

ARCHITECTURAL – URBANISTIC SOLUTIONS
FOR THE 5-STAR TOURIST FACILITY ON GLAVATI - PRČANJ



TEXTUAL ANNEXES

1. INTRODUCTION

- 1.1. History
- 1.2. Architectural Heritage
- 1.3. Natural Values

2. ANALYSIS OF SITUATION

- 2.1. Current situation
- 2.2. Spatial Plan

3. USE OF THE AREA

- 3.1. Planned capacities
- 3.2. Urbanistic & Project Parameters of the UP6

4. CONCEPTUAL DESIGN

- 4.1. Architectural Design
- 4.2. Structural Design
- 4.3. Landscape Design
- 4.4. Interior Design



1. INTRODUCTION

1.1. History

Prčanj is one of the first settlements in the territory of Kotor and Risan Bay that have developed in the ancient period.

The name Prčanj appears in documents starting from the XIV century. Around 1420, Kotor and Prčanj fell under the rule of the Venetian Republic, which resulted in the arrival of the Venetian families who erected the palaces and fraternity buildings in this area.

The oldest settlement developed on the slopes of Vrmac, above the present-day Prčanj, around an old parish church. Along the coast, there were just small chapels and buildings related to commercial activity.

A more intensive colonization of Prčanj began under the rule of the Venetian Republic

Due to the Turkish occupation of a part of the Bay of Kotor, from Risan to Herceg-Novi, at the end of the fifteenth century, the settlement remained in the higher mountain areas. The development of longitudinal settlement on the coast, in the southeast-northwest direction, began in the 16th century.

Prčanj is part of a network of settlements constituting a whole with Kotor, featured on the UNESCO list of world natural and cultural heritage, due to its specificity.

1.2. Architectural Heritage

The UNESCO Convention on the natural, culturo-historical region of Kotor from 1979, mentions Prčanj as an old maritime municipality, with significant ecclesiastical buildings such as the Church of Our Lady, the Franciscan monastery with the church of St. Nicholas, the remains of the church of St. Thomas and an ensemble of Baroque palaces.

Facades of traditional buildings were made of cut stone from Korčula stone, jointed with narrow strips of mortar protruding from the surface of the facade, with stone slab finishing and little or no outside decorative elements.

The openings are profiled. Above the entrance to the house there is a fenced balcony balustrade. Behind the house, and to its sides there were walled gardens. External staircases usually made of stone slabs.

Roof Types are mostly gabled and slope ranges from 15-22°.



“Tre Sorelle” Palace



Ruin (St. Anna Church)

1.3. Natural Values

Glavati Cove is the only surviving part of the authentic landscape of the Boka bay coast, whose one of the basic characteristics is the preservation of green space between the parts of the settlement.

The manor with Glavati-Sbutega ruined palace with the church of St. Anna’s Church, in an isolated position overlooking the bay, surrounded by forest vegetation, are an integral part of this unspoiled landscape and provide insight into the development of the settlements of Boka and the way of life of

its inhabitants. Isolated villas and manors of Kotor nobility largely lost their original context, and it is crucial to preserve the remaining holdings in their original context and to revitalize them.

Numerous olive groves represent one of the biggest natural resources of the area. Olive groves and households in the hinterland are formed on the characteristic terraced ground.



2. ANALYSIS OF THE SITUATION

2.1. Current Situation

The location occupies the central part of Glavati cove and consists of cadastral parcels No. 1137, 1138, 1139, 1140, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174/1, 1174 / 2, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183 and 1184, and parts of cadastral parcels No. 1136, 1141, 1185, 1186 and 1187, all belonging to CM Prčanj 1. Municipality of Kotor, whose total surface area is $P = 41,191.00\text{m}^2$, designated as urbanistic parcel No. 6, Block 2, in the Local Location Study.

There are no constructed objects on this location.

2.2. Spatial Plan

At the building plot UP 6 the plan defines the purpose tourism – intended areas where it is allowed to build hotels and tourism settlements with a maximum capacity of 400 beds.

3. USE OF THE AREA

3.1. Planned Capacities

According to the architectural solution for UP6, which is located in the zone intended for tourism construction, construction index (CI – FAR) is 1.0, while the occupancy index (OI) is 0.35.

In addition to these indices, the hotel is planned as 130 room with 204 beds and annexes are 6 blocks with 196 bed which is total 400 bed.

