurant and conference room addresses to a public in search of a balance between advanture and peace. Being so close to Tulcea, the gateway to Danube Delta makes this hotel a place where you can enjoy free time, contemplate or just meet with others and go further in search for more things to explore.

SITE PLAN

SECTION

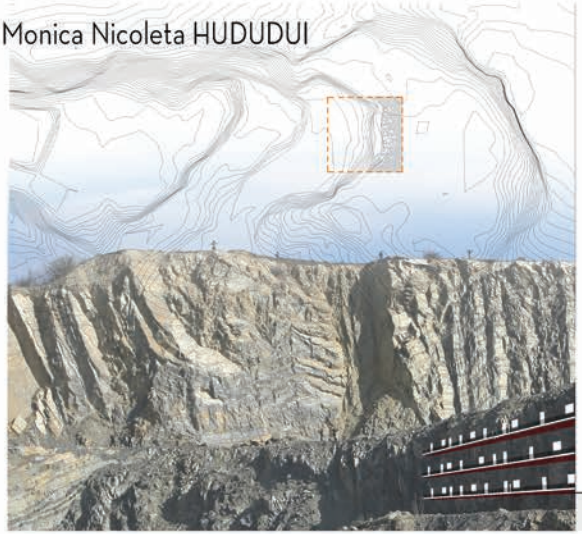
FACADE

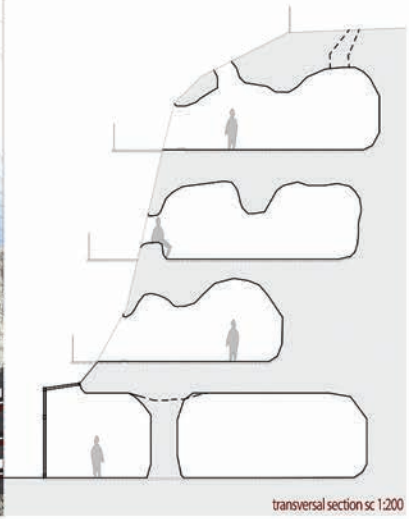
PLAN - ROOMS



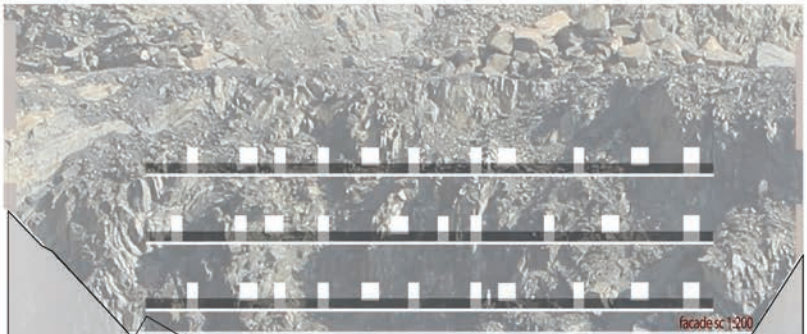
PLAN - ACCESS

Monica Nicoleta HUDUDUI

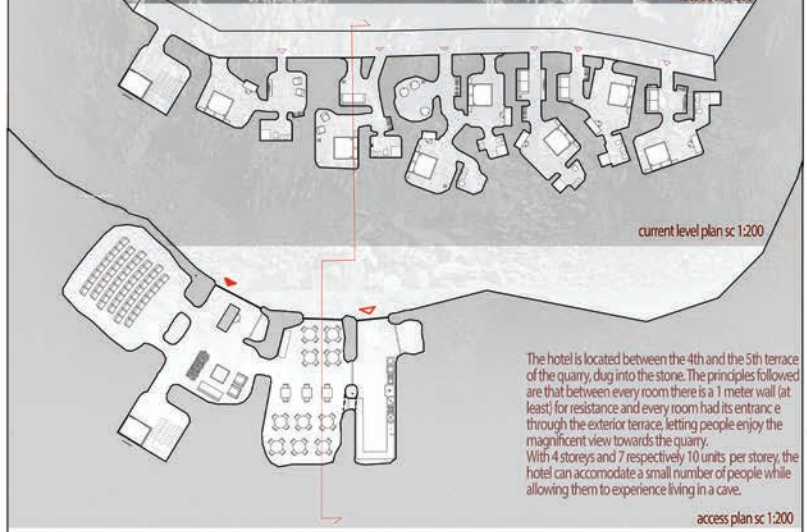




transversal section sc 1:200



facade sc. 1:200



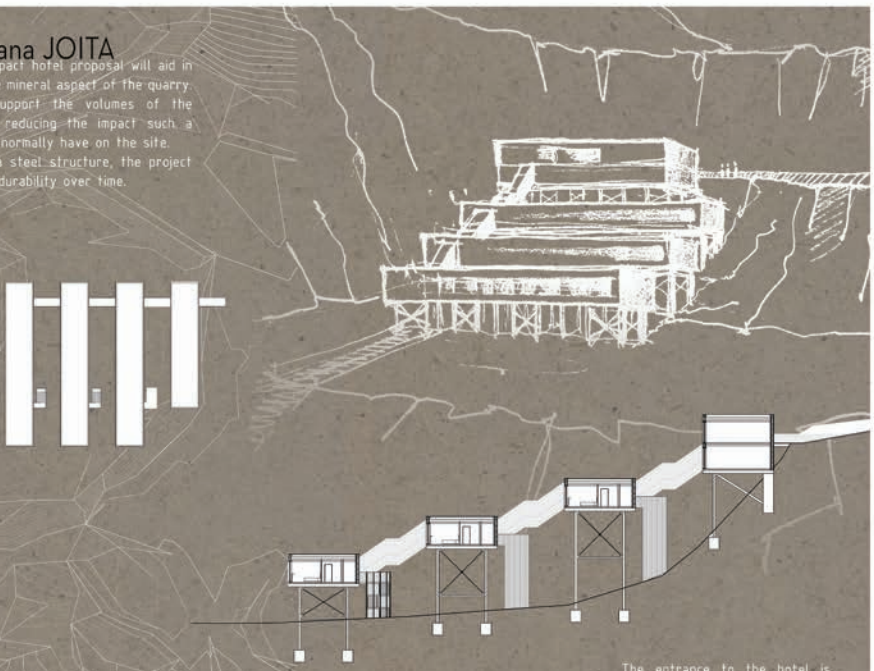
current level plan sc 1:200

