**COMPETITION BRIEF**

**COMPETITION FOR CONCEPTUAL ARCHITECTURAL DESIGN**

**OF THE BASE STATION FOR THE „HAJLA AND ŠTEDIM“ SKI CENTER**

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1. **RECCOMMENDATIONS AND REGULATIONS**
2. **INTRODUCTION**

Montenegro possesses immense potential for the development of mountain tourism. Through strategies, plans, and development programs for mountain tourism, strategic and programmatic directions for the development of the Hajla and Štedim areas have been defined. An assessment of the justification for the development of the tourist offer in Hajla and Štedim was conducted based on available potentials, demand developmet, and competitive positioning.

The municipality of Rožaje has outlined goals, directions, and content for the development of mountain tourism in this area. In the Hajla, Štedim, and Rusulija areas, there are exceptional skiin potentials for more than 15,000 skiers daily, with observations of skiing potentials for an unlimited number of skiers daliy, in the interconnected space of these mountains. The Hajla, Štedim, and Rusalija area is defined as one of the greatest potentials for the development of mountain tourism, not only in Montenegro but also in the regional context. The most suitable space for establishing a winter sports center with numerous ski slopes is located in the mountain complex of Hajla - Štedim - Rusolija, with absolute altitudes ranging from 1200 to 2000 meters above sea level.

Considering the significance of tourism for the further development of the municipality of Rožaje, and the potential it offers, along with the long-term development plans of the municipality and the intention to valorize attractive sites, the need arose to create a Local Site Study for 'Hajla and Štedim.' The planning document envisages the construction of ski slopes, including ski lift systems and trails, as well as the construction of facilities for service activities. The plan includes the formation of several ski bases that will serve as meeting points for skiing trails and the starting stations of cable cars.

The construction of the base station for the ski center "Hajla and Štedim" is defined by the Decision for designating the location with elements of urban-technical conditions for the construction of a local facility of general interest - the base station, for the needs of the Ski center "Hajla and Štedim," number 01-018/23-671 dated April 10, 2023, issued by the President of the Municipality of Rožaje. As construction and development of tourist infrastructure are planned in several locations/zones, in order to protect the authentic image of the area, it is essential to preserve natural ecosystems and characteristic structural elements of the landscape during all spatial interventions.

Touristic development will undoubtedly contribute to the affirmation of the landscape values of the area through the preservation and enhancement of dominant structural elements of the landscape. The landscape design of built areas must ensure their integration with the natural environment. Spatial interventions should be planned to minimize significant changes in the landscape, focusing on reducing interventions to the smallest extent possible.



*Figure 01: Competition site with the departure station for the ski lift (right)*

* 1. **Competition subject**

**The Competition subject** is the development of a conceptual architectural design for the base station of the „Hajla and Štedim“ ski center, located within the scope of the Local Site Study of Hajla and Štedim ("Official Gazette of Montenegro - municipal regulations", No. 22/18), Municipality of Rožaje.

* 1. **Competition objective**

**The Competition objective** is to obtain a functional and recognizable conceptual architectural design that will, above all, meet the prescribed requirements and achieve maximum alignment of all aspects specified in the Competition Brief, with crucial importance placed on establishing a direct and most efficient connection between the base station and the existing plateau of the cable car's starting station.

Competition entries are expected to offer solutions that, considering the existing environmental values of the narrower and wider location, will characterize uniqueness in architectural design and provide an optimal functional solution for the planned program contents. An innovative approach is expected in spatial and architectural design solutions, as well as in the use of materials, all in accordance with the purpose of the facility.

The competition solution should enable a quality and adequate connection between all functional units. All necessary spaces and equipment should be dimensioned in accordance with applicable norms and standards. Regarding architectural values, the concept should be based on an optimal and functional architectural solution that demonstrates the vision of a modern architectural approach.

