



D 5.5.1: PLANS AT THE MUNICIPAL/INTERMUNICIPAL LEVEL FOR THE SPATIAL ORGANISATION OF CULTURAL HERITAGE

Golubac & the Iron Gates

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What is DANUrB Project?

DANUrB - a regional network building through tourism and education to strengthen the “Danube” cultural identity and solidarity. Cultural network aims to strengthen the Danube regional cultural identity and to create a common brand by fostering transnational cultural ties between the settlements along the Danube, and by exploring the unused or hidden cultural and social capital resources for a better economic and cultural return



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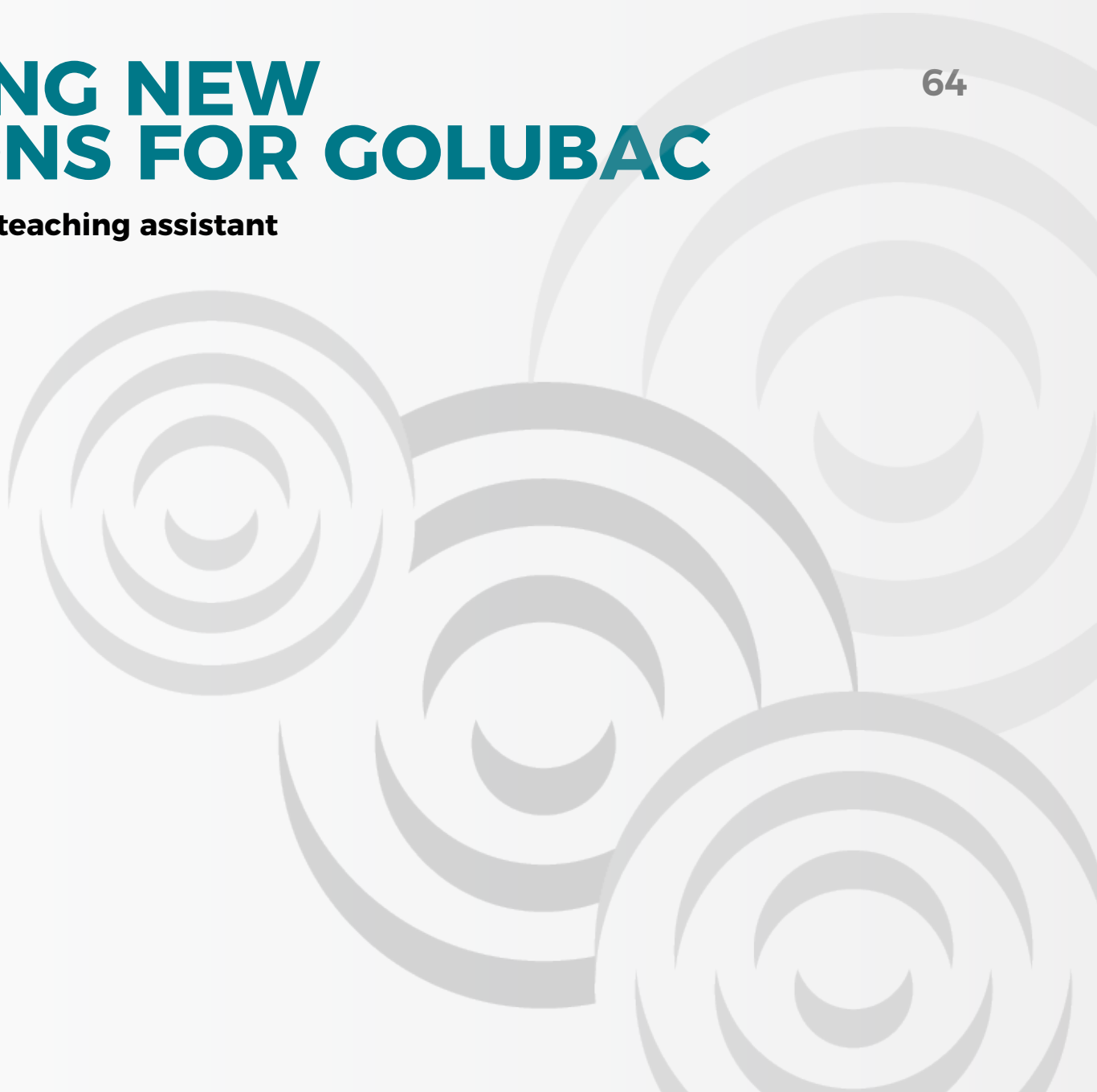
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0. INTRODUCTION

Prof. Dr. Aleksandra Djukić

The Faculty of Architecture – University of Belgrade has got a long history of cooperation with local Municipalities and Faculties from Serbia and abroad on different projects within the studio courses. The results from this cooperation, in the form of visions and scenarios for future development, as well as Master projects and urban design, are useful for development new ideas and could be used as a background for new urban and action plans.

The cooperation within DANUrB project has been realised with Golubac and Smederevo as Associated partners, and it included the involvement of local authorities, stakeholders and citizens. The students from obligatory course Methodology of Urban Design from the Master course Master of Integrated Urbanism did the research and projects for Golubac and students from the last semester of the same Master course did their Master thesis and Master projects for Smederevo. The process of research and design included the research of documents and materials, in situ work and meetings with stakeholders and all interested parts in city development. As the main topic of the research was strengthening of the cultural identity and solidarity along the Danube, students In their project's tried to find the answers on the research questions: what the cultural identity is, how can we defined it and how we can use it in urban development, regeneration and promotion of a city. They are also searching the answers about the authenticity and uniqueness of local cultural identity and its use in forming the urban brand and the part of a new "Danube cultural promenade".

Research polygon – the Iron Gates and Golubac Towns.

Golubac is a small town located along the Danube with rich and valuable natural and cultural heritage. Although, the town has been shrinking during the past half century and it suffers from the lack of accessibility and infrastructure, and facing many socio-economic challenges today, it has a lot of potentials for development of tourism regarding the medieval Golubac Fortress nearby, which has been recently reconstructed and the entrance of Iron Gate next to it. The newest incentives and investments have made little influence to overcome this situation.

On the other hand, the Iron Gates are a large transboundary protection area, with "Đerdap" National Park in Serbia and "Porțile de Fier" Natural Park in Romania. The entire region presents a huge and rich ecosystem, with four inner gorges and three inter-valleys. The landscape is characterised with many specific and different segments of scenery.

Small towns and villages along the Danube in Iron Gate have got a different impact across the gorge. The most important change that was done during 1970s is the formation of large Iron Gates artificial lake, which lead to the flooding the lowest part of the gorge with all previous islands and the reallocation of several settlements (Orșova, Donji Milanovac) and the most valuable heritage sites (Tabula Traiana, "Lepenski Vir" archaeological site), leaving old settlements to be flooded. Accordingly, formation of the lake formed a new riverside, too.

However, there are many (>50) localities of immovable cultural heritage that are protected by Serbia and even more that are

preliminary protected or even not included in official protection lists. These localities are sprawled across the gorge, so they can play the role of nodes in the prospective spatial development of network for cultural tourism in cultural routes

Golubac municipality has developed a lot of planning and strategic plans for the most attractive areas within its territory. It has enacted 12 important spatial and urban plans, urban design projects and strategic documents. More than half of these documents are mostly essentially orientated towards tourism.

The Spatial Plan of Republic of Serbia and the Spatial Plan of Municipality of Golubac are strategic plans and incorporated both strategic and regulatory elements by law. The Spatial Plan of the Republic of Serbia 2010-2020 is an umbrella document in territorial planning Serbia. Landscapes are well-elaborated in this plan in two major topics – ‘nature and ecology’ and ‘sustainable use of heritage’. They are also represented in all sections of the plan, from planning objectives till the implementation at the end of the plan.

The main intention of the Spatial plan of Municipality of Golubac is strengthening of tourism development, in accordance with valuable cultural heritage and, particularly, the possession of Golubac fortress as a special cultural asset as well as preserving the natural heritage and identity.

The General Urban plan is focused on the built area within the town and supports mixed-use and mixed-density development in the part of the town along the river, where a mix of non-residential facilities is planned. This is also the area where the main concentration

of tourist infrastructure is placed as well as the bicycle route and pedestrian path along the riverbank.



Fig. 1: The first national workshop in Golubac: students and teaching staff from the course “Methodology of urban design” and local experts (source: B. Antonić)

Expectation from the project and contributions

The relationships between cultural heritage, specific patterns, identity on one side and different concepts, approaches and instruments of urban development on another one was investigated. The focus was on development of regional network through tourism, education, strengthening cultural identity and solidarity.

The expected results were development of the region and Municipality, incitement of cultural identity, connecting the existing settlements and creating common brand, as well as research of not recognised and hidden cultural capital.

The results should contribute to development of spatial – cultural network “Danube cultural promenade”, which would connect all the settlements.

1. METHODOLOGY

Prof. Dr. Aleksandra Djukić

The course Methodology of Urban Design is the obligatory course at second semester of Master Academic studies – program at Master of Integrated Urbanism. The course takes place for hours per week.

The course goals are to introduce the students with the methodologies of urban design and to accept the general methodology recognised by RIBA, which could be described as a process in four phases: analysis, synthesis,

appraisal and decision, that pass through a series of linked decisions. The focus is on the training of students for work in the field of urban design, i.e. the development of their abilities to understand, systemise and implement the different methods of urban design, as well as to use acquired knowledge in practice – in urban plans and urban design projects.

The course consists of theoretical part and theoretical lessons.

Theoretical part includes the following topics:

- Introduction in the methodology of urban design;
- The review of research methods and techniques which are used in the field of urban design;
- Implementation of different methods in urban design, Dialectical process;
- Adequate organisation of research;
- Definition of criteria for the evaluation of optimal solution.
- Practical part includes the practicing of acquired knowledge in situ, i.e. on two selected polygons: the historic core of Smederevo and Golubac Fortress with the central part - riverside of the town, through following steps;
- Analysing the concrete polygons by the different methods and techniques of urban design, In situ research;

- Defining the problems that should be examined;
- Organising of the entire research;
- Creating a design concept;
- Defining the programme for the concept evaluation;
- Developing and presenting planning scenarios – development scenarios, with outcomes;
- Checking previous steps and outcomes on the selected polygons.

Teaching is conducted through interactive and multimedia lectures (ex-cathedra lectures, discussion, surveys), through group work during practical classes and through the elaboration of acquired knowledge by its presentation (colloquia).

Work in situ is necessary part of practical work as well as use of methods and techniques presented in theoretical part of the course, such as mental mapping, space syntax, research data on internet.

The main aim of colloquia is the audit of the student implantation of obtained knowledge in a concrete site.

Learning outcomes of the course

Attending lectures and acquiring presented information, students should:

- Obtain their knowledge about the different methods of urban design and the possibilities of their use in practice;
- Develop their ability for work in the states of both wide autonomy and active collaboration;
- Expand their capacities to link and combine theory and practice in urban design and
- Improve their skills in the various types of communications (verbal, written, graphical and digital).



THE IRON GATES





2. THE IRON GATES MACRO-REGION

Milica Cvetanović, PhD student

The Iron Gates is a gorge in Southeast Europe. It is located at the lower Danube and is a boundary space between Serbia and Romania. On both sides, it is protected due to its natural and cultural significance – in Serbia as a national park, and in Romania as a natural park. In Serbia, the location of the gorge is in its eastern part.

With a length of 100 km, the Iron Gates Gorge crosses the Carpathian ranges and connects Panonian Basin with the Pontian Basin (Marković & Pavlović, 1995). The Danube valley in this gorge is composite, which means that narrower and wider parts change.

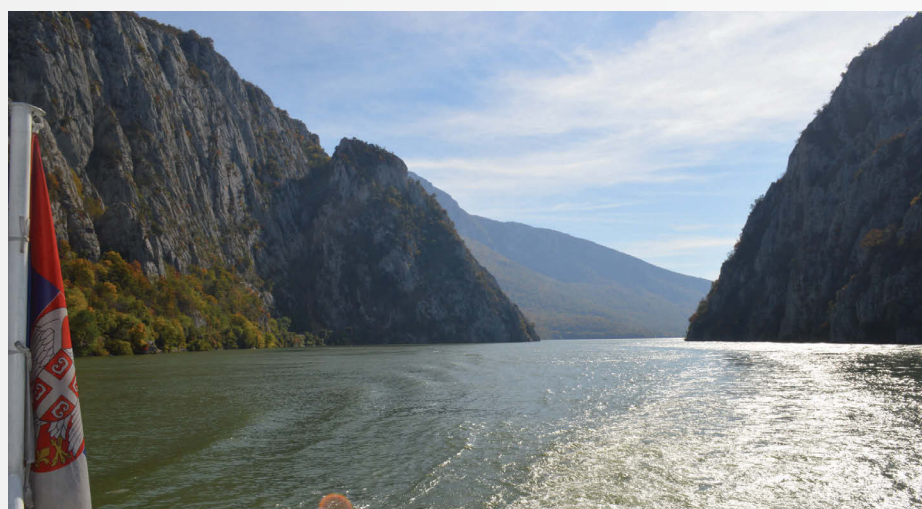


Fig. 1: Veliki and Mali Kazan with the narrowest part in the Iron Gates Gorge – 180 m (source: B. AntoniĆ)

The Đerdap National Park was declared in 1974. It spreads along the right bank of the Danube, from Golubac to Karataš near Kladovo. It is the largest national park in Serbia, and by its characteristics is the most complex. This park is known by great natural diversity and numerous cultural and historical monuments (Jovičić, 2009). Three municipalities – Golubac, Majdanpek and Kladovo manage this national park. The area of the gorge is actually accumulation Đerdap Lake, which was created after the construction of the hydroelectric power plant Đerdap I in 1972. It is the largest artificial lake in Serbia.

In terms of river traffic, the gorge has a good position since it is on the route of the Danube Corridor or Corridor 7. It has positive effects in attracting tourists on cruisers. State roads 34 and 35 (smaller part) pass through the gorge. Via state road 33, the road 34 is connected to the most important road in Serbia - the highway A1, which is part of the E75 road (connects Greece and Norway). However, the land traffic position is not enough transparent so most foreign tourists still come by river road.

Natural heritage of the Iron Gates in Serbia is characterized by numerous geomorphologic features and plant species. The borders of the national park that separate it from the rest of Eastern Serbia are the mountains: Miroč (768 m), Veliki Greben (655 m), Šomrda (806 m) and Liškovac (803 m). The mountain area of the Đerdap National Park is dissected with the valley of the Porečka River (Jovičić, 2009). The territory of the Đerdap National Park is situated on the border of two different floristic regions: the middle-European region of temperate forests and the Ponto-South Siberian or steppe-forests floristic region (Stevanović, 1996). In this area there are more than 1.100 plant species, and especially forests of beech and oak forests are known. The fauna of this area is also rich and various (Jovičić, 2009). It is thought that at least 200 bird species visit this area throughout the year. Numerous species of mammals are present, including: wildcat, bear, wolf, jackal, chamois, deer, otter and others. A great number of species of insects, amphibians and reptiles also inhabit this territory (Macura et al., 2012). The cultural and historical significance of the Danube banks in the Iron Gates Gorge is big. Historical data on the right, Serbian bank speak about periods thousands of years

before the new era. The Iron Gates is best known for Mesolithic and Neolithic culture and historical settlements such as Lepenski Vir, Vlasac and Padina. Roman, Byzantine, Slavic and Ottoman cultures also left great significance. There used to be many more archaeological sites, cultural and historical monuments. By raising the dam due to the construction of the hydroelectric power plant on the Danube, most of these sites from various periods have been submerged.

Municipalities Golubac, Majdanpek and Kladovo have made a decision to proclaim a geopark whose beginning will be near Golubac, in the part of Usije-Vinci. Currently, it is being labeled, and some parts of the geopark will coincide with the borders of the national park.

In the geomorphological and geological view stands out the **Boljetin River canyon**, which is also part of the nature reserve. It is recognizable by its visible layers of sediments that date back to the time of the Tethys ocean. This canyon is one of the most valuable objects of geo heritage in this part of Serbia and also an inevitable place for adventurers. Among the narrower and wider parts of the Danube valley in the Iron Gates, by its beauty stands out the gorges **Veliki and Mali Kazan** (also known as Danube Boilers), 19 km long. The width of the Danube at this point is 180 m, which is the smallest width in the entire gorge, and the biggest depth in this part is 68 m. In several places in the gorges there are karst springs. The remains of Trajan's Road can be seen, as well as the monument in the rock – Tabula Traiana (Trajan's board). (Stanković, 2008). On the Romanian side of this part of the gorge there is the famous statue in the rock – the face of Decebalus,

king of Dacia, but the view on it is possible from the Serbian side.

Lepenski Vir is considered to be the home of the oldest European civilization. The locality is dislocated, moved 100 meters away from the original location. It is estimated that it is about 9000 years old and that the culture of Lepenski Vir lasted about 2000 years. During that period, the look of the houses in Lepenski Vir has never changed.



Fig. 2: Archaeological site Lepenski Vir was a prehistoric urban settlement (source: B. Antonić)

The inhabitants of Lepenski Vir were fishermen and had some knowledge of nature. They had developed religious-magic and ritual practices. The characteristics of the space were similar to all the early settlements - a large compactness in a small area, enclosed with stone or wooden fence (Đorđević, 2009). The houses were trapezoidal structures with lime plaster floors containing numerous large stone sculptures and other symbolic artefacts (among other finds), together with a record of complex burial practices associated with the structures and the areas between them (Bonsall et al., 2008). Today the archaeological site is the central part of the museum of Lepenski Vir. It is a modern building with an archaeological site in the central part, an impressive museum exhibition and media

contents. However, tourist signaling to the site could be improved.

Tabula Traiana (*The Trajan's board*) is the best preserved monument of the Roman culture in the Iron Gates Gorge. It is a sign in Latin that speaks of the great undertaking of building a Roman road through the gorge, during the regency of Emperor Trajan. The road was completed at the beginning of the second century. The inscription on the board is engraved in a rock (Petrović, 2004). During the construction of the hydroelectric power plant Đerdap I (1963-1972), the Roman road was sunk, and Tabula Traiana was cut from the rock and re-set 21.5 m above the former site. Today is visible from the river.

Medieval **fortress Golubac** is located at the entrance to the Đerdap National Park. It is one of the most recognizable fortresses on the lower Danube and attracts a large number of visitors. During the last years the fortress was renovated and reconstructed, and the road that had previously led through the fortress was displaced. Near the site, there is a modern visitor center and a dock. The construction of an ethno complex near the fortress is also planned.

The area of the National Park is in general poorly populated and it is also characterized by absence of larger industrial plants in the surrounding environment and lower level of construction of transport infrastructure (Jovičić, 2009). The process of depopulation and aging of the population spreads beyond the borders of the national park. The largest number of settlements in the gorge is rural (with the exception of Golubac, Donji Milanovac, Kladovo and partly Tekija). Still, urban settlements are smaller centers and the process of urbanization is actually a bit

slow. Agriculture is limited, in certain places and prohibited. There are potentials for the development of viticulture. The main initiator of the development of this region is tourism. Due to the sensitivity of the area and its protection, tourism must be sustainable and environmentally oriented. Cultural tourism should be established as the primary because in its frames it would include visits to natural resources, since all cultural motives of the Iron Gates are in a unique natural environment.

The intermixture of various ethnic groups - Serbs, Romanians, Czechs, Turks, Germans, Hungarians, etc. - in the area of the Đerdap National Park has produced a richness of ethnography and folklore traditions passed from generation to generation (Patroescy & Vintila, 1997).

Spatial plan of the special purpose area of the international waterway E80 - Danube (Pan-European Corridor VII) mentions construction of docks and marinas at priority locations, such as border sections. It was also said that the direct positive effects of the corridor development of the Danube waterway and its surroundings are expected from tourism. According to plan, Danube is recognized as an important tourism route, but mostly for luxurious tourism. The plan mentions new waterway development projects in the municipality of Golubac such as a cruise pier at Golubac Fortress and a renewed marina next to the center of Golubac Town, as well as marinas in Lepenski Vir, Tekija and nautical center in Poreč bay. The small settlements like Usije, Vinci, Dobra, Brnjica are included among potential locations for small marinas. (IAUS & IUUV, 2015). Most of the priorities from this plan related to the area of the Iron Gates Gorge are still not fulfilled.

Spatial plan of the special purpose area of the Đerdap National Park foresees the adoption of the Law on the Đerdap National Park and the program of protected area management. Priority activities that are planned: protection, presentation and controlled use of the area, preservation of natural areas, protection and improvement of the state of immovable cultural goods, construction and arrangement of new contents in the function of tourism (marinas, docks, visitor centers), development of rural tourism, development of hydropower, construction and modernization of the road network (construction of a bypass at Golubac Fortress), arranging of mountain, excursion, hiking, fishing and bicycle trails (bicycle trail on the Eurovelo 6 route). In addition to the basic environmental protection priorities, intensification of trans-national and international cooperation is also planned - cooperation at the local level with Romanian municipalities on the Danube (IAUS, 2012).

The opening of the reconstructed fortress is planned for the spring 2019, but the tourist infrastructure in Lepenski Vir is not fully completed. The biking trail on the Eurovelo 6 route starts from the settlement Vinci to Golubac fortress and is still not completed due to lack of finance. About 70% of the trail is done, but for the rest the help of European funds is necessary. Spatial plan of the special purpose area of the Đerdap National Park says about the Law on the National Park and the program of protected area management. The law is not passed, but it is the Management Plan of Đerdap National Park. The most important is that the future development of the Iron Gates Gorge and Đerdap National Park must be exclusively sustainable

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GOLUBAC FORTRESS





3. THE GOLUBAC MICRO-REGION

Dr. Branislav Antonić, teaching assistant

The location of student investigations and design was Golubac Micro-region. Golubac is a town and municipality in the Braničevo District, in Eastern Serbia. It is located on the right side of the Danube River. Considering its location in the Iron Gates Region, Golubac Municipality makes its western third, towards Pannonian Plain to further west.



Fig. 1: Golubac Fortress in July 2017 (source: B. Antonić)

Golubac is mainly known by Golubac Fortress, one of the most important medieval fortresses in the country and a major tourist attraction in the Danube Region in Serbia (Fig. 1). It is located 4 km east from Golubac Town. The fortress is founded in 13th century on a strategically important position at the western entrance of the Iron Gates Gorge. In the following centuries, many realms battled for and possessed the fortress: Byzantines, Hungarians, Bulgarians, Serbs, and Turks-Ottomans. The last ones, Ottoman Empire were rulers during several centuries, making it one of their strongholds against Habsburg Empire across the Danube as a border (Đidić, 2008). During this period, the fortress got its shape; it consists of an inner and outer fortification, built in irregular form due to its position of a rock above the river. In total,

the fortress has nine massive towers, with so-called “Hat Tower” at the top of the rock as the most impressive one (Cunjak & Jordović, 2002). In early 19th century, Golubac Fortress lost its military function and started to fade. It was officially protected after the World War II, as a cultural monument of exceptional importance. Nevertheless, its reconstruction and revitalisation has been carried only since 2010.

The significance of Golubac Fortress would not be noticed without knowing its position. It is a “guardian” on the western entrance of the Iron Gates. It demarcates the scenic gorge with mountainous hinterland on east from the docile landscape of south-eastern Pannonia on west. The first narrow part of gorge, east of the fortress, is known as Golubac Canyon (Stanković, 2002). The Danube is very narrow in the canyon, just 200 m wide. Further east, there is Liubcova Valley, where Dobra Village is located. This eastern part of the municipality is part of the Đerdap National Park, which imposes protection under the gorge space, considering its all values: geology, geomorphology, hydrology, and biodiversity. Locations with the most valuable natural heritage are under a strict protection regime (Maran Stevanović, 2017). Such example is Bosman-Sokolac Natural Reservation at the eastern border of Golubac Municipality.

The dichotomy between the gorge and lowland also defines Golubac Municipality; its eastern half with only two villages (Dobra and Brnjica) belongs to the gorge and all other settlements (22 of them) are located in western, lowland half. Golubac Town and Fortress are positioned at this, natural border between two regions.

This division is visible in all aspects of local economy and life. Agriculture is the main economic activity in western half, while eastern half is more attached to livestock breeding and limited forestry. The only other source of local income is a tourism, which is mainly developed in five Danubian settlements of the municipality: Golubac Town, Vinci, Usije, Brnjica and Dobra villages (ARHIPLAN, 2011). Nevertheless, local economic prospects are still weak – Golubac Municipality is officially enlisted among the critically underdeveloped municipalities, where the level of development is under 50% of national average (SORS, n.d.).

Table 1: Comparison of the main population data for Golubac and upper levels, according the last three national censuses (source: SORS, 2014).

Nat. census	Census	Census	Census	Difference
NUTS/LAU*	1991	2002	2011	2011/1991
Golubac Town (LAU 2)	1,995	1,896	1,653	-17.1%
Golubac Municipality (LAU 1)	12,513	9,913	8,331	-33.4%
Braničevo District (NUTS 3)	253,992	200,806	183,625	-27.7%
Southern and Eastern Serbia (NUTS 2)	1,940,252	1,753,004	1,563,916	-19.4%
Republic of Serbia	7,822,795	7,498,001	7,186,862	-8.1%
* NUTS – Nomenclature of Territorial Units for Statistics				
* LAU – Local administrative unit				

Economic difficulties have been profoundly reflected in demographic sphere at local level. The lagging of both Golubac Town and Municipality is evident if they are compared with upper levels. This can be explained through the Table 1:
The rapid demographic population loss in

Golubac is also connected with the other demographic and social problems, such as: rampant ageing at the first place, but also under-average education attainment, high level of unemployment. When demographic data are transferred in space, the other issue emerges. The average size of a settlement in Golubac Municipality is just 347 inhabitants per settlement (Census 2011). Then, the overall density is very challenging – just 22.6 inhabitant/km2 (Census 2011), which is the lowest among all Danubian municipalities in Serbia. Similarly, with less than 2,000 inhabitants, Golubac Town is among the smallest municipal seats in Serbia. Therefore, it is very complicated to plan any kind of the future communal service and infrastructure with these limiting demographic figures and trends (ARHIPLAN, 2011).
Socio-economic difficulties at municipal and regional level have mirrored in the physical state of Golubac Town. The town has a unique position at the widest part of the Danube in its entire flow – the river is more 6 km wide in the front of Golubac. The other advantage of the town is that this is the only settlement in the Iron Gates Gorge with preserved historic core and several valuable buildings from the 19th century under state protection (Fig. 2)
The other settlements are rather new ones, built in the 1970s, after the flooding of old settlements by the lake of Iron Gates Dam Hydro Plant 1. Although some important parts of the town has been refurbished in the last decade, such as the main square (Fig. 2) and quay with a cycling-pedestrian path, many parts and buildings are in pretty neglected state. Then, the town itself is not under protection regime, which limits the possibilities to preserve the characteristic ambient of historic core by its many segments.

The main driving force of local development is currently tourism. Aside of Golubac Fortress, a key attraction for local level is Tumane Monastery, situated 9 km south of the town. Hence, cultural tourism is the most promising type of tourism for Golubac. Interestingly, the most of tourist capacities are located in Golubac Town and suburbia (Usije and Vinci in its western part), despite the main attractions are in vicinity. The small-format tourist entities (guest-houses, lodging houses, restaurants, cafes) are present across the urban zone and they contribute greatly to the vibrancy of Golubac during summer season. In contrast to them, the largest accommodation in the town, “Golubački Grad” Hotel from 1980s, is in bad state. Retail sector is also alive, especially in small pedestrian zone around the main square and the town park.

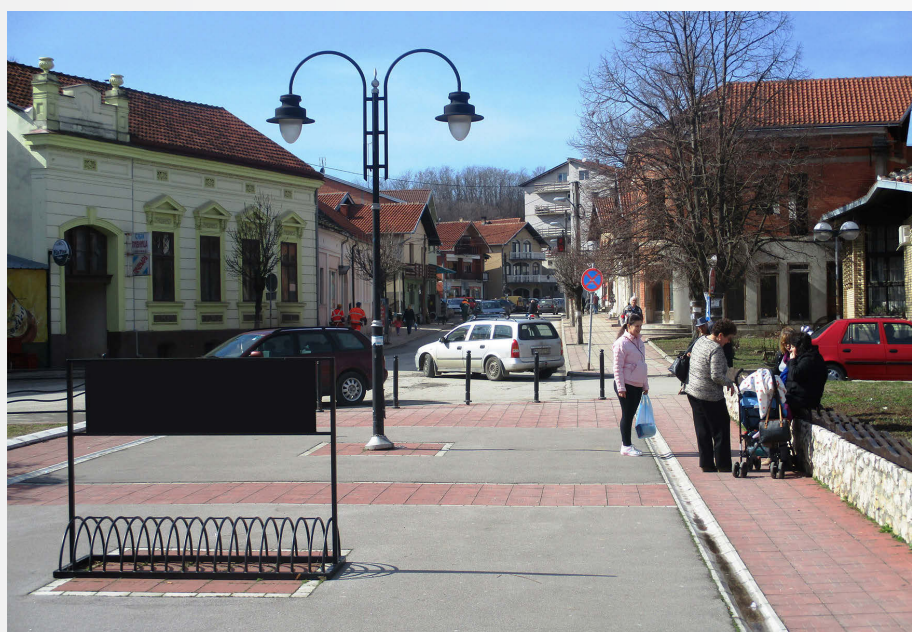


Fig. 2: The main town square is the centre of the historic core of Golubac Town (source: B. AntoniĆ)

Nevertheless, many things in Golubac tourism still wait for revision and new development. Just to mention that strategic framework is still traditionally oriented, without innovative approaches (Djukić, Djokić & AntoniĆ, 2017). Many problems are related to the general lack of big-format capacities (high-quality hotel,

bigger supermarket, the town museum/gallery), as well as to supplementary offer in culture, retail and transportation. Despite these challenges, tourist sector has proven to be agile last years. The key stimulus was certainly the reconstruction and revitalisation of Golubac Fortress. The reconstruction is also important, because it included visitor centre with large parking lot and a pier for cruisers on the Danube (ALBO, 2009). More than 80 thousand tourists visited Golubac Fortress in 2018. Furthermore, the offer of tourist accommodation has been doubled in the last three years. New capital projects are in preparation or in progress. This is the case with the town marina, the renewal of the town beach in Vinci weakened zone, and the extension of the town quay to the fortress. These tendencies wake up hope that there is a better future for Golubac.

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4. PLANNING AND STRATEGIC PERSPECTIVE

Dr. Branislav Antonić, teaching assistant

Serbian territorial planning system is based on an operative Law on Planning and Construction of the Republic of Serbia. The law recognises two types of territorial plans: spatial plans and urban plans. The later ones consider settlements and their parts, while the former ones are related to above-settlement level – regions and municipalities. The planning system generally follows the territorial development that respects the horizontal and vertical coordination of plans (PS, 2009-2019, Art. 3).

The organisation of plans by their vertical coordination (PS, 2009-2019, Art. 11):

Spatial plans:

- 1) Spatial Plan of the Republic of Serbia;
- 2) Regional Spatial Plan;
- 3) Spatial Plan of the unit of local administration;
- 4) Spatial Plan of the region of special use.

Urban plans:

- 1) General Urban Plan;
- 2) General Regulation Plan;
- 3) Detailed Regulation Plan.

Additional urban and technical documents, which follow spatial and urban plans, are (PS, 2009-2019, Art. 13):

- 1) Urban design project;
- 2) Design project of re-allotment and allotment;
- 3) Design project of correction of borders of adjoining lots.

All enlisted documents include both textual and graphical content.

Any new document in Serbian planning system should be created to be harmonised with the Spatial Plan of Republic of Serbia. Currently, the operative plan is for the period 2010-2020 (Fig. 1).

Apart of the planning documents, in recent years, ministries and local self-governments (cities and municipalities) strategic documents have adopted numerous strategies. However, the legislative framework regarding strategies is still in progress, so their mutual coordination, as well as coordination between planning and strategic documents is still a challenging issue in Serbia.



Fig. 1: The title page of the Spatial Plan of the Republic of Serbia 2010-2014-2020 (source: RAPP)

Planning and strategic perspective for the Iron Gates Region and Golubac Town (Table 1)

For the purpose of this report, two types of territorial plans are especially important, because their coverage do not reflect official administrative borders between settlements and municipalities; there are shaped with special purposes, to enable the special regime of organisation, use and prospection of a certain territory (PS, 2015). This is the spatial plan of the region of special use at spatial/regional level and detailed urban plan at urban/settlement level. These plans

are thereby optional and their purpose is to better coordinate the development of the territories that are divided between different administrative units and with different ownership rights. Typical examples are spatial plans for Đerdap/Iron Gates National Park or for Danube Corridor in Serbia, as well as the detailed regulation plan for Golubac Fortress.

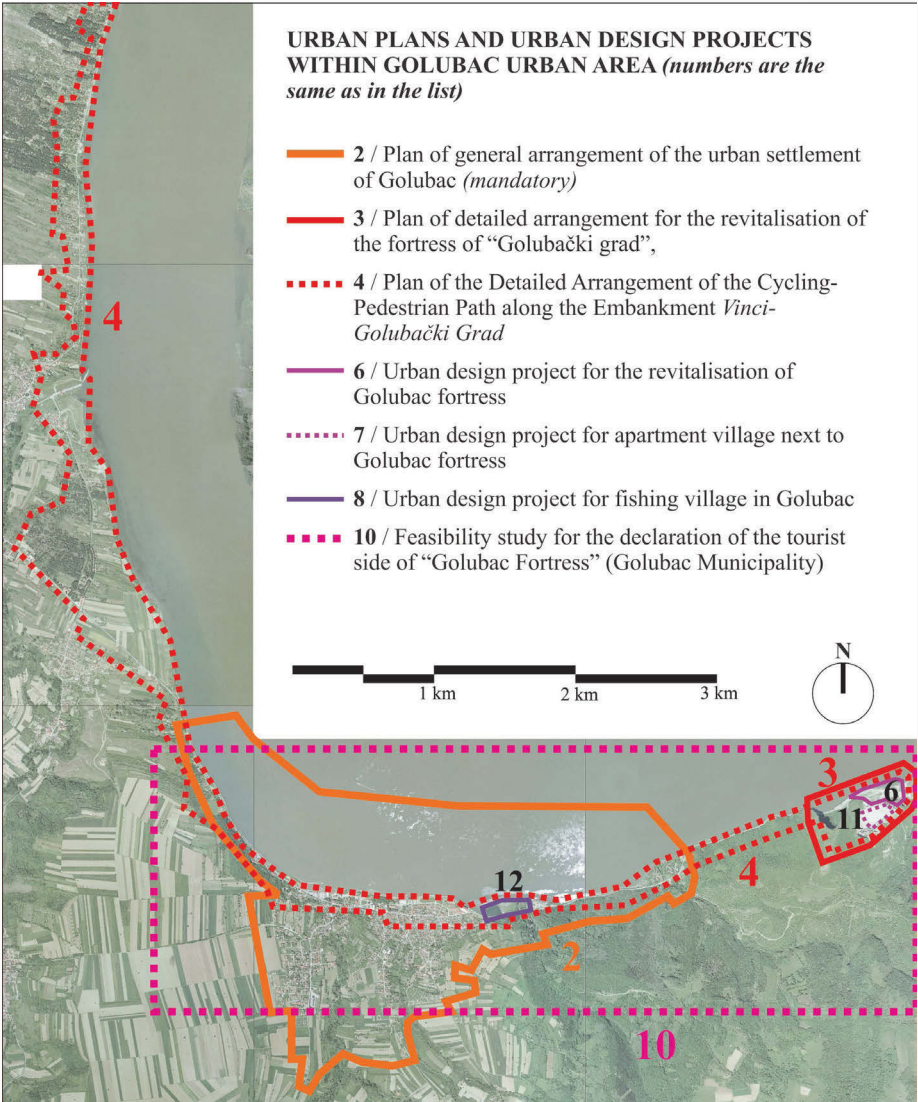


Fig. 2: The coverage by urban plans and urban design projects in the area of Golubac Town (source: Djukić, Djokić & Antonić, 2018)

The other plans are generally prescribed by law and their creation and enactment are obligatory. In the case of strategic documents, the most important ones are those that refer to tourism development. Such example is the Master plan of “Donje Podunavlje” Tourist Destination (Donje Podunavlje = Lower Danube).In the case of

Golubac Municipality, the most of planning and strategic documents covers the area of Golubac Town and Golubac Fortress (Fig. 2):

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Annex 1

Table 1: The list of planning, urban design and strategic documents relevant for the Iron Gates Region and Colubac Town

Official / Serbian name	English name / translation	Year of enactment	Relevance (order by importance)
NATIONAL LEVEL – SPATIAL PLANS			
Закон о просторном плану Републике Србије од 2010. до 2020. године	Law on the Spatial Plan for the Republic of Serbia 2010-2020	2010	General territorial development, tourism, heritage, culture
Просторни план Републике Србије од 2010. до 2020. године	Spatial Plan for the Republic of Serbia 2010-2020	2010	General territorial development, tourism, heritage, culture
Просторни план подручја посебне намене међународног пловног пута Е80 – Дунав (Паневропски коридор VII)	Spatial plan of special-purpose area of E-80 international waterway – the Danube (Pan-European corridor VIII)	2010	Danube region
NATIONAL LEVEL – STRATEGIES			
Стратегија просторног развоја Републике Србије 2009-2013-2020	Strategy on spatial development of the Republic of Serbia 2009-2013-2020	2009	General territorial development
Стратегија развоја водног саобраћаја Републике Србије од 2015. до 2025. године	Strategy on development of water transport of the Republic of Serbia 2015-2025	2015	Internal waters and ports
Стратегија развоја туризма Републике Србије за период 2016. – 2025.	Strategy of tourism development of the Republic of Serbia 2016-2025	2016	Tourism
Стратегија Европске Уније за Дунавски регион (на српском)	Strategy of European Union for Danube region (in Serbian)	2010	Danube region
REGIONAL LEVEL – PLANS AND STRATEGIES (Iron Gate/Đerdap Region, Braničevo District, Podunavlje District)			
Мастер план туристичке дестинације „Доње Подунавље“	Master plan of “Donje Podunavlje” tourist destination (Donje Podunavlje = Lower Danube)	2007	Local-self-government unit of Golubac
Регионални просторни план за подручје Подунавског и Браничевског управног округа	Regional spatial plan for area of Podunavlje and Braničevo Districts	2015	Local-self-government units of Golubac
Регионална развојна стратегија Браничева и Подунавља 2016-2020.	Regional development strategy Braničevo-Podunavlje 2016 – 2020	2016	Local-self-government units of Golubac
Просторни план подручја посебне намене Националног парка „Ђердап“	Spatial plan of special-purpose area of “Đerdap” National plan (Đerdap = Iron Gate)	2009	Local-self-government unit of Golubac
План управљања Националним парком „Ђердап“	Management plan for “Đerdap” National plan (Đerdap = Iron Gate)	2017	Local-self-government unit of Golubac
LOCAL LEVEL – GOLUBAC MUNICIPALITY – PLANS AND DESIGN PROJECTS			
Просторни план општине Голубац	Spatial plan of Golubac Municipality	2011	General territorial development
План генералне регулације градског насеља Голубац	Plan of general regulation of urban settlement of Golubac	2011	Urban development of Golubac
План детаљне регулације за ревитализацију тврђаве „Голубачки град“	Plan of detailed regulation for revitalization of the fortress “Golubački grad”	2010	Golubac fortress
План детаљне регулације приобаља Дунава, од туристичког насеља Винци до тврђаве „Голубачки град“	Plan of detailed regulation of the Danube riverside, from Vinci tourist village to the fortress “Golubački grad”	2011	Danube riverside in Golubac urban area
План детаљне регулације комплекса манастира Тумане и споменика природе „Бигрена акумулација“	Plan of detailed regulation of complex of Tumane monastery and “Bigrena akumulacija” natural monument	2011	Tumane monastery and “Bigrena akumulacija” natural monument
Урбанистички пројекат ревитализације Голубачке тврђаве	Urban design project for revitalisation of Golubac Fortress	-	Golubac Fortress
Урбанистички пројекат апартманског насеља код тврђаве „Голубачки град“	Urban design project of apartment village next to Golubac fortress	2009	Tourism
Урбанистички пројекат рибарског насеља у Голупцу	Urban design project of fishing village in Golubac	2013	Tourism
LOCAL LEVEL – GOLUBAC MUNICIPALITY – STRATEGIES			
Стратегија локалног економског развоја општине Голубац	Strategy of local economic development of Golubac municipality	2010-14	General development
Стратегија одрживог развоја општине Голубац за период од 2015. до 2020. године	Strategy of sustainable development of Golubac municipality for the period 2015-2020	2015	General development
Маркетинг План - Унапређење туристичке понуде општине Голубац	Marketing plan – Upgrading of tourist offer of Golubac municipality	2009	Tourism
Студија оправданости за проглашење туристичког простора „Тврђава Голубачки град“ (Општина Голубац)	Feasibility study for declaration of tourist side “Golubac Fortress” (Golubac Municipality)		Tourism

5. EXPLORING GOLUBAC

Prof. Dr. Eva Vaništa Lazarević

The process of student investigations and design in Golubac Micro-region in studio generally followed the explained curriculum of the course “Methodology of Urban Planning and Design”. In line with this, studio work and supplementary theoretical lectures passed through several phases during the summer semester 2016/2017.