Hotel block has four typical floors and two basement. Annexes have three floors, only Block A has a basement garage and three floors.

3.2. Conditions for parking, garaging

3.2.1. Urbanistic Parameters

Hotel 130 room	<i>1/2 carpark per room</i>	65 lots
Commercial units	<i>10 parking lots for every 1000m²</i>	87 lots
Accommodation units		
	<i>1 lot for accommodation units below 100 m²</i>	34 lots
	<i>1, 5 lot for accommodation units below 150 m²</i>	72 lots
	<i>2 lot for accommodation units below 200 m²</i>	16 lots
	<i>2, 5 lot for accommodation units below 250 m²</i>	8 lots
Total		282 lots

3.2.2. Project Parameters

Garage (Hotel & A Block)	185 lots
Open Park on Site	102 lots
Total	287 lots

3.3. Urbanistic & Project parameters of the UP6

URBANISTIC PARAMETERS FOR UP6			
Area			41.191,00 m²
Occupancy Index (OI)	0,35		14.416,85 m²
Construction Index (CI - FAR)	1		41.191,00 m²
OCCUPANCY			
Hotel Ground Floor			4.949,59 m ²
Annexes Ground Floors			
A Block			1.749,56 m ²
B Block			1.280,13 m ²
C Block			433,65 m ²
D Block			1.286,25 m ²
E Block			861,00 m ²
F Block			2.145,47 m ²
Sub Total			7.756,06 m ²
Total Ground Floor Area			12.705,65 m²
CONSTRUCTION			
	GROSS AREA	TECHNICAL & GARAGE	GBA - FAR
Hotel			
3rd Floor	2.857,28 m ²	0,00 m ²	2.857,28 m ²
2nd Floor	2.857,28 m ²	0,00 m ²	2.857,28 m ²
1st Floor	3.939,68 m ²	551,70 m ²	3.387,98 m ²
Ground Floor	4.949,59 m ²	474,72 m ²	4.474,87 m ²
1st Basement Floor	6.444,47 m ²	3.073,21 m ²	3.371,26 m ²
2nd Basement Floor	5.450,50 m ²	5.450,50 m ²	0,00 m ²
Hotel Total	26.498,80 m²	9.550,13 m²	16.948,67 m²
Annexes			
A Block	8.632,25 m ²	3.256,47 m ²	5.375,78 m ²
B Block	3.554,19 m ²	228,25 m ²	3.325,94 m ²
C Block	2.387,58 m ²	0,00 m ²	2.387,58 m ²
D Block	3.560,30 m ²	0,00 m ²	3.560,30 m ²
E Block	2.383,00 m ²	0,00 m ²	2.383,00 m ²
F Block	5.954,96 m ²	0,00 m ²	5.954,96 m ²
Annexes Total	26.472,28 m²	3.484,72 m²	22.987,56 m²
TOTAL	52.971,08 m²	13.034,85 m²	39.936,23 m²



4. CONCEPTUAL DESIGN

4.1. Architectural Design

Kotor is a historic coastal town settled at the Boka Kotorska Bay on the Adriatic Sea of Montenegro. The city of Kotor is the largest ancient settlement in Montenegro and hosts Illyrian, pre-Roman, Roman, Gothic, Renaissance and Baroque cultures.

The region also has rare natural beauty arising from a nest of the Adriatic Sea and Balkan Mountains. Today, Kotor and its surrounding is one of the famous destinations in this region. Its cultural and natural values have been listed in the UNESCO World Heritage since 1979 and maintained by the UNESCO funds.

The form of the historic center consists of narrow streets, modest city squares similar to coeval medieval settlements. The town walls, the Castle of San Giovanni, historic cathedrals and churches are listed buildings that define the silhouette of the city centre.

After holistic understanding of the region, the project site is assessed. The site is located at 3km-north of the Kotor city center, inner the Kotor Bay. The site is on the southeast aspect.

Local references in harmony with nature have been chosen to promote the functional needs of the project during the design of the complex; using Mediterranean and Montenegro architectural inspirations aimed to achieve a genuine design.

One of the main input during the mounting of the project was the slopes of the plot reaching %25 at its highest. A and B blocks housing the hotel and commercial areas as restaurant, café and studio have been located close to the road to benefit from the access, service and visual perception whereas other accommodation units have been located on the slopes taking advantage of the declivity so as not to obstruct one another's view.