The competition solution should also meet criteria regarding space organization, taking into account the experience and aesthetics of the facility, as well as proportions in relation to the existing environment.

* 1. **Legal basis**

**Legal basis** for announcing the competition for the conceptual architectural design of the base station for the "Hajla i Štedim" ski resort is contained in Article 54 of the *Law on Spatial Planning and Construction of Facilities ("Official Gazette of Montenegro," no. 64/17, 44/18, 63/18, 82/20, 86/22, and 04/23)*. According to Article 54 of this law, a public competition must be announced for facilities for the needs of state bodies, local self-government, health, education, science, culture, sports, and social protection facilities that are state-owned.

In this regard, the Ministry of Spatial Planning, Urbanism, and State Property, in collaboration with the Ministry of Tourism, Ecology, Sustainable Development, and Northern Development, has prepared competition documentation for the purpose of announcing the competition for the construction of the base station for the "Hajla i Štedim" ski resort.

1. **LOCATION**

**Location** for the conceptual architectural design is within the scope of the Local Site Study ‘’Hajla - Štedim’’, Municipality of Rožaje. The competition site comprises two zones:

**Zone A –** Locationfor the base station;

**Zone B –** Contact zone for establishing the connection between the base station and the departure station for the ski lift;

**Zone A –** The total area of the location for the base station is 9.530,00m2.

**Zone B –** The total area of ​​the contact zone, consisting of the urban plot on which the departure station for the ski lift is located - UPŠT3, is 20,663.00m2. This urban plot is intended exclusively for establishing a direct connection between the base station and the departure station for the ski lift, as prescribed in Chapter 4. Functional Aspects, and no other facilities can be planned on it.

The boundaries of Zone A and B, as well as the building line, are shown on the geodetic base map which is an integral part of the competition documentation.

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*Figure 02: Competition site*

1. **CONDITIONS AND PARAMETERS**
   1. **Urban parameters**

* Competition site area (Zone A) : 9.530,00 m2;
* Building line is defined on the geodetic base map. **The base station must be positioned within the building lines in the Zone A.**
* Maximum area of the underground stories: 2.859,00 m2;
* Maximum footprint: 1.906,00 m2;
* Maximum Gross Building Area (GBA): 2.500,00 m2;
* Number of floors: the building can have a maximum of three above-ground floors: semi-basement, ground floor, and first floor (SB+GF+1), with the possibility of organizing an underground floor (basement). The number od undergroung floors is not limited. If the underground floors are utilized for a garage and technical rooms, they are not included in the calculation of the Gross Building Area (GBA);
* It is necessary to provide a minimum of 200 parking spaces;
* On the competition site, it is possible to plan one or more structures while adhering to the specified parameters;
* Minimal greenery zone: 30%;
* To accommodate waste disposal within the competition site, designate a zone in direct proximity to the roadway. Determine the waste bin zone based on sanitary and hygienic regulations, shielding them from atmospheric precipitation and wind by placing them in recesses or surrounded by greenery. Unimpeded access to waste bins is essential, necessitating a container pushing surface made of sturdy material without steps and with a maximum slope of 3%;
* Design the roofs with slopes ranging from 30° to 70°, adapted to the climatic conditions of the given location. Through roof slopes, spacing, and orientation of structures, ensure the maximum reduction of snow accumulation and the formation of critical points, while providing corridors for unobstructed snow cover clearance;
* If adequate height is achieved during steeper roof planning, a gallery can be organized within the attic space, which will be included in the Gross Building Area (GBA) calculation. It's important to ensure a rational approach to resolving roof pitches and attic space to prevent excessive heights and unused areas in the attic;
* All entrances to the structure should be designed with appropriate windbreaks.
  1. **Reccommendations for landscaping and ground-level design**