The hotel is located between the 4th and the 5th terrace of the quarry, dug into the stone. The principles followed are that between every room there is a 1 meter wall (at least) for resistance and every room had its entranc e through the exterior terrace, letting people enjoy the magnificent view towards the quarry.
With 4 storeys and 7 respectively 10 units per storey, the hotel can accomodate a small number of people while allowing them to experience living in a cave.

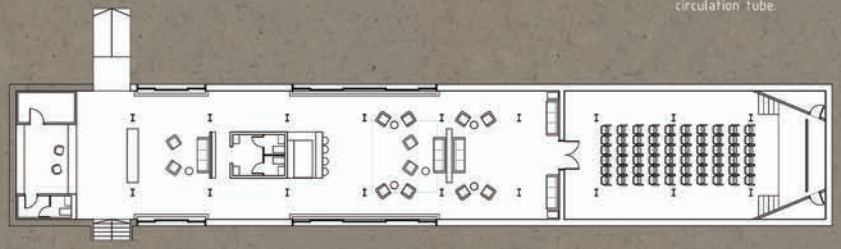
access plan sc 1:200

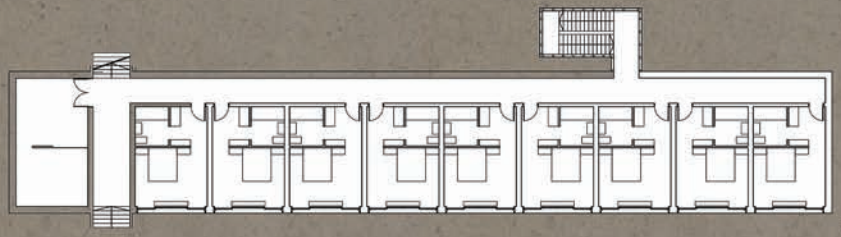
Catinca Ioana JOITA

The minimal impact hotel proposal will aid in maintaining the mineral aspect of the quarry. The pillars support the volumes of the building, thus reducing the impact such a building would normally have on the site. Composed of a steel structure, the project will prove its durability over time.