The Hotel has a total of four floors, ground floor and 3 guest floors, and 2 basement

The guest floors have a total of 130 rooms. The rooms on the left and right wing are on the edge of the façade so that they can benefit to the maximum from the view and most of the rooms are implemented to face the view.

It has been planned that the guest are going to spend most of their time in the open air. Wide, retractable, transparent façade elements will provide light, airy internal spaces to the common areas and a continuous multi-directional relationship with the external areas. The restaurant, Lobby bar and spa areas organized parallel to the sea can spread towards the terrace, the open-air pool and external activities. Terraces which strengthen the relationship of the building with outside are covered with a large canopy providing partly shaded open areas. The building is open to the external areas from many aspects and there is a space set up enhancing the relationship between inside and outside.



The complex will provide a new animation to Kotor and Prčanj region with its location and capacity. The use of the complex outside summer season is planned with the use of a big health club and dividable meeting rooms for conferences and meeting activities. Thanks to these additional amenities the hotel will be operational four seasons with health and meeting activities outside holiday tourism. The health club can be reached from guest floors with a direct lift as well as from the lobby area for outside visitors.

The service ramp of the hotel is placed in the opposite direction of the main entrance and carpark ramp, thus avoiding users and service cars to cross each other. The 1.st basement of the hotel is

occupied completely by service and technical areas. The hotels receiving area and energy center is in the loading area at the end of the service ramp.

The 2.nd basement floor of the hotel has been planned as carpark for the hotel and other block guests. There is a buggy park area for users leaving their cars and needing to reach their accommodation units and room services and food services from the hotel side.

As they are located in a Unesco protected area and due to the construction conditions of the region, it's been decided that no mechanical device would be placed on the roof of the hotel or other accommodation buildings.

Except the main hotel building, 6 other commercial and accommodation buildings have been planned.

All blocks have been organized parallel to the slope so as to minimize the disturbance to the soil and avoiding as much as possible that they block each other's view.

Forward and backward movements both on the façades and on block basis and terracing helped creating attractive effects on the silhouette.

As A block is nearest to the road, café and restaurant units have been planned for both hotel guests and people coming from around. On the upper floors there are art gallery and similar commercial areas for the investor to decide upon later.

B block houses units to back up common areas from the hotel. Main restaurant, a-la-carte and a fish restaurant for local cuisine are located on the ground floor. Fitness and a studyo have been planned on the upper floor.

Accommodation units are located in C-D-E-F blocks. Living areas of each unit are planned on the front façade, as wide terraces and balconies have been created in front of each unit.



Materialization

Both the hotel and the accommodation units the façades are planned to be clad in grey and beige stone from a local quarry to be in harmony with local architecture

Natural wooden shutters and metal handrails have been used in reference to Mediterranean architecture both in the hotel and the accommodation units.

Gabled roof and dark red terracotta roof tiles have been used in the accommodation units as local reference.

4.2. Structural Design

4.2.1. Hotel

Framing plans for hotel are planned with a total plan length of 43.00m to 84.00m with an expansion joint at 55.00m.

All structural analysis will be performed by taking into consideration the assumptions that are provided below;

Hotel block has 3.5, 4m and 5.00 m floor heights. Framing plans based on a grid system with grid spans 9.00m to 7.25m/8.75m. Hotel block has six total floors consisting of two basement and four typical floors.

The structural system will be designed as a flat slab system, supported with columns and shear walls around staircases and elevator cores. Structural walls are also going to be effective in the design of structure against the lateral forces (seismic, etc.) acting on the structure.

Element dimensions provided below are predict as per the preliminary design:

Column dimensions are predicted to be rectangular 30/125cm under vertical loads and seismic loads which are determined according to the parameters defined in the related section of this report.

Structural wall thicknesses are predicted as 30cm & 35cm according to the geotechnical terrain and seismic parameters. Seismic loads will be governing in final design.

Beam dimensions (around the perimeter and staircases) are predicted to be 60/50cm, 60/60cm

The slab thicknesses are predicted 30cm according to the span lengths required by the architectural layout.

Foundation system for the structure is going to be mat foundation. In foundation design, sea influence will also be considered in determining the final thickness.