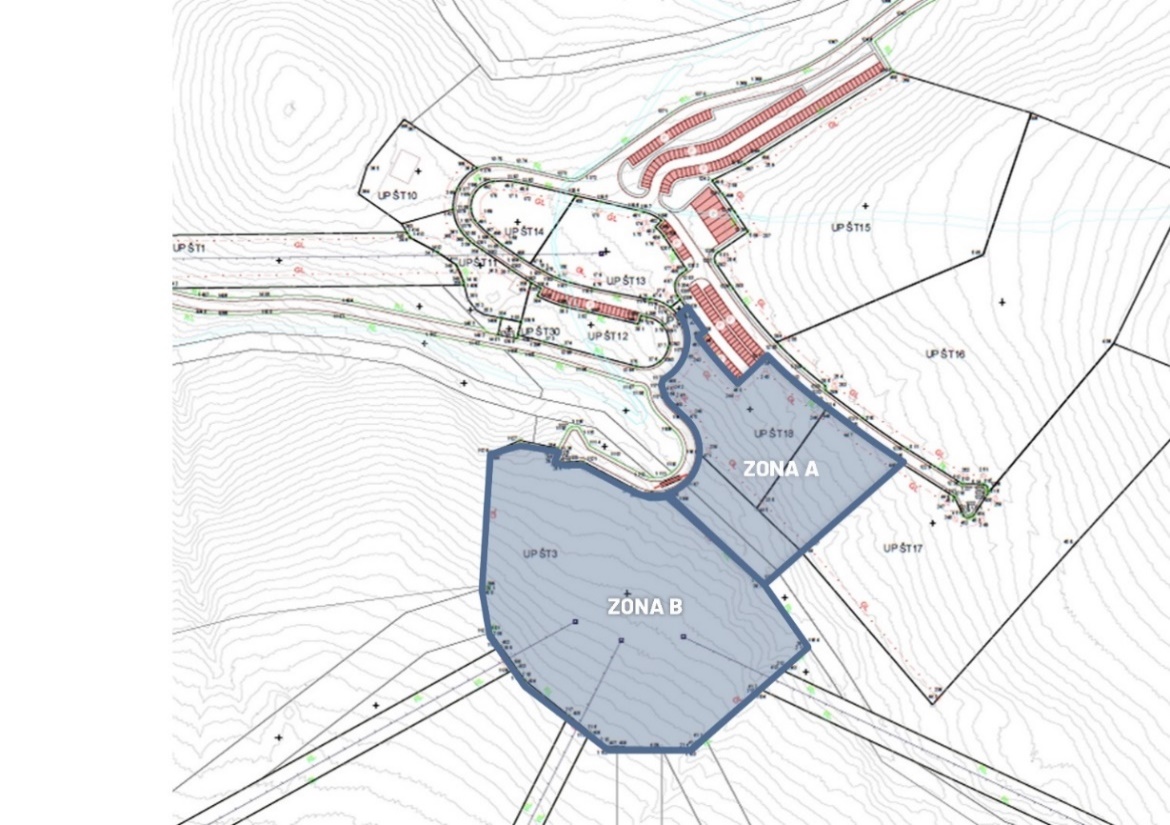
During the development of the conceptual architectural design of the base station, special attention must be dedicated to preserving the authentic character of the area. It is crucial to ensure that spatial interventions prioritize the conversation of natural ecosystems and distinctive structural elements of the landscape.

Through landscaping, ensure the creation of access paths, fire access roads, and the development of green spaces in harmony with the natural surroundings. The treatment of ground levels within the scope must align with the intended purpose. When selecting materials for paving pedestrian paths, prioritize those know for durability and resistance to climatic conditions. Adapt pedestrian paths to the terrain characteristics and seamlessly integrate them into the landscape. It is imperative to shape open and green spaces in accordance with the unique charachteristics of the surroundings, both ecologically and environmentally. The landscaping of the site should be rooted in seamless integration with the surrounding environment, encompassing both aesthetic and functional considerations. When selecting horticultural solutions, priority should be given to indigenous plant species and existing vegetation.