The introduction of Golubac Micro-region was the first phase. Students got to know the region and collect the data from on-site research (Fig. 1) and the data available from provided plans and strategies and general literature and internet.



Fig. 1: Discussions between students and local experts at the second national workshop in Golubac (source: B. Antonić)

Thematic research is carried parallel with the introductory part. All students were organised in 2-3 member groups. Ten student groups investigated specific topics that bridge spatial development, culture and tourism: historic development, cadastre and ownership, geodata based on photography, natural and built heritage, spatial and urban patterns, functions and activities, mapping of visitor tours, networks and infrastructure, and Golubac in news, forums and blogs.

The second-phase research was developed

on two well-established theories: (1) the theory of the city image, developed by Kevin Lynch, and (2) space-syntax theory, based on the analysis of spatial configurations. Student conducted independent on-site research based on both theories, which both were customised to the purposes of the course.

The last phase in the first part was SWOT analysis, as an assessment of the current state of Golubac Micro-region. All groups made the SWOT analyses on their thematic topics, which were eventually merged in a final, comprehensive SWOT analysis. Upon this phase, the first colloquium was completed and orally presented in the first decade of April.

The phases that belong to design process were included in the second colloquium. From the early beginnings, all students were focused on the central core of Golubac Town. Group work was preserved till the end of the studio work.

The two phases, a concept and programme, were mainly interconnected. The concept was a link between the current assessment/SWOT analysis and new proposals for Golubac. The fundamental elements, settled by the concept, were then elaborated through programme, which actually detailed all possible functions, activities and facilities in urban space.

Then, these basic design postulates were used and additionally checked through design scenarios. Each member of a group created one scenario with a unique logo, motto or catchword, proposed actions and their graphical presentation in the space of central Golubac. After that, all groups chose their most appropriate scenario.

The last phase was the concrete design of

a small open space in central Golubac as one of key actions proposed by the chosen scenario. This phase was done as a typical urban design project, including drawings and spatial models.

The described student studio work was “disrupted” by four student workshops. Two of them were national workshops, conducted in Golubac, and the other ones were regional, conducted abroad and in international atmosphere, with students from the other DANUrB universities from Vienna, Budapest, Bucharest, Bratislava, Krems/Donau, and Novi Sad.

The first national DANUrB workshop was in Golubac on March 2, 2017. Teaching staff and students had discussions with local experts from spatial development, heritage, cross-border cooperation, and tourism. They also have fieldwork in Golubac Town, measuring spatial syntax and surveying the issues important for the city image theory.

The second national DANUrB workshop was happened in May 29, 2017 and it was in form of the second colloquium. Students orally presented their design proposals to local experts, who gave them remarks and comments how to further improve them for the final design solutions (Fig. 1). Aside of this major event, students and teaching staff visited Golubac Fortress in reconstruction as a short cultural tour.

Apart of the national workshops, the best students from Belgrade participates in two international DANUrB workshops in Wachau, Austria (March 2017) and Esztergom-Šturovo, Hungary-Slovakia (June 2017). They shared their research and ideas about Golubac to the other students from the above mentioned faculties from Danubian countries, making

partnership and synergy about solutions for the Danube towns and regions (Fig. 2).

Both studio work and four organised workshops showed students how to finalise their studio projects during July 2017.



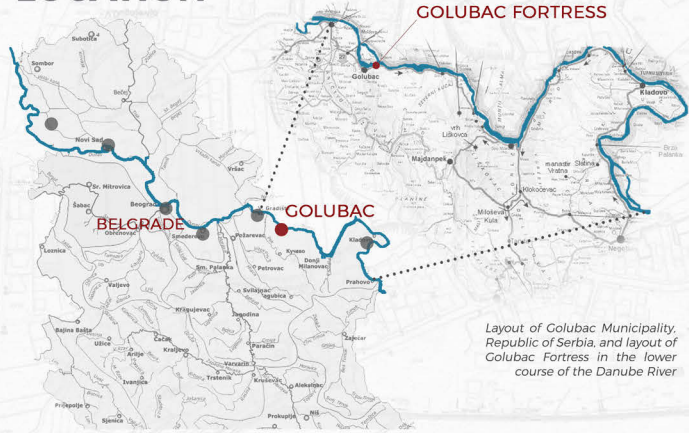
Fig. 2: Students from Belgrade in the front of their posters at international DANUrB workshop in Esztergom (source: B. Antonić)

EXPLORING GOLUBAC

STUDENT PROJECTS



LOCATION



Golubac Municipality belongs to the south-east part of Central Serbia, to Braničevo District. It is 130 km or 2 hours' drive from Belgrade. It is situated on the right bank of the Danube river, in its lower course though Serbia, at the place where the river is widest in its entire course (it reaches a width of 6.500 m). It belongs to LOWER PODUNAVLJE (LOWER DANUBE REGION) tourist destination area (Veliko Gradište, Golubac, Majdanpek, Negotin, Kladovo), which strives to consolidate its offering. The Fortress itself is located on the 4th km from the town, at the very entrance to the Iron Gates.

ESTABLISHMENT OF THE SETTLEMENT

The earliest material evidence in the area of Golubac Municipality belongs to the **Middle Stone Age** – the **Mesolithic period** (between 7000 and 6000 BC).

Multilayer site **Padina**, at the easternmost point of Golubac territory bears its roots from the period after the Ice Age, time of changes in the nature and the way of life of human communities.

In this area, in the Late Bronze Age, **Dubovac** – **Žuto Brdo** culture was formed.

The Early Iron Age was marked by the **Triballi** and then by the **Celts**, by mixing of which the **Scordisci** tribe was formed.

The remains of the **Celtic Fortress** from the 1st and 2nd century BC were found at the site of what later was to become **Roman Fortress** called **Cuppae** (above the present day Golubac).

After the **Scordisci**, this area, rich in minerals, was taken over by the **Romans**, who consolidated their power in the area and Romanised the population.

On the right bank of the Danube, they formed **limes**, an integral delimiting system (a series of small and large forts, watchtowers, partition walls, crafts centres, connected by the road they constructed also through the Iron Gates).



In the 9th century, the **Bulgarian state** grows stronger and spreads administratively to the area of the present day East Serbia and the Danube region.

In the 11th, and even more so in the 12th and 13th centuries, this area represents a highly unstable border territory packed with troops, over which crusaders pass, the conflicts of interests arise between **Byzantium**, **Hungary**, **Bulgaria**, and, by late 13th century, **Serbia**.

ESTABLISHMENT OF THE FORT

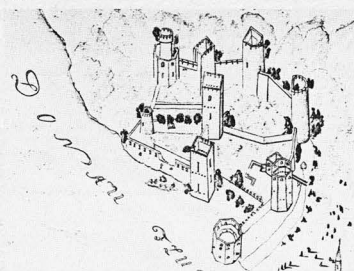
The tactical position of the fortification strongly affected its future life, characterized by **constant wars and conflicts** between the **Hungarians** and **Turks**, **Serbs** and **Turks**, and **Serbs** and **Hungarians**.

The completely reliable historical data on the establishment of fortifications are not available.

According to a group of experts, the **Romans** erected fortifications on the town site, on both sides of the Danube – **Vicus Cuppae**, in which emperor **Diocletian** resided in 299.

Golubac Fortress, the remnants of which we see today, was most probably erected by the **Serbs**, in late 13th or early 14th century, as a **strategic border fortification**.

However, it is first mentioned in documents in 1335, as a stronghold with a Hungarian garrison.



There are two legends describing its origins:

The first legend is about the erection of the town itself which, according to it, lasted 80 years, and the workers carried the stones from a nearby quarry in their bare hands to the construction site.

The second legend is about a Byzantine empress **Helena**, who, imprisoned in the tallest tower, used to feed pigeons – after which the town was named.

HISTORICAL DEVELOPEMENT AND CONTEMPORARY LOCAL CONTEXT

GOLUBAC FORTIFIED TOWN

ID card of the cultural monument:

Country: Serbia
Municipality: Golubac
Town: Golubac
Type: Cultural monument
Degree of protection: Cultural property of exceptional importance

Type: Fortified town
Owner: Republic of Serbia
Competent institution: Regional Institute for Protection of Cultural Monuments in Smederevo
Seat: Smederevo



DEVELOPMENT OF THE FORTIFICATION

STAGE 1

- Erected in the late 13th and early 14th century as a border fort, constructed by the Serbs.
- The important strategic position – on a high, inaccessible rock, it secured control over the Danube to its proprietors.
- The history of the Fortress/town is characterized by constant wars and conflicts between Hungarians, Turks, and Serbs.
- The first stage of construction of the town, the beginning of which, according to the historians, dates back to the 13th century, was probably initiated by King Dragutin.
- The erection of the upper Fortress was completed before 1335, when the northern territories of the Serbian state, including Golubac, were seized by Hungary.



STAGE 2

- In the years to come, the town was alternately Serbian and Hungarian.
- From 1355, it was probably under Hungarian rule.
- It was ruled by Prince Lazar when the Battle of Kosovo took place, but after the defeat of the Serbian army, it comes under rule of Bayezid I.
- In 1391-1392, the Hungarian army conquers the town.
- In 1402, following the Battle of Ankara, Despot Stefan Lazarević was bestowed Golubac from Hungarian King Sigismund.
- In 1427, after the death of Despot Stefan Lazarević, Golubac fell under the Turkish rule.
- During the rule of Despot Stefan, the second stage of construction of the town was also completed, namely the lower Fortress and the palace.
- The years after the death of Despot Stefan Lazarević were marked by the conflicts between the Hungarians and the Turks in Golubac surroundings.
- King Sigismund built a new town on the other side of the Danube – Laszlovar, or the city of Saint Ladislaus.
- The Hungarians attacked the Fortress from all directions and from the water. The cannons were firing at the town from Laszlovar and severely damaged it. The Turkish army occupying the town seeks aid, which is provided by the Beylerbey of Rumelia, commanding a huge number of Turkish troops.
- The large Turkish army filled the Hungarians with panic and they flee away even before the battle starts.
- Sigismund concludes a truce with the Turks who, irrespective of that, take advantage of the situation and attack the Hungarians.



STAGE 3

- After the Hungarian defeat, Golubac fell under rule of the Turks and was under their control until 1444, when Serbian Despotate was restored by the Peace of Szeged, comprising Golubac as well under the rule of Đurađ Branković.
- In 1456, after the death of Đurađ Branković, it was seized by the Turks.
- In 1481, the Hungarians managed to conquer it, only to abandon it soon after.
- Since then, until 1867, Golubac is almost continuously under the Turkish rule.
- From 1688 to 1690, it was shortly ruled by the Austrians.
- The Fortress was under the rule of Serbian rebels during Koča's frontier and the First Serbian Uprising.
- Gradually, to the South West of the fort, a suburb evolved, which was inhabited by mid 19th century.



STAGE 4

- In 1867, after it was handed over to Prince Mihailo, Golubac was abandoned.
- In 1926, immediately after the WW I, a trunk road was cut through the rock atop of which the Fortress seats, and which runs through the Fortress, making use of both main cart gates of the Fortress. This road is a shortcut between Serbia and the eastern parts of the Balkan Peninsula, so that it frequently happens that semi-trailer trucks struggle through Fortress, which can hardly pass through the gates.
- From 1969 to 1987, research and conservation works took place.
- In 1974, due to construction of Đerdap Hydroelectric Power Station on the Danube, the river level nearby Golubac rose, flooding the lowest parts of the town.



CONTEMPORAR LOCAL CONTEXT

TOURISM POTENTIAL

The following sights are located up to 50km from the Fortress:

- 1 – Iron Gates gorge
- 2 – Đerdap Lake
- 3 – Lepenski Vir
- 4 – Silver Lake
- 5 – Traian's Plaque from the early 2nd century is located at a distance of 90 km.



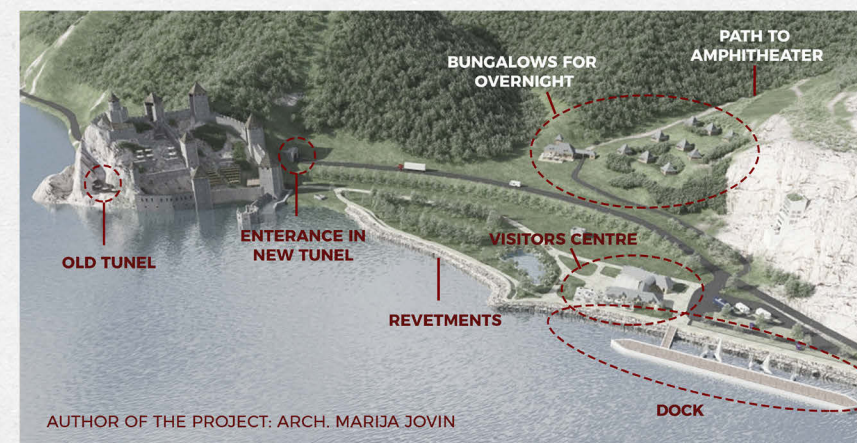
The objectives of the Master Plan for the "Lower Danube Region" also include:

- a consolidated tourist offering of the Lower Danube Region;
- creation of "Golubac Fortress" tourism brand.



RECONSTRUCTION PROJECT

- Restoration of the Fortress – 10 towers and the palace;
- Construction of a new ring road and a new tunnel outside the Fortress, in order to close the existing road which runs through the Fortress;
- Construction of a visitor centre for reception of tourists;
- Construction of river dikes and a wharf;
- Construction of an amphitheatre at the site of the present day quarry



Refurbishment of the Fortress itself includes reconstruction of 10 towers, ramparts and walls, renovation of wooden elements and roofs, palace, conversion of the existing tunnel, as well as construction of an amphitheatre with a seating capacity of 250, a belvedere, and a footpath and a bike path.

The reconstruction will facilitate the towers and other facilities to fulfil their function of representing the cultural and historical heritage. The project includes relocation of the existing road running through the Fortress, and construction of a new tunnel outside the Fortress and a new ring road. In this manner, traffic will be relocated from the Fortress area.

The project also envisages construction of a visitor centre in the immediate vicinity to the Fortress, which also includes bungalows for overnight accommodation. Renovation of the old quarry is planned, and its transformation into an amphitheatre with a seating capacity of 3,000, while the old stone crusher will become an artists' pavilion.

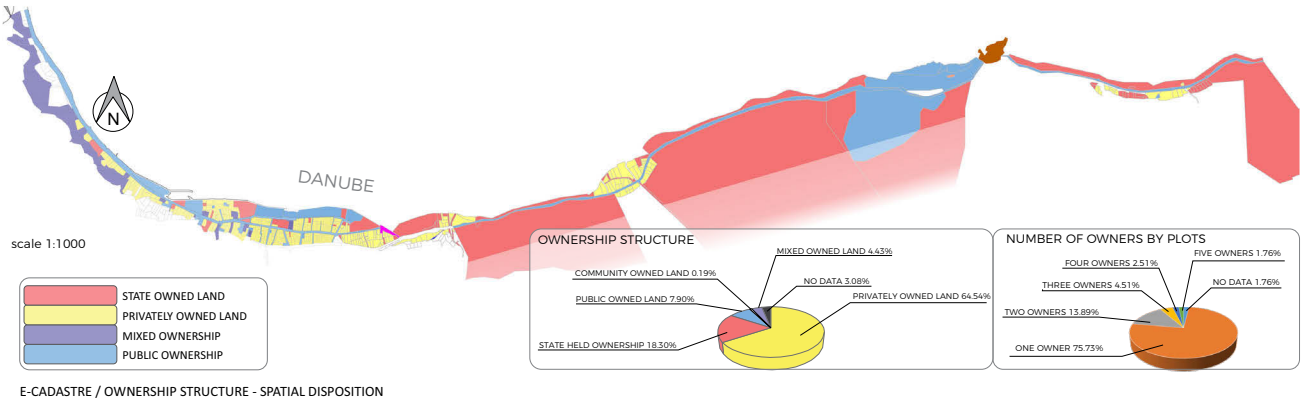
It has also been planned to construct a wharf for tourist boats in extension of the embankment, by the visitor centre.



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Academic year: 2016/2017



Milica Ristović, Milica Djurdjević, Stefan Hadži Arsenović



AREA AND OWNERSHIP

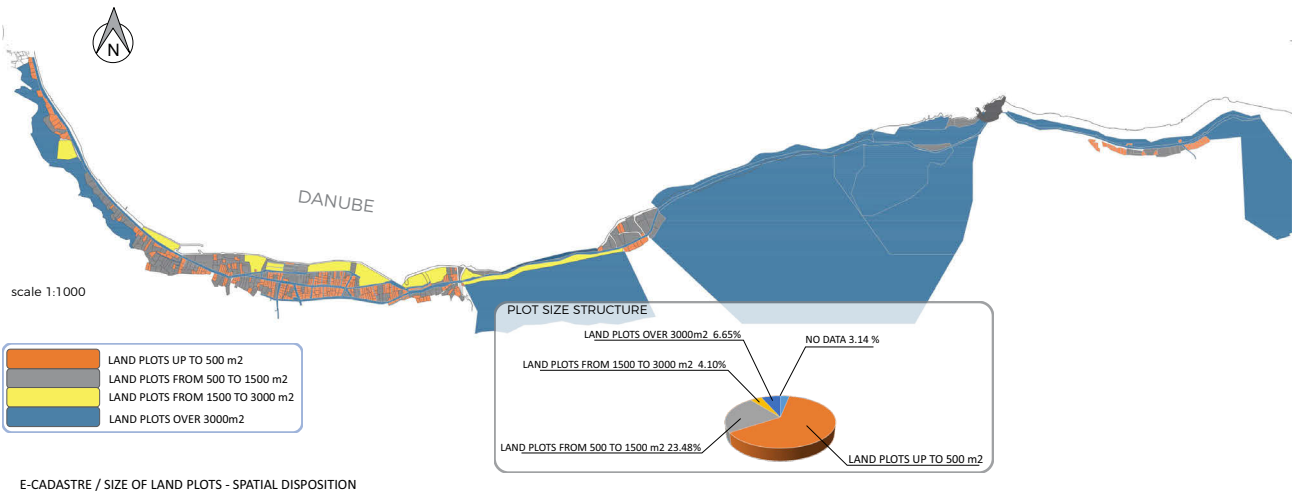
The private plots are predominant in the town centre. They are crossed by roads that are manifested as public property. The peripheral parts of Golubac are specific for mixed ownership, where several types of owners are overlapped (Derdap Hydroelectric Power Plant, Agricultural Cooperatives, Golubac Municipality, Sribajšume Public Company). Large plot areas towards the Golubac Fortress are owned by the state of Serbia and Sribajšume Public Company owns the right to land. An exception is the area around the Golubac Fortress, which is surrounded by publicly owned land plots. The land plots that are located in the riverside of the town centre are medium-sized land plots (from 500 to 3000 m²). A new land emerged due to the riverside embankments and land expansion on the account of the river. Its area capacity can be used for building purposes, but it is located in a zone of the National Park of Derdap. Therefore it is necessary to further consider the land purpose.



SHAPE OF LAND PLOTS

Most of the plots in the town centre are of regular rectangular shape with residential buildings without any associated recreational facilities. Several triangular plots that exist are a result of land subdivision and two plots are located in the town centre, while the others are located in the riverside area at the exit from the town. Irregular non-jagged land plots are large agricultural lands that are situated in the hinterland of Golubac. The irregular jagged land plots have been created by dividing large agricultural land in small parts.

The jagged land located on the sloped terrain at the entrance to the urban centre of Golubac from Belgrade direction. The land plot is divided between 12 different owners including the state and the municipality. The forest predominantly covers the land plot. The jagged land plot in the centre of Golubac on the Danube bank. A hotel is located at the land plot. The land plots that make the town park and quay on the Danube consist of four regularly-shaped land plots and six irregular non-jagged land plots. The land plots that make a wide area of Golubac are irregularly shaped (non-jagged) and have mixed ownership (public and state).



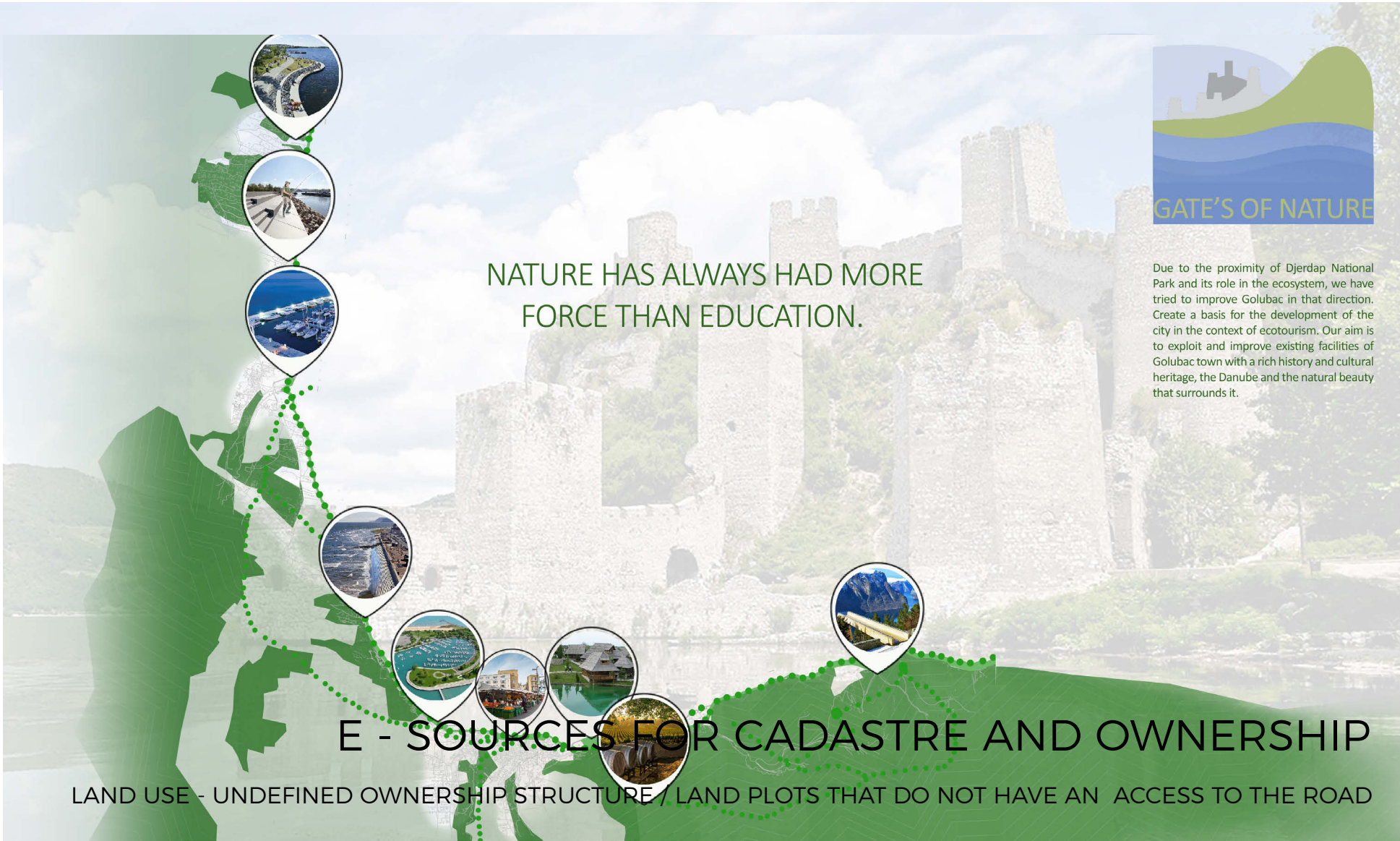
SIZE OF LAND PLOTS

The current plots meet the basic needs of the population of Golubac. The land plots of up to 500 m² dominate the town centre, which are suitable for residential construction. Bigger investments in the form of hotels and business incubators are impossible because of the lack of adequate area of land plots in the town centre. The peripheral parts do not restrict the area capacity for construction, but the morphology of the terrain significantly increases the financial costs of construction.

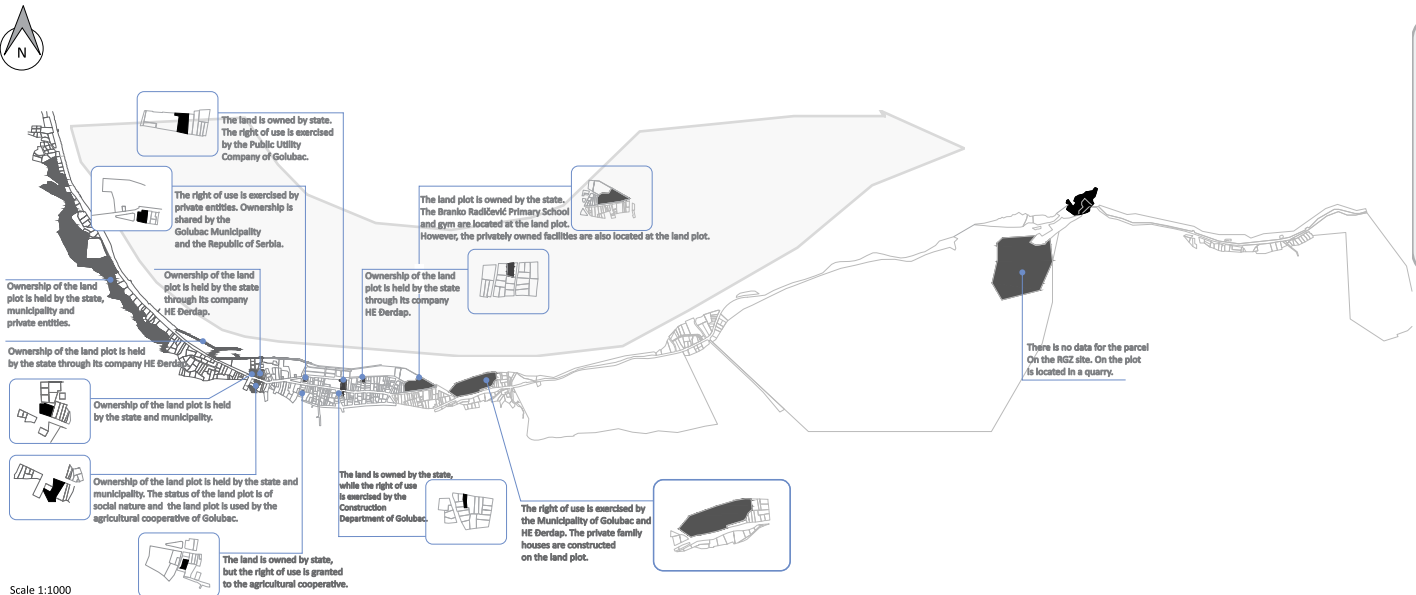


Author: Mladen Kostadinović 22011/16; Mandić Nevena 22019/16; Mićanović Srđan 22011/16
Supervisor: Aleksandra Đukić; Ivica Nikolić; Branislav Antić; Tamara Radić
Academic year: 2016/2017



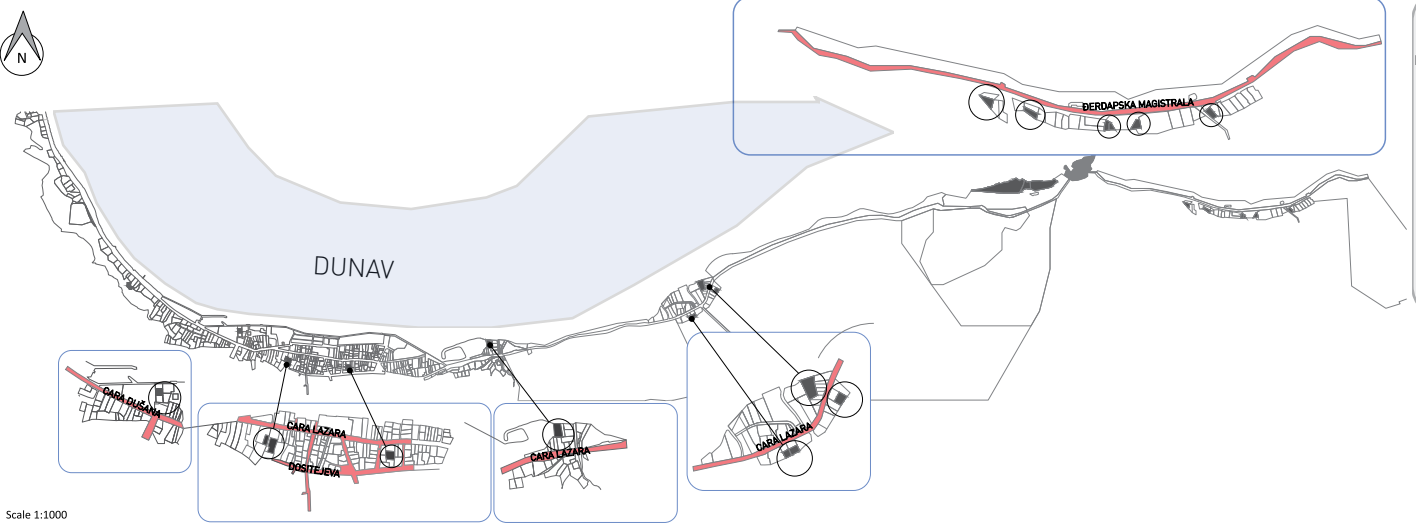


Due to the proximity of Djerdap National Park and its role in the ecosystem, we have tried to improve Golubac in that direction. Create a basis for the development of the city in the context of ecotourism. Our aim is to exploit and improve existing facilities of Golubac town with a rich history and cultural heritage, the Danube and the natural beauty that surrounds it.



CONCLUSION
LAND USE / UNDEFINED OWNERSHIP STRUCTURE

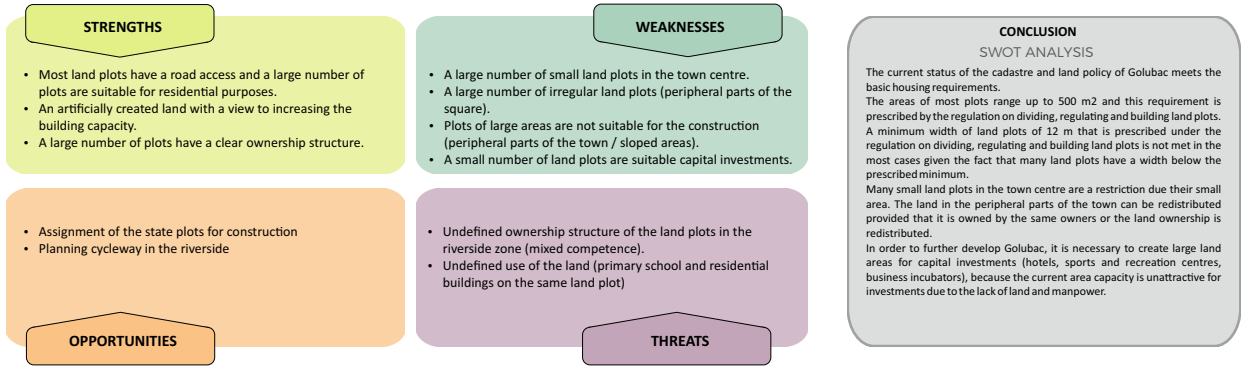
The number of land plots with unclear ownership is small compared to the total number of land plots in the Municipality of Golubac (a total of 13). However, some land plots occupy large areas (peripheral parts of the town centre and the area around the Golubac Fortress). A number of land plots in the town centre belongs to the state, but are used as a land of cooperative. Based on this we can conclude that there is a mutual overlap of interests and needs between the state and the municipality. This overlap can cause a conflict of interests.



CONCLUSION
LAND PLOTS THAT DO NOT HAVE AN ACCESS TO THE ROAD

A small number of land plots do not have an access to the road. The land plots that have no access to the road are built from the pre-existing land plots and their areas do not exceed 400 m2. The facilities that are constructed on these land plots are a problem. According to the building rules, the land plots that do not have a road access cannot be building plots. In these cases, it often happens that the public land and often privately owned land are usurped due to the access. Even though there are 6 land plots that do not have a road access, only three land plots have facilities, while others are used agricultural lands. The redistribution of land is possible for the purpose of its enlarging.

SWOT ANALYSIS



Author:	Nevena Mandić 22019/16, Kostadinović Mladen 22011/16, Srđan Mićanović 22010/16
Supervisor:	Aleksandra Đukić, Branislav Antonić, Ivica Nikolić, Tamara Radić
Academic year:	2016/2017





Internet access – anyone can post a photo (Google Earth, etc.) / a good advertisement
There is a tourist webpage with descriptions
There is a webpage of the town
There is a webpage of the fortress
There are different unofficial webpages
There are photographs of farmhouses and the rural tourism
Photographs with descriptions of the fortress in foreign languages

Internet access – anyone can post a photograph / lack of appropriate filters for validation of information
The official website of the town of Golubac is incomplete, as far as photographs are concerned
Not enough photographs of the interspace (town streets, route to the fortress, etc.)
Farmhouses in the area are not marked
Poor promotion of the cycling route
Poor promotion of other activities



Social networks – users' photos / a good advertisement
Facebook page of the Tourist Organisation of Golubac has its
Possibility to access other people's photos Stock photos on online maps

Incorrectly marked locations on social networks/"Golubac in Bosnia", "nearby Valjevo", etc. Unverified data
Poor promotion of accommodation offerings on social networks



E-MAPPING / PHOTOGRAPHY

RESEARCH

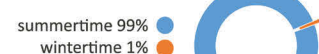
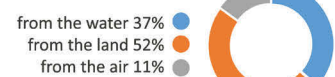


SWOT ANALYSIS

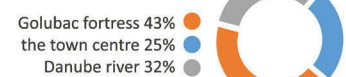
_CONCLUSION

Large quantities of material exist. This area has a huge potential, as far as the nature, points of interest, and activities are concerned. The problem lies in the lack of people responsible for checking some things, identifying false information, as well as for publishing as many (professional) photographs as possible, depicting Golubac as a town suitable for vacation, walking, hiking, sailing, etc., given that they already, on official websites, state what can be seen or done here, but do not provide sufficient supporting and interesting photographs to attract attention of local population, as well as Romanian and Bulgarian, and other foreign tourists, coming from all around the world to visit our country.

The approximate amount of photos of the fortress that are captured:
sources: www.google.com, google earth, www.bing.com, www.facebook.com, instagram



The approximate amount of photos of Golubac fortress and its surroundings on the internet:



Authors: Jana Milovanović 22013/2016, Milica Zukanović 22020/2016
Supervisors: prof. dr Aleksandra Đukić, asst Branislav Antonić, Ivica Nikolić
Academic year: 2016/2017



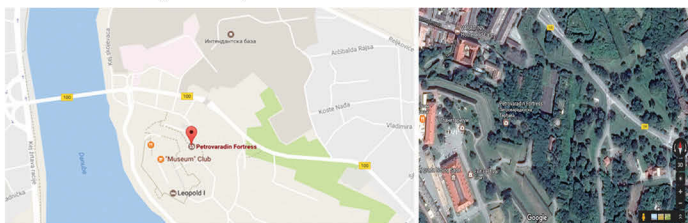
E-MAPPING

OTHER FORTRESSES

Here we explored how other states and cities promote their fortresses through photos on the internet. We came to a conclusion that, compared to other fortresses in Serbia (Kalemegdan and Petrovaradin) and wider, Golubac lacks photo diversity. It is clear that the city is less visited than the others. Furthermore, the official promotion website is significantly different from presentations of compared examples.

E-MAPPING / PHOTOGRAPHY RESEARCH

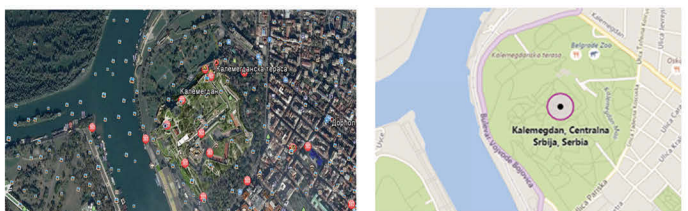
Petrovaradin fortress / Novi Sad / Serbia



professional photos taken 27%
amateur photos taken 73%



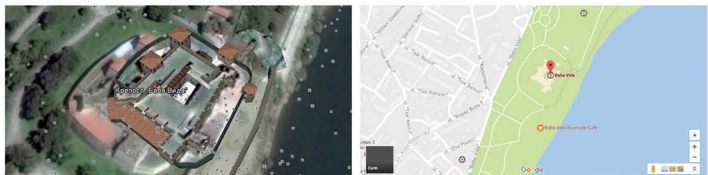
Kalemegdan fortress / Belgrade / Serbia



professional photos taken 10%
amateur photos taken 90%



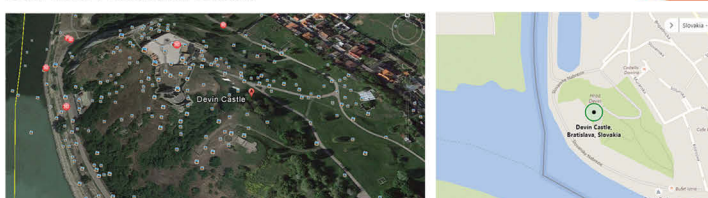
Baba Vida / Vidin / Bulgaria



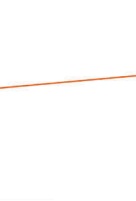
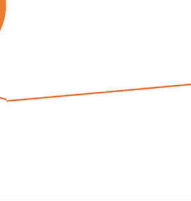
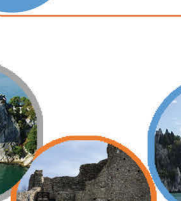
professional photos taken 14%
amateur photos taken 86%



Devin castle / Bratislava / Slovakia



professional photos taken 20%
amateur photos taken 80%

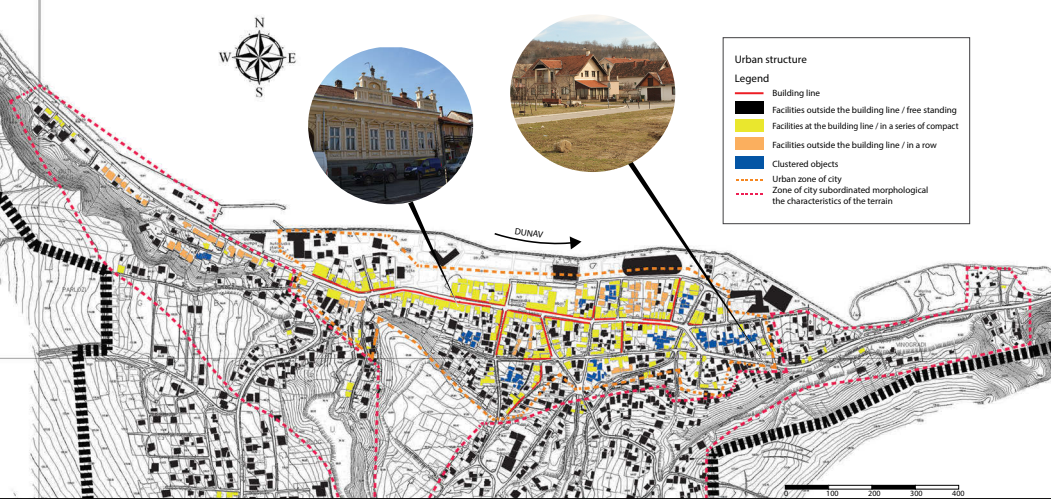


Authors: Jana Milovanović 22013/2016, Milica Zukanović 22020/2016
Supervisors: prof. dr Aleksandra Đukić, asst Branislav Antić, Ivica Nikolić
Academic year: 2016/2017



INTRODUCTORY RESEARCH - BUILDING PATTERN

Urban structure



- Facilities outside the building line / free standing
They are located mainly in the inner parts of the blocks, without specific structured logically layout.