4.2.2. Annexes

The Project contains six different blocks which are A, B, C, D, E and F. Framing plans for A and F blocks are planned with a total plan length of 22.00m to 101.00m with an expansion joint at 60.00m .Also for B and D blocks, framing plans are planned with a total plan length of 19.00m to 60.00m

with no expansion joint. Finally for C and E blocks, framing plans are planned with a total plan length of 19.00m to 40.00m with no expansion joint.

All structural analysis will be performed by taking into consideration the assumptions that are provided below;

All blocks have 3.25m floor height .In general whole framing plans based on a grid system with grid spans 6.75m to 6.30m/9.50m. B, C, D, E and F blocks have three typical floors without basement and A block have four floors consisting of one basement and three typical floors.

The structural system will be designed as a flat slab system, supported with columns and shear walls around staircases and elevator cores. Structural walls are also going to be effective in the design of structure against the lateral forces (seismic, etc.) acting on the structure.

Element dimensions provided below are predict as per the preliminary design:

Column dimensions are predicted to be rectangular 30/125cm under vertical loads and seismic loads which are determined according to the parameters defined in the related section of this report.

Structural wall thicknesses are predicted as 30cm & 35cm according to the geotechnical terrain and seismic parameters. Seismic loads will be governing in final design.

Beam dimensions (around the perimeter and staircases) are predicted to be 30/50cm, the slab thicknesses are predicted between 25 to 30cm according to the span lengths required by the architectural layout.

Foundation system for the structure is going to be mat foundation. In foundation design, sea influence will also be considered in determining the final thickness.

4.3. Landscape Design

Montenegro has two important national parks. Lovcen National Park and the Orjen National Park demonstrate environmental values and offer visual experience of the region.

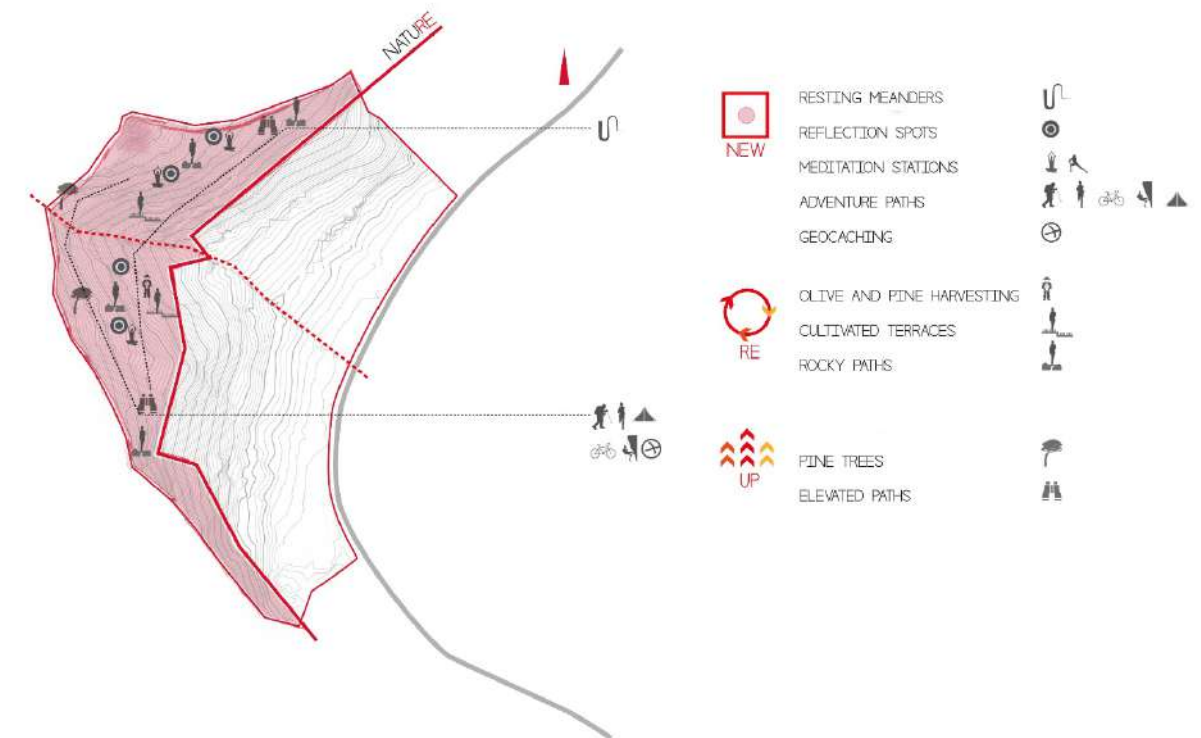
Consequent of its geomorphology, the region presents significant local material palette. Limestones and certain rock formations formed by tectonic disturbances are dominant hardscape material. Floral structure of the region is diverse with rare and protected species. *Galanthus nivalis* L., *Ruscus aculeatus* L., *Polygonum maritimum* L., *Cyclamen hederifolium* aiton. , *Cyclamen repandum* Sm. are significant native species. These cultural and natural values of the region stated above constitute foundation of landscape design concept.