Minimum of 30% of the competition site should be planned as green spaces. Compositional solutions for green and open spaces should be aligned with the natural landscape. Achieving a verdant effect throughout all seasons is attained through a combination of deciduous, evergreen, and coniferous species.

* 1. **Reccommendations for the traffic solution**

Vehicle access to the location can be anticipated through the existing road depicted in the geodetic base map and orthophoto from the northwest side of the development area, as well as from the planned road shown in the Graphic attachments from the planning document - Local Site Study of Hajla and Štedim - Traffic plan. The latter road runs along the northern side adjacent to the competition site (between UPŠT16, UPŠT18, and UPŠT17).



*Figure 03: Graphic attachments from the planning document - Local Site Study of Hajla and Štedim: traffic plan.*

The design of vehicular access, parking spaces, and pedestrian areas within the competition site should adhere to all relevant regulations for this type of structures. Ensuring unobstructed access for fire and ambulance vehicles to the facility is essential.

The existing access roads to the completed departure station for the ski lift, documented in the orthophoto and geodetic base map, cannot be considered within the scope of the project. These roads were utilized as temporary vehicular access points during the construction activities at the departure station for the ski lift.

It is necessary to provide a minimum of 200 parking spaces, with at least 5% of the total number of parking spaces designated for persons with disabilities. The prescribed number of parking spaces can be accommodated within the underground garage, which may have multiple levels. When designing the appropriate number of parking spaces, it is possible to take into account public parking spaces for cars on the very edge of the site as well as the spaces for buses in the immediate vicinity of the location, as provided for in the planning document, which are shown on the graphic attachments from the planning document - Local Site Study of Hajla and Štedim: traffic plan.

It is necessary to anticipate and provide access, as well as unimpeded movement for individuals with reduced mobility and disabilities. The required number of parking spaces should comply with the *Regulation on specific conditions and methods of adapting facilities for the access and movement of persons with reduced mobility and disabilities*. Ensuring access to all public buildings and areas at ground level without stairs is essential. All ground-level uneven surfaces, typically negotiated by stairs, must have ramps with a maximum slope of 5%.

* 1. **Structural system**

Structural system should be in accordance with the level of detail of the conceptual design. The selection of the primary structural system and construction technology should economically and technologically address the requirements of implementing this type of facility. Anticipate a structural system that allows for flexible space utilization and employs durable materials meeting standards for physical security, hygiene, and efficient maintenance.

Design the structure in harmony with the architectural organization of space and the purpose of the buildings. The structural system must be secure, stable, rational, functional, easy to maintain, designed to withstand seismic influences, and comply with applicable technical regulations and standards. The project should incorporate high-quality materials in terms of load-bearing capacity, safety, and durability.

* 1. **Materialization**

From a design perspective, the structure should possess an architectural expression suitable for its function, based on adapting the building to its specific location. Design the facility in accordance with its intended purpose, utilizing high-quality, durable, and innovative materials that meet the required standards for this type of construction. The materialization theme should be integrated with the design of the projected structures. Particular attention should be given to the selection of enduring exterior materials to reduce maintenance costs and enhance the energy efficiency of the facility.

The competition solution should also provide proposals for addressing relevant materialization issues of the base station structure, primarily focusing on the final treatment of facade and roof surfaces. Materialization suggestions should encompass a technical description with relevant technological elements. Consider cladding the facade with stone and wooden paneling on an appropriate substructure. For internal finishing, incorporate contemporary materials suitable for the purposes of the facility. When applying materials for the final treatment of facades, ensure resistance to atmospheric influences.

* 1. **Architectural aspect of energy efficiency**

Within the architectural aspects related to energy efficiency, special attention must be given to the architectural form, geometric and structural characteristics of the building envelope, as well as the layout of the envisaged spaces, concerning orientation. Properly dimensioning the depth of the structures allows winter sunlight to penetrate the interior. The design solution for the building should provide physical protection from wind and snow, minimizing heat loss to the greatest extent possible.