- Facilities at the building line / in a row, compact
They are located on the peripheral parts of blocks, positioned building up to building making a row along a construction line.

- Facilities outside the building line / in a row.
They are located in the inner parts of the blocks, mostly positioned house by house along plot dividing line.

- Compact facilities
Facilities that are located in the inner part of the blocks and are characterized by the fact that are chaotically distributed facility by facility.

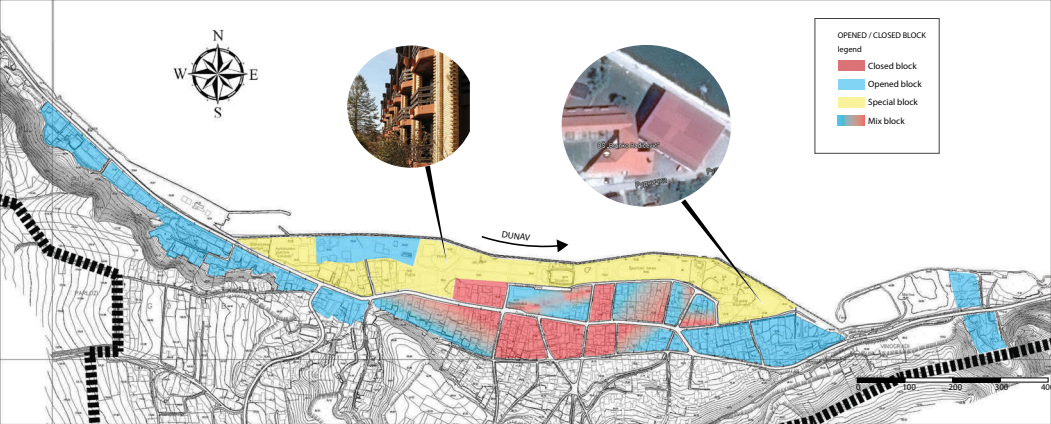
- Urbanized area of the city
Zone which has formed urban matrix

- Zone of the city subordinated to geomorphological characteristics of the terrain
Built in rural zone of the city, which is due to the slope, exposure and soil structure designed and field custom.

Swot

strength	weakness
Urbanized city structure Preserved building heritage in the central part of the city Protected Golubac fortress and Tuman monastery Existence of catering facilities with adequate capacity to receive guests Great variety of building heritage, as well as the potential for tourism The existence of the sports hall offers sports and recreational opportunities in addition to tourism	Floors not exceed G + 1 as the reason of the lack of urbanization of the city Not protected entire building heritage, only fortress Golubac Tuman Monastery and some buildings in the city center The rural part of the city is built unplanned, which can be perceived through the positioning of facilities, anatomy and urban structure The main road through the center of Golubac disrupts the environment of building heritage of Golubac city downtown and fortress Golubac Golubac, Tuman Monastery and some of the facilities in the city downtown
opportunity	threat
Building heritage through tourism network of Golubac Protection and enhancement of the building heritage by the participants Bringing investors in city of Golubac as tourist potential for investment.	Inadequate reconstruction and revitalization of building heritage The morphological characteristics of terrain prevent further spread of the urban core Illegally constructed buildings in the area of national parks Illegally constructed buildings in the rural part of the city violate the identity and type of construction

Block typology



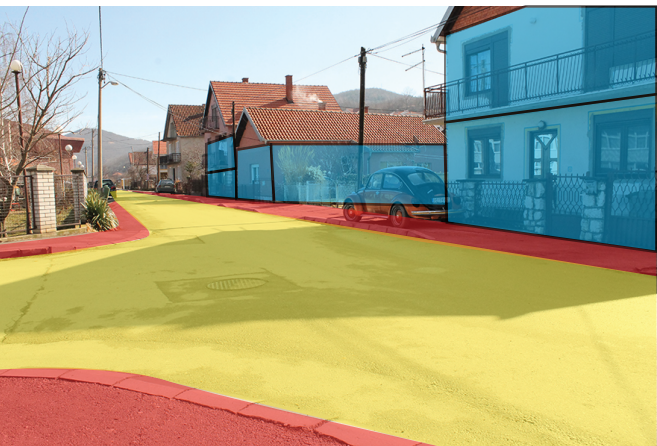
- Closed blocks
Include urbanized city structure, where facilities are mainly in a row and on the building line.

- Open blocks
Include rural part of the city and mainly objects that are free standing outside the building line.

- Special blocks
Characterized by specific development, such as hotel (high rise buildings), sports stadiums, hall of sports, park, quay, green area settled for football etc.

- Mixed blocks
Mixed blocks include parts of urbanized structure where located facilities in a row and freestanding facilities.

STREETS



Streets are in urbanized structure with dual sidewalks without the line of trees and with nonporous materials such as concrete elements and asphalt. Floors largely varies from G, G + 1 and G + 1 Attick.

Floring



Floring

- G (ground floor)
Floring of the facilities consisting of mainly sports facilities and a gas station

- G - G + 1 Attick
The most common floring, mainly residential houses, not represented by Moravian type of construction but more contemporary simple construction and design.

G + 1
School, municipality, The post office Srijbe.

G + 2
Hotel, Commercial bank.

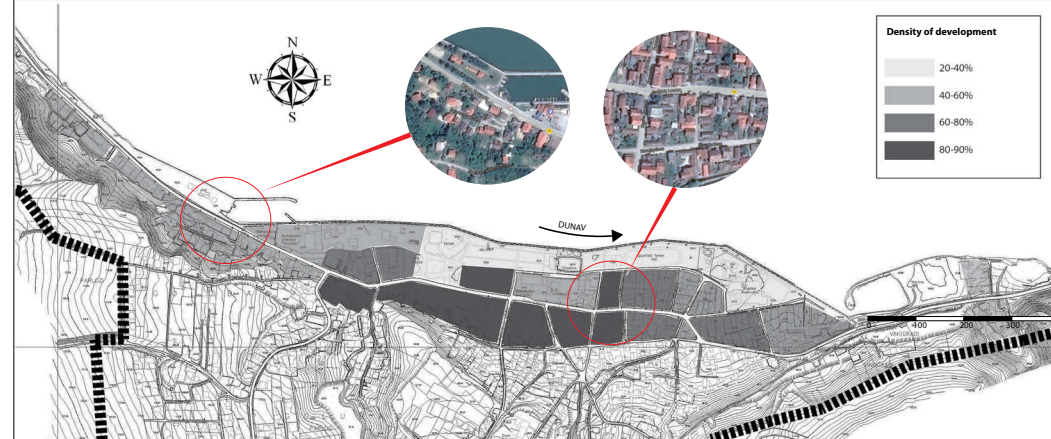
G + 4
Hotel Bogoević

SQUARE



The square is rectangular, with diagonal traced pedestrian paths, with large flowerpots on whose walls are sitting benches. Square surrounded by facilities mainly intended for commercial purposes and public buildings, modern buildings (the hotel) and old architecture

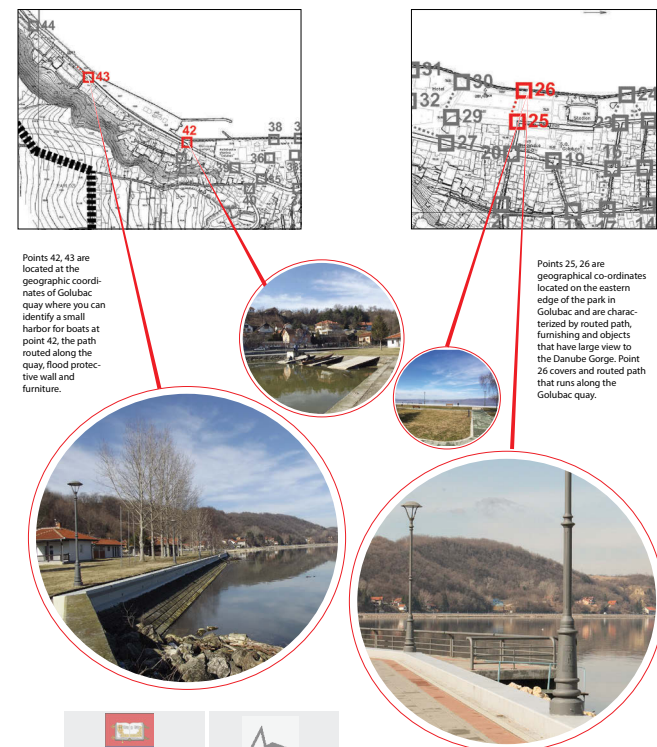
Density of development



Density of development is the largest in the central part of the town, where moving to rural part is gradually reduced the level of development.

Besides coastal part where development is with intention lower because it includes areas of quay, park and green area.

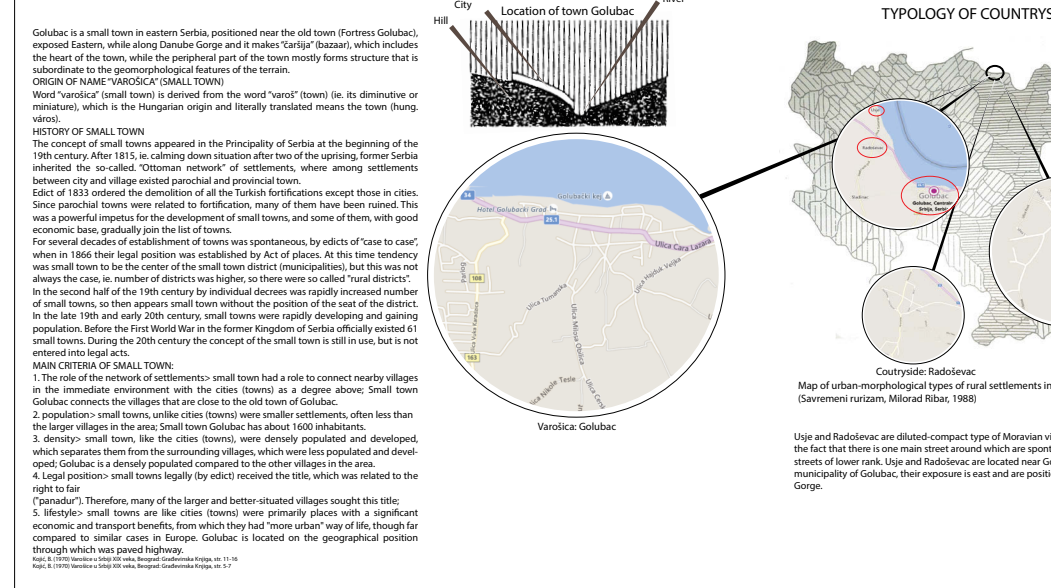
SPACE SINTAX



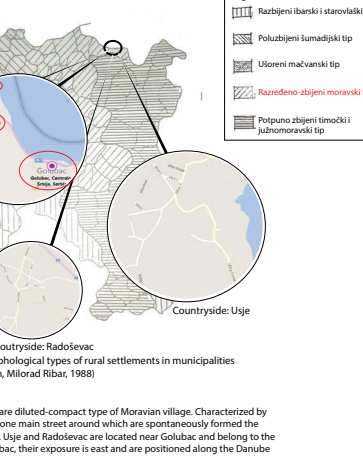
Points 42, 43 are located at the geographic coordinates of Golubac quay where you can identify a small harbor for boats at point 42, the path routed along the quay, flood protective wall and furniture.

Points 25, 26 are geographical co-ordinates located on the eastern edge of the park in Golubac and are characterized by routed path, furnishing and objects that have large view to the Danube Gorge. Point 26 covers and routed path that runs along the Golubac quay.

TPOLOGY OF THE SETTLEMENT



TPOLOGY OF COUNTRYSIDES



Ušje and Radoševac are diluted-compact type of Moravian village. Characterized by the fact that there is one main street around which are spontaneously formed the streets of lower rank. Ušje and Radoševac are located near Golubac and belong to the municipality of Golubac, their exposure is east and are positioned along the Danube Gorge.

Author: Sara Kovačević, Antonio Mareš
Supervisor: dr. Aleksandra Đukić, Ivica Nikolić, Branislav Antonić i Tamara Radčić
Academic year: 2016/17

Interreg
Danube Transnational Programme
DANUrB

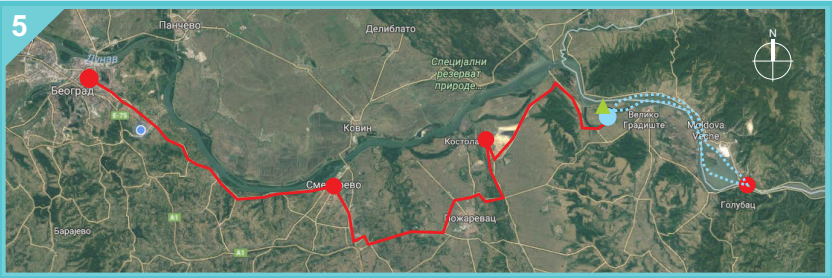
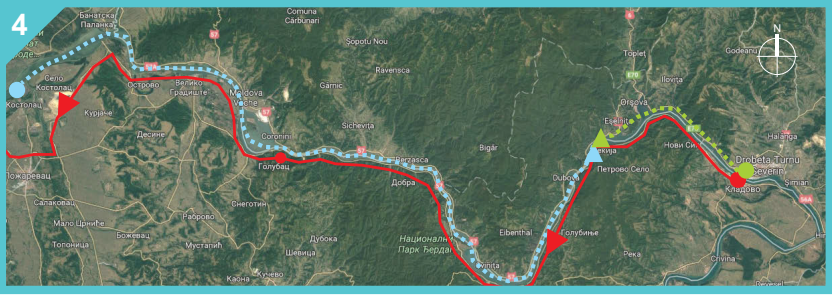
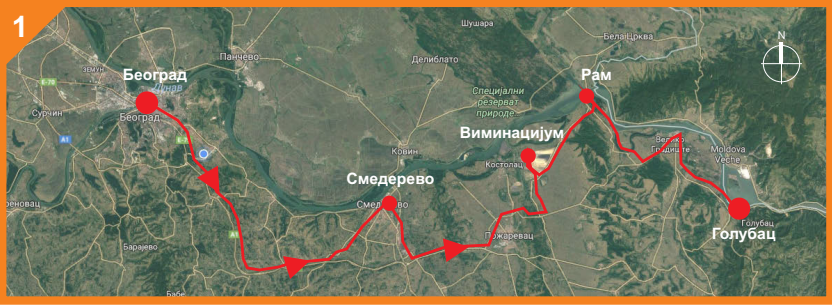
METODOLOGY OF URBAN DESIGN

GOLUBAC: CITY OF EXTREMES

Thematic reseraches

Thematic research:
Touristic tours and routes

ANALYSIS OF TOURS



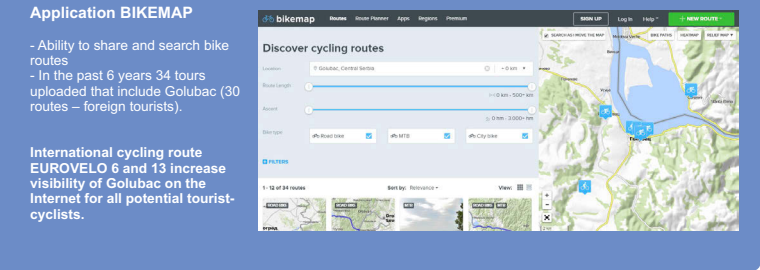
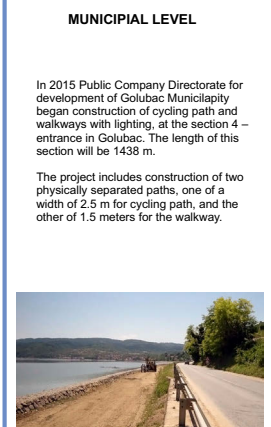
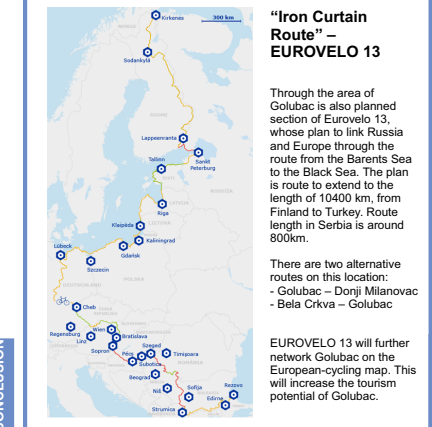
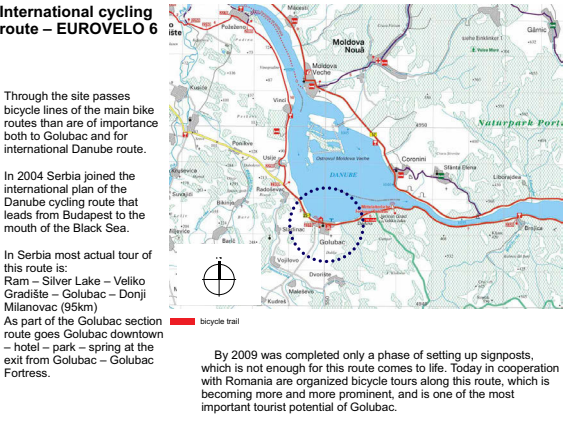
Spreadsheet of Golubac position in tourist tours

	Traces of Ancient Past-bus,one day trip	Bicycle tour	Danube Cruise- 3 days	Cruising to Golubac-bus/boat, 1 day	Mountain Climbing
the starting point					
end point					
stopping/viewpoint					
transit point					

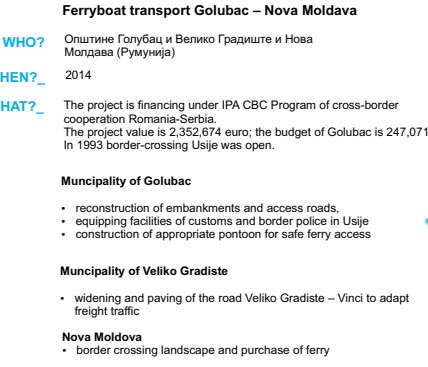
In organized tourist tours, which are mostly organized from Belgrade, Golubac is usually only stop along the way or the end point with stopping of 15min - 2hr.

Points and reasons for stopping – Golubac Fortress (short pause and photographing)
– Break for the lunch in the town (up to 2 hours)

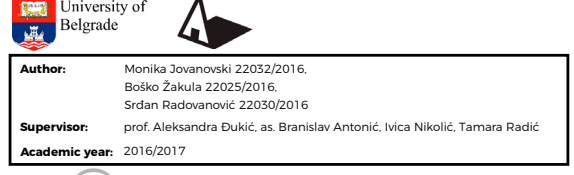
BICYCLE TRAFFIC



WATER TRANSPORTATION



A major weakness of Golubac Municipality is unused river potential for sports, river traffic, river crossings.



Monika Jovanovski, Boško Žakula, Srđan Radovanović

METODOLOGY OF URBAN DESIGN

GOLUBAC: CITY OF EXTREMES

Thematic reseraches

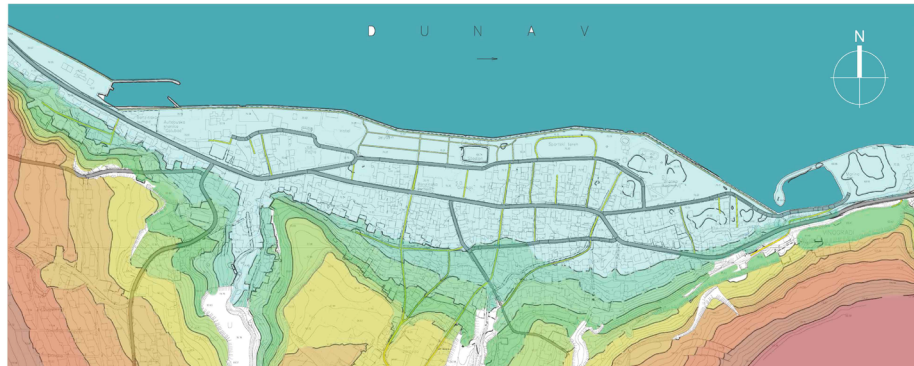
PEDESTRIAN TRAFFIC



PEDESTRIAN MOVEMENT

- width of street profile is small for road rank
- terrain slope is an obstacle for pedestrians
- the main road is an obstacle and a danger to pedestrians
- pedestrian paths are well-maintained

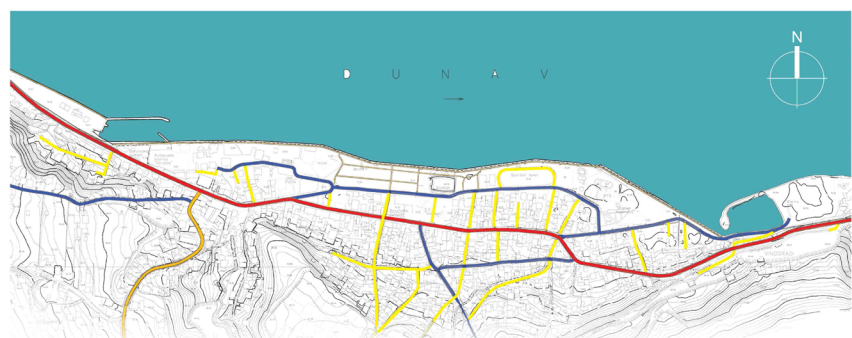
The system of pedestrian paths is positively realized, with minor defects as few critical points that users avoid due to unfavourable slope, lack of sidewalks, heavy traffic etc.



TERRAIN SLOPE MAP

Terrain in the city of Golubac is considered steep and unappealing to pedestrian traffic. This map serves as an argument to spatial analysis by Kevin Lynch and shows the advantages the city needs to use. Plateau by the river is a great place for developing tourist facilities.

MOTOR TRANSPORT



After the street analysis, we find streets inadequately dimensioned compared to their ranking. Freight traffic is necessary to relocate from the downtown for further development of the site. The system of footpaths is well implemented, with minor defects as few critical points that users avoid due to unfavourable slope, lack of sidewalks, heavy traffic etc.

TIPOLOGY OF THE ROADS

- the main road, two lanes of 3.5 meters
- main settlement road, two lanes of 3-2.5m
- regional road, two lanes at 2.5m
- promenade 3-4m

- REGIONAL ROAD
- MAIN SETTLEMENT ROAD
- ACCESS ROAD
- DANUBE PROMENADE



MAP OF THE PASSANGER TRAFFIC DISTRIBUTION

- Village / settlement
- Intercity transport
number of lines illustrates the number of routes
- Local transport
number of lines illustrates the number of routes
- Highway road

The map shows the coverage of long-distance (blue) and local (green) passenger traffic.

By reading the maps we came to know that there are surrounding villages which are not included in the network of passenger traffic and that there is a potential resurgence of Golubac. Another thing that is noticeable is the neglect of the other highway road, normal to the Danube. Lack of good connections with central Serbia is an economic problem, which is characterized by smaller tourist offer, exchange of goods etc. The third drawback is the neglect of Golubac fortress as long-distance and as a local bus station.

SWOT ANALYSIS of touristic tours and routes

SWOT ANALYSIS



STRENGTHS

1. The existence of the main road
2. The existence of Golubac fortress as an important historical site and tourist attraction
3. The immediate vicinity of the Danube as the most important water European road – Pan-European Corridor 7
4. Passing the international cycling route EUROVEL 6



OPPORTUNITIES

1. Construction and activating of international cycling route EUROVEL 13
2. Strengthening border relations with Romania
3. Strengthening tourism cooperation with Romania
4. Possibility of building a marina with pontoon pier for larger yachts
5. Landscaping the coast along Municipality of Golubac
6. Activation of the border crossing Usje-Nova Moldova

WEAKNESSES

1. Lack of administration of local bus station
2. The absence of a database of tours
3. Underused floating potential of the Danube along Golubac Municipality
4. Unregulated coastal and port
5. The morphology of the terrain as a barrier to further development and construction of Golubac

THREATS

1. Position of the Danube as a threat to the development of the immediate coastal zone due to high water levels dilation and seasonal ice erosion
2. Continuous devastation of fortress due to the proximity of the highway
3. Unfavourable impact of freight transport on the driveway quality of the main road along Golubac
4. Unfavourable impact of the high intensity of traffic on air quality along the main road

CONCLUSION

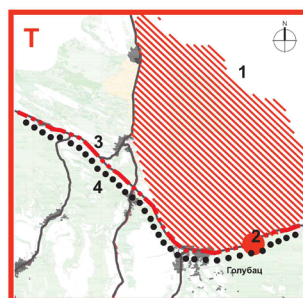
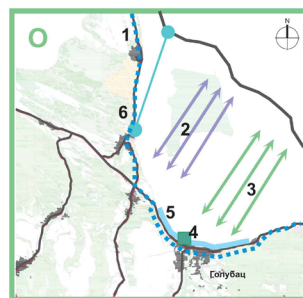
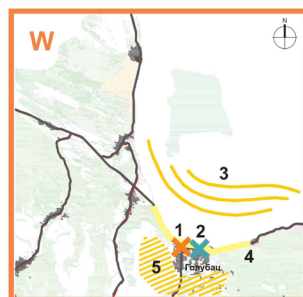
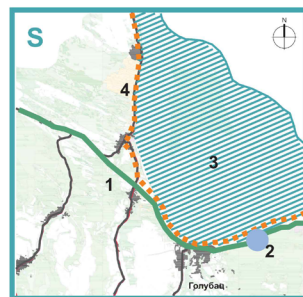
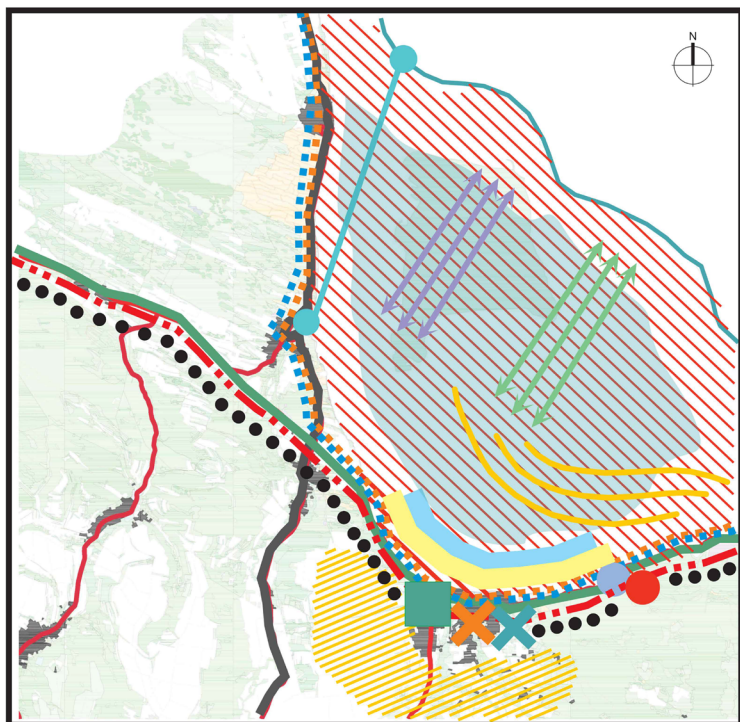
Golubac position with its international potential as well as cultural and historical heritage are the main advantages of this location. The Danube bicycle route and river routes ensures the circulation of people and goods that need to be used largely both on the narrow and wider territory of location.

Possibilities for better use the potential of Golubac were stopped by infrastructure and that is primary field of interventions where should operate. Waterway transport is limited with the features of the existing marina; system of bike trail is incomplete as well as additional services such as bike services and storeroom. Opportunity for development of the site is also the plan Eurovelo 13 that should further internationally network this location.

Weaknesses of locations come from the national level of administration, including inconsistency in the implementation of plans, incomplete approach to development strategies, lack of funds etc. In addition to systemic deficiencies of planning and realization, the weakness of enforcement is the morphology of the terrain as well. Unsuitable terrain that requires significantly more investment is a major obstacle, especially for the economic status of Branicevo district.

Threats of the location reflect in high freight traffic, which creates a negative impact on the entire territory, both to infrastructure and to users. In addition to the human factor, natural characteristics of the Danube complicate development and seasonally threaten coastal region.

Map of sublimation



University of Belgrade



Author: Monika Jovanovski 22032/2016, Boško Žakula 22025/2016, Srđan Radovanović 22030/2016
Supervisor: prof. Aleksandra Đukić, as. Branislav Antonić, Ivica Nikolić, Tamara Radić
Academic year: 2016/2017



Monika Jovanovski, Boško Žakula, Srđan Radovanović

Document analysis
PGR_General Regulation Plan of Golubac

Current condition

Current basis
land use

- In relation to the current basic land use, the land is divided in building, forest, water and agricultural land.
- The current building land includes developed and undeveloped land, which according to 2002 General Plan of Golubac was intended for construction. According to the plan, the existing building land occupies approximately 134 ha or 30% of the territory covered by the plan.
- The existing forest land occupies 36.30 ha, or about 8% of the territory covered by the plan.
- The forest land is located along the waterways of Bradarac creek and Grobljanski creek and along the slopes between "Vinograd" and "Dedine".
- The existing water land covers about 245.04 hectares or about 57% of the territory covered by the plan.
- The agricultural land occupies 21.49 ha, or about 6% of the territory covered by the plan and these are the mainly the peripheral areas in the eastern and southern border of the plan.

Approximately planned condition

Approximately planned
basic
land use

- The building land approximately covers 144.26 ha. In accordance with the land use regime, the building land is divided in land for public and other use.
- The building land for public use occupies 41.59 ha, or 29% of the building area. The building area for other use occupies 102.66 ha or 71% of the building area. The building land consumption rate is approximately 627m² per capita, which can be assessed as optimal given the nature of the village and the current construction status.

Current condition

Building land for public
use:
Primary education
Culture and information
Sports and recreation
Public greenery

- The Branko Radičević Primary School was built in 1986. The school occupies around 0.80,82 ha (a part of the cadastral parcel no. 6822, Golubac Cadastrol Municipality) and is attended by 433 pupils (with the department in Dobro) from Golubac and surrounding villages.
- The cultural activities are concentrated in the building at the Cara Lazara Street, in which the cinema, Veljko Dugošević National Library and reading room are located. The Information Centre of the Tourist Organisation is also situated in this building.
- The following sports and recreational facilities are built in the village:
 - Sports fields, on the banks of the Danube, between the park and children's institution and occupy an area of 1,23.97ha;
 - Football field "Derdap" FC, with additional facilities in an area of 0,91.77ha.
 - Park includes landscaped green area, which is located in the built urban area, the size of which exceeds 1 ha, which is used for a relaxation and walk.
- Landscaped public areas in the village are:
 - Park area between the building of the municipal administration and the Danube, which builds on the square in front of the hotel and occupies an area of 0,74.00ha;
 - Square in front of the municipal administration building (which has not yet been landscaped, because the fuel station has not been completely removed) occupying an area of 0,43.52ha.

Approximately planned condition

Approximately planned
condition

- Building land for other uses covers areas intended for housing, business, tourism development, commercial activities and similar needs.
- Housing development involves completion of the construction of the units whose construction has been initiated, while the largest areas are planned in the villages Parlog and Prošće. In the hilly part, housing will maintain the character of family housing, except that in the coming period, it would be desirable to focus on houses in rows, semi-detached houses, etc. in addition to the independent buildings. Taking into account the existing multi-family housing at the Cara Lazara and Cara Dusan streets, it is reasonable to allow an increase in the vertical regulation of buildings and construction of multi-family housing of an optimum number of floors - GF + 3.
- In the riverside zone, the port construction, landscaping of the promenade with a cycleway, reconstruction of embankments and landscaping of the area around the sailing club and the "lower marine" (fishing village) create conditions for the quality receipt of tourists who arrived by water, as well as for tourists and residents. The potential site that can be transformed in tourist accommodation capacity in this area is the existing bus station (after the construction of a bypass road and the relocation of the bus station to the new location).
- New areas for tourist accommodation facilities with commercial activities are planned on undeveloped land, near the archaeological site (which will be converted in the archaeological park after the survey).

PDR_Detailed Regulation Plan of the Danube from
the Vinci Tourist Village to the Golubac Fortress

Current condition

Current basis
land use

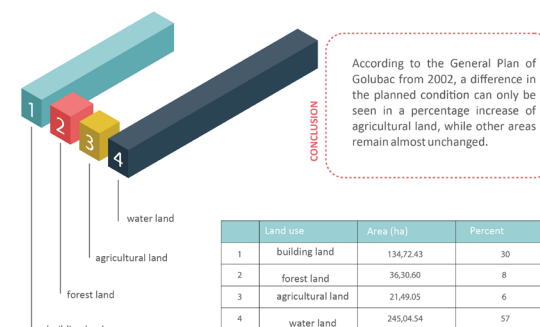
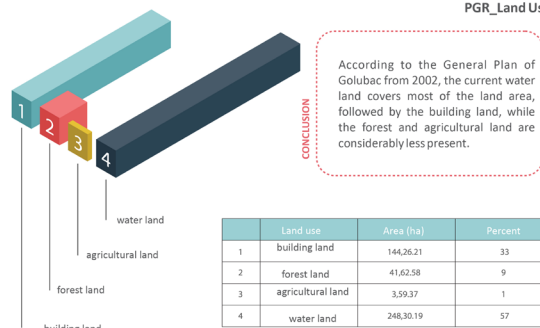
- The building land (in the construction area), water and forest land are included in the scope of the plan.
- The existing building land covers the areas with constructed facilities (of public and other uses) and undeveloped land.
- The forest land includes the complex of forests at the slope of "Velika Čuka" between the PGR borders area of Golubac village and PDR border area for the revitalization of the Golubac Fortress.
- The water land covers the land under waterways – Danube and its tributary Tuzane River.

Approximately planned condition

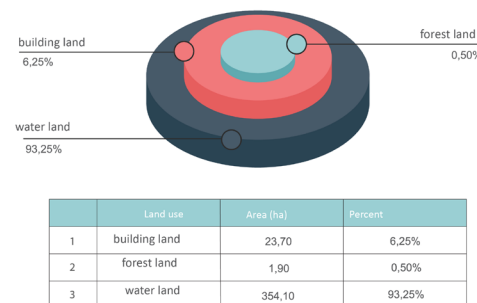
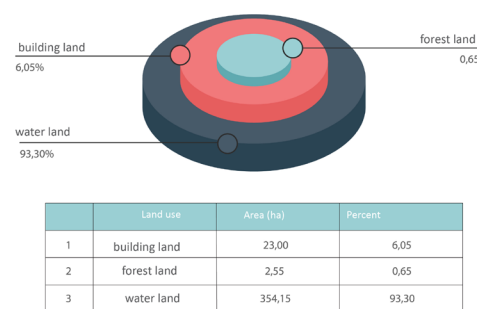
Building land for other uses

- The area of use of the planned and current condition shows that the forest land has decreased by 0.15%, while the other areas minimally increased. Therefore, no major changes in the current condition are planned.

PGR_Land Use Table



PDR_Land Use Table



DOCK OF CULTURE

DOCUMENT ANALYSIS AND LANDMARKS

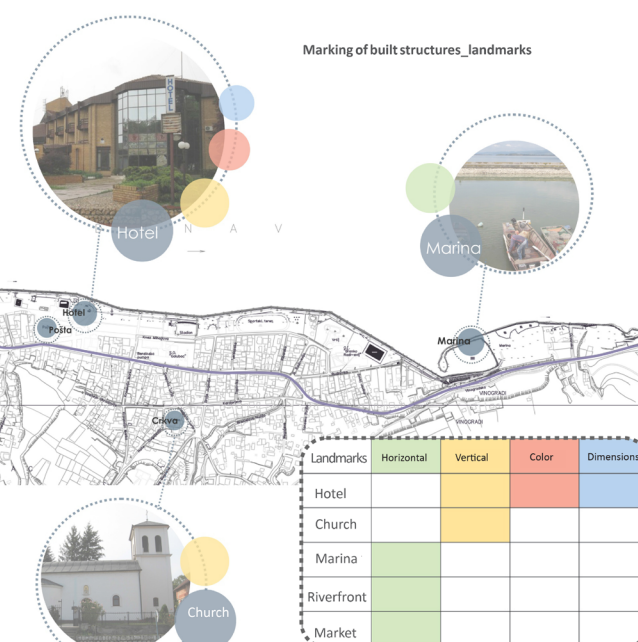
Marking of built structures_landmarks



Marking of the ground floor along the main road



Marking of built structures_landmarks



Landmarks	Horizontal	Vertical	Color	Dimensions
Hotel				
Church				
Marina				
Riverfront				
Market				



Author: Vanja Vujanović 22012/2016, Ivana Savić 22016/2016, Mila Stojanović 22018/2016
Supervisor: prof.dr Aleksandra Dukuć, ass. Ivica Nikolić, saradnici Branislav Antonić, Tamara Radić
Academic year: Prolećni semestar 2016/2017, Master Integralni Urbanizam, 1. godina





6. SURVEYING THE IMAGE OF GOLUBAC

Marija Cvetković, teaching assistant
and PhD candidate

In accordance with a plenty of information and instructions to conduct a survey by a questionnaire, theoretical focus to form a survey and a questionnaire was done by customisation of the principles of City image theory. It is created by Kevin Lynch, famous American urban planner, and published in the book “The Image of the City” in 1960. According to Kevin Lynch there is a public image of any given city which is the overlap of many individual images. Such group images are necessary if an individual is to operate successfully within his environment. This analysis limits itself to the effects of physical, perceptible objects. There are other influences on imageability, such as the social meaning of an area, its function, its history, or even its name. The theory describes that a city image in the eyes of an observer is formed by five physical forms as its elements (Lynch, 1960):

1. Paths are the channels along which the observer customarily, occasionally, or potentially moves. They may be streets, walkways, transit lines, canals, railroads. For many people, these are the predominant elements in their image.
2. Edges are the linear elements not used or considered as paths to the observer. They are boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls.
3. Districts are the medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters ‘inside of’, and which are recognizable as having some common, identifying character. Always identifiable from the inside, they are also used for exterior reference if visible from the outside.

4. Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is travelling. They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another, or even simple concentrations.
5. Landmarks are another type of point reference, but in this case the observer does not enter within them, they are external. They are usually a rather simply defined physical object: building, sign, store, or mountain.

МЕТОДОЛОГИЈА УРБАНОГ ДИЗАЈНА 2016-17.

АНКЕТНА ПИТАЊА

ПУТАЊЕ

1.1 Које улице најчешће користите за кретање?

☒ а) Цара Душана (Магистрала - западни део)

☐ б) Карађорђева (Магистрала - источни део)

☐ в) Дунавски кеј

☐ г) Вука Караџића (улица уз пијаву)

☐ д) _____

1.2 Коју путању користите до кеја?

☐ а) Краљевића Марка (пролаз поред општине)

☒ б) Пролаз преко трга

☐ в) Бранка Радичевића (пролаз поред вртића)

☐ г) _____

☐ д) Не идем до кеја

ГРАНИЦЕ / ИВИЦЕ

2.1 Које улице и друге препреке ограничавају Ваше кретање у приобалном делу Голупца?

☐ а) Магистрала кроз насеље

☒ б) Парк између кеја и остатка града

☐ в) Стрмина око улица Доситејева и Карађорђева

☐ г) Стрмина код Ул. Вука Караџића / пијаве

☐ д) _____

2.2 Које потезе избегавате због великих стрмина?

☐ а) Улица Вука Караџића код пијаве

☒ б) Улица Краљевића Марка изнад општине

☐ в) Улица деспота Вука код цркве

☐ г) Улица браће Југовића код цркве

☐ д) _____

СУСЕДСТВА / КРАЈЕВИ / ПРОСТОРНЕ ЦЕЛИНЕ

3.1 Које суседство / крај / просторну целину издвајате по препознатљивости на ширем подручју Голупца?

☐ а) Кеј и приобаље

☐ б) Целину око трга

☐ в) Целину око марине

☒ г) Простор Голубачке тврђаве

☐ д) _____

3.2 Који крај / просторну целину сматрате најмање безбеднијим ноћу?

☐ а) Простор око кеја

☒ б) Простор парка између кеја и града

☐ в) Простор око трга

☐ г) Простор око магистрале

☐ д) Простор око Голубачке тврђаве

☐ е) _____

ЧВОРИШТА

4.1 На ком чворишту најрадије боравите или се састајете током лепог дана?

☐ а) Голубачка тврђава

☐ б) Градски трг

☒ в) Марина и кеј око ње

☐ г) Градски парк

☐ д) Градска пијавица

☐ е) _____

4.2 На ком чворишту најрадије боравите зими / по лошем времену?

☐ а) Голубачка тврђава

☒ б) Градски трг

☐ в) Марина и кеј око ње

☐ г) Градски парк

☐ д) Градска пијавица

☐ е) _____

РЕПЕРИ / ДОМИНАНТЕ / ОБЕЛЕЖЈА

5.1 Које је по Вашем мишљењу главно обележје Голупца?

☒ а) Голубачка тврђава

☐ б) Лепоћа и ширина Дунава испред града

☐ в) Градски трг

☐ г) Комплекс општине и суседних зграда

☐ д) _____

5.2 Када бисте правили разгледницу Голупца где би је сте најрадије сликали?

НА ГРАДСКОМ КЕЈУ

Fig. 1: The hardcopy sample of fulfilled questionnaire.

40

Landmarks distinguish in this group, because they are the only elements to be external and utterly symbolic; the other ones are more spatial elements for an observer. Furthermore, according to K. Lynch (1981), the concentration of landmarks in urban space is greatly important for dynamic city image – maximal distance between landmarks should be 200-300 metres.

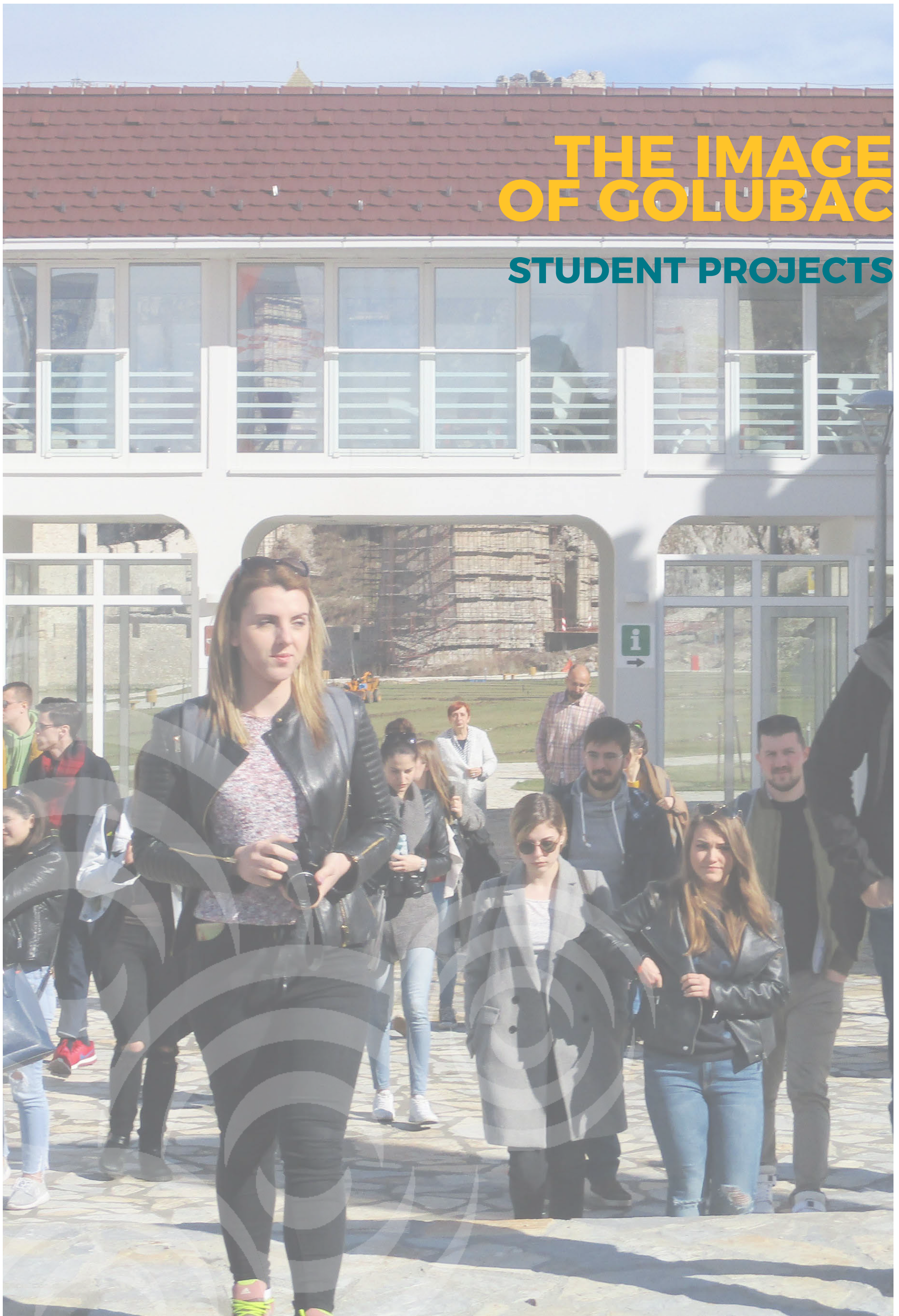
SURVEY WITH QUESTIONNAIRE: A survey is a well known and very common method in social sciences as well as in the scientific disciplines where social sciences are applied as theoretical foundations. Urban planning and design are among them. The survey in Golubac was planned by staff with a simplified and shorter questionnaire, where every element of city image theory was a base for two questions. A special aspiration was made to make the questionnaire understandable and receptive for the wide range of respondents. The targeted threshold was 10% of permanent town population (or >150 respondents). Almost all questions are thereby shaped as semi-closed, where several concrete choices, well-known physical elements in Golubac, are given and the last one was left as a blank for additional and unexpected choice. Respondents could choose just one choice. The last question was different, because it was settled as a specific “synthesis” of the previous ones. Hence, there were no given choices in the question and a respondent could give one answer on his/her own.

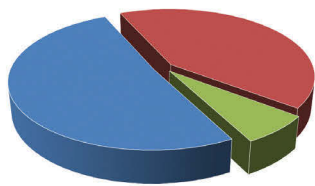


Fig. 2: The survey with questionnaire in Golubac (source: B. Antonić).

THE IMAGE OF GOLUBAC

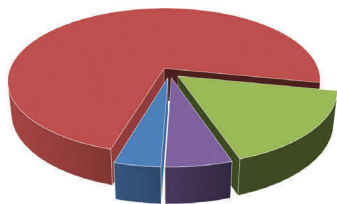
STUDENT PROJECTS





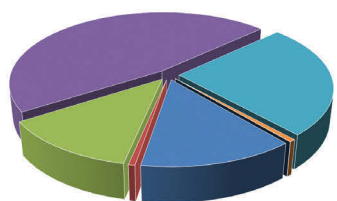
Gender

51%	Male
42%	Female
7%	Not answered



Age

4%	Minor (<18 god.)
74%	Working age (19-65 god.)
17%	Elderly person (>65 god.)
6%	Not answered



Professional qualifications

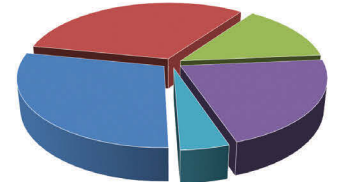
1%	Not finished primary school
13%	Finished primary school
47%	Finished high school
25%	Finished college
1%	Finished Specialist / Master / PhD
14%	Not answered

Which streets do you usually use?

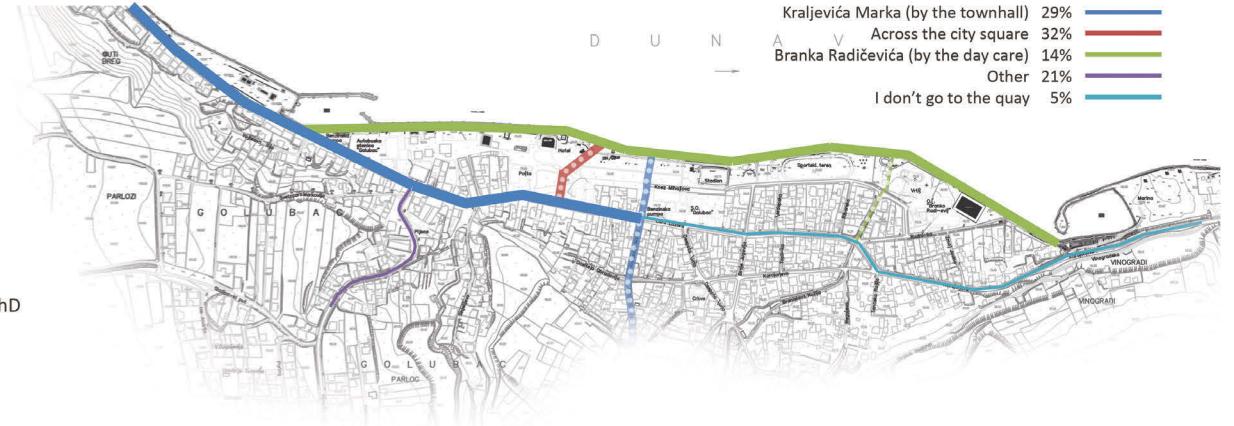


39%	Cara Dušana (highway - west)
8%	Karađorđeva (highway - east)
37%	Danube quay
8%	Vuka Karadžića (street bay the market)
8%	Other

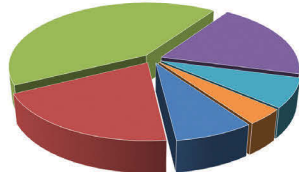
Which path do you use to get to the quay?



29%	Kraljevića Marka (by the townhall)
32%	Across the city square
14%	Branka Radičevića (by the day care)
21%	Other
5%	I don't go to the quay

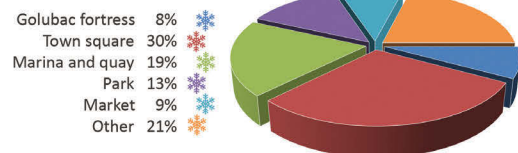


In what part of the city do you prefer to stay or meet up during the nice days?



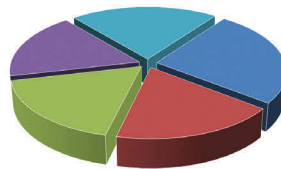
8%	Golubac fortress
20%	Town square
42%	Marina and quay
20%	Park
7%	Market
4%	Other

In what part of the city do you prefer to stay or meet up during the bad weather?



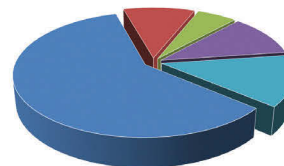
8%	Golubac fortress
30%	Town square
19%	Marina and quay
13%	Park
9%	Market
21%	Other

What paths do you avoid because of the very steep slopes?

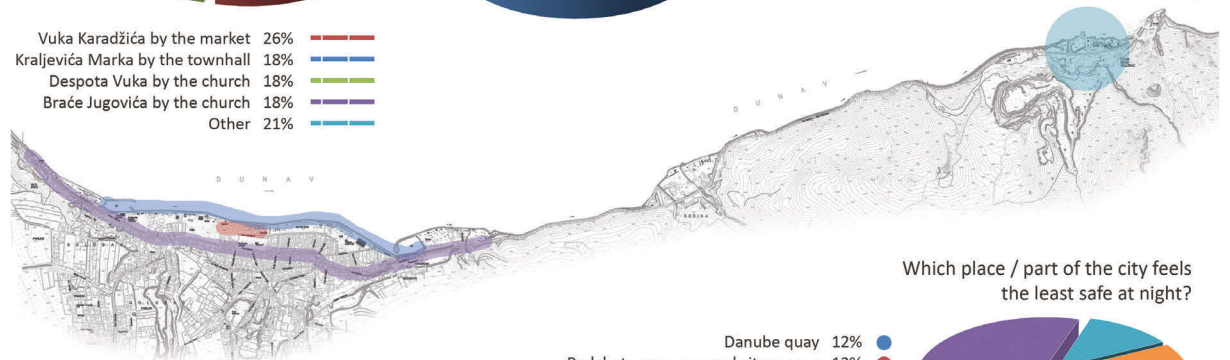


26%	Vuka Karadžića by the market
18%	Kraljevića Marka by the townhall
18%	Despota Vuka by the church
18%	Braće Jugovića by the church
21%	Other

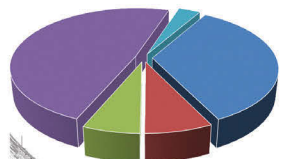
Which streets and other obstacles limit your movement in the coastal part of the town?



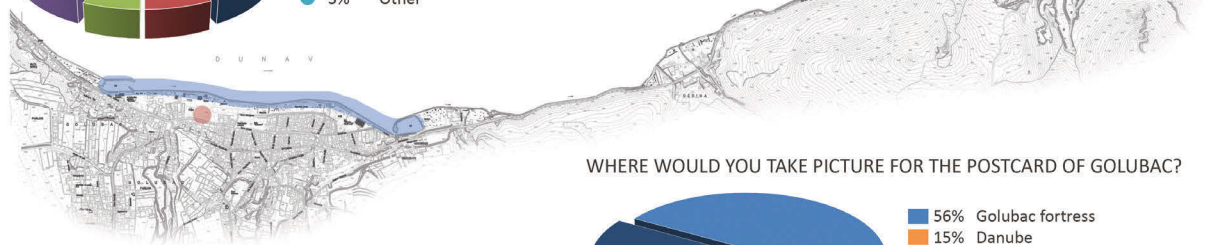
60%	Highway through the town
10%	Park between quay and the town
6%	Steep streets around Dositejeva i Karađorđeva
11%	Steep street around Ul. Vuka Karadžića / market
13%	other



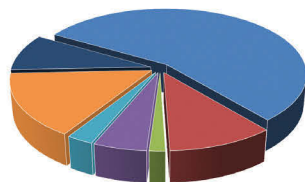
What neighborhood / part of the city single out as recognisable in the wider area of Golubac?



34%	Quay and Coastal
7%	City square
6%	Space around marina
49%	Golubac fortress
3%	Other

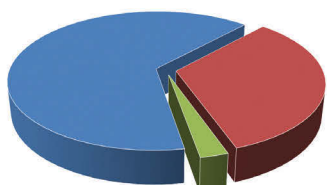


WHERE WOULD YOU TAKE PICTURE FOR THE POSTCARD OF GOLUBAC?



56%	Golubac fortress
15%	Danube
11%	Danube quay
9%	Entrance to the city
5%	Square
3%	Monastery
2%	Hotel

What in your opinion is the main feature of Golubac?



65%	Golubac fortress
33%	Beauty of Danube river
3%	City square
0%	Township and adjoining buildings
0%	Rest



7. FORMING THE SPACE SYNTAX OF GOLUBAC

Jelena Marić, teaching assistant and PhD student

In order to plan and design cities first we need In order to plan and design cities first we need to understand them. Different techniques are used to achieve a better and more comprehensive understanding of a city, its patterns, movement and development. One of the new, but rather effective technique is the space syntax. Built on mathematical algorithms and geospatial computer technology, space syntax provides for analysis of spatial configurations. As a very significant tool it has presented an improvement used in different fields, such as: architecture, urban design, planning, transportation and interior design (Al Sayed et al, 2013). The idea was firstly introduced by Bill Hillier, a professor at The Bartlett School of Architecture, University College London (UCL 20 years ago. Together with Julienne Hanson he wrote a book called “The Social Logic of Space” (1981) (Jacoby,2006).

Spatial syntax is an analysis of spatial configurations measured during one or more selected characteristic periods. In space syntax, the spaces are understood as voids such as streets, squares, rooms and fields, between walls, fences and other things that restrain pedestrian movement or the visual field. In the case of urban research, it consists of the following steps (Hillier, 1999): 1) selected urban area as a network broken into nodes; 2) the analysis is based on the choices of users' movement throughout the area; 3) choices of the users are represented in schematic maps (Hiller, Stonor, 2010). However, space syntax cannot measure the character of a city or a building; it also lacks the 3D perception (Ratti, 2004). While this method is a useful tool for detecting different kind of spatial changes and characteristics, the interpretation of the results from this analysis

must be done in accordance with the social aspects considering human behavior in open spaces (van Nes, 2014).

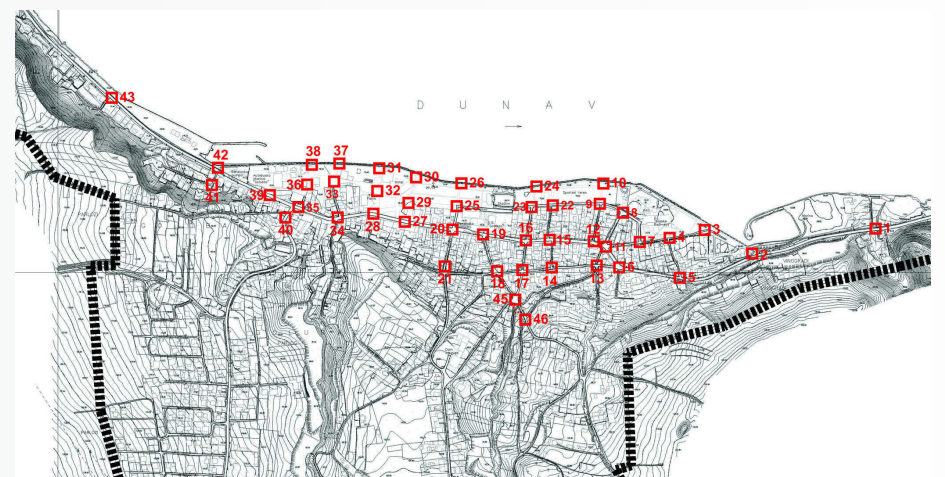


Fig. 1: Spatial syntax: network of nodes selected for the counting

Regarding the case of Golubac, a space syntax method was conducted in March 2, 2017, by the programme staff and 21 students. First, the urban fabric of Golubac centre was divided into 44 nodes in total representing street intersections. The date for the research was intentionally chosen because it was the only market day in Golubac in a week, thus enabling high concentration of people in the centre and the biggest pressure on urban fabric. The counting of pedestrians, cyclists, cars and long/heavy road vehicles was conducted in two 60-minutes periods. After successful measurement were taken, all of the gathered data was processed using statistic tests in MC Excel programme and an online platform for data collected in situ. The next step required from students to set-up the numbers for all investigated issues and form the thematic maps.

During the research different limitations were observed such as: 1) the offer and variety of “leisure and free time” related activities are usually problematic in small towns such as Golubac; 2) the day of investigations was in March, i.e. out of summer holiday and tourist

season and 3) important locations, such as Golubac fortress, were excluded because they do not belong to the city centre. Analysing the gathered data results showed some places are significantly more used by people (pedestrians, cyclist, drivers, and passengers) than others. The most frequent street in Golubac is that which concurs with the state road No IB34 along the Danube, which connects Lower Danube region in Serbia with rest of the country. One of the least occupied place is the area along the Danube quay due to limited access for vehicles. Western half of Golubac centre is much more used than eastern part, even though this part is closer to Golubac fortress. The other subjects are more present – car and pedestrians are almost the same by numbers in many cases. However, there was a huge gap between pedestrians and other subjects. Cyclists and all types of vehicles tended to use the state road, which is also the widest street in the town. At contrary, pedestrian movement make much more complex and dispersed network. In the main street and, especially, in its part around the main square with the highest concentration of central facilities, the number of pedestrians and other observed subject is usually equal.



Fig. 2: Spatial syntax: the volunteer (right) counts pedestrians, cyclists and vehicles in the middle of related crossroad.

These results were useful and significant for the overall study of the Golubac city area and provided some qualitative data that can be used in different development strategies and urban regeneration projects.

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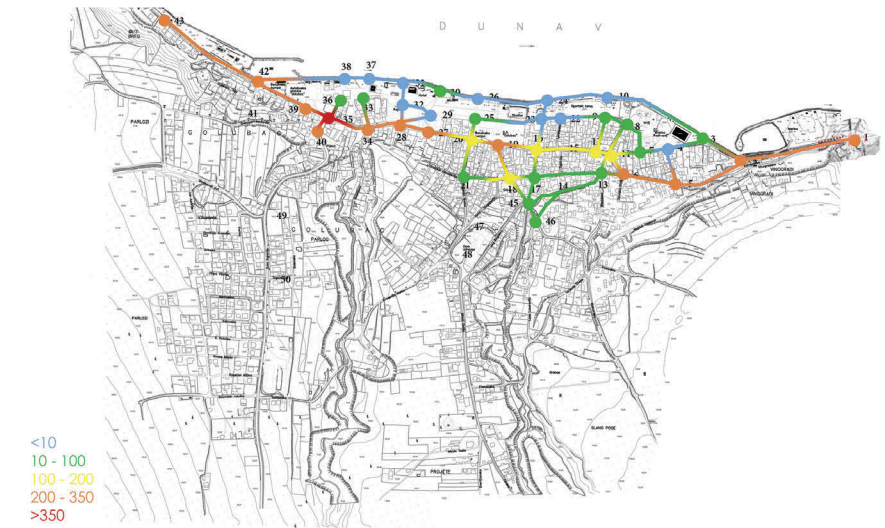
THE SPACE SYNTAX OF GOLUBAC

STUDENT PROJECTS

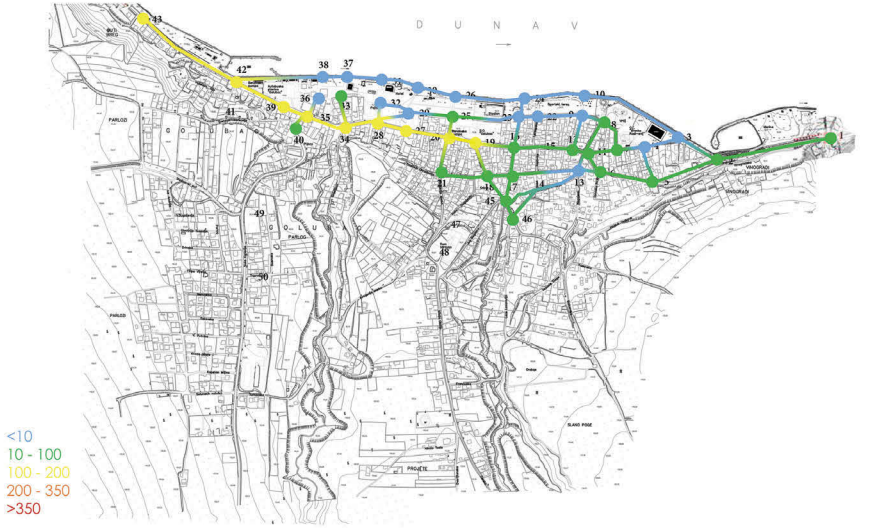




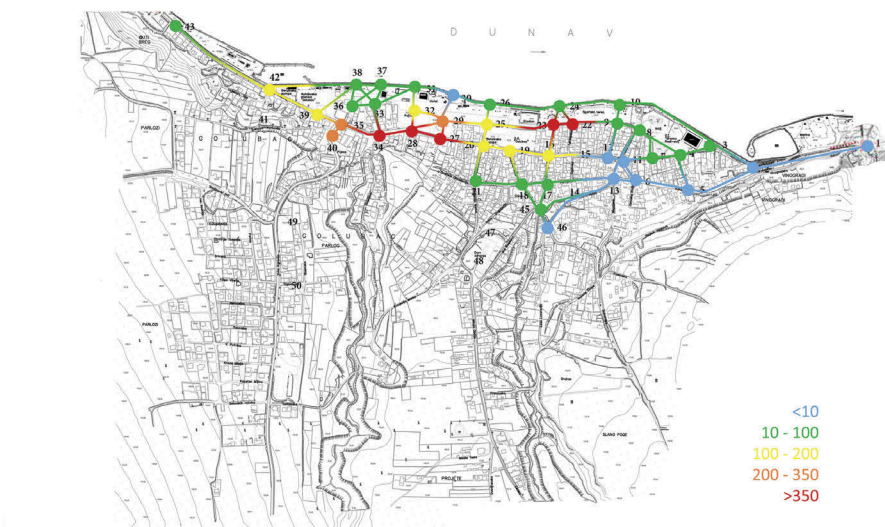
CARS / WORKDAY / 9:30-10:30 AM



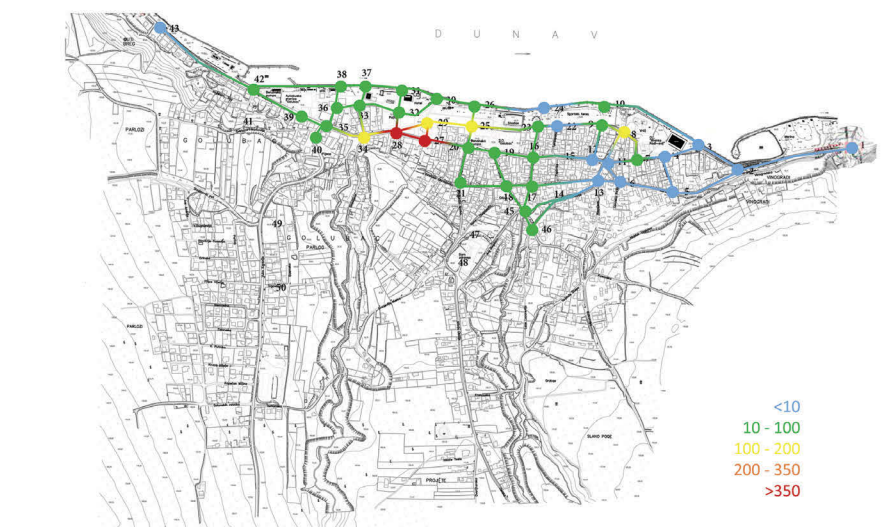
CARS / WORKDAY / 2:00-3:00 PM



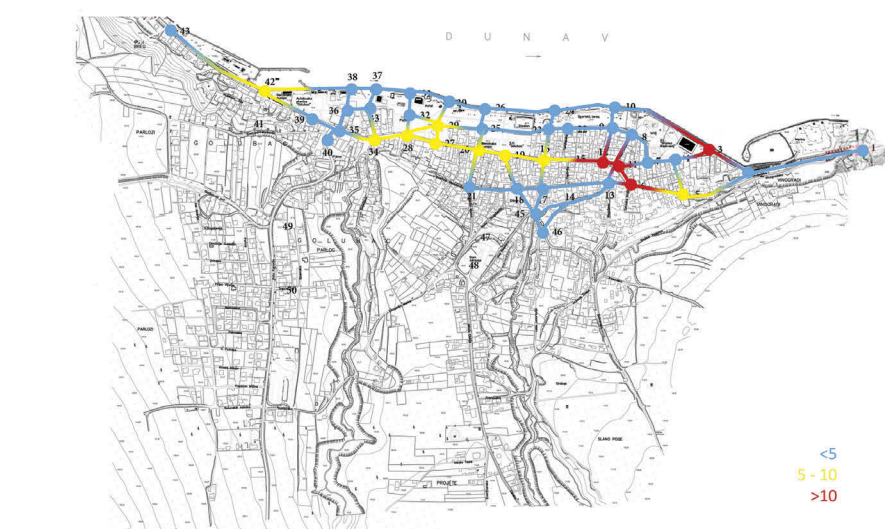
PEDESTRIANS / WORKDAY / 9:30-10:30 AM



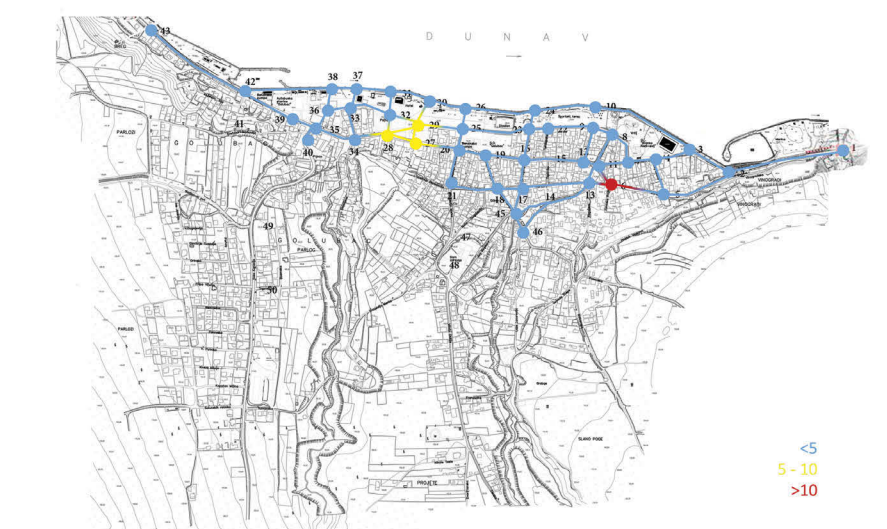
PEDESTRIANS / WORKDAY / 2:00-3:00 PM



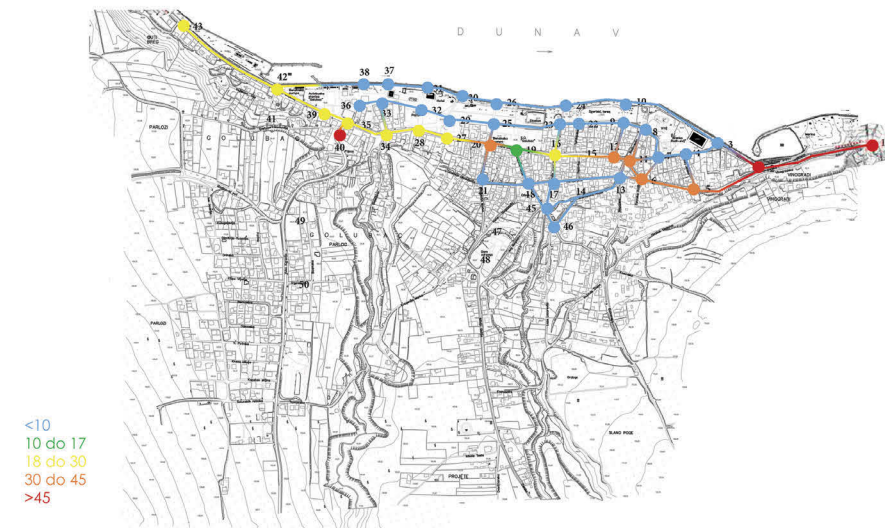
BICYCLES / WORKDAY / 9:30-10:30 AM



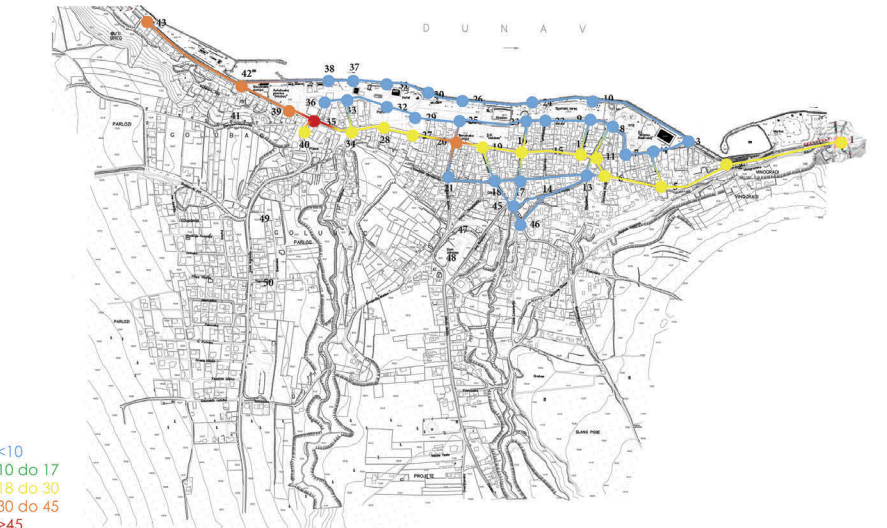
BICYCLES / WORKDAY / 2:00-3:00 PM



CARGO VEHICLES / WORKDAY / 9:30-10:30 AM



CARGO VEHICLES / WORKDAY / 2:00-3:00 PM



8. SUMMING IN SWOT ANALYSIS

Dr. Branislav Antonić, teaching assistant

The assessment of current state of Golubac Town and its vicinity was given in the form of SWOT analysis. The SWOT analysis is a well-known method derived from economics science, but it has become prominent in urban studies and planning (Mu, Xiaoguang & Ming, 2007). It is a strategic planning technique. It is based on the determination of four types of features that influence on the planning and, eventually, competitiveness of a certain entity (Dess, 2018):

- Strengths: advantageous features of the entity;
- Weaknesses: disadvantageous features of the entity;
- Opportunities: features in the environment of the entity that it could exploit to its advantage; and
- Threats: features in the environment of the entity that present a disadvantage for it.

In the case of student research in Golubac Micro-region, two steps of SWOT analysis were conducted. In the first step all student groups formed their own SWOT analyses, derived from their thematic research. The implemented approach enabled the mutual differentiation between SWOT analyses and an aspect-based assessment. However, this approach made these SWOT analyses rather sector-oriented. This was an obstacle for the next step, to start the design process through the settling of the design concept. Therefore, the second step was the joint formation of a final, comprehensive SWOT analysis from all thematic analyses. The explained two-step SWOT analysis fulfilled all elements of the proper assessment of the current state of Golubac.

Both steps were further spatially elaborated through mapping, which was customised

for SWOT analysis in urban studies. A special task in this process was how to adequately map all included features in one drawing. The features from environment (opportunities and threats) were particularly challenging to spatially determine due to their 'external' character.



Fig. 1: Discussion between students and local experts in Golubac about the most significant challenges in local urban developments. This discussion was important for forming SWOT analysis (source: B. Antonić).