Existing vegetation of the site is dense and constitutes olive and pine species with under canopy species. The amount of open green space in the project is approximately 2.1hectare. This open green space is conceived in two conceptual zones which are named as nature and in-nature. The nature zone has its name after its existing grove texture and design intention is to preserve it by proposing contextually relevant landscape program. The second zone, in-nature, is construction-dominant zone which has ½ hectare fragmental open green space. The landscape approach in this zone is to apprehend aesthetic and meaningful content to these residual open spaces. The proposed landscape program in both zones includes three categories:

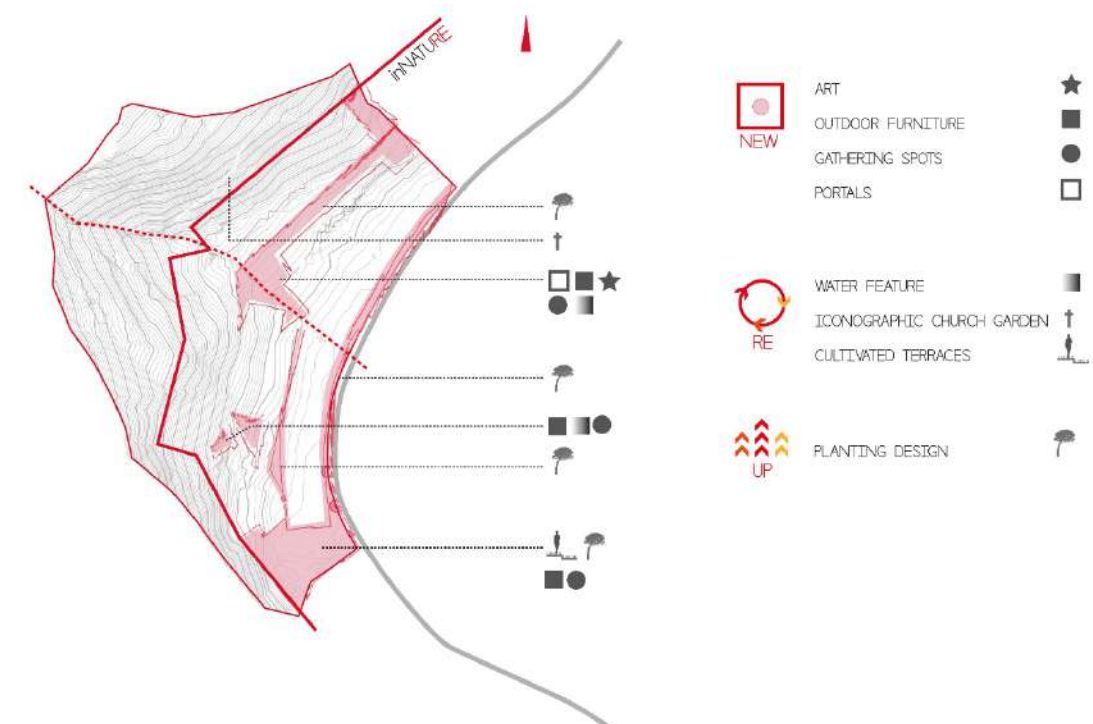
- new activities
- contextually recycled activities