1. **SPATIAL CONTENTS**

Participants are required to strategically position and design the base station facility with accompanying amenities within the location, optimizing their placement concerning the planned and existing access roads, ski slopes, and departure station for the ski lift. This should be done while considering vehicular and pedestrian traffic, economic accessibility, supply logistics, orientation, and the layout of the building components. Attention should be given to the access points, panoramic views, traffic directions, and green spaces.

**Participants are obligated to position the base station with consideration for the entire location, particularly in relation to the elevation of the departure station's platform for the ski lift at 1738 meters above sea level. The base station's position (ski lodge - where skiers depart) must not be lower than the elevation of the departure station's platform for the ski lift. The micro-location needs to be addressed comprehensively, meaning that resolving the base station's structure should also address parking space and propose a solution for bridging the existing stream to connect the base station and the departure station for the ski lift.**

The competition entry must primarily provide all the required facilities necessary for the functional operation of the base station. Considering the type of structure, it is possible to design multiple functional units within the location while adhering to basic urban planning parameters. The competition solution should clearly define the provided facilities, with the option for phased construction.

The ski lift's planned capacity is 2,500 skiers per day.



*Figure 04: Competition site with the departure station for the ski lift (right)*

**Overview of the necessary spatial contents along with the minimum net floor areas of the rooms**

|  |  |  |  |
| --- | --- | --- | --- |
| **O.N.** | **SPATIAL CONTENT** | **Number of rooms** | **NET SIZE**  **(m2)** |
| **A.** | **HOSPITALITY FACILITIES** | | |
| A.1. | Restaurant | 1 | 500 |
| A.2. | Cafe bar | 1 | 70 |
| A.3. | Kitchen with accompanying facilities | 1 | 150 |
| **B.** | **SKIERS' ZONE** |  |  |
| B.1. | Info - centar and skipass office | 1 | 50 |
| B.2. | Ski room:   * Equipment rental * Equipment storage * Workshop and service | 1 | 200 |
| **C.** | **ADMINISTRATION** |  |  |
| C.1. | Office | 3 | 45 |
| C.2. | Security personnel office | 1 | 15 |
| **D.** | **MEDICAL CENTER and MOUNTAIN RESCUE SERVICE** | | |
| D.1. | Medical room | 1 | 30 |
| D.2. | Office for medical staff | 1 | 15 |
| D.3. | Office for mountain rescue service | 1 | 25 |
| **E.** | **SPECIALIZED VEHICLE ZONE** | | |
| E.1. | Snowplows space | 3 | 300 |
| E.2. | Snowmobiles space | 1 | 100 |
| **TOTAL** | | | **1500** |
| **F.** | **GARAGE** |  |  |
| D.3. | Parking spaces for guests | / | / |
| **G.** | **TECHNICAL ROOMS** |  |  |
| G.1. | Boiler room | 1 | \*50 |
| G.2. | Workshop | 1 | \*35 |
| G.3. | Storage room | 1 | \*70 |

\* If technical rooms are planned within the underground level, they are not included in the Gross Building Area (GBA) calculation.

1. **Hospitality facilities**

Within this zone, it is essential to design the restaurant in accordance with the ski resort's capacities, incorporating multiple entrance points for the restaurant area. Alongside the café bar and restaurant, the kitchen should be designed to seamlessly accommodate the food preparation process, aligning with the restaurant's capacity. The kitchen should include an service entrance in compliance with regulations.

In addition to the café bar and restaurant, it is necessary to design a terrace that can be partially covered (the covered portion of the terrace is included in the Gross Building Area calculation);. It is mandatory to plan for restroom facilities for both restaurant guests and employees.