References:

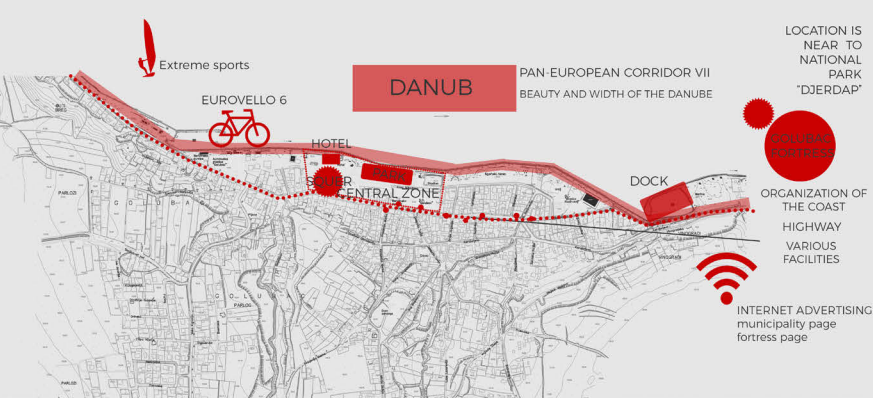
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OVERALL SWOT ANALYSIS

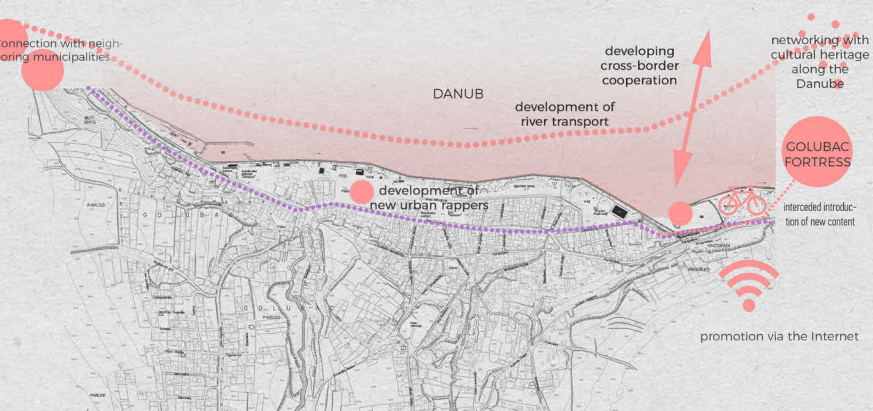
GOLUBAC

TOPICS:	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	ASPECTS OF INFLUENCE:
CULTURAL AND NATURAL HERITAGE	<ul style="list-style-type: none">- Golubac Fortress as a cultural property of an exceptional importance- the vicinity of Đerdap national park	<ul style="list-style-type: none">- inactive and inadequate presentation of the cultural and historical heritage in the Golubac municipality- insufficient cooperation and networking of municipalities in the Braničevo District- the Fortress is situated outside the settlement and has poor connections with the Golubac municipality	<ul style="list-style-type: none">- introduction of this content during revitalisation of the Golubac Fortress- connecting the Fortress with the old core areas of the municipality by bike paths- a possibility of inclusion into international projects related to revitalisation of cultural heritage alongside the Danube- promotion of natural richness- the Danube and the Iron Gates	<ul style="list-style-type: none">- preservation areas limit possible interventions- vanishing of the old crafts	<ul style="list-style-type: none">- development of tourism- local economic development- development of creative industry- urban regeneration and reha-
MAPPING OF PHOTOGRAPHS	<ul style="list-style-type: none">- internet access - anyone may publish a photograph- existence of a tourism website with descriptions- existence of the town's website- existence of a dedicated Fortress' website- existence of various unofficial websites- existence of motif photographs of farmhouses and rural tourism- photographs with descriptions about the Fortress in foreign languages	<ul style="list-style-type: none">- internet access - anyone may publish a photograph/ there is no adequate filter to check the validity of information- the official website of the town of Golubac is incomplete, as far as photographs are concerned- not enough photographs of the interspace (town streets, route to the Fortress)- not enough photographs of the hospitality facilities	<ul style="list-style-type: none">- social networks - users' photographs / good promotion- existence of the facebook page of the town of Golubac- lots of tourists use Instagram- there is a possibility to access other people's photographs- existence of stocks of geotagged photographs on online maps	<ul style="list-style-type: none">- incorrectly marked locations on social networks - e.g. "Golubac in Bosnia", "Golubac nearby Valjevo"...- untrustworthy data	<ul style="list-style-type: none">- development of tourism- place branding
PURPOSE OF LAND AREAS	<ul style="list-style-type: none">- recognisable town landmarks- variety of content along the trunk road- cultivated riverbank- cultivated green areas- existence of commercial service facilities in the core area of the town	<ul style="list-style-type: none">- punctual layout of administration facilities- the trunk road separates the residential part of the municipality from the core area of the town- vicinity of the industrial zone with its sports complex and the arable land- unexploited potentials of plots, few floors in the residential area	<ul style="list-style-type: none">- potential for restoration of the urban landmarks- determination and erection of new urban landmarks- open fields for investments in commercial and recreational facilities	<ul style="list-style-type: none">- competitiveness of the adjacent municipalities- lack of planning documents- unprepared investment location- terrain configuration	<ul style="list-style-type: none">- improved urban physical structure- sustainable distribution of space and content- mixed-purpose development- improved readability- improved investment climate
SIGHTSEEING TOURS AND SECTIONS	<ul style="list-style-type: none">- existence of the trunk road- existence of Golubac Fortress, as an important historical site and tourist attraction- an immediate vicinity of the Danube, as the most important Europe's waterway - the Pan-European Corridor 7- the EuroVelo 6 international cycling route passes through the site	<ul style="list-style-type: none">- non-existence of administration at the local bus station- non-existence of an adequate database of sightseeing tours- unexploited waterway potential of the Danube along the Golubac municipality- morphology of the terrain as an obstacle for further construction and development of the town of	<ul style="list-style-type: none">- tracing and activation of the EuroVelo 13 international cycling route- strengthening cross-border relations with Romania- strengthening tourism collaboration with Romania- possibility of construction of a marina with a pontoon dock for larger yachts	<ul style="list-style-type: none">- position of the Danube as a threat to development of the immediate vicinity of the riverbank due to large differences in water level, as well as the seasonal erosion by ice- continuous devastation of the Fortress due to vicinity of the trunk road- unfavourable influence of freight traffic to the condition of the trunk road	<ul style="list-style-type: none">- local economic development- development of tourism- improved attractiveness- introduction of compatible content- development of alternative types of traffic
NEETWORKS, INTERCONNECTIONS, AND THE INFRASTRUCTURE	<ul style="list-style-type: none">- well-developed street network /interconnections with the trunk road	<ul style="list-style-type: none">- undeveloped passenger and freight water transport on the Danube - the Pan-European Corridor 7	<ul style="list-style-type: none">- networking possibilities with surrounding municipalities- possibilities of developing passenger and freight water transport on the Danube - the Pan-European Corridor 7- cross-border cooperation	<ul style="list-style-type: none">- morphology of the terrain- the trunk road as a barrier for the development of connections between the core area of the municipality and the hinterland /- lack of planning in the development of utility infrastructure	<ul style="list-style-type: none">- improved mobility- improved investment climate- development of tourism- local economic development
E - CADASTRE	<ul style="list-style-type: none">- most of the plots have access to communications- a significant number of plots are suitable for residential construction (up to 500 m2)- artificially created construction land for the purpose of increasing construction capacity- a significant number of plots are the property of a single owner (which facilitates property-rights issues)	<ul style="list-style-type: none">- a significant number of fragmented plots in the core area of the town- a significant number of plots of irregular shape (perimeter segments around the square)- plots of larger areas are not suitable for construction (peripheral parts of the town/highly sloped terrain)- few plots suitable for capital investments	<ul style="list-style-type: none">- relinquished state-owned plots for construction of cycling routes (through a concession) in the riverbank area	<ul style="list-style-type: none">- undefined ownership structure over the plots belonging to the riverbank strip (mixed jurisdictions / Public Water Management Enterprise / state / Đerdap Hydroelectric Power Station)- undefined use of land ("Branko Radičević" Compulsory School and a residential building on the same plot)	<ul style="list-style-type: none">- improved e-Government system- improved land management- improved investment climate
PATTERN MAPPING IN CONSTRUCTION	<ul style="list-style-type: none">- an urbanised town centre layout- preserved architectural heritage in the core area of the town- the existence of hospitality facilities of an adequate capacity for reception of guests (five-storey, i.e. CF+ 4 buildings)- a wide variety of architectural heritage- the existence of a sports hall provides for sports	<ul style="list-style-type: none">- number of floors does not exceed two storey buildings (CF+1) - the reason for an insufficient urbanisation of the town- protection of cultural heritage does not cover the entire architectural heritage, instead it is limited to the Golubac Fortress, Tuman monastery, and certain buildings in the town centre- the rural part of the town has been built without proper planning- tectural heritage of Golubac town centre and the landscape of Golubac Fortress	<ul style="list-style-type: none">- promotion of architectural heritage through the tourism offerings of the town of Golubac- preservation and improvement of the architectural heritage by all the actors- attraction of investments into the Golubac municipality through promotion of its tourism potentials	<ul style="list-style-type: none">- inadequate reconstruction and revitalisation of the architectural heritage- morphological characteristics of the terrain prevent further expansion of the core area of the town- illegally constructed buildings in the national park areas- Illegally constructed buildings in the rural part of the town, corrupted identity and architectural style	<ul style="list-style-type: none">- local identity creation- improvement of ambient values- a clear vision of spatial development- an improved readability
TOURISM AND HOSPITALITY	<ul style="list-style-type: none">- the identity of the Golubac Fortress- situated at a stretch where the Danube is at its widest point - the vicinity of the Iron Gates- the existing events / "Danube Fair", sailing regatta, / - construction of a wharf- well-developed offer of extreme sports	<ul style="list-style-type: none">- small capacities of hospitality and tourism offerings- poor rating of the facilities- lack of web presentations- insufficiently developed tourism offer- location unappealing to investors	<ul style="list-style-type: none">- connecting with other towns and municipalities nearby the Danube, and inclusion into the network of tourism offerings along the Danube- connecting with municipalities in the region, by creating an ethno-tourism network of Eastern Serbia- possibilities for organisation of international events- collaboration with Romania, extension of the offering to the other bank on the opposite side of the widest stretch of the Danube	<ul style="list-style-type: none">- state's indifference to invest in the development of tourism in Golubac and the surrounding municipalities- insufficient number of tourists- insufficient numbers of qualified professionals in tourism organisations- legal regulations which impede the development of hospitality and tourism offerings	<ul style="list-style-type: none">- local economic development- revitalisation of cultural and historical heritage- urban regeneration

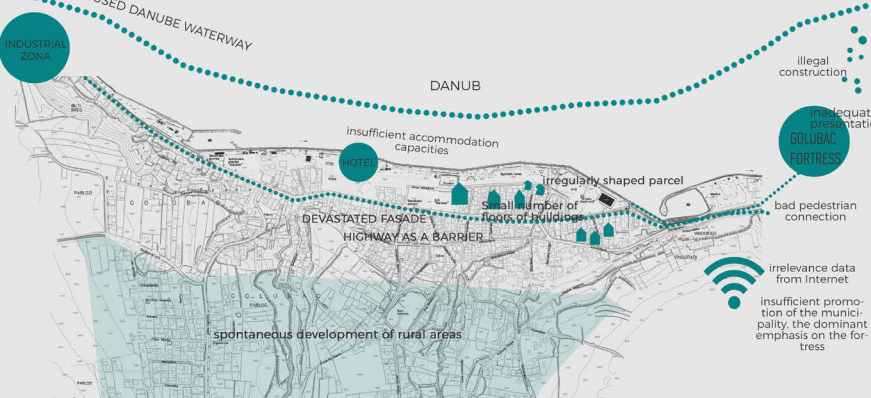
STRENGTHS:



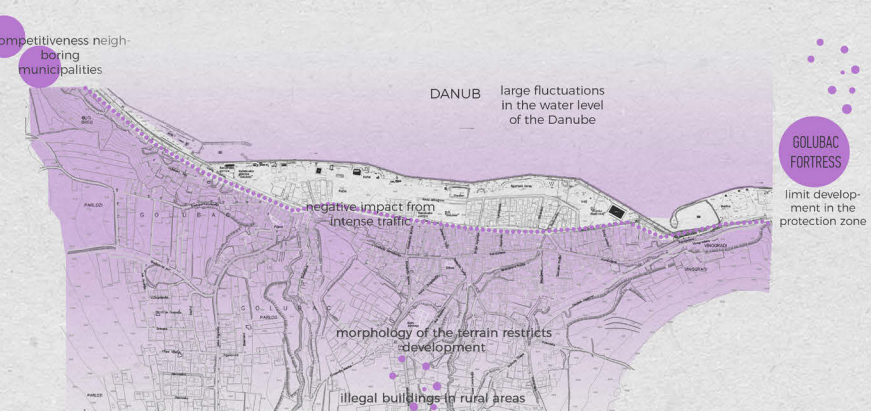
OPPORTUNITIES



WEAKNESSES



THREATS:



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Academic year: 2016/2017



Interreg



Danube Transnational Programme
DANURB

Milica Milica Ristović, Milica Djurdjević,
Stefan Hadži Arsenović

9. SETTING NEW DESIGN CONCEPTS & SCENARIOS

Dr. Branislav Antonić, teaching assistant

The design process was narrowed to the central core of Golubac Town with the long Danube Riverfront as a polygon. This historically valuable and functionally and physically diverse urban space allowed the variety of ideas and approaches in student projects.

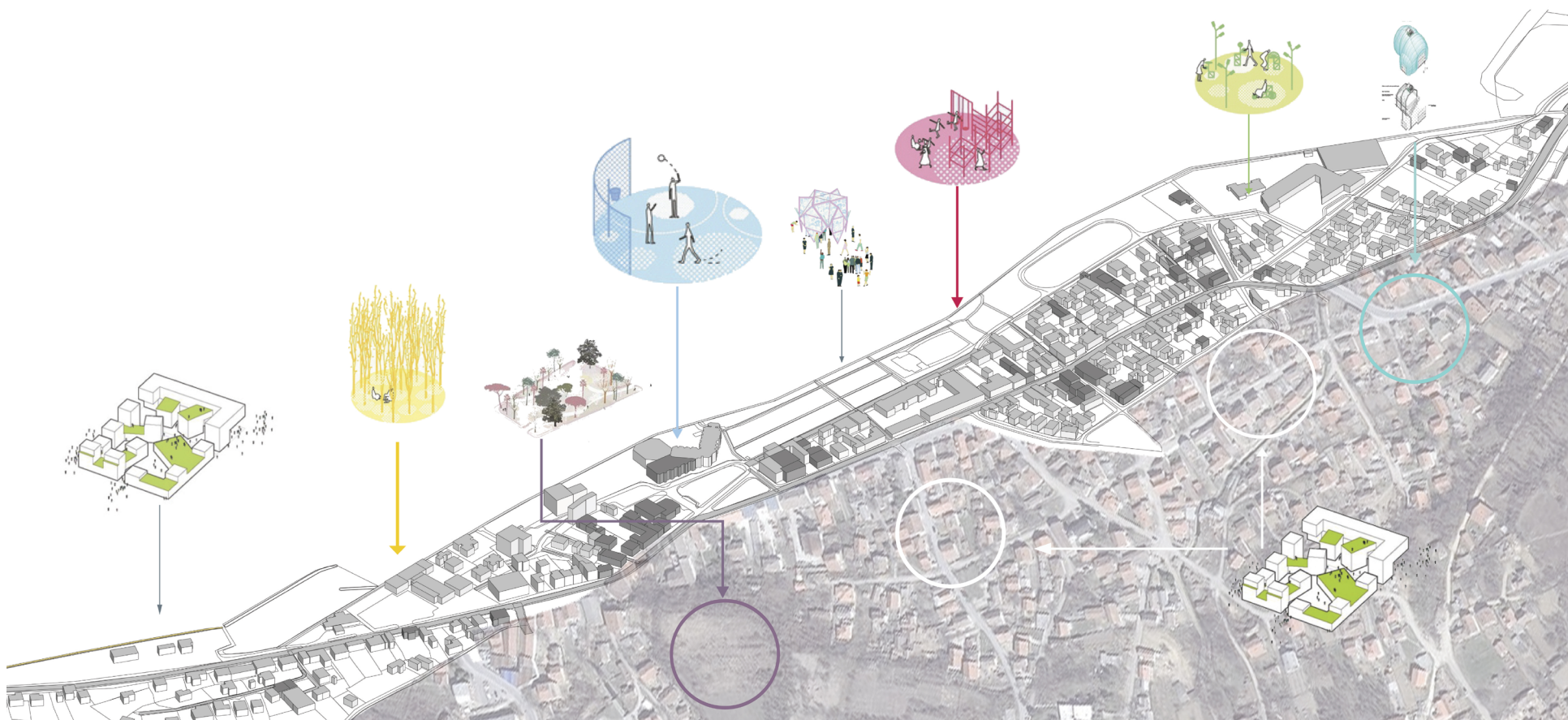
The first phase in student design process had two steps: a design concept and design programme. The first one was the concept. It refers to the set a vision and to further develop it through aims and their basic spatial presentation – a matrix-look proposal of new links, networks, nodes, and neighbourhoods, without losing genius loci. The vision is scrutinised in a catchword of the proposed design project. Students were innovative and space-sensitive in this task; some of their visions pointed Golubac as the “treasure of the Danube”, “Dock of culture”, “City of Extremes” or “Smart”. Their widely specified visions enabled extensive sets of aims that targeted the economic, ecologic, and social sustainability of Golubac.

The second phase was programming, where it was expected from students to develop a comprehensive programme of proposed all urban functions, activities and facilities as their spatial representations that are applicable for central Golubac. The programme did not mean to simply enlist them, but to make a reasonable network or patchwork that would work in urban space. The most of students recommended a mix-use development with the special respect to culture, retail, tourism, leisure, and housing in their programmes. Similarly to the concept, the design programme also included the mapping; students finished this phase by presenting their programmes as networks in the urban space of central Golubac.

NEW DESIGN CONCEPTS & SCENARIOS

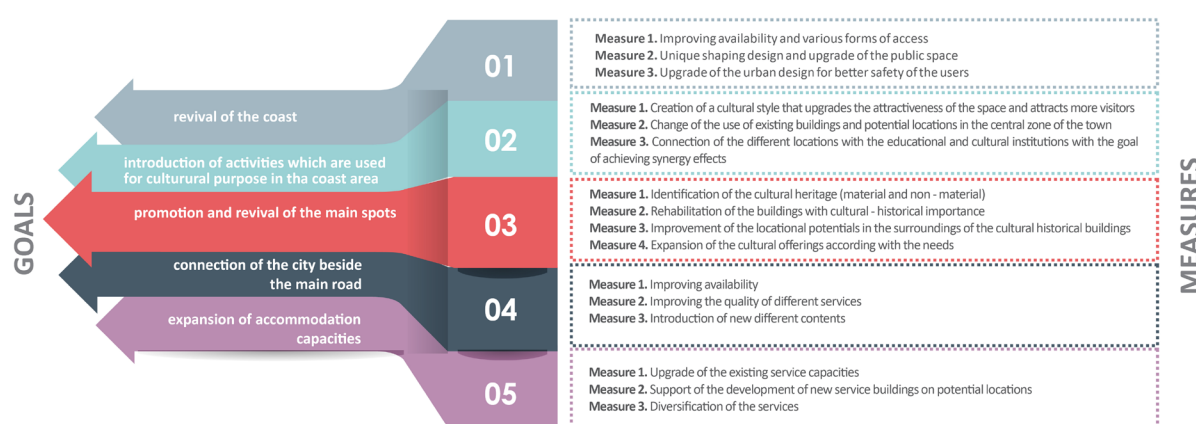
STUDENT PROJECTS





DOCK OF CULTURE

VALUES, PROBLEMS, GOALS, MEASURES AND SPATIAL ZONING



VALUES

- Diversity of cultural - historical heritage**
 - Golubac fortress as important part of the cultural - historical heritage
 - Vicus Cupae (in the place of nowadays town of Golubac, not started archeological excavations but remains dated from the Roman period)
 - Zaviša Crni (monument of the Polish knight, located in foothill of the Golubac fortress)
 - Medieval monastery Tuman (12km south of Golubac, foundation of Miloš Obilić)
- Danube**
 - Marinas as docks in the river corridor
 - Bicycle route EUROVELO 6
 - Danube through the municipality represents part of the corridor 7, river route Rhine - Main - Danube - Black Sea
- Rich agricultural land**
 - 41% of territory of the municipality is under agricultural land
 - Foothill gives good conditions for pomiculture and viticulture
 - Developmet of the organical production, specially in the field of herbs, beekeeping and goatkeeping
- Diversity of natural inheritance**
 - National park Đerdap
 - Canyon of Brnjička river (12 km east side of Golubac - mountain paths)
 - Black Hill (the highest mountain hill in municipality Golubac, 7 km south side of Golubac)

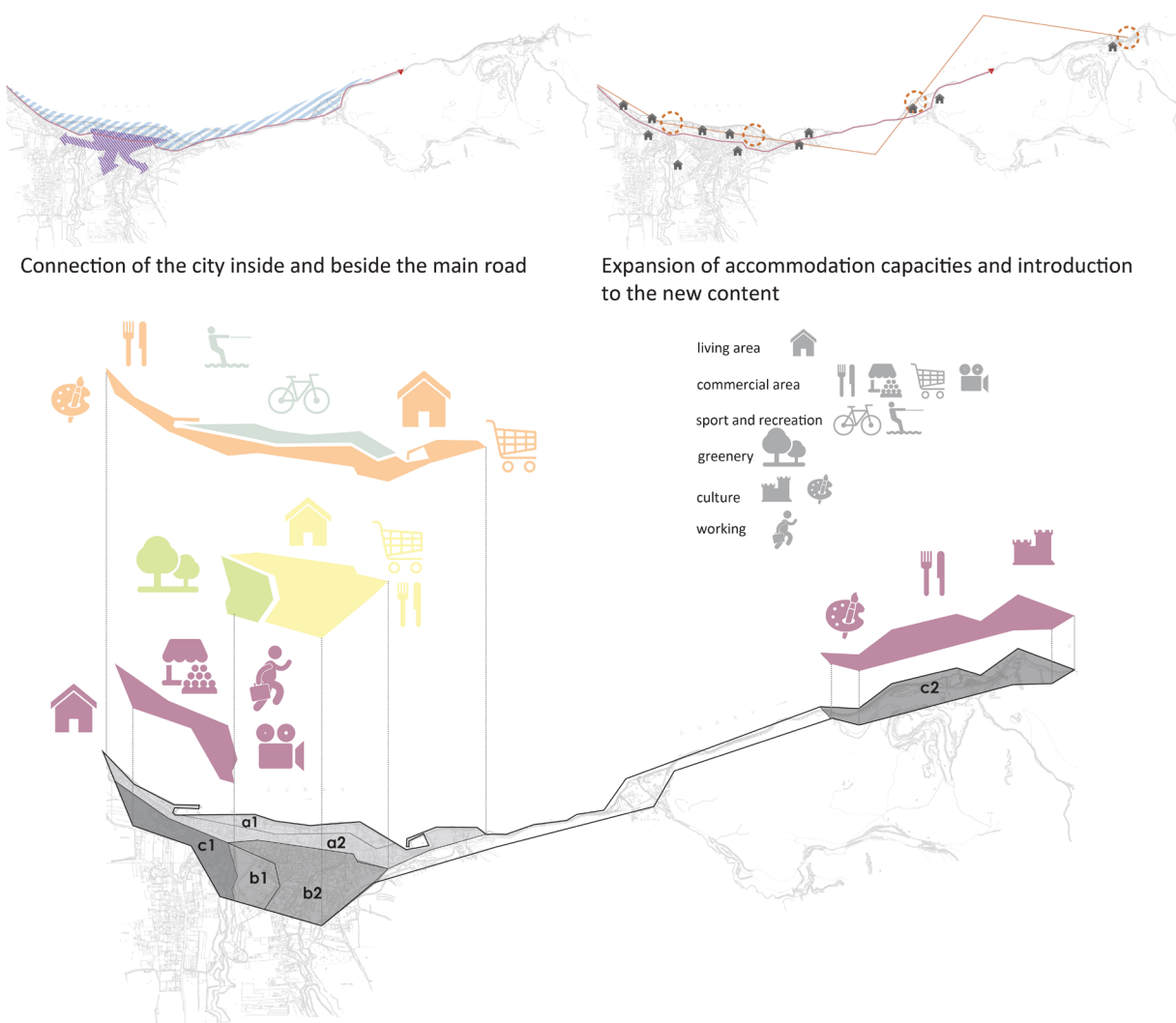
PROBLEMS

- Insufficient connection of the contents inside of the town**
 - Main road passing through the central area of the town
 - Lack of cultural buildings and cultural content
 - Devastation of public spaces
- Insufficient accommodation offerings**
 - Lack of accommodation capacities
 - Lack of restaurants, cafe's, fast foods, etc...
- Disrepair and insufficient usage of the main spots**
 - Unrecognised main spots
- Lack of safety in the places**
 - Insufficient quality of the urban design which directly affects the lack of safety in the places

PROGRAM

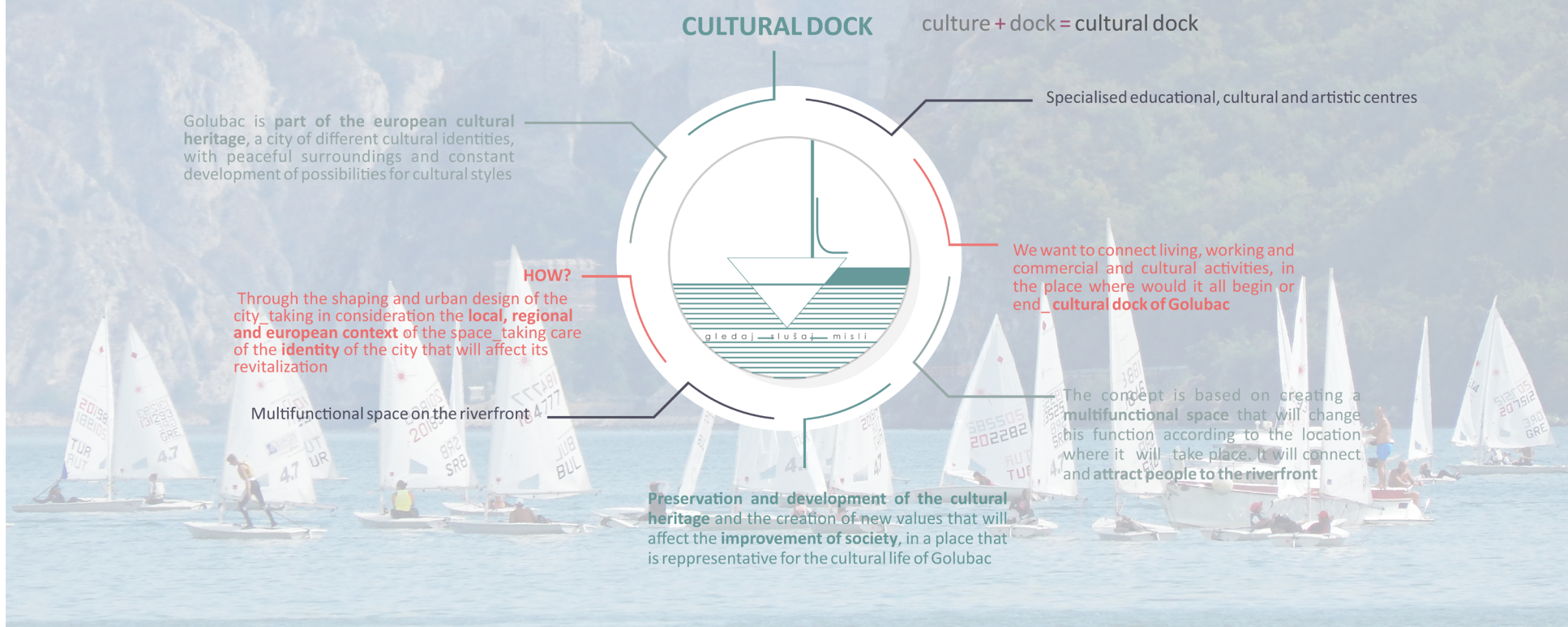
DESCRIPTION OF THE AREAS

- Area A**
- a1_subzone a1 is part of the A area, situated by the river, used for walking, with different contents for a better use of the area
 - a2_subzone a2 is a part of the A area, which is used for buildings with mixed purpose, for extra contents of culture and education and commercial purpose
- Area B**
- b1_subzone b1 is part of the B area that is used as a living area, as well as commercial area, with the purpose of activation of the area beside the main road
 - b2_subzone b2 is part of the B area that is used for the greenery, and represents the passage between the commercial and living area
- Area C**
- c1_subzone c1 is part of the C area that is used for commercial and working purposes
 - c2_subzone c2 is part of the C area where the Golubac fortress is situated, with mixed use, since it connects historical heritage and other commercial purposes



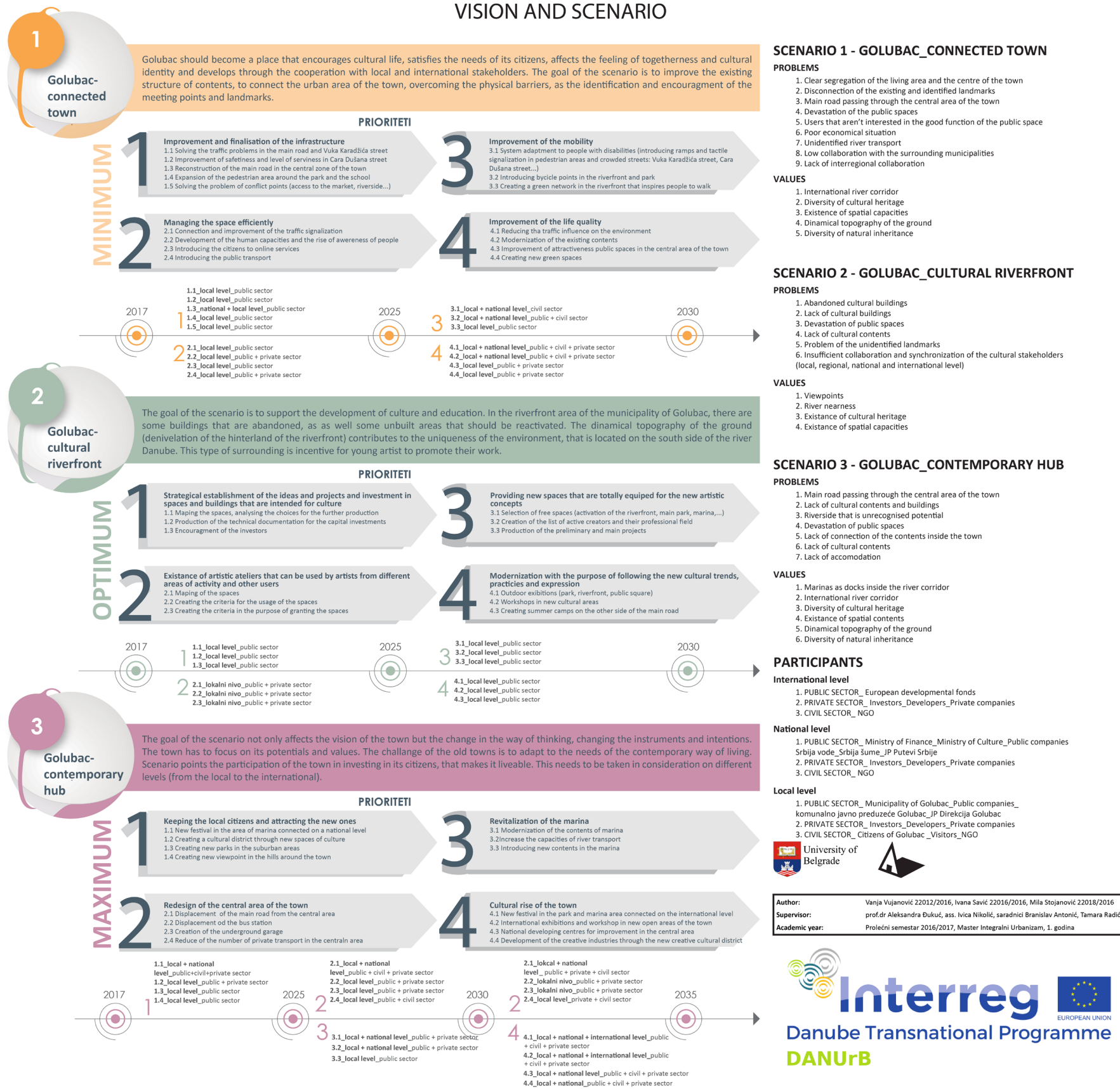
Author: Vanja Vujanović 22012/2016, Ivana Savić 22016/2016, Mila Stojanović 22018/2016
 Supervisor: prof.dr Aleksandra Đukić, ass. Ivica Nikolić, saradnici Branislav Antić, Tamara Radić
 Academic year: Prolećni semestar 2016/2017, Master Integralni Urbanizam, 1. godina





DOCK OF CULTURE

VISION AND SCENARIO





GOLUBAC: CITY OF EXTREMES

CONCEPT/VISION/GOALS/PROGRAM



CITY OF EXTREMES CONCEPT

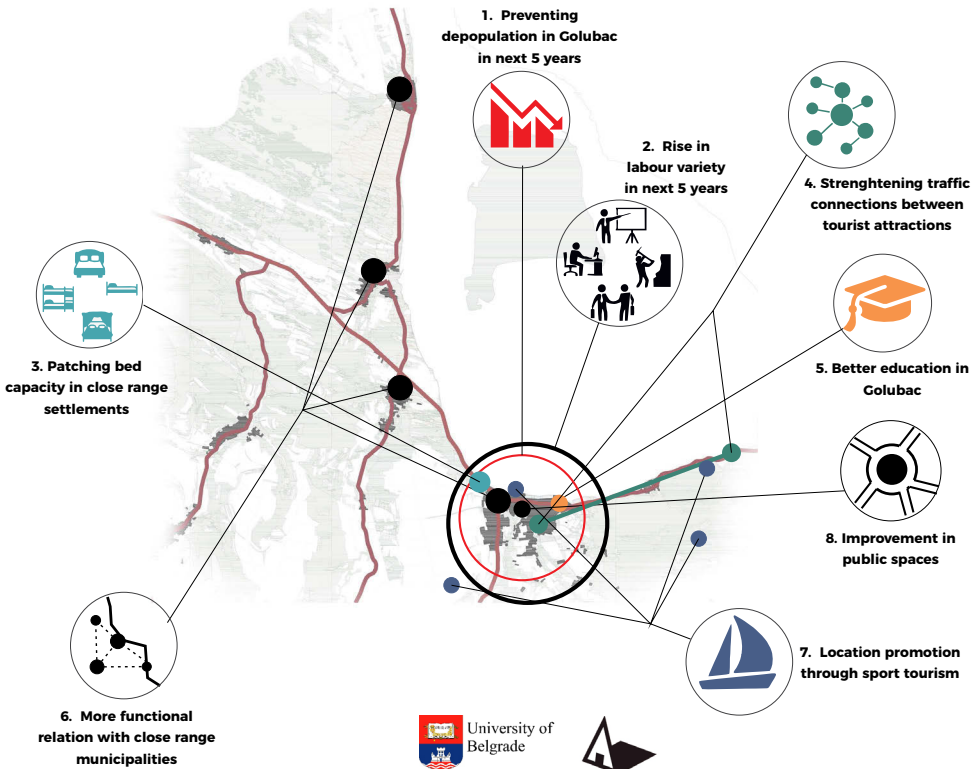
Position of the Golubac city and its rough terrain lead us into thoughts about using it as advantage for creation of the new city identity - the city of extremes. Possibilities of development in the field of extreme sports, habitation and gastronomy makes the brighter future image for Golubac. With constant changes in life dynamics and a lack of spare time, demand for extreme activities that provoke adrenalin rush gain on demands among human population.

Following the rise of extreme activities in town we also expect extreme rise in mainly tourist visits. This is especially expected during diverse manifestations that we are planing to develop in Golubac. Rise of visits would lead to urgent rise in bed capacity which is exactly what city needs to start devenoping in a positive manner rapidly. Cultural and historical legacy of Golubac has very strong identity which could be used as a strenght in promotion of the city by synchronising such identity with activities that take place in the area.

MAP OF GOALS

The PROGRAM

purpose	industry/activities	facilities
HABITATION	<ul style="list-style-type: none">Land accommodations expansionBuilding accommodation complex on water	<ul style="list-style-type: none">New accommodation unitsNew accommodation units on water
INDUSTRY AND PRODUCTION	<ul style="list-style-type: none">Manufacture of souvenirsManufacture of sport equipment	<ul style="list-style-type: none">StonecutterPaintersSculptors
PUBLIC SERVICES	<ul style="list-style-type: none">Competition and festival organizationReactivation of main bus station	<ul style="list-style-type: none">Main bus station
TRAFFIC	<ul style="list-style-type: none">Bicycle infrastructureRiver traffic infrastructure	<ul style="list-style-type: none">Bicycle urban related equipmentBicycle pathsMarine
BUSSINES MANAGEMENT		<ul style="list-style-type: none">Tourist centre
TOURISM AND CATERING	<ul style="list-style-type: none">Patching advantages of nerby municipalitiesBranding local productsHotel industry (increasing capacities)Management of private accommodationCatering varietiesNearby attraction visitsCreating new tourist routes both by land and waterInternet city promotion	<ul style="list-style-type: none">Center for tourism promotionHotelsBungalowsRestourantsCaffes
SPORT AND RECREATION	<ul style="list-style-type: none">Sports arena improvementsMountainbike races through park-mountainBuilding mountainbiking trailFreeclimbingAlpinismBungee jumpingRiver docks improvements and sailboat center improvement	<ul style="list-style-type: none">Center for sport promotionMultifunctional sport arenaSailboat centerMountainbiking trailParaglding centerTraining grounds for climbersBungee jumping craneGymsBicycle centerAlpinism center
BASIC PRODUCTION (agriculture, hunting, forestry)	<ul style="list-style-type: none">Raw material collectionProduction of local authentic food (honey, cheese)Distribution of local food	<ul style="list-style-type: none">Village households



University of Belgrade

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Academic year: 2016/2017





SCENARIO 1 - Monocentric scenario

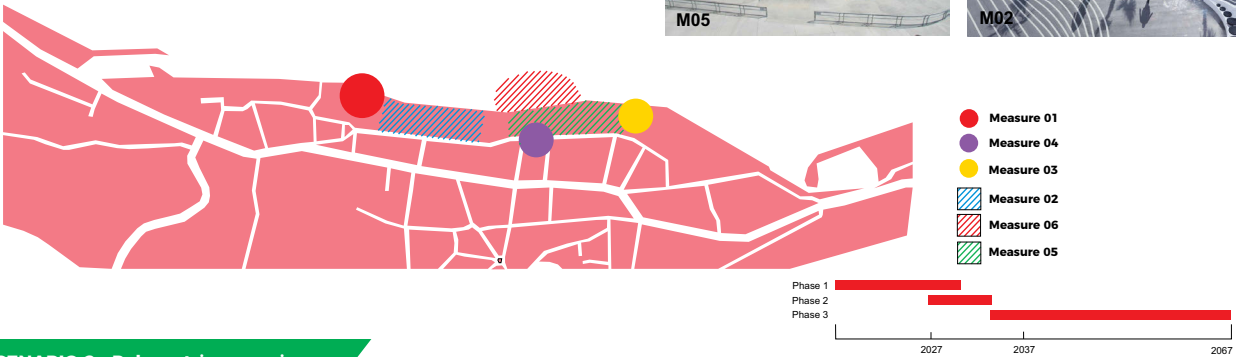
MEASURES

- M01 Hotel adaptation and expansion in the city centre
- M02 Park renovation and lighting system set up
- M03 Building of High school near kindergarten
- M04 Building of culture and sport manifestation centre
- M05 Building of skate and parkour park at location near stadium
- M06 Building of floating apartments on water

- PUBLIC SECTOR**
- Municipality of Golubac
 - Ministry of sports and culture
 - Ministry of traffic, construction and infrastructure
 - Ministry of education, science and technological development

- PRIVATE SECTOR**
- private construction companies
 - sport clubs
 - catering facilities
 - tourist agencies

- CIVILIAN SECTOR**
- local community
 - visitors
 - NGO
 - investors



SCENARIO 2 - Polycentric scenario

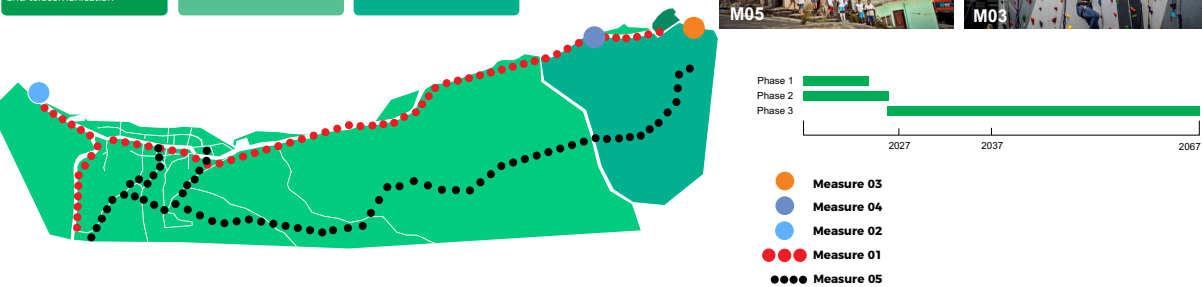
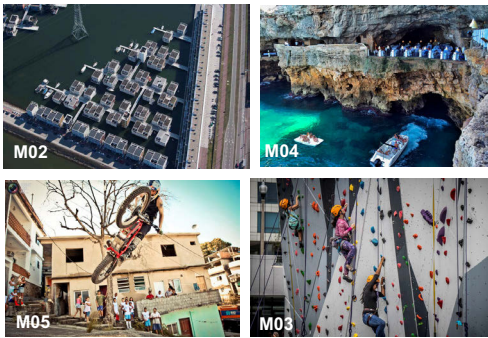
MEASURES

- M01 Renovation of existing transport infrastructure to tourism attractions
- M02 Construction of housing units on the water off the western marine
- M03 Building a climbing center and training grounds near quarry
- M04 Building a restaurant on the cliff near Golubac fortress
- M05 Building a mountinbiking trail in the woods and in the city

- PUBLIC SECTOR**
- Municipality of Golubac
 - Ministry of sports and culture
 - Ministry of traffic, construction and infrastructure
 - Ministry of trade, tourism and telecommunication

- PRIVATE SECTOR**
- private companies
 - sport clubs
 - catering facilities
 - tourist organizations

- CIVILIAN SECTOR**
- local community
 - visitors
 - NGO



SCENARIO 3 - Linear scenario

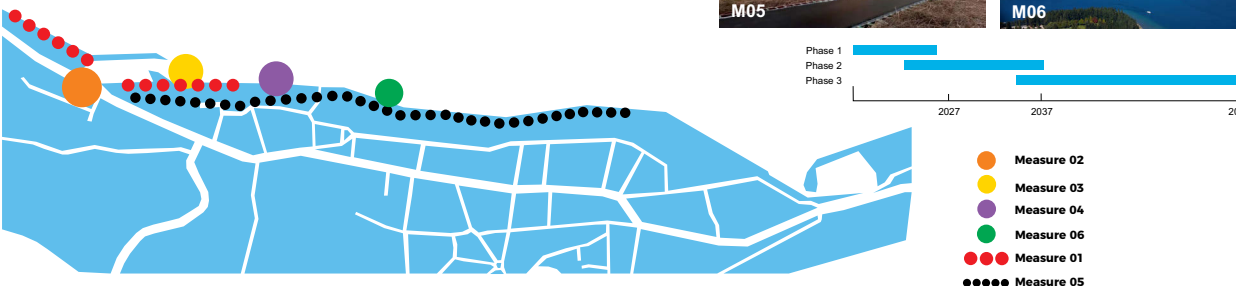
MEASURES

- M01 Urban planing of river coastline in marine area
- M02 Adaptation of existing marine with dock
- M03 Opening a sailing center inside marine
- M04 Building a pool complex near marine
- M05 Building an extreme trim trail and linear trampolines along the river bank
- M06 Setting up a crane for bungee jumping

- PUBLIC SECTOR**
- Municipality of Golubac
 - Ministry of sports and culture
 - Ministry of traffic, construction and infrastructure
 - Ministry of trade, tourism and telecommunication

- PRIVATE SECTOR**
- private companies
 - sport clubs
 - catering facilities
 - tourist organizations

- CIVILIAN SECTOR**
- local community
 - visitors
 - NGO



DEVELOPMENT SCENARIOS

SCENARIO OF MONOCENTRIC DEVELOPMENT / „HOT SPOT“

Phase 1 /2027
Development of Golubac in the nearest city of main square has a goal to focus activities in one main spot and rapidly improve its development. Hotel adaptation and expansion allows higher number of visitors due to improved accommodation capacity. Lighting system has been placed in the park to lead people to use new pedestrian routes during night. Building the centre for sports and cultural manifestation opens up new possibilities for Golubac activities through the whole year.