- focal points

EMBLEMATIC EXPLANATION ZONE I - NATURE



EMBLEMATIC EXPLANATION ZONE II -inNATURE

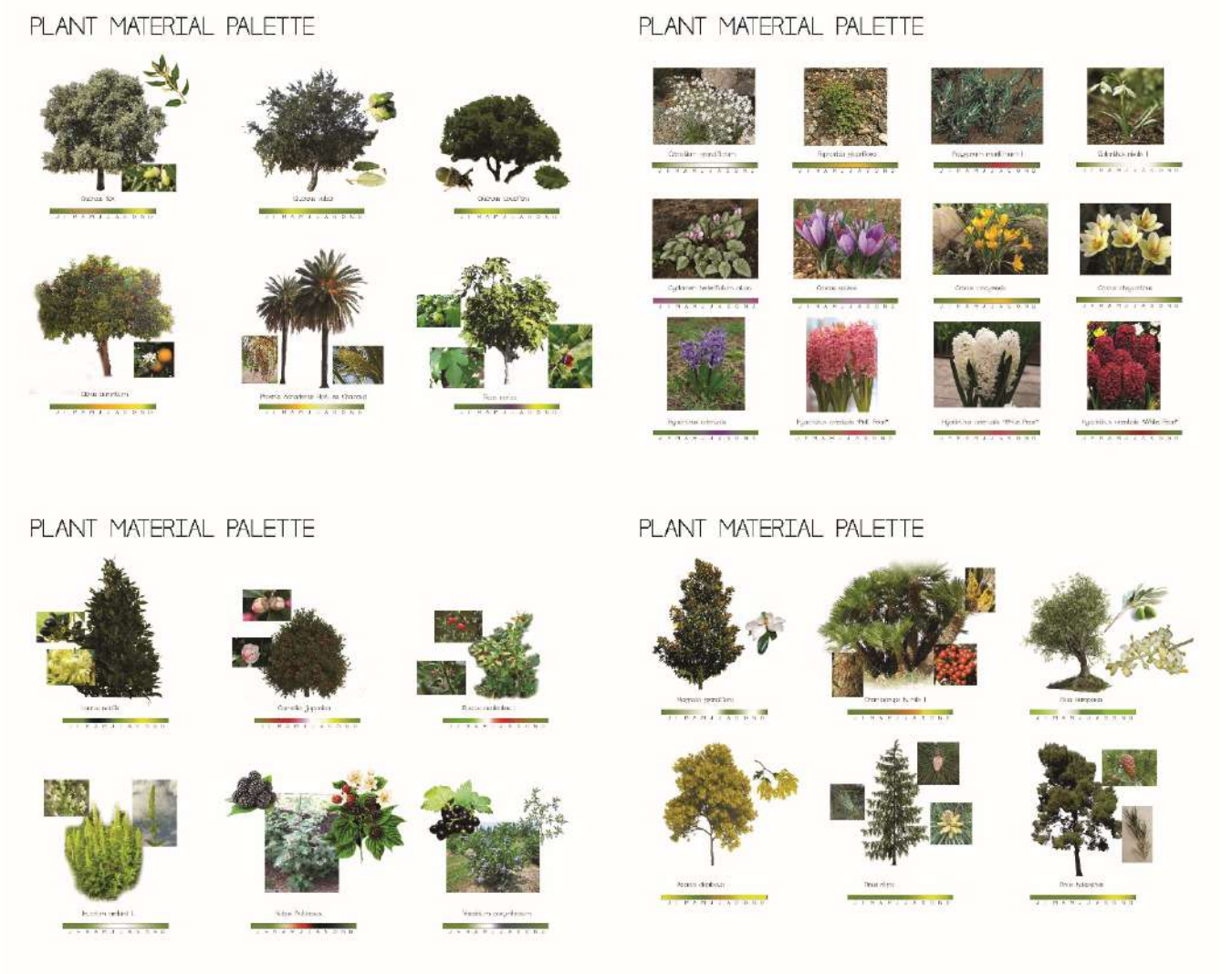


Human and spatial relationship dimensions are utilized to optimize environmental disturbance in the existing vegetation. Comfort limits in intimate, personal, social and public relations are reinterpreted in landscape design process.

Boardwalk with sharp zigzags, steps, balconies and bridges, viewpoints and small scale events gradually unfolds the unique topography of the project site.

Coherent concept of landscape design is to slow down for extend beyond immediate experience. Hardscape blends in with the surrounding landscape.

Enchanted routes are in the bounty of colours, sounds and scents that are expressed in softscape design.



4.4. Interior Design

Big openings have been designed to effectively visually connect Kotor Bay and the hotel rooms and accommodation units. The stones and woodwork used outside have been plainly reflected to the rooms and living areas to echo the freshness of the nature to the user.

It is planned to use as much natural and local materials as available in the internal areas.