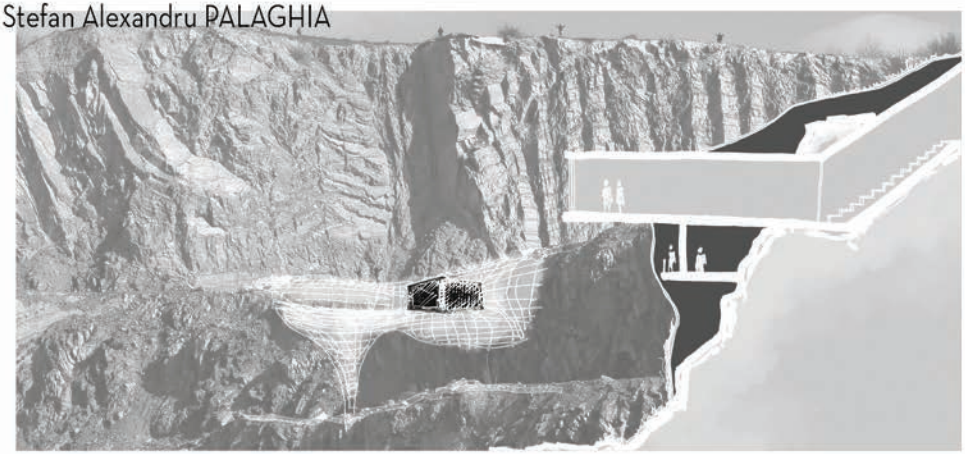


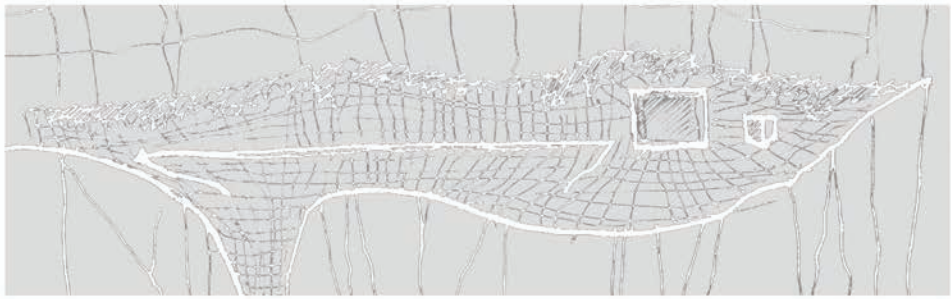
The entrance to the hotel is situated on the 5th platform of the quarry. The entryway leads to a double height volume containing all the common spaces (conference room, foyer, bar, reception and restaurant).
The rest of the volumes, placed after the volume containing the entrance and the common spaces, contain all the rooms. The entire ensemble is tied together through a main, generous, translucent, circulation tube.