Phase 2 /2037
Investments of foreign embassys in Golubac are helping park improvements to follow active trends. Due to clearly formed of the core of the city new urban contents are appearing. New work places bring in younger people to live and form families in here. Extreme sports organizations through town are creating the new identity of Golubac and pulls up creation of new urban courts as skate and parkour park.

Phase 3 /2067
City centre of Golubac is following current trends in every way and the space identity becomes recognizable even on the international level. Due to large number of organized competitions, with a goal of giving the different variety of accommodation capacities, floating accommodation units were built near the marine. Central zone of Golubac became one of the most recognized manifestation symbols on the national scale. Local population with highschool qualifications stay living and working inside Golubac in large percentage.

SCENARIO OF POLYCENTRIC DEVELOPMENT

Phase 1 -2027
Natural division of Golubac which brings challenges of rough terrain, after polycentric content and infrastructure management, today is seen as attractive entity rich with challenges. Expected rise in number of visitors during the next ten years has attracted investments for building of floating accommodation on Donau. Also perifer settlements are investing in modernization of private accommodation for rent according to prognosis about organizing international events in Golubac.

Phase 2 -2037
There are extreme paths for mountain biking opened deep in the land part of Golubac and lead users through forests and steep streets of town. For these paths there is public transport organized and new road infrastructure. In close range of mountain biking paths new free climbing club has been opened and is already free climbing on nearby steep cliffs from medium to advanced level of difficulty. Following trends of thrill and excitement throughout location, new ambition activities are appearing. Among these is the new restaurant on the cliff that has been opened near fortress of Golubac and even famous international 24 kitchen channel is promoting it.

Phase 3 -2067
Decades behind existing accommodation capacities are constantly occupied with the increasing number of people interested in owning and renting their private accommodation. Certain number of activities that were experimentally organized on territory of Golubac, has integrated and became tradition, such as catching giant cat fish from pool filled with murky water, sleeping over in imitation of medieval dungeons close to fortress and similar. Whole city became interesting for exploration and very evenly developed which enables stay in accommodation on different relations from centre of the town without losing attraction.

SCENARIO OF LINEAR DEVELOPMENT OF GOLUBAC

Phase 1 -2027
Development of river bank of Golubac allows organization of new events which attract interest groups for which this town hasn't provided much in the past (17-40 years of age). Opening of sailing centre allows organization of more adequate competition in sailing which attracts other events during its duration like concerts and exhibition of nautical equipment. Newly built marine is capable of accepting bigger tourist boats and there is rise in number of tourists that come via Donau. Swimming pool complex near hotel attracts swimming sports in national scale and becomes popular place for teams and individuals preparing themselves for competitions. Sequentially, there is diver's club for advanced training, extreme paths for running and a continuous linear contents that are being attracted by development of this part of the town (restaurants, shops, souvenir shops, galleries). Experimental events such as bigger international competition in sailing, bicycle racing along Donau and first triathlon are showing potential to stay and become tradition of the town.

Phase 2 -2037
With identity of the town and terrain characteristics, extreme sports are concentrating even more in this town. River banks of Golubac became symbol of extreme competitions. After 10 years of traditional sailboat festival it has become ordinary for international broadcasters to report from Golubac. During festival days, extreme number of visits is being reported. Hotel capacities have become insufficient, which provoked expansion of hotel complexes and also rise in number of private accommodation rents. Location attracts large foreign investors.

Phase 3 -2067
Golubac becomes well urbanized town with high quality infrastructure, highly developed river banks with park, hotels and famous restaurants. Golubac became recognizable sight of Serbia and a "must visit" place. It is especially recognizable as place for extreme sport fans because it has wide variety in this field. International competitions are circularity returning to Golubac, maintaining attraction of town on high level.

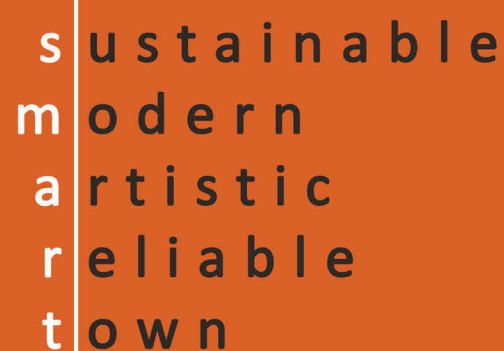
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Supervisor: prof. Aleksandra Đukić, as. Branislav Antonić, Ivica Nikolić, Tamara Radić
Academic year: 2016/2017



Monika Jovanovski, Boško Žakula, Srđan Radovanović



ARTISTIC & RELIABLE



CREATIVE CITY GOALS

CREATIVE CITY GOALS
better promotion of existing content - to use what has already been organized in the tourist offer in the best possible way,
better promotion of the fortress over the Internet, road signs, maps
better promotion of the sailing

the introduction of new cultural content - to use the potential that Golubac offers for tourism, tourists, foreign as well as domestic submit bids that are affordable and organized, so there would be free advertisement - word of mouth

introduction of cultural routes

museum opening

amphitheater opening

new events- outdoor plays and concerts

inform visitors with local traditions, bring farms back to life

organizing art colonies - the nature, the Danube, legacy, potentials that can be used for organizing poetry and art colonies that are looking for peaceful and quiet places, instead of a typical accommodation in hotels, offering accommodation in camps and in that way stand out from other products

RELIABLE CITY GOALS

RELIABLE CITY GOALS

- safe environment - the idea is to provide a safe environment for residents and tourists, in which they will be able to feel comfortable and pleasant
- relocating the highway out of the center
- restoring infrastructure
- improve the lighting along the highway, around the fortress
- restoring old buildings

- healthy environment - except the security, residents also need healthy environment in which they will be able to enjoy in nature without harmful gases
- get rid of the motor vehicle through the center
- get focused on pedestrian, bicycle traffic
- introduce water forms of public transport
- development of alternative energy sources - aero, hydro, solar

job creation - how to attract people to come to live in Golubac, if the creative city worth as an investment, the next step forward in the development would be the creation of an environment that people come to live and work in, not just as tourists

opening of the business center (IT.) in nature

opening of the small and medium-sized enterprises

improvement of existing firms in cooperation with the municipality

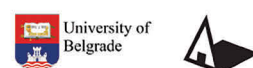
alternative forms of accommodation - because of the lack of the hotels as accommodation for tourists, focus has to be on the provision of alternative forms of accommodation for tourists that would provide a sense of connecting with nature

opening of the business, children's camps and for tourists

organizing art colonies in nature

contruction of the camps and bungalows in nature as accommodation for tourists

getting ships for accommodation out of the center

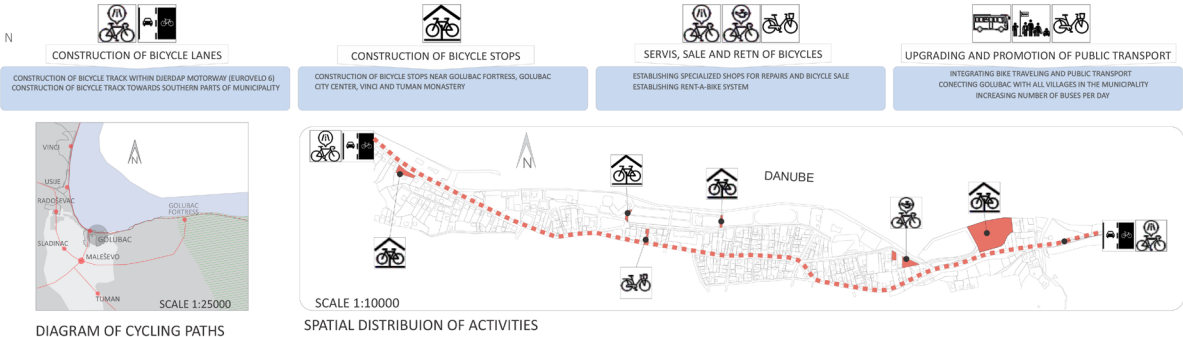


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Academic year:	2016/2017





CYCLING



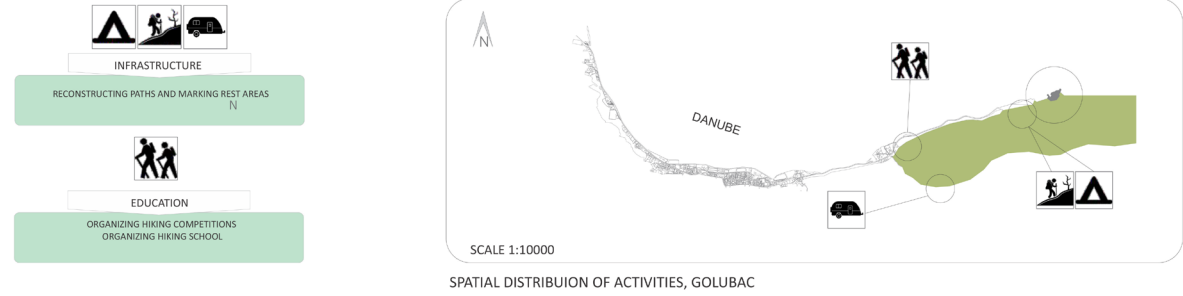
- CYCLING**
1. Construction of the bicycle lines is the first phase that is being implemented (0-5 years) and it's implemented by the Municipality Golubac and the state of Serbia. Linking Eurovelo6 track with southern part of municipality, create would be further incentives for the local population and tourism the municipality itself.
 2. The construction of the parking spaces for bicycles is the first phase of which is being implemented (0-5 years) and implemented by the Municipality Golubac. The possibility of realization of this action is reflected in the large number of undeveloped plots, both in the center of the city and in large enough plots around the main square and the city park
 3. Service, sale and bike rental is the first phase of which is being implemented (0-5 years) and it's implemented by the Municipality Golubac and private entrepreneurs in the framework of a public-private partnership. The possibility of, as well as for the space for parking facilities, is reflected in the transfer of a space which are abandoned and trough private-public partnership can regulate and can be used by the bicycle clubs and private companies.
 4. Upgrading the network of public transport is the first phase of which is being implemented (0-5 years) and it's implemented by the Municipality Golubac in co-operation with the private bus operator through public-private partnership

NAUTICAL TOURISM



- NAUTICAL TOURISM**
1. Implemented within the first phase of the plan and the stakeholders of the implementation are Municipality of Golubac and private companies through a public-private partnership. Through the action, the number of tourists could rise and economy in general. The locations for such events are all around Golubac. Some of them are areas of both marina, as well as the space at the city park next to sport fields.
 2. The action is implemented in the first phase of the (0-5 years) with option of growing in later stages of development. The holders of the implementation are Municipality of Golubac in co-operation with the state of Serbia and private companies. The school would be located on the main road towards Golubac fortress on undeveloped public plot.
 3. The space should incorporate workshops for repairing and constructing boats. These workshops could employ a certain number of the local population. It's implemented within the first phase of the plan and the stakeholders that could be interested in implementation are Municipality of Golubac, Sports clubs and private companies through a public-private partnership
 4. The action is closely connected with the implementation of the new marina in the eastern part of the city. Such actions could contribute to the development of the trade and tourism as well as increasing number of visitors. Implementation is in the framework of the first and the second phase of the plan and the stakeholders of the implementation are Municipality of Golubac, state of Serbia and the International Organization for crossborder co-operation.

HIKING AND SIGHTSEEING



- HIKING AND SIGHTSEEING**
1. This action is implemented within the first phase of the plan and the stakeholders of the implementation are Municipality of Golubac and private companies through a public-private partnership. Golubac is situated on border of National Park Djerdap, and construction of facilities are not possible at the hills around Golubac. It is necessary to regulate the already existing track which are used by mountaineers. In addition, it is necessary to create conditions which are prescribed by the law of National parks for rest areas. (tents, tables, trash disposal...)
 2. This action is implemented within the first phase of the plan and the stakeholders of the realization are Municipality of Golubac and private companies through a public-private partnership. The inclusion of the Cycling-hiking club of Golubac in action, and using of their knowledge. The inclusion of the other mountaineer associations from nearby towns.

University of Belgrade

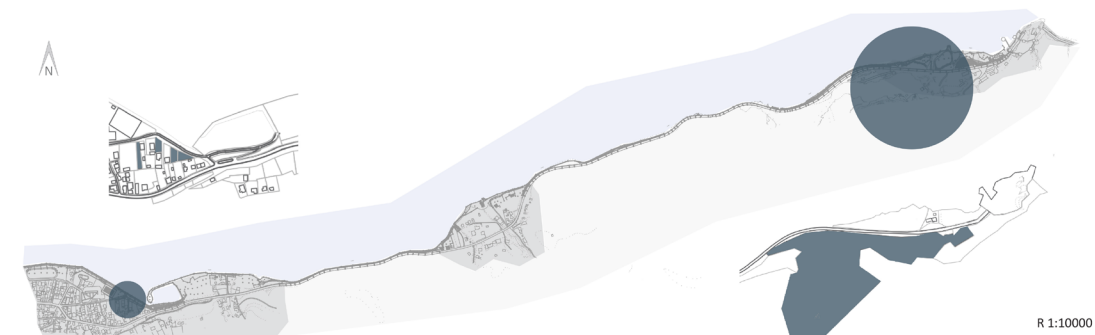
Author: Mladen Kostadinović 22011/2016
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Interreg

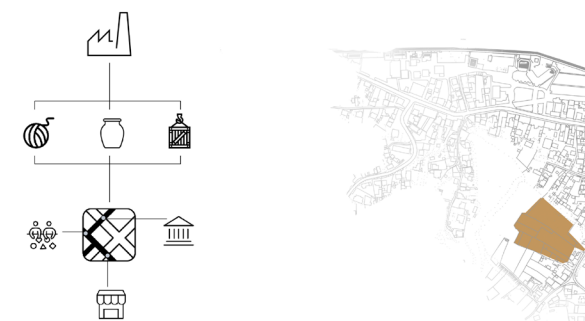
Danube Transnational Programme

DANUrB

EUROPEAN UNION



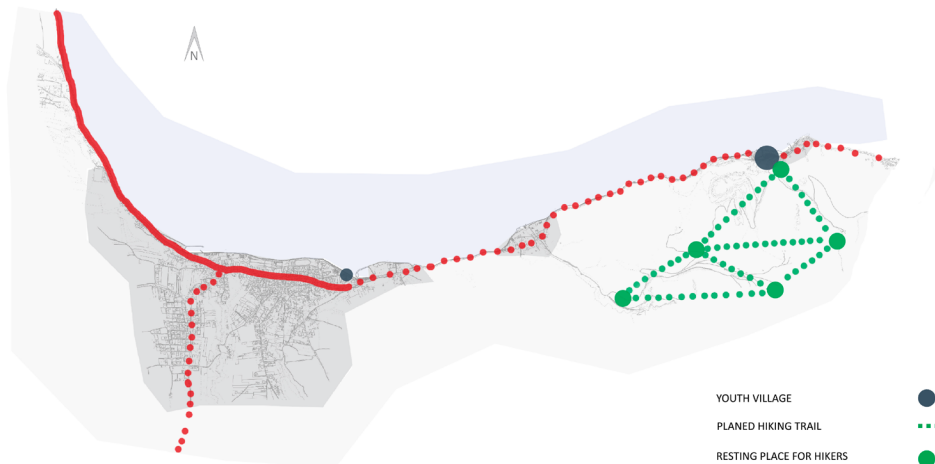
YOUTH VILLAGE
OVERVIEW FREE PLANTS AVAILABLE FOR BUILDING THE YOUTH VILLAGE



ACTIVATION OF ECONOMY
SCHEMATIC REPRESENTATION OF THE MANNER OF FUNCTIONING FACTORIES AND HANDICRAFT STREET



ACTIVATION OF ECONOMY
OVERVIEW SUITABLE PLACE FOR FORMING FACTORY, CRAFT STREETS AND WORKSHOPS FOR MAKING BOAT



SPORT ACTIVITIES
OVERVIEW OF RELATIONS WITH YOUTH VILLAGES CYCLING AND HIKING TRAILS

TOURISM THROUGH TRADITION

The aim is to activate the production in Golubac, where the main items are produced in the factories and home workshops. In order to produce closer to the camp participants and other interested parties workshops are planned where the products are made on the traditional way, the way it was done by our ancestors.

YOUTH VILLAGE

Forming Youth's villages / camps. For starters, the camp will be located on two sites. One camp will be formed near the Golubac fortress. Due to the specific location and protection measures that are defined in the vicinity of the fort, camp will be made of natural materials in accordance with the prescribed rules. Camps are connected with the city center by bus lines and cycling path on the main road. Second camp's location is planned within the city center, near the school.

ACTIVATION OF ECONOMY

It's planned to open a factory or home workshop for the production of ceramics, textiles and crafts, whose products are intended for local and regional market. Continued development and improvement of production is planned for product placement and on the international market in the next 5-10 years. Opening the workshop is planned as part of the family house or within facilities that are currently not in operation. To turn the visitors of the camp and other stakeholders in the process of production is planned to open a workshop where they will be with the help of trained workers maintain courses for making objects in the traditional way.

CRAFT STREETS

To activate as many city space, includes building is forming a "craft street". Within the craft street, there would be workshops where the participants of the camp as well as other interested parties had the opportunity to participate in the production process. The workshops are intended for the generation of decorative ceramic items and handicrafts. In addition to pottery, there will be a workshop where they will be intrigued to learn how to use traditional objects for weaving as well as how to make a product at their discretion. In addition to workshops within the craft streets being and sales facilities where they sold products have resulted in workshops and factories.

SPORT ACTIVITIES

The aim is to involve young people in sports activities. It is therefore necessary to achieve favorable conditions for the construction of sports fields and landscaping already existing. In this way it will be possible and the organization of sports competitions within Golubac. It is necessary to:

- Construction of bicycle paths and networking with Eurovelo 6 trail. Connecting youth camps with trails enable active participation of young people in cycling.
- Regulation of the existing hiking trails and the erection of temporary rest areas that will create the conditions for active hiking in the hills around the Golubac. Organizing courses hiking and navigating in the countryside will bring users the camping hiking as one of the interesting aspects of recreation.

In addition to these sporting activities, introduction course for gliding would allow visitors to camp after the training participate in existing events and competitions in sailing.

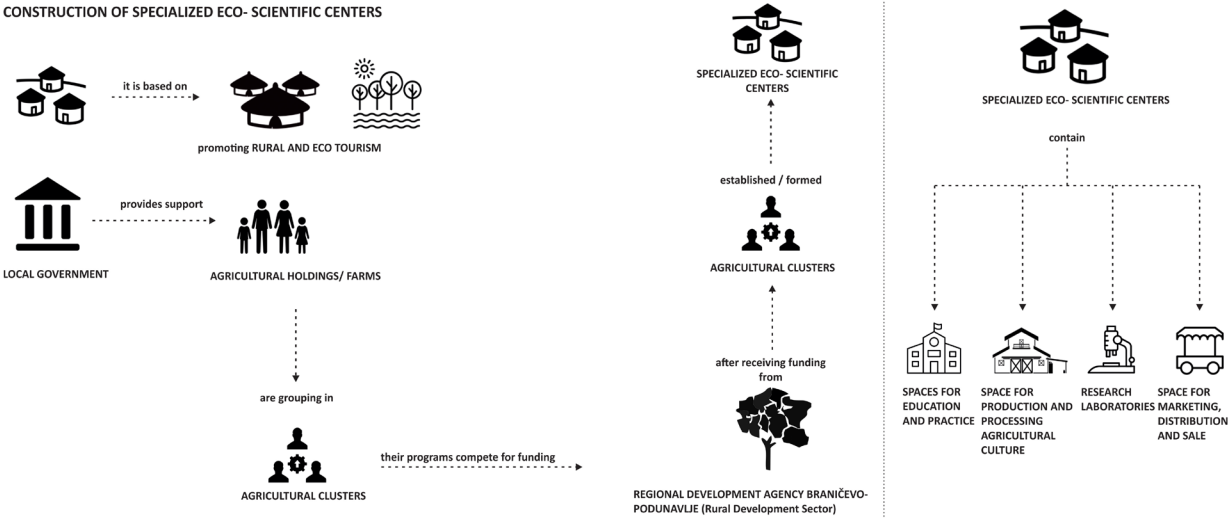


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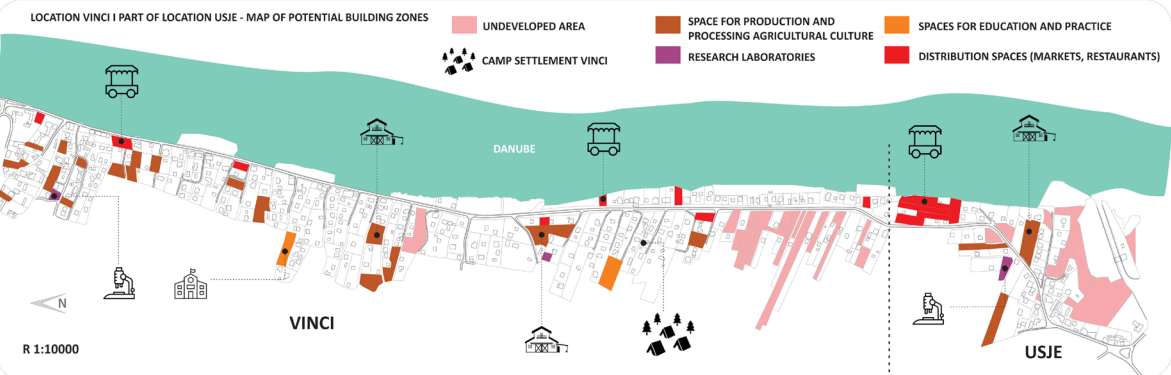
CONSTRUCTION OF SPECIALIZED ECO- SCIENTIFIC CENTERS



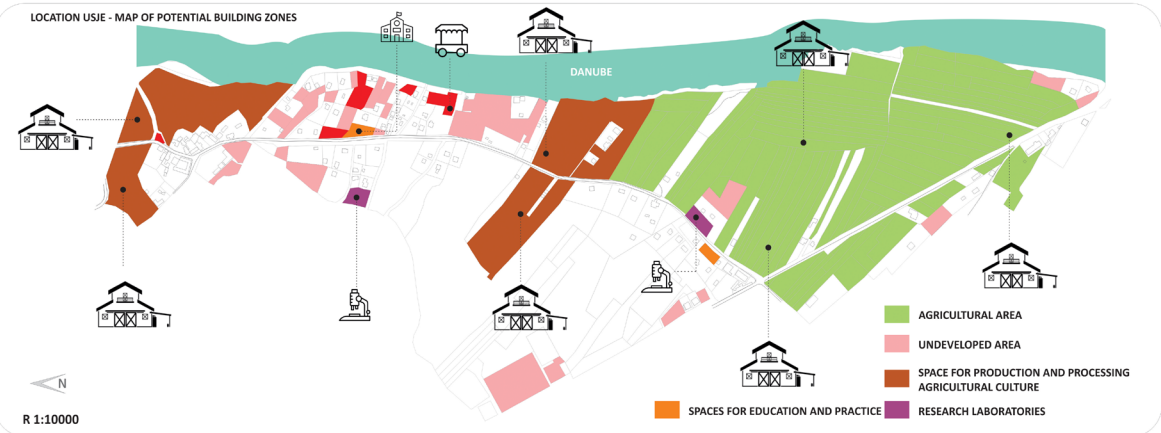
MEASURES FOR DEVELOPMENT AND PROMOTION OF RURAL AND ECO TOURISM :

- Agricultural Association at the local and regional level, will be opening restaurants based on local food (fish restaurants, organic food, animal products).
- Listing of all locations of villages, rural tourist households (which are already engaged or may be engaged in tourism in the country, categorized and uncategorized their potential advantages and disadvantages).
- Participation and promotion of rural tourism in the region unified at all similar fairs or exhibitions, with special emphasis on pre-defined priority markets.
- Approaching the information to all potential future rural tourist households of procedures, legal decisions, agencies dealing with categorization, presentation, ways of tourism in the country.

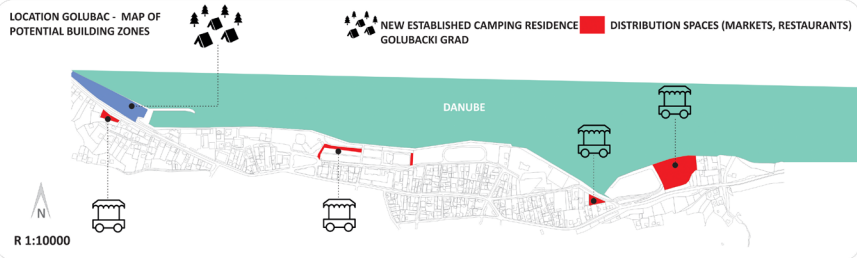
Encouraging eco scientific centers of the local economy would have more financial incentives from whose financial income to form settlements around the camp and in the Golubac, and would be based on tradition and local culture. Camping village to host tourists during the various thematic festival, there would be the possibility of free food if local tourists to adequately promote Golubac on social networks. This would be the only one of the measures that need to be coordinated and complementary to other content on the local level.



Basic infrastructure (roads, water, sewer) is in a satisfactory condition. Modernization is needed, which design the new methods of irrigation area, in order to accelerate the production of agricultural crops. Within the camp village Vinci, tourists can use local agricultural products, provided that during the stay in the location, they need to make photography of the location and post on social networks. Under existing households that are already engaged in agriculture to build additional facilities that would enable further development of the household. Spaces for education and training, areas for processing agricultural crops and research laboratories would be located in the rear of the village, in the context of existing households. In the coastal area, we would be content with the primary function of the distribution and marketing of local agricultural products. Location Vinci is significant because it is currently used as a camping resort and attracts tourists, so tourists are in direct contact with nature, and this way of presentation of local products can further contribute to increasing the number of tourists. Distribution and marketing take place in the second phase (5-year and 10 years). In the first phase, formed areas that would be able to produce local crops. Holders of development would be Golubac Municipality in cooperation Regional Development Agency Braničevo - Podunavlje.



Location Usje has a serious potential for the construction objects of a large volume (factory, plant). Large areas are available, suitable for building, well-connected infrastructure. This location can be a serious investment potential, with the possibility of certain tax incentives for investors who are interested to invest long term while working to promote local products. New construction can start immediately in the first phase (0-5 years), given that all the prerequisites for further development. The holder of this kind of project can be a Regional Development Agency Braničevo-Danube in cooperation with the Municipality of Golubac. The supervisor should be the state authorities, JP Srbijavode, as potential sites located on the banks of the Danube and needed their overall analysis. Along the coastal area it is possible to realize the commercial potential (hotels, restaurants), it is necessary to connect the recreation zone Vinci hiking and cycling routes with Golubac, to the contact zone of the Danube revived.



In the municipality of Golubac there is potential for the distribution and marketing of local agricultural products. If the revived Danube routes, and works to promote the festival during the summer months, tourists stay longer in the new camping village Golubacki city, would allow local producers to sell their products to foreign and domestic tourists. In this way, tourists directly convey their experiences to local manufacturers to further improve the offer. Tourists would be provided free food, if they would on social networks promote Golubac and promote local products, for example with photography. They need to sent photography to their friends.



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CITY THAT LIVES ON THE DANUBE AND FROM IT

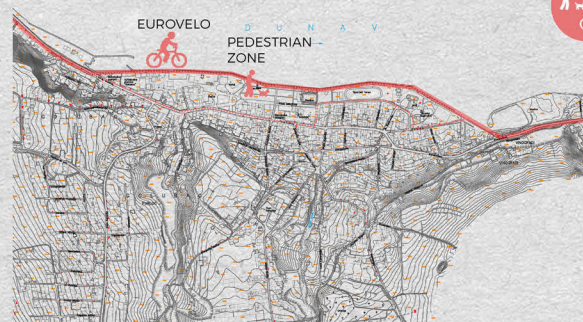
CITY OF LIVE STREETS

EXCITING CITY OF HOSPITALITY

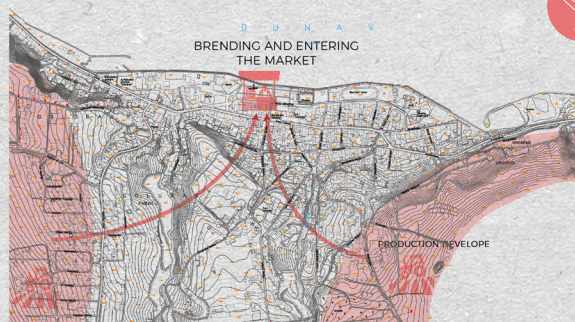
MEETING OF TRADITION AND INOVATION CITY

GOLUBAC - TREASURY OF THE DANUBE

VISION AND GOALS



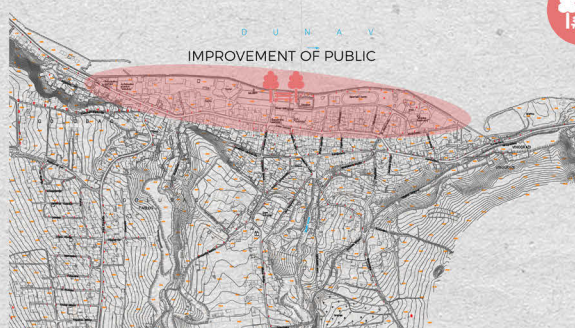
GOAL 1 - The affirmation of alternative modes of transport



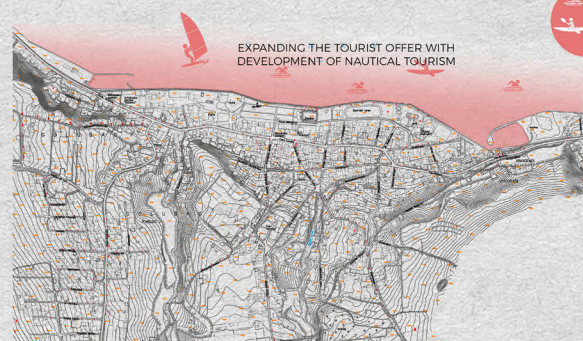
GOAL 2 - Improvement of local production, brending and entering the maket



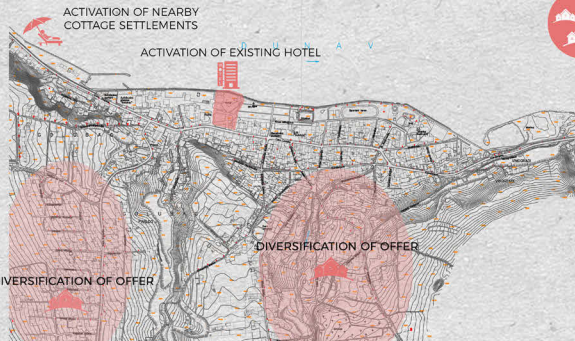
GOAL 3 - Encouraging entrepreneurship, youth employment and the use of modern technology



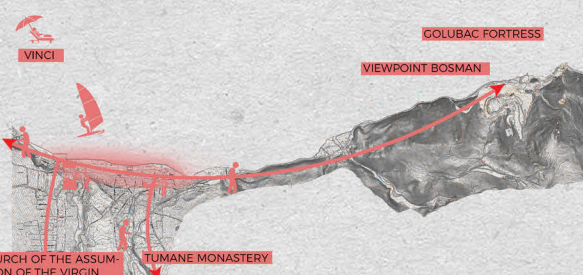
GOAL 4 - Improving the quality of public open space and enhancement their inclusiveness



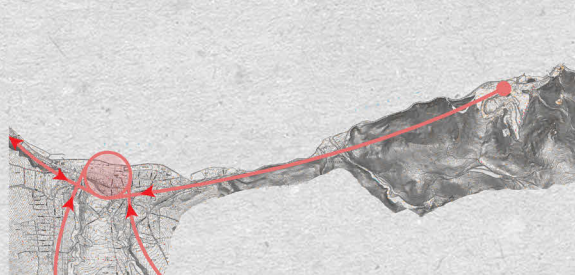
GOAL 5 - Increasing the number of facilities and activities on the Danube and the expansion of the tourist offer development of nautical tourism, as well as access to the town from the international waterway corridors



GOAL 6 - Increasing accommodation capacities, diversification of offer and the creation of the concept of overall service



GOAL 7 - Diversification of the tourist offer through the creation of a variety of tours inspired by local heritage and natural resources with the unique offer of events which present the identity of the city



GOAL 8 - Better connections between municipality and cultural and natural resources which are located in its immediate environment and their involvement in the life of the city

CREATING A VISION - GOLUBAC

Vision for the development of Municipality of Golubac is based on defined goals for improvement of quality of life and encourage of sustainable development of local community. Goals are defined according to basic problems and opportunities which are identified in the area of municipality and they tend to develop Golubac with approach based on unique local identity and great natural and cultural wealth.

Golubac - identity card

district..... Branicevo
area..... 368km²
population..... about 10,000
distance from capitol..... 130 km

PROBLEMS AND OPPORTUNITIES:



Golubac is the city that lives on the Danube and from it forming of unique ambience of riverside, offering many facilities which provide different scales and ways of the experience of the Danube. Beside the taming city coast, Golubac offers the experience of the Danube in its whole freedom, along the Iron Gates gorge, which is the biggest demonstration of its forces along the entire course.

Golubac is the city of live streets with many facilities in the public place which encourage the development of social life of local community and whose citizens gladly spend most of their free time outdoors, strengthening the community spirit. Golubac is the city of trade with the market as a place for meeting, trade and exchange of experiences, which is significant part of *genius loci*.

Golubac is an exciting city of hospitality which is an unavoidable destination for nature lovers, thrill seekers, nautical enthusiasts, and devotees of cultural and historical contents, permeated with many historical, and mythological layers. It provides the possibility of direct experience of life in the local community, in the modern time and through historical development, with many events throughout whom the local natural, cultural, historical and gastronomic wealth is presented. As a city of adventure, Golubac provides invaluable experience of staying in untouched nature through a number of activities for all ages.

Golubac is the city where tradition and inovation meet eachother which has developed local manufacturing culture, based on traditional activities with a favorable climate for contemporary activities of young freelancers and start up companies. It successfully integrates lokal entrepreneurship and modern economic trends, creating conducive investment environment.



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Academic year: 2016/2017



PROGRAM

Let's start up Golubac

Part of the program which includes, not only start up companies and freelancers, but also driving the local economy, especially incitement development of small and medium-sized enterprises. It is based on the existing local production, development of markets for local products and incitement self-employment in the field of production itself and the branding of the city.

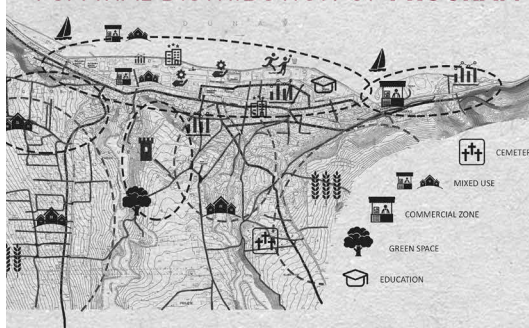
Let's meet Golubac

Part of the program which includes introducing visitors to the city, tourism development and introducing citizens themselves to the resources that are in their immediate environment, making them interested in issue of protection and presentation of heritage. The development of tourism itself is based on the formation of the concept of active holiday and different types of networking the city with sites as Golubac fortress, National park of Djerdap, Tumane monastery, Lepenski vir etc., and these sites with each other.

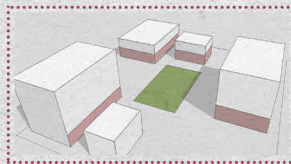
Let's taste Golubac

Part of the program which is based on encouraging the local production and branding of local products such as honey, cheese, herbs, fish and venison, spreading on the wider market, but also producing for the specific turistic offer in within municipality area (hotel, local restaurants and shops)

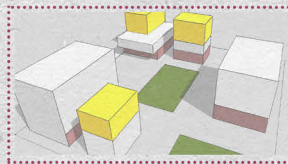
I SPATIAL DISTRIBUTION OF PROGRAM



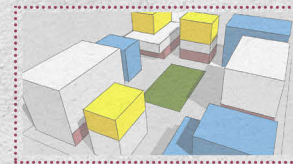
SCENARIOS



USE



IMPROVE



MAXIMIZE

Scenarios are conceived as a phases, the first one (use) can be the base for second (improve), but it is not necessary. They can also be used separately in different fields (start up, meet, taste), so the flexibility is achieved in several directions. But also, parts of program are connected so the development of one will automatically drive another two parts.

