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## Reconstruction of Hotel President in Dubrovnik in 2013

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**Abstract**: The aim of this paper is to provide an analysis of the reconstruction of Hotel President in Dubrovnik in 2013. The paper is based on student Dean Sošić's Master's thesis titled "Reconstruction of Hotel President in Dubrovnik in 2013," successfully defended at the Faculty of Civil Engineering, University of Rijeka, in 2020. The student analyzes Edward Stone Durell's original design from the 1970s and subsequent works on the hotel until 2013 when it was thoroughly reconstructed for the new investor. In addition to a construction analysis, this paper also brings an evaluation of the reconstructed hotel.

Key words: hotel reconstruction, Hotel President in Dubrovnik, Edward Durell Stone

# Rekonstrukcija hotela President u Dubrovniku 2013. godine

**Sažetak**: Cilj članka je analiza rekonstrukcije hotela President u Dubrovniku 2013. godine. Rad je nastao na temelju diplomskog rada studenta Deana Sošića obranjenog na Građevinskom fakultetu Sveučilišta u Rijeci 2020. godine pod nazivom "Rekonstrukcija hotela President u Dubrovniku 2013. godine". Student analizira izvorni projekt arhitekta Edwarda Stonea Durella iz sedamdesetih godina te zahvate na hotelu do 2013. godine kada je temeljito rekonstruiran za potrebe novog investitora. Pored konstruktivne analize rad donosi i valorizaciju rekonstrukcije.

Ključne riječi: rekonstrukcija hotela, hotel President u Dubrovniku, Edward Durell Stone

#### 1. INTRODUCTION

The urban development of the Lapad peninsula (Babin Kuk settlement) northwest of the city of Dubrovnik began in the early 1960s, after the adoption of the General Urban Plan for Dubrovnik, with the help of foreign investment. The Babin Kuk urban design was the first complete urban development of a tourism-oriented spatial entity in the Adriatic. An international team led by the SWECO company began to develop the largest tourist resort on the Adriatic coast. The envisaged concept was to apply the strict structuralism and metabolism of urban construction throughout the peninsula in the form of spacious porches and large terraced buildings with visible concrete façades. The development would extend over the peninsula as far as the highest peaks. The plan even included a cable car that would connect the beach with the lookout at the top (Fig. 1). However, there were unfortunately no financial resources and political will to implement the program to the planned extent [1].

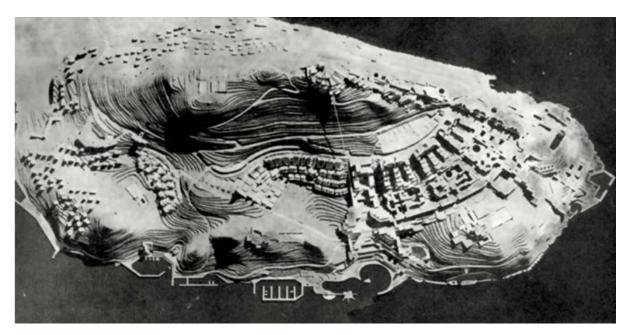


Figure 1. Model of the Babin Kuk tourist complex from 1969 according to the South Adriatic project, cooperation SWECO, Urban Institute, Zagreb, SR Croatia. Urbanistički projekt Babinog Kuka kod Dubrovnika, Arhitektura, 1969, 104, pp. 25-30.

The American design office Edward Durell Stone Associates was selected to design part of the program, having previously implemented several government projects in India, Pakistan and Puerto Rico, where they built similar hotels and resorts. E. D. Stone (1902-78) is best known for the following works: MoMA in New York, the US Embassy in New Delhi, the Keller Center at the University of Chicago, and the J. F. Kennedy Center for the Performing Arts in Washington D.C. The project was awarded to the American architect as a guarantee for the future promotion of Yugoslav tourism in the United States. Hotel President was designed in collaboration with architect Vjenceslav Richter (Architectural Bureau Centar 51 and design office Hidroelektra) and engineers of Bovay Engineers Inc. from Houston. The idea of a covered pedestrian zone was retained, and in addition to the volume of the hotel, a looser structure of small densely built compact clusters with two-story or three-story units was planned [2].



Figure 2. View of the Babin Kuk complex, the existing state before the reconstruction in 2013. Studio 92 d.o.o., Labin

Already during the development of the Urban Design Babin Kuk near Dubrovnik, the potential for economic development through the development of tourism was realized, and so was the risk of being dependent on only one economic branch. Although the plan envisages the preservation of the coastal zone for recreational purposes, Hotel President is built in the immediate vicinity of the sea (Fig. 2). Notwithstanding the advantages for guests of this type of hotel, which has beautiful views from all parts of the hotel and is surrounded by nature, this type of hotel uses large areas of valuable land. Mass tourism, developed since the 1950s in Yugoslavia as a catalyst for progress, irreversibly alienates natural resources and the local population, preventing natural and cultural exchange with visitors in the process [3].