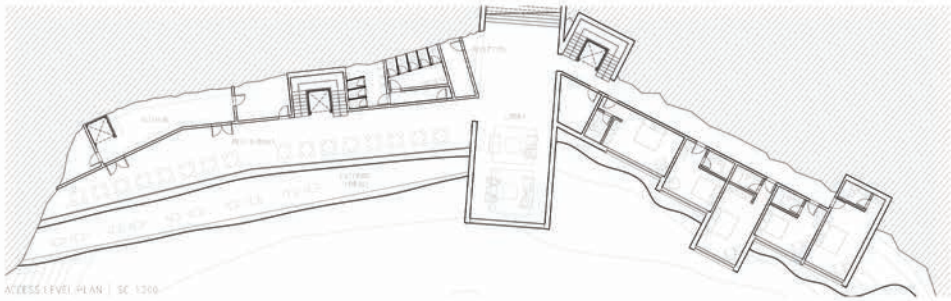




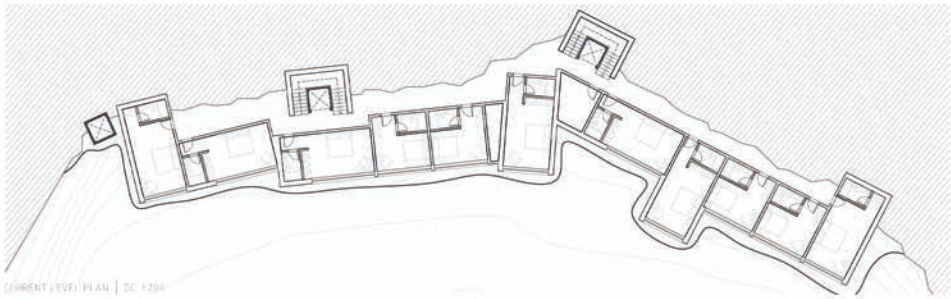
Stefan Alexandru PALAGHIA





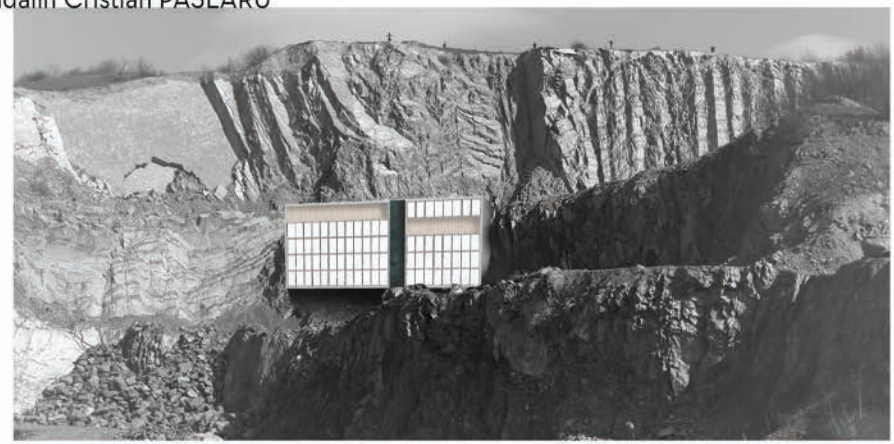


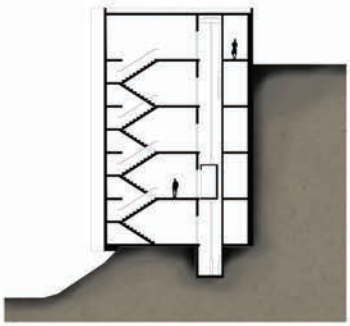
ACCESS LEVEL PLAN | SC 1:200



CURRENT LEVEL PLAN | SC 1:200

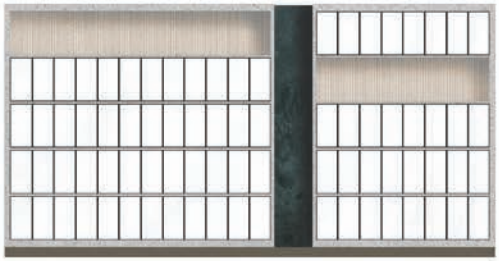
Madalin Cristian PASLARU



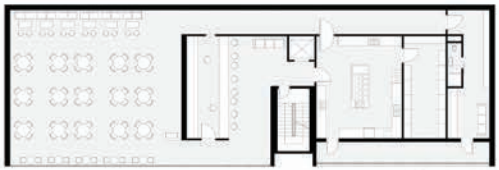


The Emerald Rectangle

The hotel is intended in a proportion which gives it a hint to the structural integrity of the structure. The levels of the building are separated so that their meaning is precise and understandable, because the first thing we do after we buy a room, the circulation is the main refference point for orientation