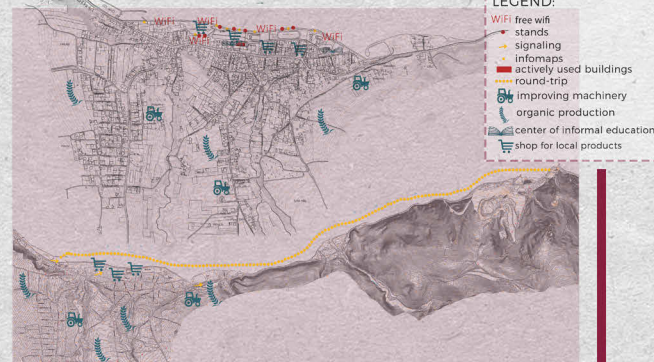
USE	ACTIVITY	FACILITIES
HOUSING	- Building of new housing capacities	- mix use objects - multi-family residential building - single-family residential building
INDUSTRY AND PRODUCTION	- Creative industries - Production in field of soft industries	- Art incubators - Coworking spaces - Final processing of products - Equipment for quarry - Production of agricultural equipment and supplements
PUBLIC SERVICES	- Forming the services which will help and advice producers and young people in variety of fields - Increasing the use of modern technologies	- Service for help in applications for international and domestic funds - Forming and connecting GIS data bases
TRAFFIC	- improvement of the existing road network - building of new transport infrastructure	
BUSINESS	- Selfemployment - Creative industries	- Start up companies in field of branding of local products - Start up companies in the field of traditional manufacturing production - Start up companies in IT - Start up companies in field of tourism
TOURISM AND CATERING	- Developing connections between the city itself and sites in its immediate environment - Expansion and diversification of accommodation capacities	- Information offices and maps in the city center - Forming the camp - Concept of hosting - accommodation in local households
SPORTS AND RECREATION	- Promotion of navigation, extreme sports and recreation of untouched nature, close to the city	- Nautic centre
PRIMARY SECTOR	- Developing local agricultural production, forming cooperatives, and branding products	- Cooperatives - Common treatment plant

I USES, ACTIVITIES AND FACILITIES DEFINED BY PROGRAM

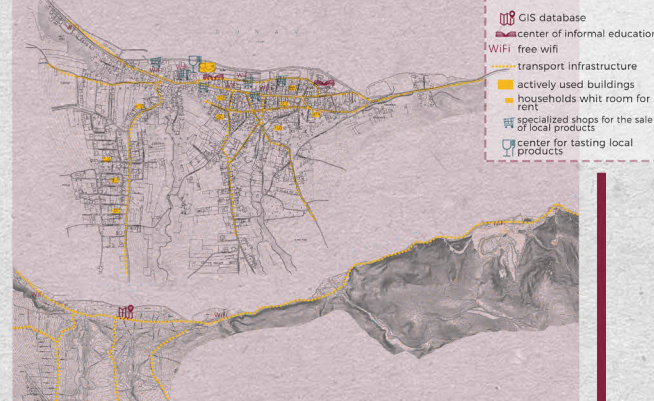
GOLUBAC - TREASURY OF THE DANUBE
PROGRAM AND SCENARIOS

I SPATIAL DISTRIBUTION OF SCENARIOS

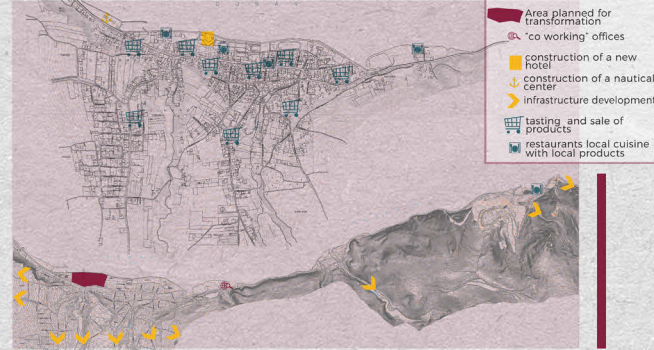
SCENARIO 1: USE



SCENARIO 2: IMPROVE



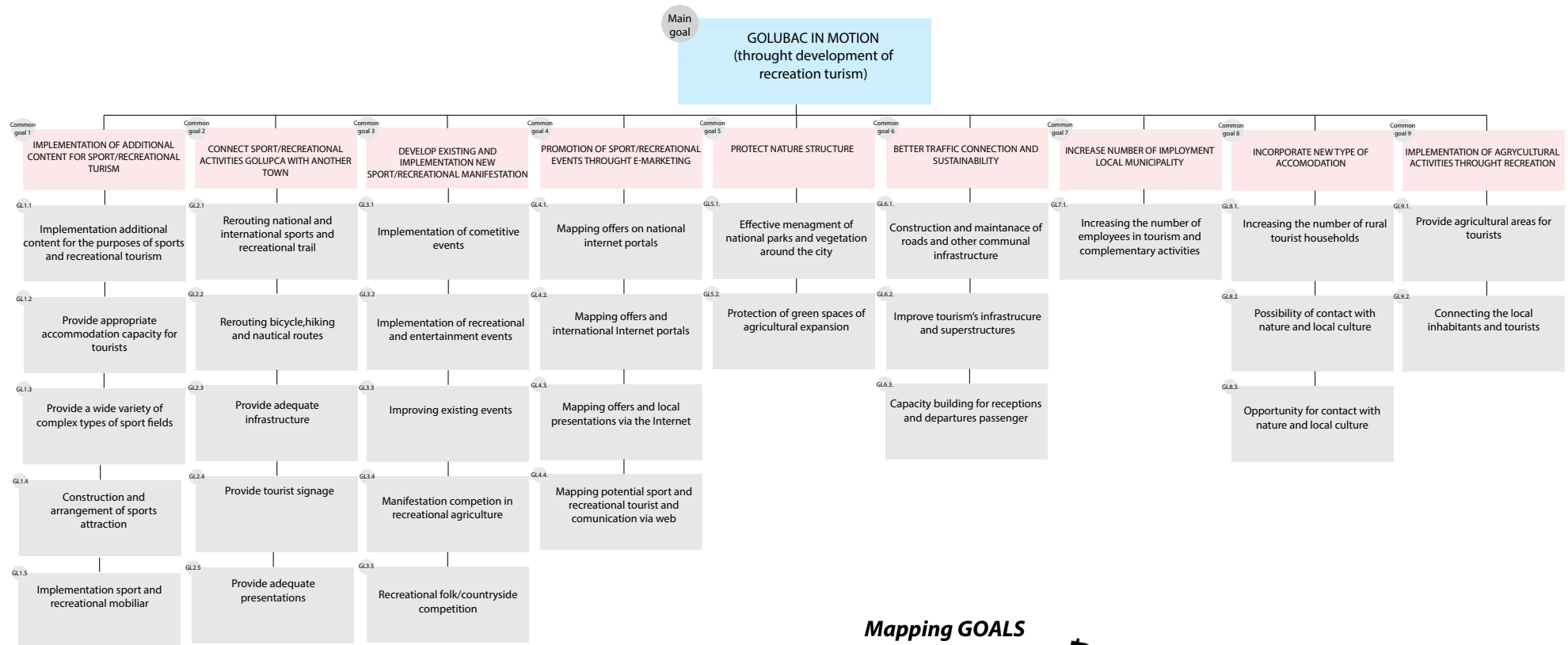
SCENARIO 3: MAXIMIZE



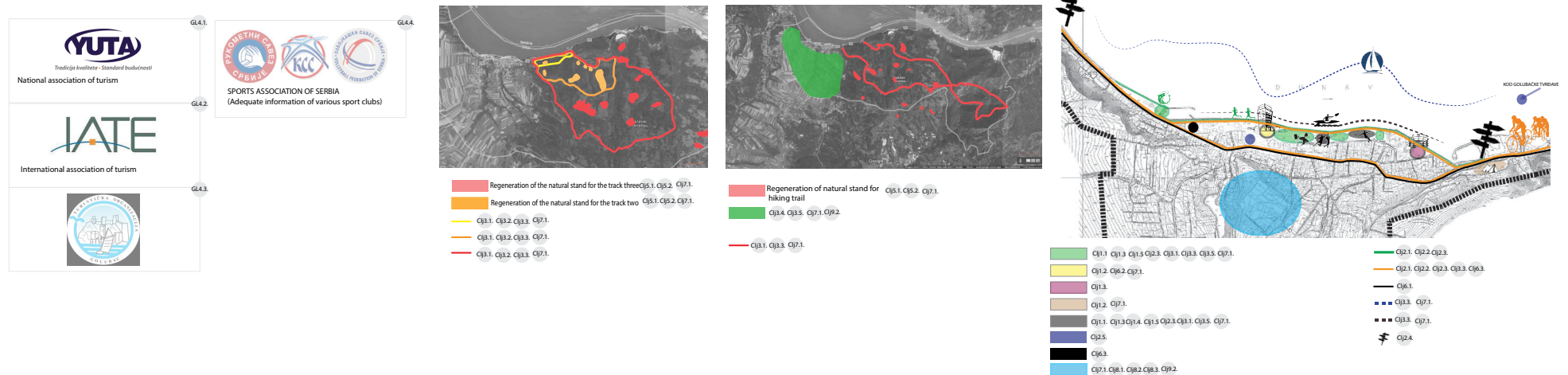
Author: Milica Ristović, Milica Đurđević, Stefan Hadži Arsenović
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Academic year: 2016/2017



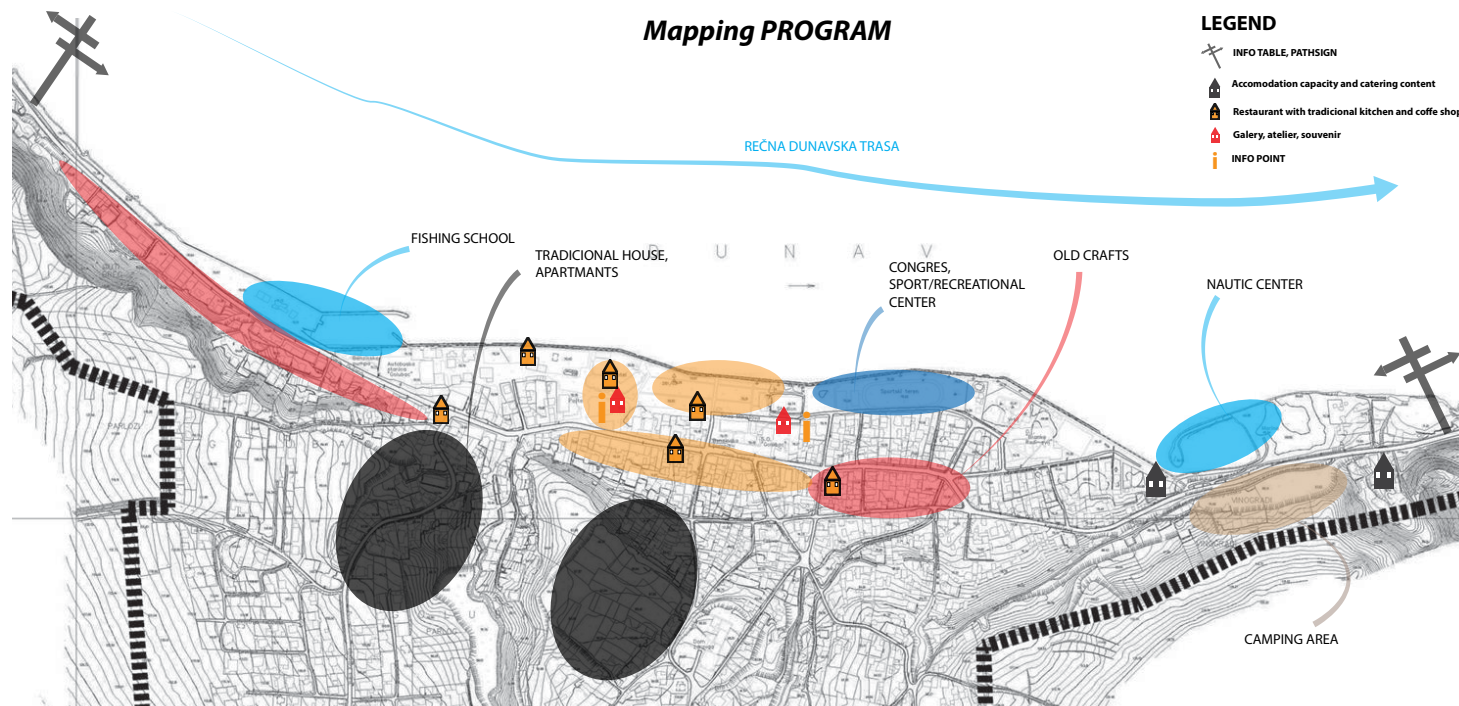
CONCEPT AND PROGRAM








Mapping GOALS



Mapping PROGRAM



LEGEND

-  **INFO TABLE, PATHSIGN**
-  **Accommodation capacity and catering content**
-  **Restaurant with traditional kitchen and coffee shop**
-  **Gallery, atelier, souvenir**
-  **INFO POINT**

RELATIONS OF TOURISM AND RESTAURANT WITH RESIDENCE

Stay in traditional holiday homes, rooms and apartments, secretarias (Ethno-tourism). Accommodation is networked with a range of recreational agriculture where tourists can participate in the production of agricultural or culinary products.



RELATIONS OF TOURISM AND CATERING SA OPERATIONS

Networking old crafts, souvenir shops, studios, galleries ... (Cultural thematic route; Ethno-tourism); Business hotels, restaurants and cafes traditional food (all kinds of tourism). Increasing sports and recreation facilities, will increase the demand for a certain activity.



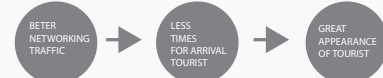
RELATIONS OF TOURISM AND HOSPITALITY INDUSTRY WITH AGRICULTURE

Carrying out everyday agricultural jobs - provision of agriculture Land for tourists (Ethno-tourism). In relation to ethno tourism, in terms of recreation, agricultural tourism is a new aspect recreation where home-made and guest participate in everyday agricultural and other the activities of a household.



RELATIONS OF TOURISM AND ACCOMMODATION WITH SAFETY

Developed network of traffic paths and adequate tourist signaling – connectivity Golubac at national and international level (All types of tourism and catering). Traffic connections are crucial for the development of tourism, if the traffic is improved, the flow of users through the routes will be greater, as well as the very variation of the arrival of tourists to Golubac.



RELATIONS OF TOURISM AND CATERING WITH NATURAL VEGETATION

Dealing with various sports activities in nature, biking and cycling through natural areas (ethno-tourism, eco-tourism), sightseeing of the local plant and animal life areas (eco-tourism). Vegetation is a crucial factor for human health, especially when it comes to recreation and sports tourism, where we make our own initiative more effort and where we can not be risk factors such as viruses, bacteria, dust, etc.

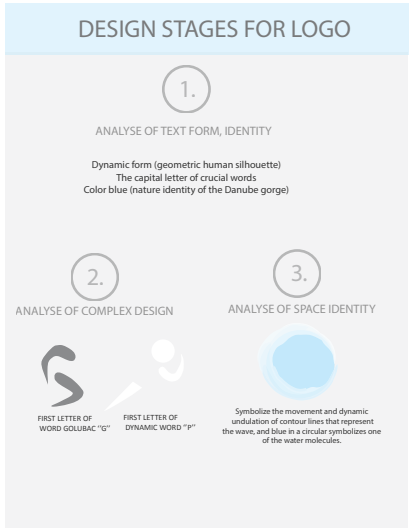


PURPOSE	SUBPURPOSE	WORKS AND ACTIVITIES	CONTENT
TURISM AND CATERING	CULTURAL-THEME ROUTES	Festivals; fun; gastronomy; creative workshops and seminars; cultural events; tours	Cultural and historical heritage; studios; galleries; hotels; restaurants With traditional cuisine; bars; Adequate infrastructure (roads, benches, selling places...); Tourist signaling (info table, road signs, marks ...); adequate presentation (info counters, guide services, locality maps ...);
	NAUTICAL TOURISM	sailing; kayak rides; river cruise; tour around the place; sport fishing; cultural and sporting events; entertainment	all facilities of nautical infrastructure (marine, gasoline stations, numerous moorings and piers at the site of interest); nautical center; sailing camp; sailing school; sailing team for the preparation of representatives and organization of competitions; weighing and storage hangars for sailboat; fishing school; boarding school; accommodation capacities and hospitality
	ETHNO-TOURISM	walking; jogging; cycling; sports activities (volleyball, football, fitness ...); sightseeing nearby destinations and cultural and historical attraction; workshops; doing everyday agricultural activities	cultural and natural heritage; traditional products; national creativity; pld crafts; souvenir shops; restaurants and other catering facilities for traditional food preparation; traditional holiday houses, rooms, apartments, camps; bowery; appropriate infrastructure (road network, the post office ...)
	ECO-TOURISM	sightseeing of the local wildlife and wildlife; visit national parks; getting to know local culture areas; educating the passengers about significance	naturally preserved spaces; following cultural objects from the past and present; Infrastructure developed in accordance with the environment; simple accommodation facilities; decorated walk track with markings; tourist signaling
	TOURISM MANIFESTATIONS	visit manifestations of cultural, artistic, entertaining, and sporting of similar character and content; festivals local communities;	hotels; congress and sports-recreation centers; camps; adequate infrastructure (roads, runways, selling places ...); tourist signaling (info table, road signs, marks ...)

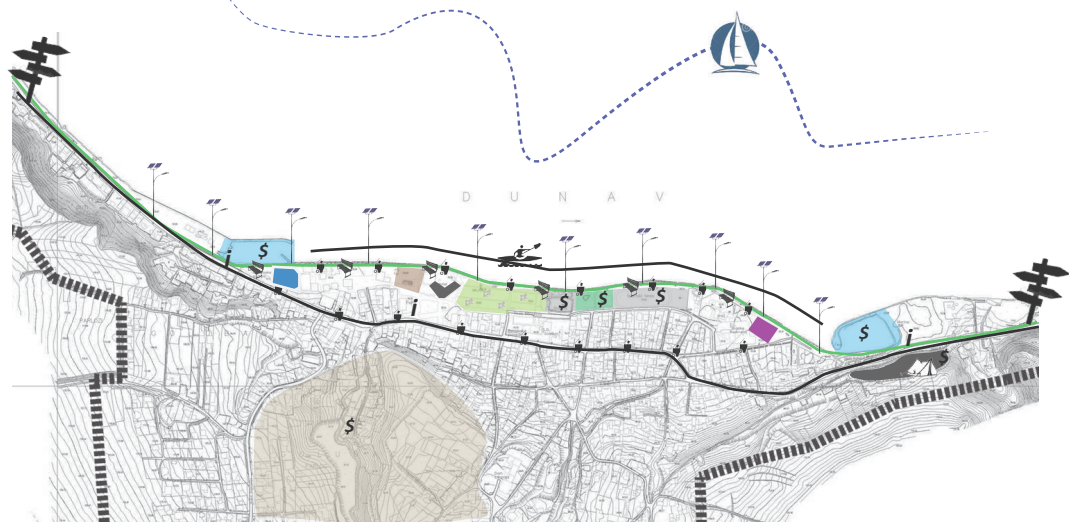


scenario: GOLUBAC U POKRETU - GOLUBAC IN MOTION

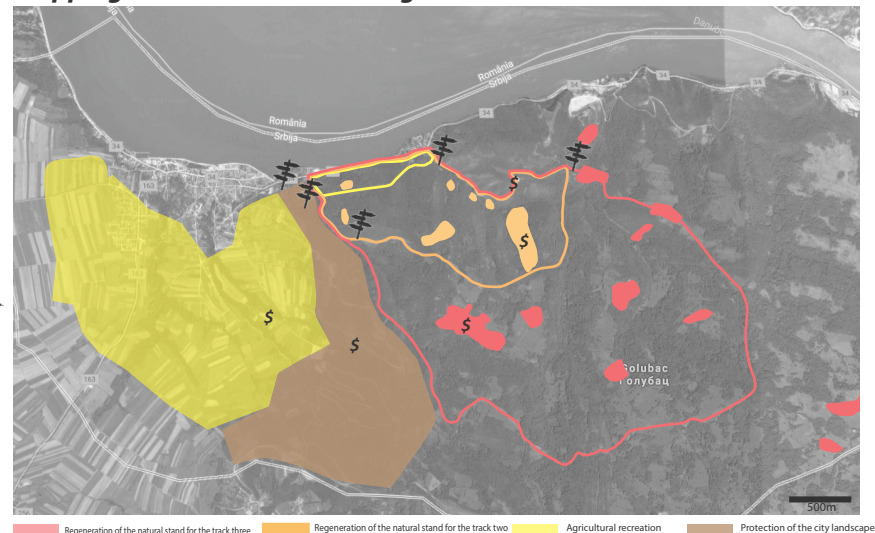
GOALS	MEASURES / PRIORITIES	IMPLEMENTATION STAGE (YEAR)	HOLDERS / ACTERS	ASPECTS	LEVELS / SCALE	MAPPING
GI1.1. Implementation additional content for the purposes of sports and recreational tourism	MEASURE 1.1.2. Concrete arrangement of football pitches in the form of multi-purpose sports surfaces with a soft material (a recycled rubber) MEASURE 1.2.1. Provide accommodation possibilities for athletes networking deals in sports and recreational tourism	2020-2030year 2020-2025year	PUBLIC - PRIVATE PUBLIC - PRIVATE	ECONOM.-ECOLO.-SOC. ECONOMIC-SOCIAL	LOCAL LOCAL	
GI1.2. Provide appropriate accommodation capacity for tourists	MEASURE 1.2.2. Provide space and supporting camping (Internet, furniture, outbuilding, toilet) MEASURE 1.2.3. Arrangement landscape architectural space for caravans and camping tents MEASURE 1.2.4. Locating the new storage capacity for sports and recreational tourism	2025-2050year 2040-2050year 2050-2070year	PUBLIC PUBLIC - PRIVATE PUBLIC	ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC.	LOCAL LOCAL LOCAL	
GI1.3. Provide a wide variety of complex types of sport fields	MEASURE 1.3.1. Networking of existing school sports hall in sports and recreational tourism MEASURE 1.3.2. . Implementation of the multifunctional outdoor terrains for team sports (Basketball, Volleyball, Handball, Futsal, Football) MEASURE 1.3.3. Provide multifunctional outdoor green ground for team sports MEASURE 1.3.4. Provide area with obstacles for practicing psycho-physical and motor skills MEASURE 1.3.5. Provide area with entertainment sports facilities	2020-2025year 2025-2040year 2030-2050year 2035-2055year 2025-2070year	PUBLIC - PRIVATE PUBLIC - PRIVATE PUBLIC - PRIVATE PUBLIC - PRIVATE PUBLIC - PRIVATE	ECONOMIC-SOCIAL ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOMIC-SOCIAL	LOCAL LOCAL LOCAL LOCAL LOCAL	
GI1.4. Construction and arrangement of sports attraction	MEASURE 1.4.1. Equipping entertainment sports and recreation area with adequate content (table tennis, table football, ...) MEASURE 1.4.2. Space design and implementation content with obstacles for practicing psycho-physical and motor skills MEASURE 1.4.3. Design green fields in a multifunctional sports and recreational green areas	2025-2070year 2030-2050year 2030-2050year	PUBLIC - PRIVATE PUBLIC - PRIVATE PUBLIC	ECONOMIC-SOCIAL ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC.	LOCAL LOCAL LOCAL	
GI1.5. Implementation sport and recreational mobilar	MEASURE 1.5.1. Equipping the park, multifunctional fields adequate furniture in accordance with their concept MEASURE 1.5.2. Positioning and design bench group seating along bicycle track (aspect of design: communication, intimacy, vistas) MEASURE 1.5.3. Implementation smart and modern sustainable mobilar (lighting with solar panels, dynamo lighting, ...) MEASURE 1.5.4. Positioning and design separated eco-multifunctional garbage	2020-2040year 2025-2050year 2050-2070year 2035-2060year	PUBLIC - PRIVATE PUBLIC - PRIVATE PUBLIC - PRIVATE PUBLIC - PRIVATE	ECONOMIC-SOCIAL ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC.	LOCAL LOCAL LOCAL-INTERNATIONAL LOCAL-INTERNATIONAL	
GI2.1. Rerouting national and international sports and recreational trail	MEASURE 2.1.1. Rerouting cycling routes in city and networking with the existing route EuroVelo 6 MEASURE 2.1.2. Rerouting walking trail and networking with existing international walk trail route MEASURE 2.2.1. Rerouting network cruise on the Danube MEASURE 2.2.2. Indentification of existing routes and networking Golubac of the existing Danube sailing inland waterway network.	2030-2045year 2020-2035year 2020-2030year 2020-2030year	PUBLIC - PRIVATE PUBLIC PUBLIC PUBLIC	ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC.	LOCAL-INTERNATIONAL LOCAL-INTERNATIONAL REGIONAL-NACIONAL REGIONAL-NACIONAL	
GI2.2. Rerouting bicycle,hiking and nautical routes	MEASURE 2.2.3. The routing paths for running and fast walking through the natural features for athletes with possible designed obstacles and without, the length from 2km to 10km. MEASURE 2.2.4. The routing paths for running and fast walking through the natural features for athletes with possible designed obstacles and without, the length more than 10km. MEASURE 2.2.5. The routing paths for running and fast walking through the natural features for athletes with possible designed obstacles and without, the length more than 10km. MEASURE 2.2.6. The routing paths for running and fast walking through the natural features for athletes with possible designed obstacles and without, the length more than 10km. MEASURE 2.2.7. The routing kayak route between two docks in parallel with Golubac downtown	2020-2050year 2020-2030year 2025-2050year 2050-2070year 2020-2030year	PUBLIC PUBLIC PUBLIC PUBLIC PUBLIC	ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC.	LOCAL-REGIONAL LOCAL-REGIONAL LOCAL-REGIONAL LOCAL-REGIONAL LOCAL	
GI2.3. Provide adequate infrastructure	MEASURE 2.3.1. Designing and arranging dock for kayaking, sailing MEASURE 2.3.2. The formation of pedestrian routes with potentiated views of the landscape features of the area	2025-2070year 2025-2070year	PUBLIC - PRIVATE PUBLIC	ECONOM.-ECOLO.-SOC. ECONOM.-ECOLO.-SOC.	LOCAL LOCAL-REGIONAL	
GI2.4. Provide tourist signage	MEASURE 2.4.1. Marking cycling routes with signs and maps MEASURE 2.4.2. Marking pedestrian routes with signs and maps MEASURE 2.4.3. Marking nautical routes with signs and maps	2020-2025year 2025-2030year 2025-2030year	PUBLIC PUBLIC PUBLIC	ECONOMIC-SOCIAL ECONOMIC-SOCIAL ECONOMIC-SOCIAL	LOCAL LOCAL LOCAL	
GI2.5. Provide adequate presentations	MEASURE 2.5.1. Securing and positioning info point at Golubac castle and the city center	2025-2040year	PUBLIC	ECONOMIC-SOCIAL	LOCAL	
GI3.1. Implementation of competitive events	MEASURE 3.1.1. Running through the mountainous route, the coastal part (track 100m), running with obstacle MEASURE 3.1.2. Race mountain biking	2020-2030year 2030-2035year	PRIVATE PRIVATE	ECONOMIC-SOCIAL ECONOMIC-SOCIAL	LOCAL LOCAL	
GI3.2. Implementation of recreational and entertainment events	MEASURE 3.2.1. Entertainment facilities in the area and competition through entertainment (table tennis, billiards, darts, chess, marbles, ...)	2025-2070year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI3.3. Improving existing events	MEASURE 3.3.1. International Canoe Regatta and competition, state championship in sailing, walking eco tours, a fishing contest	2025-2035year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	LOCAL-REGIONAL	
GI3.4. Manifestation competition in recreational agriculture	MEASURE 3.4.1. Traditionally, mowing lawns, collecting fruit brandy, picking fruit for processing, planting, transplanting plants, pruning	2030-2035year	PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI3.5. Recreational folk/countryside competition	MEASURE 3.5.1. Throwing stones, cutting logs, oxen steering, steering pajvana hawser	2030-2035year	PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI4.1. Mapping offers on national internet portals	MEASURE 4.1.1. Mapping offers the national organizations agency for tourism	2020-2030year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	NACIONAL	
GI4.2. Mapping offers and international Internet portals	MEASURE 4.2.1. Mapping offers the international organizations agency for tourism	2020-2040year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	INTERNACIONAL	
GI4.3. Mapping offers and local presentations via the Internet	MEASURE 4.3.1. Mapping offers at the official presentation of the website with a infographic map and supporting dynamic content	2020-2025year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI4.4. Mapping potential sport and recreational tourist and communication via web	MEASURE 4.4.1. Mapping of potential clubs, school sports. Mapping and networking offer information to customers	2020-2025year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	NACIONAL	
GI5.1. Effective management of national parks and vegetation around the city	MEASURE 5.1.1. Regeneration of damaged surfaces areas with local vegetation	2020-2070year	PRIVATE	ECONOM.-ECOLO.-SOC.	LOCAL-REGIONAL	
GI5.2. Protection of green spaces of agricultural expansion	MEASURE 5.2.1. Protection of natural vegetation around the city, in order to preserve the natural landscape of the city	2020-2070year	PRIVATE	ECONOM.-ECOLO.-SOC.	LOCAL-REGIONAL	
GI6.1. Construction and maintenance of roads and other communal infrastructure	MEASURE 6.1.1. Patching potholes, edit green corridor along the travel route	2020-2030year	PRIVATE	ECONOMIC-SOCIAL	LOCAL-REGIONAL	
GI6.2. Improve tourism's infrastructure and superstructures	MEASURE 6.2.1. Arranging pavements, accompanying content transport infrastructure, parking	2025-2035year	PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI6.3. Capacity building for receptions and departures passenger	MEASURE 6.3.1. Arranging the bus station for the reception and departure of a larger number of vehicles	2040-2070year	PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI7.1. Increasing the number of employees in tourism and complementary activities	MEASURE 7.1.1. Employment in maintaining bicycle, pedestrian paths, sports equipment, communal infrastructure, experts from various professions	2025-2070year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI8.1. Increasing the number of rural tourist households	MEASURE 8.1.1. Expansion of the urban development Golubac in the form of traditional construction eastern Serbia.	2030-2070year	PUBLIC	ECONOM.-ECOLO.-SOC.	LOCAL	
GI8.2. Possibility of contact with nature and local culture	MEASURE 8.1.2. Design garden area within the parcel of traditional house	2030-2060year	PRIVATE	ECONOM.-ECOLO.-SOC.	LOCAL	
GI9.1. Provide agricultural areas for tourists	MEASURE 9.1.1. Networking local households involved in agriculture in the recreational tourist offer	2025-2035year	PUBLIC - PRIVATE	ECONOMIC-SOCIAL	LOCAL	
GI9.2. Connecting the local inhabitants and tourists	MEASURE 9.2.1. Promotion of recreational agriculture to tourists who are interested in ethno-recreational tourism	2025-2035year	PRIVATE	ECONOMIC-SOCIAL	LOCAL-INTERNATIONAL	



Mapping priorities / measure



Mapping measure on wider range area



Dijagram analize mera kroz vreme

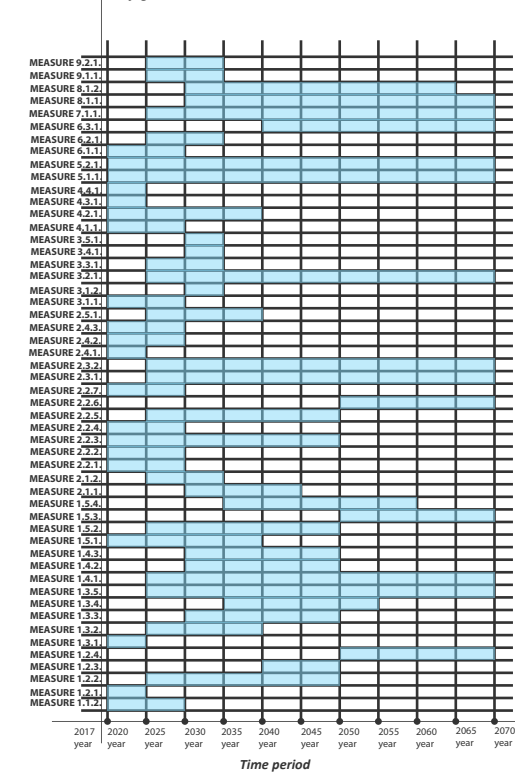
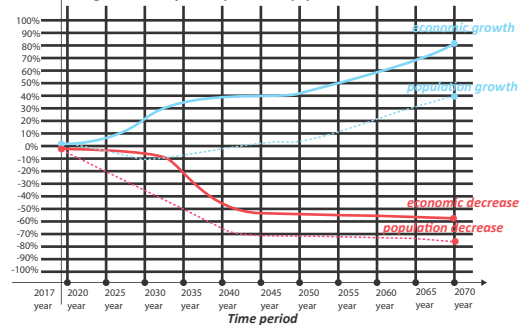


Diagram economy development and population.



Negative scenario

GOLUBAC CITY OF WEEDS

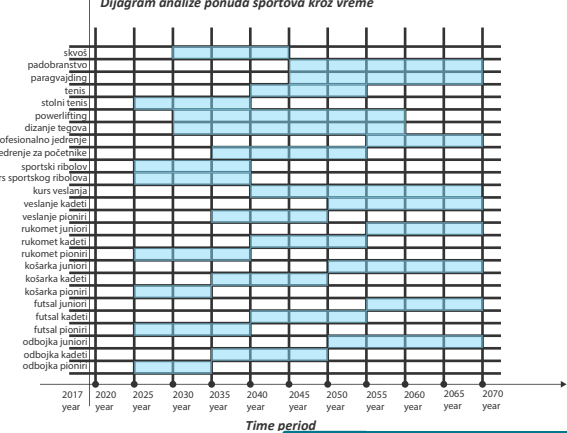
If business continues in the form of non-projected long-term and short-term goals and measures, the following critical events will take place. The economic downturn will continue in that direction because commercial agriculture swallows small households, and will therefore reach large migration to 2050 years. Also near agriculture, poor offer tourism will disturb only the potential of this and it is a natural whole and building heritage. 2070 it would probably be 1/4 of the population in Golubac and will do so mostly pensioners and those who work in public administrations.

Scenario for the future

GOLUBAC U POKRETU

In the initial stages of development, there will be economic growth because it begins a new form of collaboration, cooperation and offers the market by Golubac through sports and recreational tourism. The population will decline in the first 35-40 years, when the development of this scenario to achieve optimum and economic growth, and in bringing the population to a constant nuisance. From 2050 years there will be a mutual growth, because it will expand the demand for labor as a result of the introduction of new measures and improve sports and recreational tourism of other activities that are in between.

Dijagram analize ponuda sportova kroz vreme



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Academic year: 2016/17

Interreg
Danube Transnational Programme
DANUrB

EUROPEAN UNION

10. DESIGNING NEW SOLUTIONS FOR GOLUBAC

Dr. Branislav Antonić, teaching assistant

The last phase during studio work in Golubac was a concrete design for a small open public space in central Golubac as one of key actions proposed by the chosen scenario. Moreover, the design did not limited students to give up from architecture and building design; many of them integrated these elements in their final solutions for urban space in central Golubac. Interestingly, some of them also included the Danube River as a polygon for their solutions. Therefore, this phase was done as an urban design project with architectural segments, with presentation in both 2D drawings and spatial modelling.



Fig. 1: The presentation of draft student projects in Golubac in May 2017 (source: A. Djukic).

The ideas and character of student design projects indirectly emphasise the potential of Golubac Town. Some students opted for balanced mix-use design without clear preference to any function or activity; the other ones were strictly attached to new places for culture, socialisation, innovative housing on water, or new tourist and accommodation capacities.



Fig. 2: The presentation of draft student projects in Golubac in May 2017.

This mixture is also preserved in the locations of their design projects in central Golubac. Some of students chose to further develop or enlarge the main town square as a focal point in the town; the other ones tried to form new spaces for gathering at the edge of the centre of Golubac; the last ones got into the river and created water structures in the front of the town centre. However, for all of them could be concluded that the Danube was their inspiration and constant for their design projects in Golubac regardless they directly touched the river in their projects, indirectly included the view on it or symbolically involved the Danube as a motive in their designing process.



NEW SOLUTIONS FOR GOLUBAC

STUDENT PROJECTS

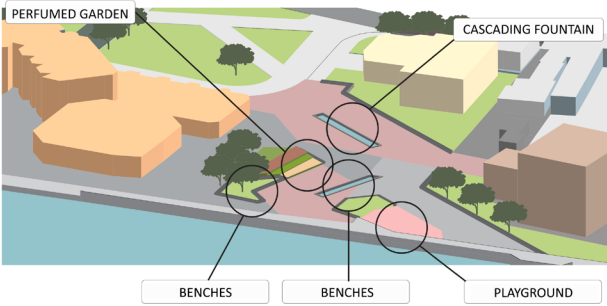




CITY SQUARE MASTER PLAN

The new space market is designed to Old market connects directly to the Danube quay and space at existing residential buildings. Fontana which is directed diagonal movement towards the area of the Danube quay. There are no obstacles that could disturb Visual direct views towards the coast of the Danube itself. Visually opening to the area of the old market perceive you to see the old core of the Municipality of Golubac, hotel Golubački grad and Retail Poste Serbia and make this space unique physical and functional.