Due to the configuration of the terrain of the eastern coast of Istria, Kvarner and the southern part of Croatia in the vicinity of Dubrovnik, there are many examples of terraced spatial structure and hotel construction. Some of the examples are: Hotels Narcis (Hedera and Mimosa) in Rabac, Hotel Plat in Dubrovnik, Hotel Rixos Libertas in Dubrovnik, Hotel Palace in Dubrovnik, Hotel Grand Park in Rovinj, etc.

## 2. HOTEL PRESIDENT (before and after)

After its construction in the 1970s, Hotel President became one of the most luxurious hotels of the Dubrovnik area, which was neglected during many years of its operation and lost its splendor and rating. The existing building of Hotel President dated from 1975. Reconstruction of the accommodation part of the hotel was carried out in 1993, and subsequent partial renovation of bathrooms took place in 2006. All works were within the existing dimensions without the need to obtain a building permit. The entire space of the public tract remained intact from the opening of the hotel in 1975 until its reconstruction in 2013. Other works on Hotel President included regular maintenance of the hotel.

## 2.1 Existing state in 2013

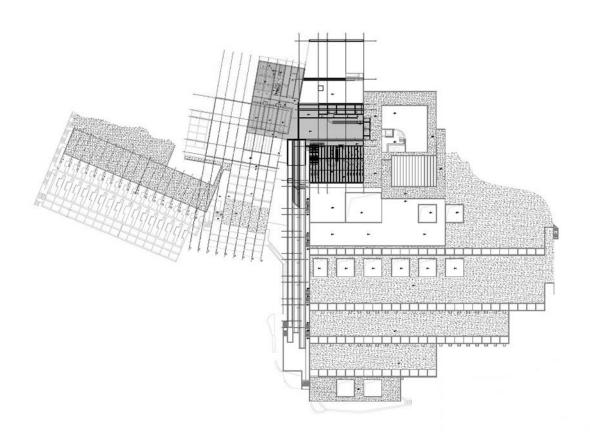


Figure 3. Plan view of the 7<sup>th</sup> (entrance) floor before reconstruction. Studio 92 d.o.o., Labin

The specificity of the hotel for reconstruction is its cascading structure that adapts to the hillside on which it is located. The main vehicular and pedestrian access to the hotel's main entrance and reception and parking area in front of the hotel is from Iva Dulčića Street at level 7 (Figs. 3, 4). Access to the hotel and other buildings at the site is provided by a number of pedestrian and vehicular-pedestrian areas around the hotel. The hotel has an indented plan form with 8 floors spaced apart in plan view to follow the natural slope of the terrain. Green roofs, visible from the upper floors, are formed on the roof slabs of the lower floors, with emphasized landscaping of the fifth façade (Fig. 2). The hotel is accessed from the highest floor (floor 7) where there are public facilities of the reception, lobby bar, meeting room. All the lower floors are accessed by an internal staircase and inclined elevators. On the floor below the reception (floor 6) there is another lobby bar, a multifunctional hall, an a la carte restaurant and a kitchen and hotel restaurant with terraces. On the 5th floor there is an indoor pool, wellness, fitness and a small bar with outdoor terrace and the first part of the accommodation units. On the lower floors (from 4 to 1) there are other accommodation units and other service facilities. On the floor 0, which corresponds to the floor of the beach, there is a restaurant serving the beach (Fig. 3).

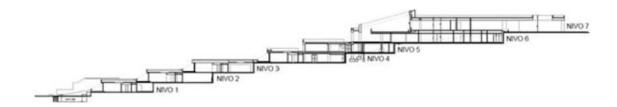


Figure 4. Section through the central part of the existing condition of the hotel in 2013. Studio 92 d.o.o., Labin

The public areas of the hotel are located mainly on the upper floors, while the accommodation tract is on the lower floors. The hotel has direct exit to the terrain from the highest and lowest floors, although the accommodation tract follows the configuration of the terrain. The inclined exterior and interior elevators were a special feature of the existing hotel President. The external inclined elevators were a recognizable detail in the design of the hotel's volume and also one of the most challenging parts of the reconstruction (Fig. 2).