1. **Skiers' zone**

The skiers' zone comprises an information center with ski pass sales points and a ski room. It is preferable for the skiers' zone to be connected to the administration. When designing the ski area, consider the position of the entrance in terms of accessibility and vistas towards the entire ski resort. It is mandatory to plan restroom facilities for skiers in this zone.

1. **Administration**

All workspaces should be provided with direct sunlight, contingent upon the overall orientation of the building, climatic conditions, and wind direction. It is necessary to anticipate protection from excessive sunlight for all workspaces. A separate restroom facility should be planned for the administration zone.

1. **Medical center and Mountain rescue service**

Within this zone, design a medical room, offices for medical staff, and restroom facilities for employees with a changing room. Ensure access to the medical center and mountain rescue service vehicles for both ambulance and snowmobiles.

1. **Specialized vehicle zone**

The specialized vehicles zone comprises spaces for snowplows and snowmobiles. For one snowplow garage space, design a repair channel. It is necessary to plan 4 garage spaces for specialized vehicles with separate entrances. The minimum clear dimension for the entrance doors for specialized vehicles is 600/400cm. The height of the room for snowplow spaces and the spot for snowmobiles is 450cm.

1. **Garage**

Consider multiple options for providing parking space (open parking area, underground garage). In the case of constructing an underground garage, define the highest corner of the underground garage space in relation to the base station so that the final level can be used as an open platform between the base station and the departure station for the ski lift. Participants in the competition are also given the opportunity to design and propose an alternative use for the final surface of the garage. In the event of constructing two or more structures, explore the possibility of connecting them according to their function.

1. **Technical rooms**

Alongside the mentioned facilities, design all associated spaces: warehouse, workshop, boiler room, and other technical rooms necessary for the functioning of the base station.

**Communications**

The surfaces of communication areas, sanitary blocks, lobbies, and corridors contribute to the total Gross Building Area (GBA).

The lobbies, corridors, vertical communications, and restroom blocks, including the mandatory cabin for individuals with reduced mobility and disabilities, need to be dimensioned according to the applicable standards for this type of facility.

Communication surfaces should be short and straightforward, enabling easy orientation and providing sufficient volume for safe movement.

In front of all entrances to the building, it is necessary to design appropriate windbreaks, which are included in the total GBA, taking into consideration climatic conditions and precipitation. If entrance doors are glazed, the glass must be resistant to wind and precipitation impact.

1. **COMPETITION DOCUMENTATION**

Competition documentation is a collection of documents, data, and conditions provided to participants as the basis for creating a competition entry.

The Competition documents consist of a textual and a graphic part.

* 1. **Textual part**

Textual part of the competition documentation consists of:

* Competition Announcement
* Competition Brief
  1. **Graphic part**

Graphic part of the competition documentation consists of:

* Geodetic base map indicating the scope and building lines;
* Graphic attachments from the planning document - Local Site Study of Hajla and Štedim: traffic plan;
* Main projects (Graphic part of Ski slopes and Cable car);
* Photo and video documentation;
* Point cloud terrain model.

1. **RECCOMMENDATIONS AND REGULATIONS**

The following regulations and recommendations must be respected during the design process:

* *Law on Spatial Planning and Construction of Buildings ('Official Gazette of Montenegro' numbers 64/17, 44/18, 63/18, 11/19, 82/20, 86/22, and 4/23)*
* *Regulation on the detailed content and form of spatial planning documents, criteria for land use, elements of urban regulation, and unified graphic symbols ('Official Gazette of Montenegro,' nos. 24/10 and 33/14);*
* *Regulation on specific conditions and methods for adapting buildings for the access and movement of persons with reduced mobility and persons with disabilities ('Official Gazette of Montenegro,' nos. 48/13 and 44/15).*

When designing, adhere to current regulations, guidelines, and standards for this type of structure. To define specific project elements for which technical norms are not prescribed in our technical regulations and standards, as well as conditions given in the competition brief, it is recommended to use technical conditions and norms provided in foreign regulations.