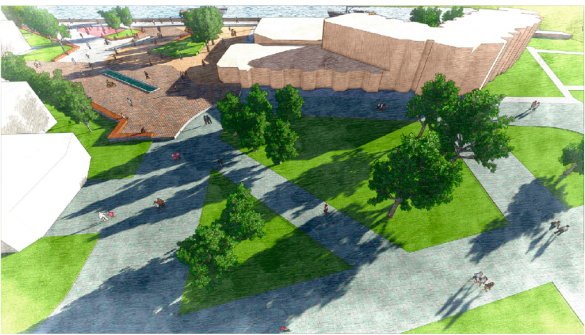
PERSPECTIVE



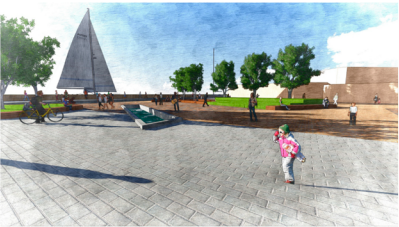
VISUALIZATION



VISUALIZATION



VISUALIZATION



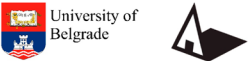
VISUALIZATION



VISUALIZATION

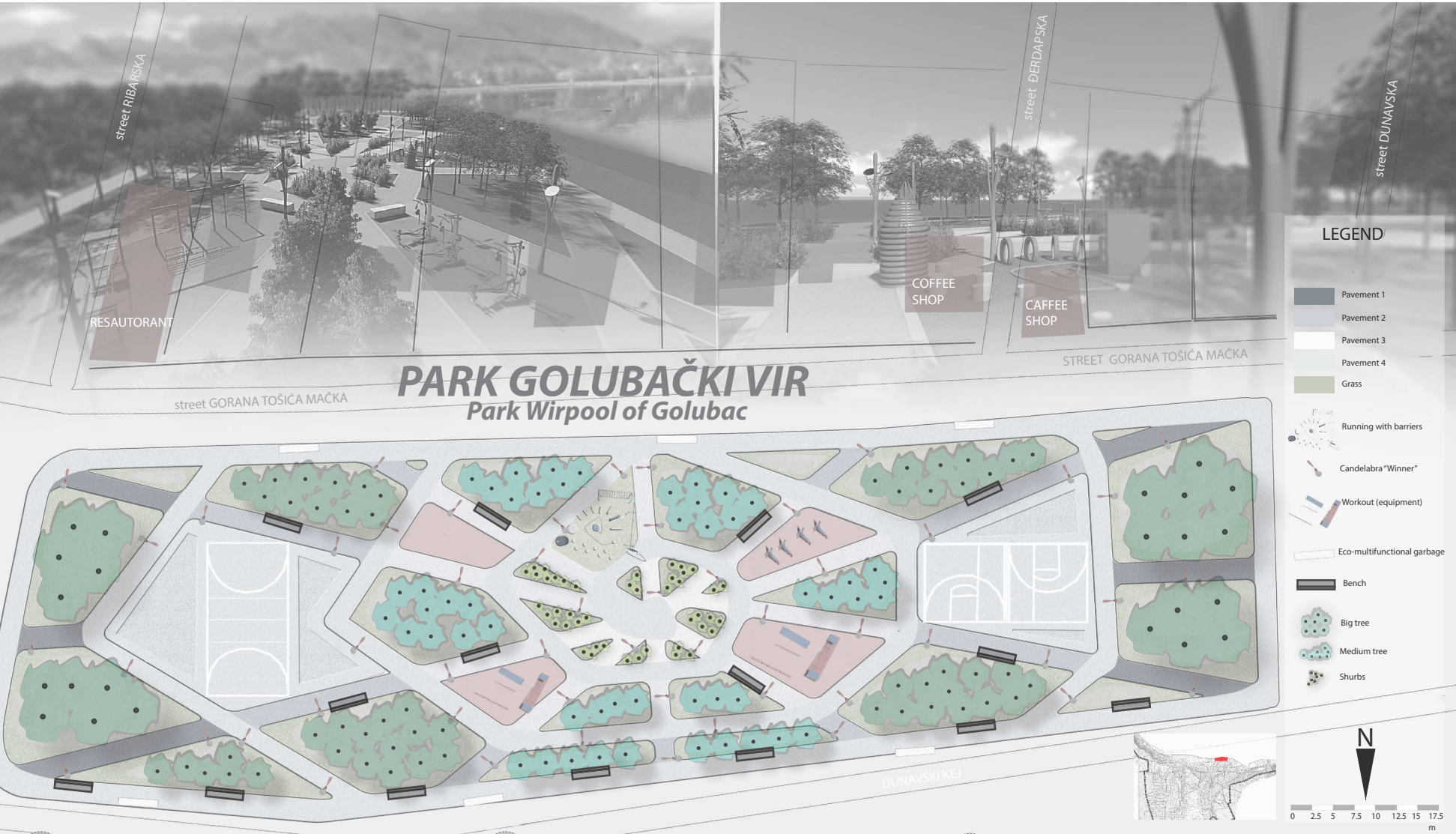


VISUALIZATION



Author:	Nevena Mandić; Mladen Kostadinović; Srđan Mićanović
Supervisor:	Aleksandra Đukić; Ivica Nikolić; Branislav Antonić; Tamara Radić
Academic year:	2016/2017





1. ANALYSE OF WORD WHIRLPOOL, SHAPE AND FORM

1.1. **ATTRACTION**
ENERGY
POWER **WIRPOOL**
značenje reči?

Whirlpool illustrate power, energy and attraction, which is sport area crucial concept of development, where power and energy have built and where its content attract users to return again. Whirlpool also an integral part of the natural phenomena which are connected to the concept of space that created actually WHIRLPOOL OF GOLUBAC in Danube Gorge.

1.2.

Analysis of the resulting depth and radiating finger structure

1.3.

Analysis to obtain a spiral shape and depth (symbolism of whirlpool)

1.4.

Analysis to obtain amorph shape and depth (symbolism of water molecules)

2. ANALYSE OF DESIGN FUNCTIONALITY

2.1. *Terrains are intended for pionner, there are multifunctional and variable dimensions.*

WORKOUT AREAS ARE PROPOSE FOR ALL AGES

Analysis of possible paths for the heating before training. Main paths that surrounds the concept which is used for fitness training, while other tracks that frame the workout areas used for heating before training.

2.2.

Analysis of track called "start/goal". Track with start and goal, are designed to strenght motirical and mental capaty, where spiral shape guides the users to continually changes direction and thereby strenghten joints and mental dexterity and dynamic of its practice.

2.3.

Analysis tracks variable lenght. Tracks of variable lenght offer different degrees of fitness training, and both will offer the possibility of separating athletes on various tracks in relation to their conditions.

2.4.

Analysis of vegetation. Its important that implemented vegetation are heterogeneous (local deversified) vegetation framed workout areas, because its emits negative ions that impact by: Clean pollution, like dust, viruses, bacteria. Improve people brathing who have respiratory problems (allergy, bronchiti, hay fever). Strenghten the immune system and positively affect on human glands and cell in the body. Increase the level serotina (happines hormone), which prevent depression. Reduce tiredness, improving mental ability of organism.

3. ANALYSE OF VIEW AND SIMBOLISM OF MOBILIAR DESIGN

3.1.

Radiating finger structure can achieved widespread system views, where in the points in space that are known analyzing the at least line of sight along the walkway with the deep penetrations by city and by coast.

3.2.

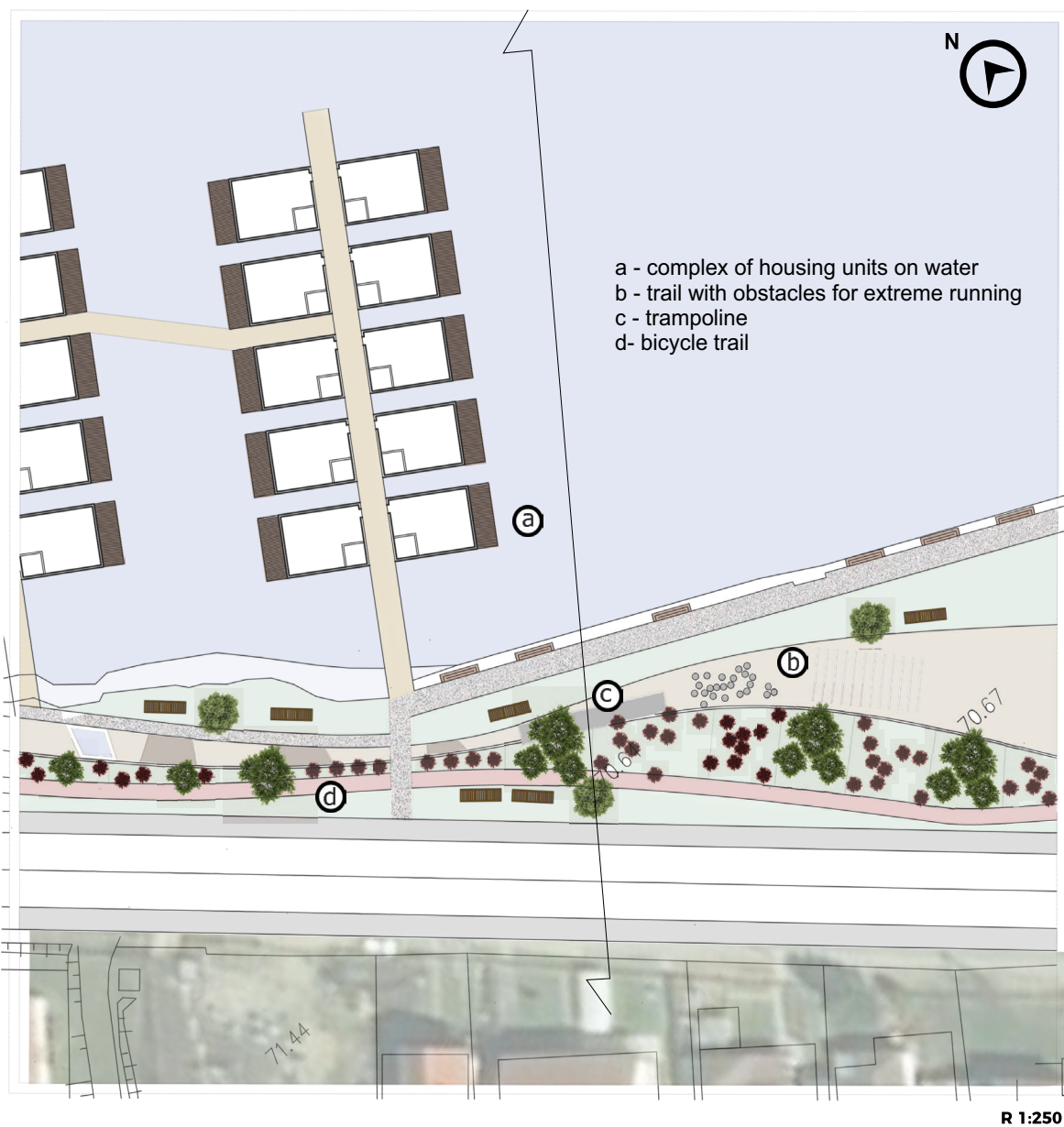
Candelabra is one of the segments that strenghten the identity of this concept because the solar panel with stand is set to symbolically represent the winner holding his trophy. Also net with natural landscape of Golubac is achieved with a birdhouse in the top of the candelabra, thus we save flora as an ecological cycle where birds eating insects which transmit protects our health.

3.3.

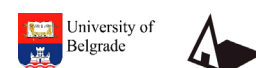
Eco-multifunctional garbage is also one of details that strenghtens identity of space. The shape represents ship sailing throught Golubac Gorge. Recreational concept is achieves by users who metal and plastic trash animate with recycling, which they have to do a certain function to pressing waste.

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Academic year: 2016/17





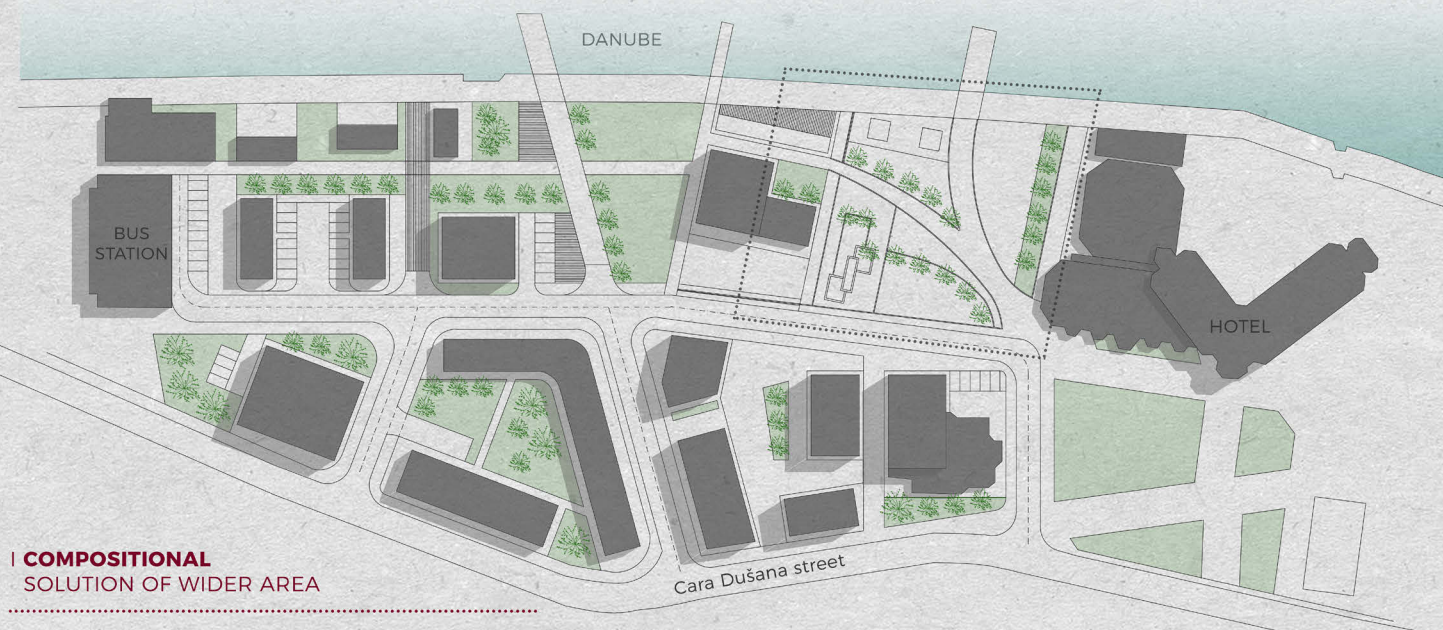
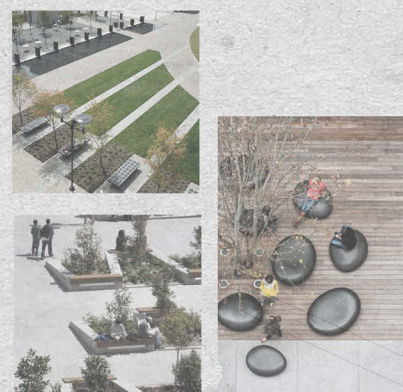
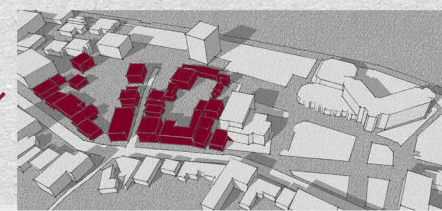
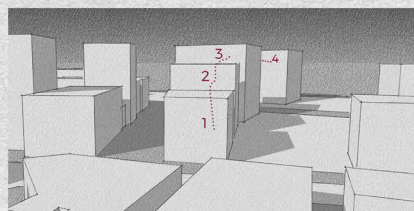
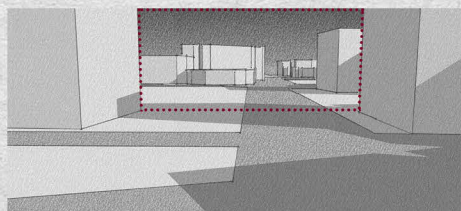
MICRO LEVEL SCENARIO



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Academic year: 2016/2017



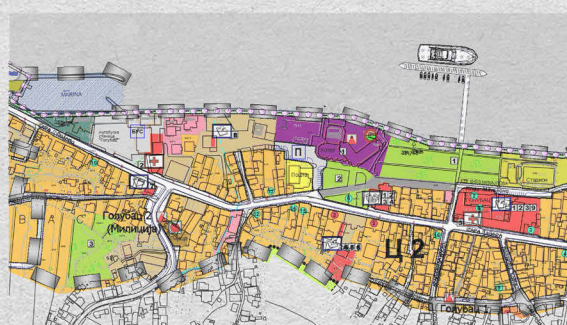
Monika Jovanovski, Boško Žakula,
Srđan Radovanović



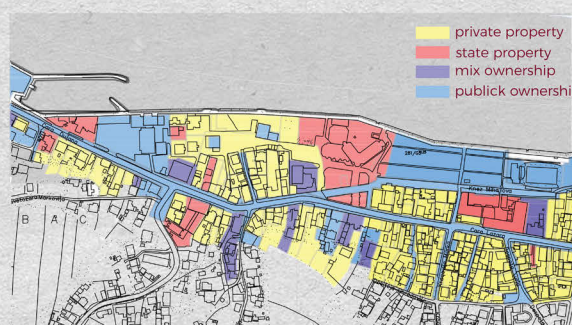
COMPOSITIONAL SOLUTION OF WIDER AREA

GOLUBAC - TREASURY OF THE DANUBE

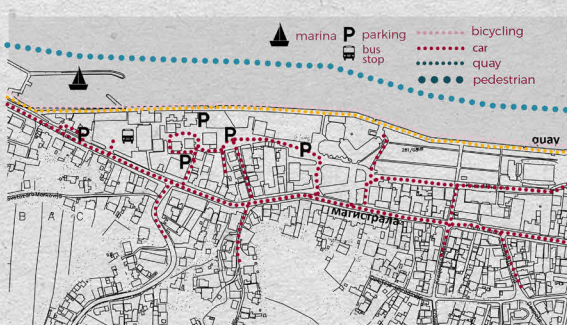
FORMING A NETWORK OF PUBLIC SPACES - PLANNING NEW CITY SQUARE



GENERAL REGULATION PLAN OF URBAN SETTLEMENT GOLUBAC - LAND USE



E CADASTRE - OWNERSHIP



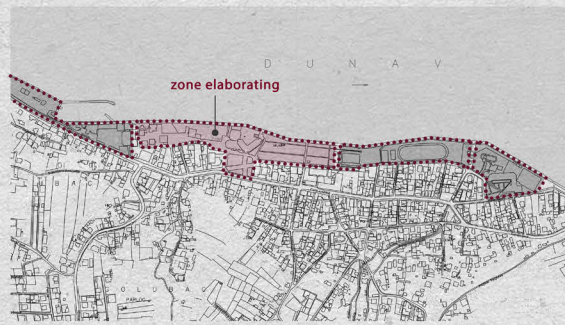
SCHEME OF TRAFFIC NETWORK



MAP OF CONTEXT OF THE CONCERNED LOCATIONS



MAPA CONSTANTS IN THE IMMEDIATE ENVIRONMENT OF THE OBSERVED



ZONING SPECIFIC UNIT MOVE ALONG THE COASTAL ZONE

CREATING A PUBLIC SQUARE

STEP 1. ANALYSIS PLANNING DOCUMENTATION:

General Regulation Plan urban of settlement Golubac:

- the general regulation did not clearly defined center zone with mixed purpose and lack of clear formation of a network of public spaces
- there are not enough diversified uses of land and buildings in coastal zone and in the central zone. the central zone is not compact but it is fragmented and does not form a clearly defined environmental entities
- the identity of the space is too monotonous and subordinated to the existing situation, the plan does not foresee significant changes in order to improve the quality of urban space

Detailed regulation plan from the Danube coastal tourist village Vinci to the fortress "Golubac city":

- plan of the entire area along the Danube is viewed as a unique offshore whole so there are not defined as different ambience and functional subunit

STEP 2. ANALYSIS OF CADASTRE

- insufficient updating of cadastre leads to the confusion and complicates the property rights and complicates the proces of buying, selling and construction on the property
- on all parcels. in the monitored zone, there are buildings and the most of them are privately owned, more then 60%
- great potential for development is a zone between the coast, the bus station, the highway and the park, which is a unique subgroup within the coastal belt, but now mostly used as a parking space

STEP 3. ANALYSIS OF TRAFFIC NETWORK:

- By analysis of the transport infrastructure and the movement of the users on the location, we conclude:
- the highway represents a significant barrier separating the residential zone on one side and the market zone on the other
- lack of cross-linking coastal areas and residential areas over the highway
- the space between mail, hotel, quay and the bus station is predominantly designed for the movement of cars, although the path from the bus station to the building of the municipality is of great importance for pedestrians

STEP 4. ANALYSIS OF CONTEXT:

- From the analysis of the context in which there is room for future square, we conclude:
- clearly stands out flight path from the bus station to municipalities and public spaces that are grouping around the extensions along this direction
- lateral connections passing around important structures that represent attractors in space
- existing public spaces are the park zone, green zone on the other side of the hotel and the existing square
- important buildings that characterize this area are: bus station, hotel, post office, the municipality and the library
- This space represents the relationship between residential zone on the other side of the highway and the coast, but at the same time it represents the core of the central zone and potentially the most significant public space

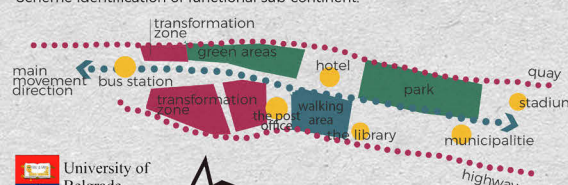
STEP 5. MAPPING SPACE CONSTNTS:

- After previously performed analysis we form the map of constants - key elements for the formation of the space square, such as: facilities for public use, with the hotel / library, bus station, municipalities and mail / park, Danube quay and highway

STEP 6. DEFINING POSITION OF THE LOCATION IN THE COASTAL ZONE:

- In order to make a good and used public space on this location it was necessary to analyze the whole municipality and especially the area of the coast so we can see what is the main role of the new square.

Scheme identification of functional sub-continent:



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Academic year: 2016/2017



CITY THAT LIVES ON THE DANUBE AND FROM IT

CITY OF LIVE STREETS

EXCITING CITY OF HOSPITALITY

MEETING OF TRADITION AND INOVATION CITY

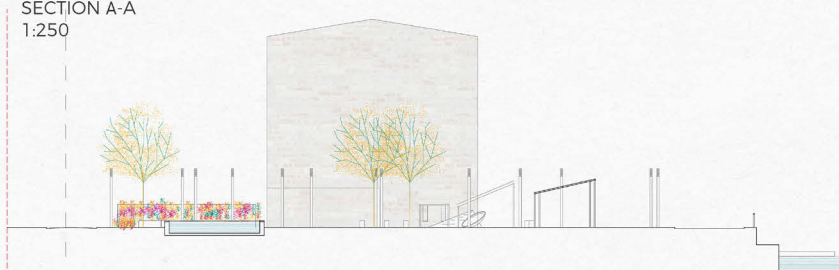
PLAN
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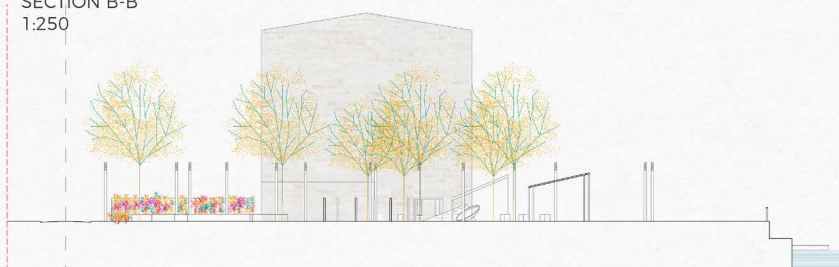
GOLUBAC - TREASURY OF THE DANUBE

CREATING A PUBLIC SQUARE

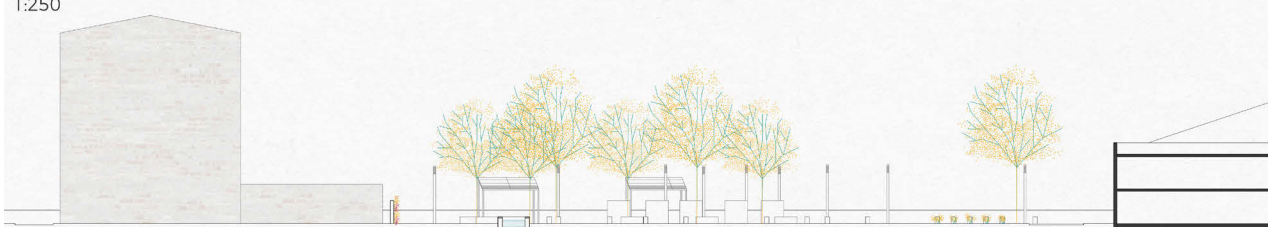
SECTION A-A
1:250



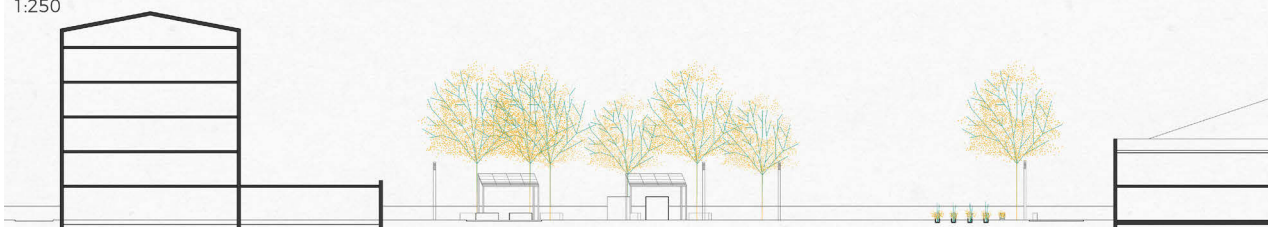
SECTION B-B
1:250



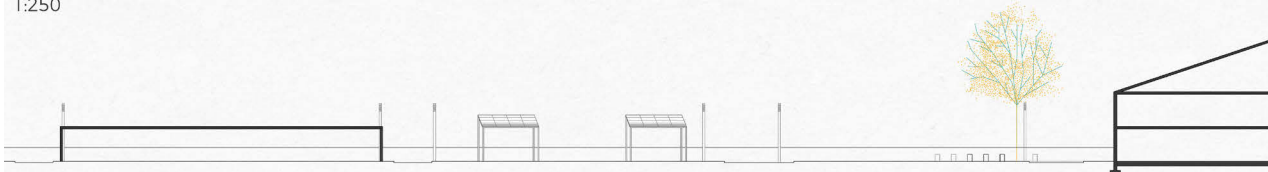
SECTION 1-1
1:250



SECTION 2-2
1:250



SECTION 3-3
1:250



MAP OF SUGGESTED ACTIVITIES



Project suggest a square with lots of a diverse ambients and different activities in outdoor space. Square is next to the Danube promenade and it gives a great panorama view from new square to the other side of the river. New square is a open public space that connect existing square and Danube promenade and riverside and at the same time has different activities and multifunctional places that improves quality of life in Golubac.

KEY ELEMENTS:



DANUBE PROMENADE:

Danube is a most important part of Golubac identity and promenade along riverside is one of the most beautiful urban areas of Golubac. New square is open towards Danube and import a riverside in its urban design. At the same time visitors are in an urban area such is a city square but also on the one of the most beautiful riversides in Europe.



FOUNTAIN:

Fountain on the square emphasize the feelin of beeing in city that lives on and from Danube.



URBAN MOBILIAR:

New square is designed with lot of space for sitting, relaxing and enjoying outdoor space. Dinamic composition with different materialisation and urban design make this space attractive and comfortable for all visitors.



FREE WIFI ZONE:

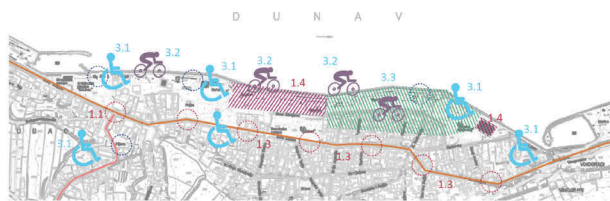
Free internet connection attract visitors and improve quality of urban space.



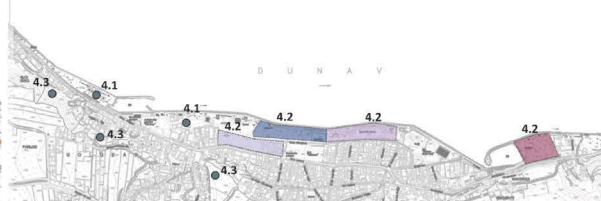
Author: Milica Ristović, Milica Đurđević, Stefan Hadži Arsenović
Supervisor: prof. dr Aleksandra Đukić, as. Ivica Nikolić, Branislav Antonić, Tamara Radić
Academic year: 2016/2017



Milica Ristović, Milica Djurdjević,
Stefan Hadži Arsenović



MAPPING OF THE PRIORITY GOALS FROM THE SCENARIO 1
GOLUBAC_CONNECTED TOWN



MAPPING OF THE PRIORITY GOALS FROM THE SCENARIO 2
GOLUBAC_CULTURAL RIVERFRONT



MAPPING OF THE PRIORITY GOALS FROM THE SCENARIO 3
GOLUBAC_CONTEMPORARY HUB



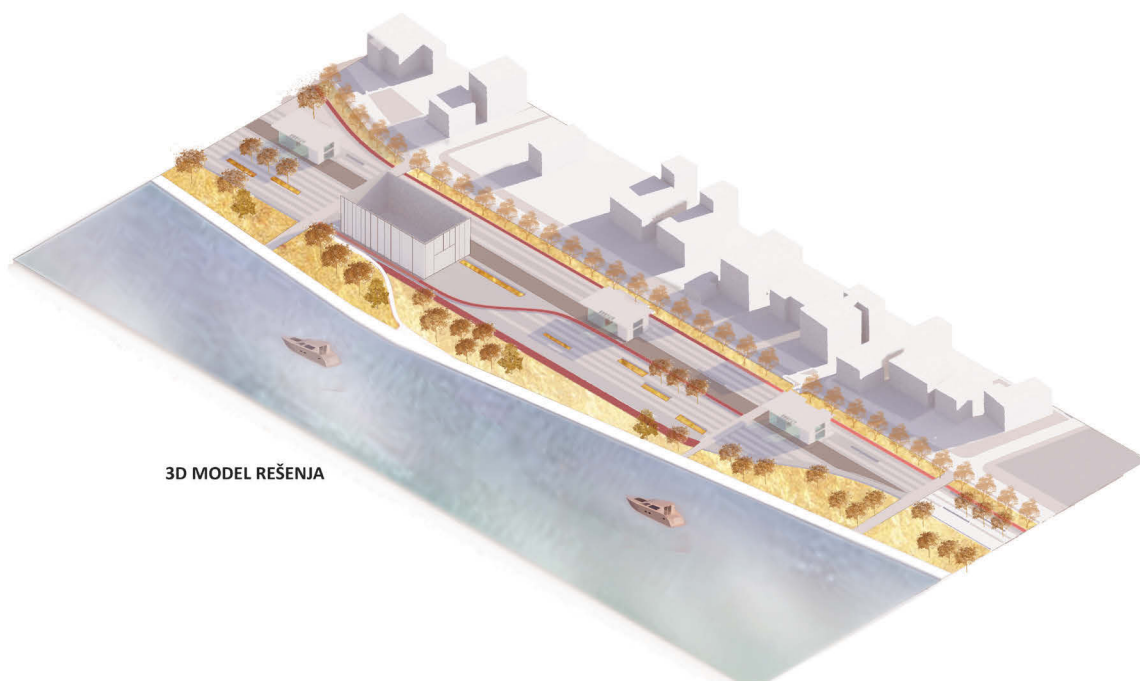
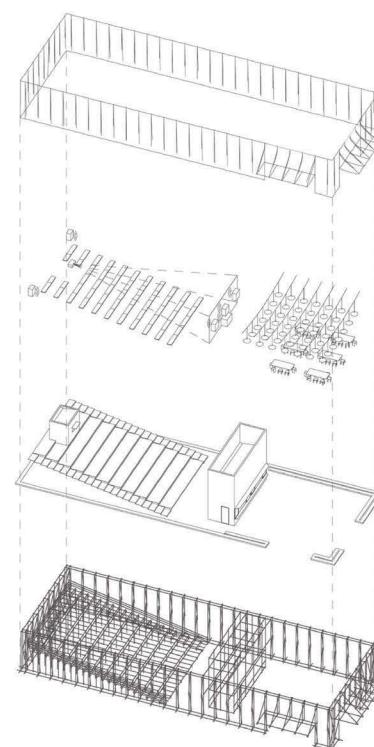
DOCK OF CULTURE

GROUND FLOOR OF THE RIVERFRONT, R = 1:500



VIEW, R = 1:500

AXONOMETRY OF MULTIFUNCTIONAL PAVILION



3D MODEL REŠENJA

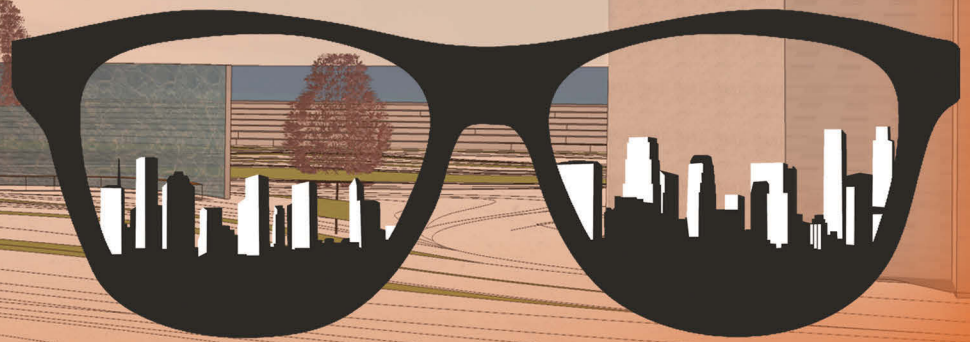


Author: Vanja Vujanović 22012/2016, Ivana Savić 22016/2016, Mila Stojanović 22018/2016
Supervisor: prof.dr Aleksandra Đukuć, ass. Ivica Nikolić, saradnici Branislav Antonić, Tamara Radić
Academic year: Prolećni semestar 2016/2017, Master Integralni Urbanizam, 1. godina

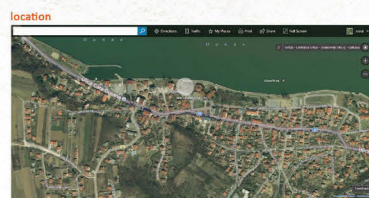
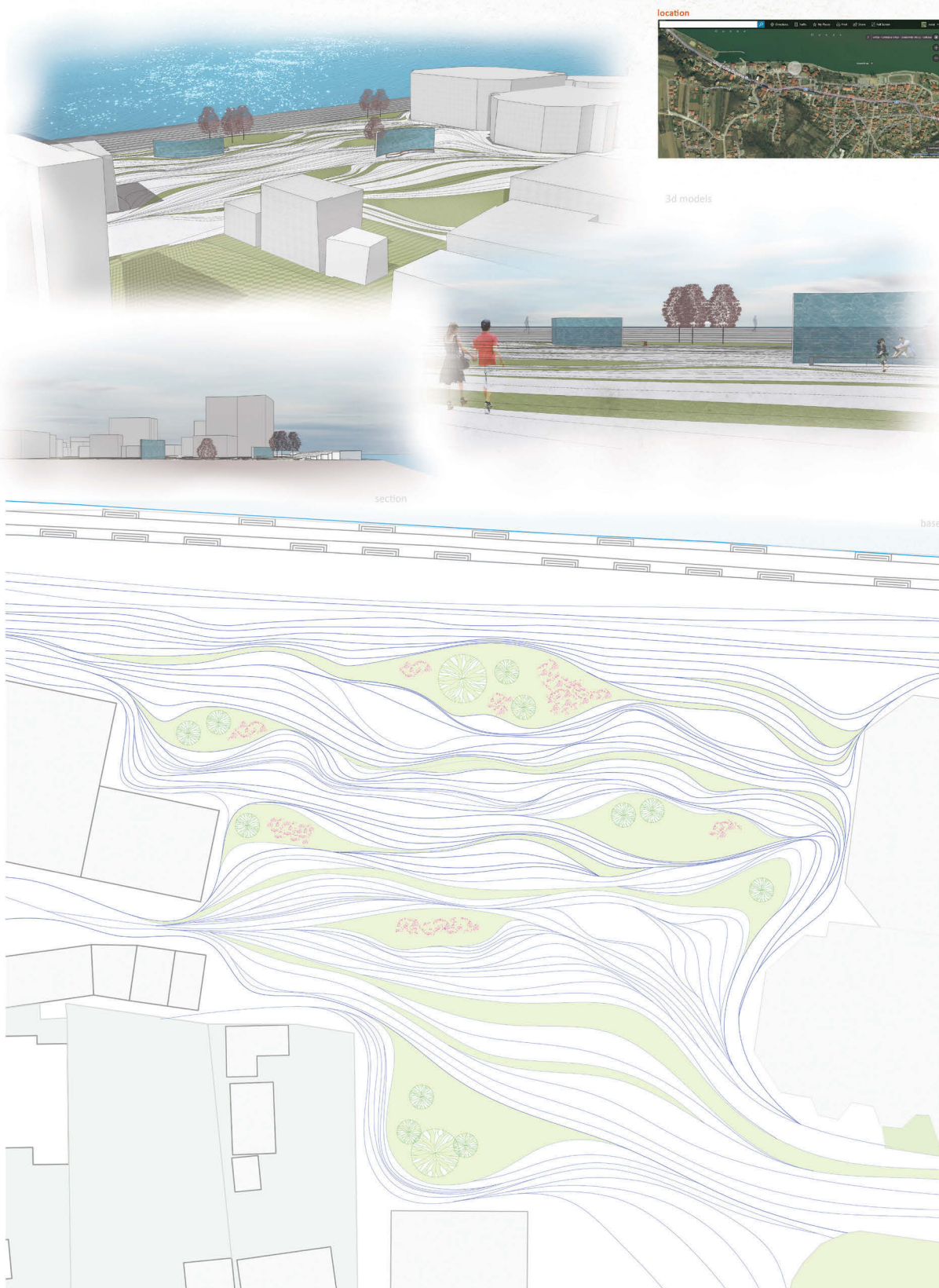




sustainable
modern
artistic
reliable
town



GOLUBAC - SUSTAINABLE, MODERN, ARTISTIC AND RELIABLE NEW SQUARE



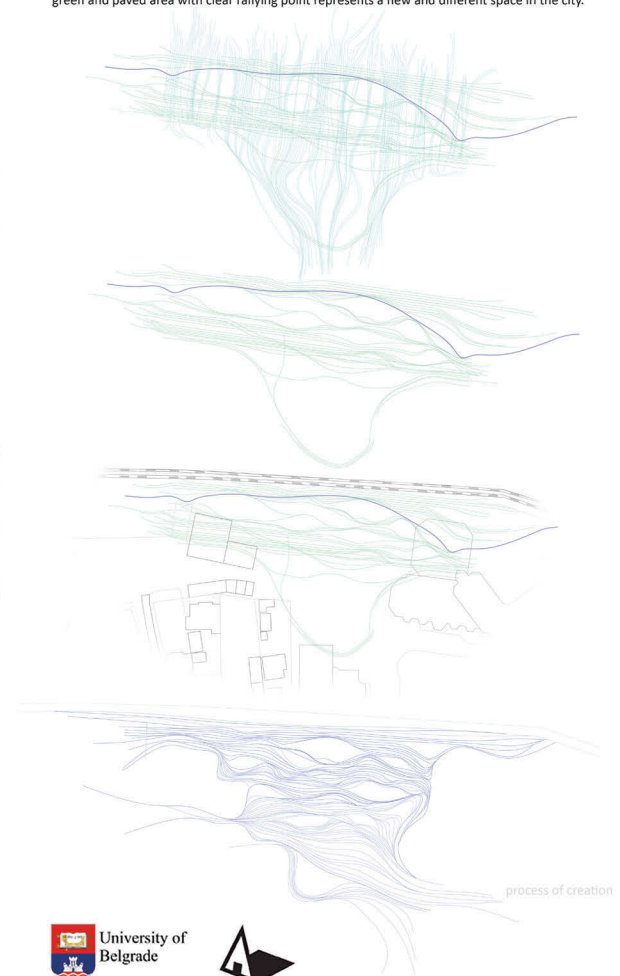
3d models

PROGRAM GOALS

NEW SQUARE

The space of the square in the transition between the two environments, water and land, conceived as intersfera, transient layer that contains elements of both sides, so treated, indication of new concept in the design of public spaces in this city. The ground floor is divided on curved surfaces which alternate with greenery in a direction parallel to the shore. This tangle of curves that are expanding and contracting in some places came from the basic idea of "expansion" of the river - curved areas suggestive of waves that are pushed into the depth of the square.

Within this grid is a pair of centers, defined as larger contiguous areas that are narrower at the ends and passes to said network. They are gathering places for residents and visitors, further emphasized furniture and materialization. "Water walls" are part of the vertical division of the space of the square to its transparency and design contribute to the vitality of the neighborhood. This network of green and paved area with clear rallying point represents a new and different space in the city.



process of creation



Authors: Jana Milovanović 22013/2016, Milica Zukanović 22020/2016
Supervisors: prof. dr Aleksandra Đukić, asst Branislav Antić, Ivica Nikolić
Academic year: 2016/2017



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