Existing facilities of the hotel:

- eight floors with two panoramic elevators,
- 180 double rooms and one apartment (362 beds),
- bathrooms renovated in 1993,
- 88 bathrooms renovated in 2006-7,
- rooms renovated in 1993-5,
- room typology: standard, superior, romantic rooms (upgraded superior rooms, used existing furniture with additional decorations),
- main restaurant with 140 seats,
- dining room with 150 seats,
- a la carte restaurant Elafiti with 90 seats,
- three meeting rooms: Olipa of 209 m², Tajan of 90 m², and Ruda of 144 m² (wedding rooms with banquet setup),
- wellness with Finnish, infrared and steam sauna,
- fitness room, two relaxation rooms,
- hairdresser,
- indoor freshwater pool,
- pebble beach

The total gross area of the hotel was 25,552.35 m<sup>2</sup>.

#### 2.2 Reconstruction 2013-14

The need for reconstruction of hotel facilities is inevitable due to the flexible nature of this industry, keeping pace with market trends and competitiveness (hotel rating, worn-out interior, outdated technology of inclined elevators that have become too slow and expensive to maintain, etc. (Fig. 5). The disadvantages of terraced hotels are long horizontal communications between individual facilities, as well as vertical communications, expensive construction and maintenance. Construction of such a hotel follows the natural slope of the terrain, which increases the cost of construction due to the large required insulation area of the embedded part of the building, displaced load-bearing structures in all floors, large façade surfaces and large surfaces of flat roofs. All of the above increases the quantity of materials and the construction cost.

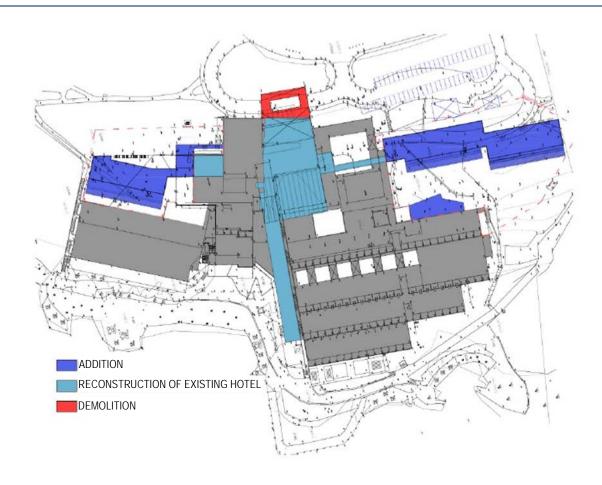


Figure 5. Marked hotel reconstruction zones from 2013. D. Sošić: Reconstruction of Hotel President in Dubrovnik in 2013, Master's thesis, University of Rijeka, Faculty of Civil Engineering, Rijeka, 2020.

The 2013 intervention by the architects of Studio 92 d.o.o. from Labin brings the hotel back to its 5-star rating and includes the following (Fig. 6): addition of the north and south accommodation wings (1); construction of an outdoor pool (2); reconstruction of public parts of the hotel (3); replacement of two inclined internal service elevators and two external guest elevators with vertical elevators (4), addition of new rooms in the position of inclined external elevators (5); construction of rooms on floor 1 (6), construction of outdoor covered parking area (7), landscaping.



Figure 6. Plan of interventions performed during the 2013 reconstruction. D. Sošić: Reconstruction of Hotel President in Dubrovnik in 2013, Master's thesis, University of Rijeka, Faculty of Civil Engineering, Rijeka, 2020.

Before the 2013 reconstruction, the hotel had 181 accommodation units and belonged to the category 2\* based on the Rulebook on classification, categorization and special standards for catering facilities from the group Hotels. With the addition of the new hotel wings, the capacity was increased by 83 accommodation units and additional six units in the position of inclined elevators, thus achieving a total of 270 accommodation units. As part of the reconstruction, two inclined guest elevators and one service elevator were replaced by vertical elevators. The gross area of the hotel increased to 32,480.65 m², which is an increase of 27% of GBA in accordance with the then Urban Development Plan of the Babin Kuk Area.

According to the original solution of the entrance part of the hotel, the sea was not visible in all its splendor but at the entrance, probably due to the architect's desire to gradually reveal the beauty of the site. In order to open the sea view in the lobby, Investor Valamar Riviera d.d. had the entire roof structure replaced (Figs. 7, 8).

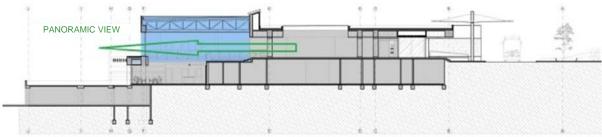


Figure 7. Section through the hotel lobby. D. Sošić: Reconstruction of Hotel President in Dubrovnik in 2013, Master's thesis, University of Rijeka, Faculty of Civil Engineering, Rijeka, 2020.