Ground Plan Sc. 1:200



1 Plan Sc. 1:200

2 -3 -4 Plan Sc. 1:200

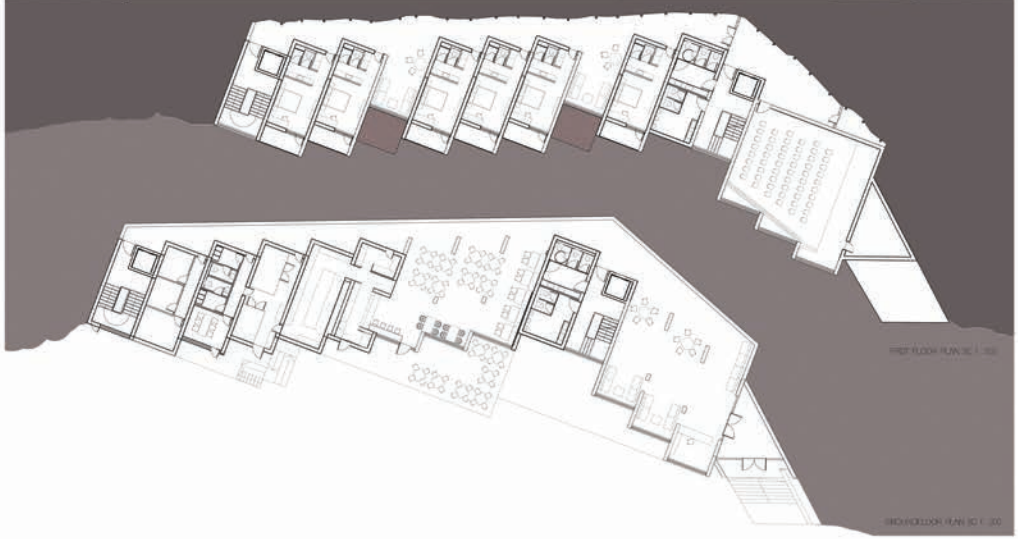
Sabina TURCU

THE PROPOSED HOTEL IS INTENDED TO HOST THE TEMPORARY GUESTS OF THE RESEARCH CENTRE ESTABLISHED IN BIBORA QUARRY. IT CAN HOST 12 GUESTS, ON THE ACCOMODATION UNITS AND IN THE RESTAURANT.
THE CONCEPT OF THE BUILDING IS CREATING AN INTERVENTION WHICH IS AS LEAST INVASIVE AS POSSIBLE, WHILE INTERACTING WITH THE STONE WALL. THEREFORE, MODULARITY WAS THE SOLUTION, BY PROPOSING SIMILAR UNITS OF PREFABRICATED CONCRETE ELEMENTS THAT CAN HAVE DIFFERENT FUNCTION, DEPENDING ON THE WAY THEY ARE RELATED. STACKED ON TOP OF EAC OTHER, THE VOLUMES ARE STAGGERED, ORIENTED TOWARD THE NORTHERN WALL OF THE QUARRY TO MAKE USE OF THE VIEW AND THE REFLECTED LIGHT. THE HALLWAY IS REPRESENTED BY SUSPENDED WALKWAYS SUPPORTED ON A METALIC STRUCTURE, ANCHORED IN THE UNITS AND INTO THE STONE WALL THUS A GAP IS CREATED BETWEEN THE ACCOMMODATION UNITS AND THE STONE WALL, WHICH CAN BE ADMIRED AT EACH FLOOR. LIGHT GETING INSIDE IN THIS MANNER.
AT THE GROUND FLOOR IS FOUND THE RECEPTION WITH THE LOBBY, AND THE RESTAURANT. AT THE FIRST FLOOR, BESIDES THE SIX ACCOMMODATION UNITS (DOUBLE AND TWIN), THERE IS A CONFERENCE ROOM FOR 10 PARTICIPANTS. THE NEXT 2 FLOORS ARE SIMILAR IN LAYOUT, WITH 6 ACCOMODATION UNITS FOR EACH FLOOR. A SMALL, METING ROOM ABOVE THE ENTRANCE (BOLLARE AND DISCUSTION AREAS INTERLOCKED INBETWEEN.


SITE PLAN 1:500

SECTION 1 : 100


FACADE 1:200


FIRST FLOOR PLAN 1:100

GROUND FLOOR PLAN 1:100

ARCHITECTURAL PROPOSALS - NO.3 2020

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Universitatea
de Arhitectură și Urbanism
„Ion Mincu"