Figure 8. Photo of the lattice roof structure of the hotel reception during the reconstruction in 2013. Studio 92 d.o.o., Labin

The technological solutions used in the reconstruction of the hotel are as follows: steel lattice structure of the lobby roof, which provides a representative entrance area and sea view with its span. Deep beams enabled the construction of the entire floor of cantilever rooms on level 1 above the existing beach (Figs. 6, 9); the solution of vertical elevators required a markedly complex static solution because the vertical shaft of the new elevators (8 levels) penetrated through the load-bearing foundation structure of the hotel and the existing internal inclined elevators. In plan view, the newly planned vertical elevators are located near the very edge of the reception interior space in order to minimize the depth of the corridor on the lowest floors. The system of main vertical elevators consists of three guest elevators and one service elevator (Figs. 9, 10). During the excavation, the existing structure had to be gradually stabilized by supports. The total elevator height is 28 m. The existing structure of the hotel is made of reinforced concrete: foundations, walls and floor slabs.

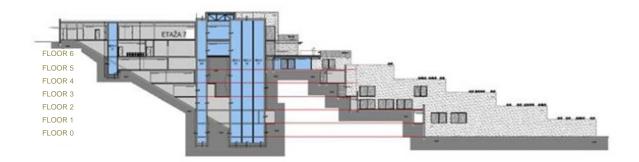


Figure 9. Section through elevators, reconstruction design, 2013. Studio 92 d.o.o., Labin



Figure 10. Photo of elevator shaft concreting. D. Sošić: Reconstruction of Hotel President in Dubrovnik in 2013, Master's thesis, University of Rijeka, Faculty of Civil Engineering, Rijeka, 2020.

The so-called cantilever rooms on floor 1 were the structurally demanding part of the construction. The length of the cantilever is about 6 m. Rooms are constructed on a deep beam fixed to the foundations and retaining wall along the slope of the terrain. Floor slabs are supported horizontally on deep beams. The foundations are reinforced with anchor blocks and rock bolts in the rock. It was also necessary to excavate part of the new corridors through the solid rock under the existing foundations of the rooms. The excavation was challenging also because of the restricted space (Fig. 11).

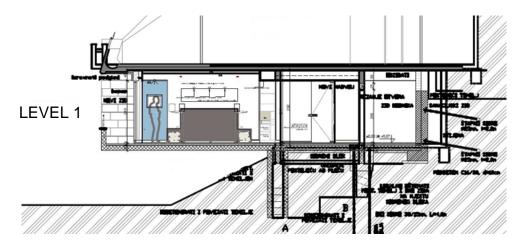


Figure 11. Cross section of a so-called cantilever room on level 1. Studio 92 d.o.o., Labin



Figure 12. Plan of added parts of the hotel accommodation tract. D. Sošić: Reconstruction of Hotel President in Dubrovnik in 2013, Master's thesis, University of Rijeka, Faculty of Civil Engineering, Rijeka, 2020.

#### 3. CONCLUSION

Mass tourism developed since the 1950s in Yugoslavia is exceptionally important for economic development, but it also irreversibly alienates natural resources and the local population, preventing natural and cultural exchange with visitors. The analyzed hotel is part of the story of the development of mass tourism in our country since the mid-1960s, which still exists.

The most common model of renovation of dilapidated hotels is reconstruction and extension in order to increase capacity and increase the rating and adapt to the needs of the modern market and user requirements, which further consumes valuable natural resources.

Recent standards and regulations in construction also make it difficult to keep the characteristics of valuable tourist architecture in their original form. The "visible concrete" of the original façade of the hotel Valamar President Dubrovnik could not be retained because present-day construction conditions require low energy and heating consumption, which increases the thermal insulation of buildings, and the concrete masonry element without double walls, as built in the 1970s, is no longer possible. The architectural heritage of architect Stone was partially lost by the reconstruction of Hotel President. By abandoning the elements of external inclined elevators, the closed reception structure, the visible profiled concrete and by adding the accommodation tract, the original concept of the architectural work and its time has disappeared. According to the current spatial plans, the maximum allowable level of development of Hotel President has been used, and it can even be expected to increase over time.

While understanding the value of the existing architectural work, the authors of the reconstruction are powerless before the regulations, the needs of investors and the community value system. In addition to numerous examples of abandoned tourist heritage in Croatia, we also witness the other extreme: the irreversible reconstruction and extension of valuable architectural works and excessive construction. In addition to the architectural heritage that has built our identity and on which the entire Croatian tourist offer is based, it is precisely space and natural beauty that are our most valuable tourist and living resources.

## **Acknowledgments**

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